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Date: February 11, 2026

Our Ref: 30275629

Subject: Semi-Annual Progress Report July 1, 2025-December 31, 2025
Revitalizing Auto Communities Environmental Response Trust
Buick City Site, Flint, Michigan

Dear Mr. Pepin,

On behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust, Arcadis of Michigan, LLC (Arcadis) is submitting this Semi-Annual Progress Report July-December 2025 to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) for the Buick City Site located in Flint, Michigan (the Site) (**Figure 1**). This report is submitted in accordance with the requirements of Section 8.9.3 of the Corrective Action Consent Order (CACO), Materials Management Division (MMD) Order No. 111-02-2020, which became effective on August 5, 2020.

This Semi-Annual Progress Report covers the period of July 1, 2025, through December 31, 2025, and summarizes the work performed, data collected, problems encountered, project schedule, and estimated percent complete for a list of ongoing Site activities. Areas of the Site and specific Site features discussed herein are presented on **Figure 2** (Northend Work Areas) and **Figure 3** (Southend Work Areas).

Work Performed

The list below provides a summary of the work conducted from July 1, 2025, through December 31, 2025.

Compliance

- On July 30, 2025 January-June 2025 Semi-Annual Report and Short Term Construction Monitoring Memo as Attachment 1 was submitted to EGLE.
- In July, August, September, October, November, and December 2025, inspections and boom maintenance (as necessary) for Outfalls 003 and 005 were completed as required by the ACO.
- In July and October 2025 select surface cover inspections were conducted.

- Dry event water samples were collected for PFAS analysis on August 5, 2025, from Outfall 001, Outfall 002, Outfall 003, Outfall 004, Outfall 005, Outfall 005A, Outfall 007, Outfall 010, Outfall 011, Outfall 012, and Outfall 013. Data was collected to help with generation of the Discharge Point Prioritization Report due to EGLE in January 2026, per the ACO.
 - Outfall 006 was unable to be sampled due to it being covered by construction debris, and Outfalls 007A and 008 were both dry; therefore, no samples were collected.
- Wet event water samples were collected for PFAS analysis on October 7, 2025, from Outfall 001, Outfall 002, Outfall 003, Outfall 004, Outfall 004A, Outfall 005, Outfall 005A, Outfall 007, Outfall 010, Outfall 011, Outfall 012, and Outfall 013. Data was collected to help with generation of the Discharge Point Prioritization Report due to EGLE in January 2026, per the ACO.
- On November 17, 2025 a meeting was held with RACER Trust, Arcadis and EGLE to discuss the baseline calculations for the Discharge Point Prioritization Report due to EGLE in January 2026, per the ACO.
- A total of 44 waste drums, and one waste roll-off were removed from the Site by Crystal Clean of Grand Rapids, Michigan and taken to a licensed disposal facility on November 18, 2025, and December 22, 2025, respectively.
- Outfalls along the Flint River were inspected and access modifications/debris removal was completed on December 12, 2025, to prepare for routine outfall sampling events required by the ACO to begin in 2026.
- Stormwater discharge/flow was measured on December 22 through 24, 2025, at outfall points along the Flint River. The goal of this scope of work was to accurately measure stormwater discharge/flow during dry weather conditions in a repeatable manner for routine sampling per the ACO beginning in 2026.

Investigation and Sampling

- On October 8, 2025, a meeting was held with RACER Trust, providing an overview of the Buick City Vapor Intrusion Assessment, with the proposed evaluation to be conducted in a phased approach.
- Building 44 Well Abandonment Work Plan was submitted to EGLE on September 24, 2025.
 - EGLE approved the work plan during discussions and an EGLE approval letter, dated December 4, 2025. EGLE comments will be incorporated into a revised workplan and submitted for EGLE records in First Quarter 2026.
- Building 44 Well Abandonment activities started December 1 and continued through December 16, 2025. Activities included:
 - The abandonment of all redundant 1" nested temporary monitoring wells, except for the following 4 locations, which EGLE requested remain on site: SB-03-34, SB-04-69, SB-04-56, and SB-04-57.
 - Nine proposed locations could not be found, or were inaccessible (i.e., buried).
 - Two wells (SB-04-37[20-25] and SB-04-30[20-25]) were inadvertently abandoned, however, based on discussions with RACER Trust and EGLE, it was decided that these were not going to be replaced due to other monitoring wells of similar screen intervals in the same vicinity for monitoring purposes.
 - EGLE met onsite during work on December 3, 2025.
 - During this work all orange buckets previously identifying monitoring wells in the area were disposed of in the onsite refuse roll off container.

- 2025 Groundwater PFAS Sampling Plan was submitted to EGLE on October 1, 2025. EGLE approved the 2025 Groundwater PFAS Sampling Plan during discussions and an EGLE approval letter, dated December 1, 2025. Comments will be incorporated into the revised workplan and submitted for EGLE records
- PFAS Monitoring Well Groundwater Sampling event was completed November 17 through 21, 2025, to assess trends in plume concentrations for the three primary PFAS plumes identified in the southern portion of the site. A total of 58 monitoring wells were sampled during this event. Six (6) shallow monitoring wells were either inaccessible or unable to be sampled due to issues identified in the field.
- Groundwater Sampling Plan - Phase I Vapor Intrusion Evaluation Work Plan was submitted to EGLE for review and approval on December 12, 2025.
- Surveying was completed on December 16, 2025, to collect coordinates and ground surface elevations for the vertical delineation and geophysics confirmation soil borings, new top-of-casing elevations for monitoring wells that had permanent covers added, and applicable sewer structures.

Remedy Design and Implementation

- Continued work on revisions to Declaration to Restrictive Covenants.
- Temporary plugging of Hamilton Avenue sanitary sewer manhole lines from MH-E-1 Northwest lateral to MH-H and north lateral to MH-G was completed July 3, 2025. Plug pressure was checked at MH-H-1A, and flow rates were assessed at MH-E-1 and MH-H prior to plugging. Manhole condition/ leakage and estimate lateral flow rates was documented at MH-E-1 entry point.
- Water samples from the sanitary sewer were collected on July 15, 2025, at MH-D, MH-D-8, MH-E, and MH-E-1 to assess the sources of PFAS in the sanitary sewer for PFAS analysis.
- Water samples from the sanitary sewer were collected on July 16, 2025, along Industrial Avenue at manhole locations MH-J-4, MH-H-3, MH-IE-4, MH-IE-5, MH-IW-8, and MH-IW-6 for PFAS analysis.
- Gauging of select monitoring wells in the vicinity of Hamilton Avenue was completed on August 6, 2025.
- On August 20, 2025 a meeting was held with RACER Trust, Arcadis and EGLE to discuss revisions to the Declaration of Restrictive Covenants (DRCs).
- On September 23, 2025 a meeting was held with RACER Trust, Arcadis and EGLE to discuss plugging and bulkheading that had been completed over the years at the Site and proposed inspections of select plugs and bulkheads.
- James P. Cole Sewer Upgradient Sampling Plan was submitted to EGLE for review and approval on October 1, 2025. EGLE approved the plan in discussions as well as in a letter dated November 12, 2025.
- Industrial Avenue Sanitary Video Inspection Work Plan was submitted to EGLE for review and approval on October 9, 2025. EGLE provided comments and conditional approval to the Work Plan via email on October 10, 2025; Arcadis provided a response to comments via email on October 13, 2025. Sewer lines were jetted on Monday October 13, 2025, and the video inspection was completed on October 14, 2025.
- Confined space entry to re-inflate the temporary plugs present in MH-H-1A and MH-E-1 was completed on October 14, 2025. After re-inflating the plugs, sewer sampling was completed at manholes MH-D, MH-D-8, MH-E, MH-E-1, MH-C-4, MH-A-3, MH-A, MH-AA-5, and MH-AA-2.

- Building 44 Pre-Design Investigation Work Plan was submitted to EGLE on October 15, 2025. EGLE approved the workplan via email on November 17, 2025, and are currently awaiting an official EGLE approval letter. A revised Work Plan to incorporate EGLE comments and changed conditions as discussed during monthly update meetings and RAT meeting will be re-submitted to EGLE.
- On October 22, 2025 a meeting was held with RACER Trust, Arcadis, and EGLE to discuss the Building 44 Pre-Design Investigation Work Plan with the EGLE Remediation Advisory Team (RAT). Additionally a meeting was held on October 23, 2025 with RACER Trust, Arcadis and EGLE to discuss the various work plans that had been submitted to EGLE for their review and approval (Pre-Design Investigation Work Plan, PFAS Monitoring Well Sampling Plan and Monitoring Well Abandonment Plan)
- Geophysics Investigation was completed November 17 through 21, 2025, and consisted of GPR survey grid across the area, 9 Multichannel Analysis of Seismic Waves (MASW) transects perpendicular to potential trench alignment, and 1 MASW transect parallel to trench alignment.
- Vertical delineation soil borings (SB-04-150 and SB-04-151), were completed November 24 through 26, 2025. Per discussions with EGLE, no permanent monitoring wells were installed at either location.
- Geophysics Confirmation soil borings were completed December 1 through 12, 2025. Soil boring locations include SB-04-152, SB-04-153, SB-04-154, SB-04-155, SB-04-156, SB-04-157, SB-04-158, SB-04-159, SB-04-160, and SB-04-161. EGLE met onsite during work on December 3.
- On December 8 through 11, 2025, groundwater was collected from select monitoring wells and transported to Xylem for the purpose of performing rapid small-scale column tests (RSSCT) to evaluate GAC and IX resin performance with groundwater from the Site. Groundwater samples were also collected for lab analysis for purposes of the RSSCT.
- Additional upgradient James P. Cole sanitary sampling was completed on December 17, 2025, at six sanitary manhole locations: MH-AA-2, MH-AA-5, MH-A, MH-A-3, MH-C-4, and-MH D.
- EGLE update meetings were held the following days –
 - July 3, 2025 – Meeting discussion included: An update on Hamilton and Industrial Avenue sanitary sewer plugging and sampling, and the Outfall 011 storm sewer re-route.
 - August 14, 2025 – Meeting discussion included: Additional updates related to tasks outlined during the July meeting, as well as an outfall sampling update, and the Hamilton Avenue Groundwater Strategy Evaluation.
 - September 9, 2025 – Meeting discussion included: the James P. Cole Boulevard and Hamilton Avenue sanitary sewer sampling, the James P. Cole Sewer Upgradient Sampling Plan, an Outfall sampling update, Hamilton Avenue groundwater strategy progress, and groundwater sampling and proposed monitoring well abandonment.
 - October 8, 2025 – Meeting discussion included: Continued update on the James P. Cole Sewer Upgradient Sampling Plan and Hamilton Avenue groundwater strategy progress, an Outfall sampling update, proposed Building 44 monitoring well abandonment and groundwater sampling work plan, and the results of the June 2025 STCM sampling event.
 - November 5, 2025 – Meeting discussion included: A review of the James P. Cole sewer upgradient sampling results, Hamilton Avenue plug re-Inflation and sampling update, an Outfall sampling update, work plan status and field schedule review, the results of the September 2025 STCM sampling event, and 2026 budget review.

- December 10, 2025 – Meeting discussion included: Outfall updates, work plan implementation status and field schedule, PFAS groundwater sampling update, geophysics update, vertical delineation and geophysics confirmation soil borings update, Building 44 monitoring well abandonment update, and an update on the RSSCT refinement.

Redevelopment

- Short Term Construction Monitoring (STCM) sampling events were completed in September and November 2025 and consisted of collecting groundwater samples from six monitoring wells, one manhole, and two storm sewer structures. The June, September, and November 2025 STCM Sampling Event Update memo is presented in **Attachment 1**.

Data Collected

The samples collected as part of Site investigation or monitoring activities during this reporting period are presented below.

Groundwater Samples

Groundwater samples were collected at the Site as part of various investigation and/or monitoring activities as follows. QA/QC samples were included in counts:

Month	Factory Area	Number of Samples	Number of Locations	Analytes
September	STCM	6	6	Project Analyte List (PAL) metals (dissolved and total), VOCs, SVOCs, PFAS
November	STCM	6	6	PAL metals (dissolved and total), VOCs, SVOCs, PFAS
November	Factory 84 Building 04/44 Building 09 Building 16/40	73	58	PFAS
December	Building 04/44	4	4	PFAS

Storm and Sanitary Sewer Water Samples

Samples were collected from multiple storm/sanitary sewers and analyzed as part of various investigation and/or monitoring activities at the Site, as follows. QA/QC samples were included in counts:

Month	Storm Sewer Sample Location	Number of Samples	Analytes
July	MH-D MH-D-8 MH-E MH-E-1	5	PFAS

Month	Storm Sewer Sample Location	Number of Samples	Analytes
July	MH-IW-6 MH-IE-4 MH-H-3 MH-IW-8 MH-IE-5 MH-J-4	7	PFAS
August	Outfall 001 Outfall 002 Outfall 003 Outfall 004 Outfall 005 Outfall 005A Outfall 007 Outfall 010 Outfall 011 Outfall 012 Outfall 013	12	PFAS
September	Outfall 005 West and East P-traps	2	PAL metals (dissolved and total), VOCs, SVOCs, PFAS
September	MH 3-9	1	Low Level Mercury, PCBs, PAL VOCs, PAL SVOCs, PAL Metals (dissolved and total), PFAS
October	Outfall 001 Outfall 002 Outfall 003 Outfall 004 Outfall 004A Outfall 005 Outfall 005A Outfall 007 Outfall 010 Outfall 011 Outfall 012 Outfall 013	13	PFAS
October	MH-E MH-E-1 MH-D8 MH-D MH-C-4 MH-A-3 MH-A MH-AA-5 MH-AA-2	10	PFAS

Month	Storm Sewer Sample Location	Number of Samples	Analytes
November	Outfall 005 West and East P-traps	2	PAL metals (dissolved and total), VOCs, SVOCs, PFAS
November	MH 3-9	1	Low Level Mercury, PCBs, PAL VOCs, PAL SVOCs, PAL Metals (dissolved and total), PFAS
December	MH-D MH-AA-2 MH-AA-5 MH-C-4 MH-A-3 MH-A	7	PFAS

Problems Encountered

Groundwater Sampling

LNAPL was suspected to be present in MW-84-73(7-12) during the November 2025 PFAS groundwater sampling event. MW-84-73 (7-12) was gauged with an interface probe (IP) on December 11, 2025, and no measurable LNAPL was observed but odor was present. This area will continue to be evaluated in 2026.

During the November PFAS groundwater sampling event six (6) shallow monitoring wells were either inaccessible or unable to be sampled due to issues identified in the field.

During the Building 44 Well Abandonment activities in December, two monitoring wells were inadvertently abandoned. Based on discussions with RACER Trust and EGLE, it was decided that these were not going to be replaced due to other monitoring wells of similar screen intervals in the same vicinity for monitoring purposes.

Outfall 006

In 2025 it was discovered that Outfall 006 discharge point was buried by construction and roadwork debris piled up along the river, and it was unable to be accessed or sampled in 2025 for dry or wet weather events. However, the location was observed to be accessible and debris moved as of December 2025.

Project Schedule

Near-Term Milestone Activities Anticipated During the Next Semi-Annual Period

Proposed Site work for the first and second quarters of 2026 include the following activities:

- Industrial Avenue video inspection evaluation
- Submittal of revised Monitoring Well Abandonment Work Plan, PFAS Groundwater Sampling Work Plan, and PDI Work Plan to incorporate EGLE conditions

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EGLE
February 11, 2026

- Submittal of Bulkhead Inspection Work Plan
- Continuing Hamilton Avenue PFAS remedy RSSCT activities and reporting
- Submittal of Semi-Annual Report to EGLE, including summary of STCM sampling events and results from March-June 2026
- Submittal of Discharge Point Priority Report to EGLE per ACO – Due January 27, 2026
- Continuing with flow measurement evaluation at outfalls and ACO required dry and wet weather sampling events January-June 2026 timeframe
- Hamilton Ave pre-design scope/planning
- Submittal of Tracer Study Summary Report
- Submittal of TSCA 761.61 Risk Based Plan to USEPA
- Begin implementation of Vapor Intrusion Work Plan once approved by EGLE
- Submittal of Interim Corrective Action Plan (ICAP) per ACO to EGLE – Due February 28, 2026
- Continue revising DRCs
- Continue with monthly project update meetings with EGLE
- Other meetings with EGLE as determined necessary

Estimated Percent Complete

This section presents a percentage complete for action items outlined in the CACO and ACO:

CACO

- Reconcile List of AOIs, AOCs, TSCA areas, etc. (Nov 3, 2020) – 100%
- Meeting with EGLE to discuss CA objectives, expectations, etc. (August 20, 2020) -100%
- Establish public document repository (September 4, 2020) – 100%
- Public Involvement/Communications Plan (September 4, 2020) – 100%
- Corrective Action Framework (Nov 3, 2020) – 100%
- List of electronic files submitted to EGLE (February 1, 2021) – 100%
- Need to identify investigation, further corrective action or EGLE approved institutional control for WMU 2, WMU 3, WMU 4, WMU 5, WMU 7 and WMU 10 – 100%
- Semi-annual progress reports – ongoing
- RACER and EGLE to schedule a meeting to discuss CACO requirements and compliance

ACO

- Boom Inspections of Outfall 003 and 005 following qualifying wet events – ongoing
- Discharge Point Priority List (Due January 27, 2026) – 80%
- Twice-Year Sampling (wet and dry weather) of discharge points and Industrial Storm Water Visual Assessment Form following completion of EGLE Study – 0%
- Interim Corrective Action Plan (ICAP) (Due February 28, 2026) – 20%

Mr. Jeremy Pepin
EGLE
February 11, 2026

Should you have any questions on the information provided within this progress report, please feel free to contact Brendan Mullen with RACER Trust at bmullen@racertrust.org 201-247-4890 or me at the below referenced contact information.

Sincerely,
Arcadis of Michigan, LLC

A handwritten signature in black ink, appearing to read "Tiffany A. Linder". The signature is fluid and cursive, with the first name "Tiffany" being more prominent.

Tiffany A. Linder
Certified Project Manager

Email: tiffany.linder@arcadis.com
Direct Line: 810 225 1928

CC. Brendan Mullen, RACER Trust
Evin Maguire, EGLE
Shaun Shields, EGLE

Enclosures:

Figure 1 –Site Location Map

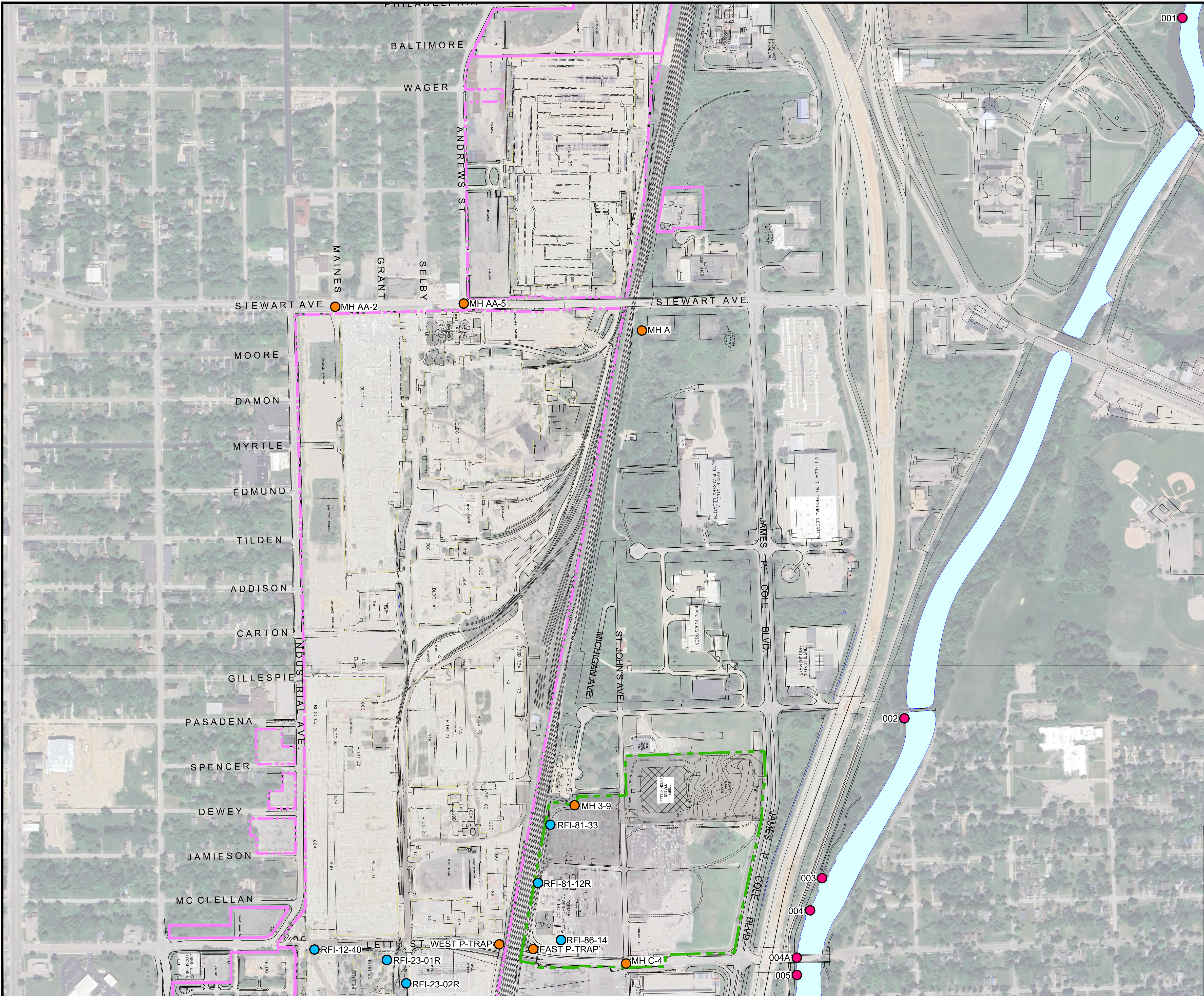
Figure 2 – North End Work Areas

Figure 3 – South End Work Areas

Attachment 1 – June, September, and November 2025 STCM Memo

Figures

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LEGEND:

- CURRENT RACER-OWNED PROPERTIES
- FORMERLY OWNED RACER PROPERTIES
- MONITORING WELL
- SEWER STRUCTURE
- OUTFALL LOCATION

NOTES:

1. RACER = REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE
2. RCRA = RESOURCE CONSERVATION AND RECOVERY ACT
3. RFI = RCRA FACILITY INVESTIGATION MONITORING WELL
4. R = REPLACEMENT MONITORING WELL

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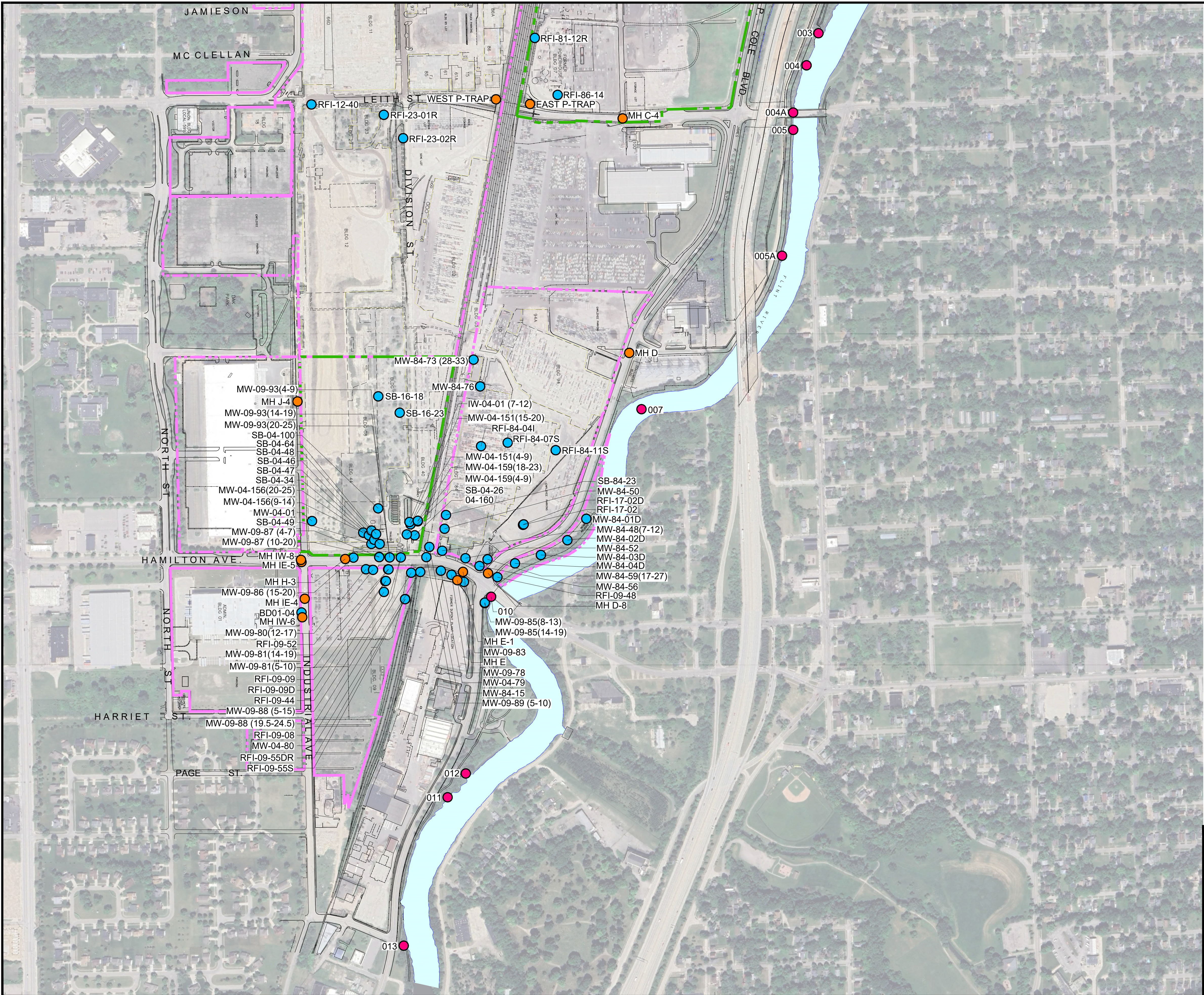
AERIAL PHOTOGRAPH FROM
GOOGLE EARTH - MAY 23, 2024.

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FLINT, MICHIGAN

WORK AREAS
NORTH END



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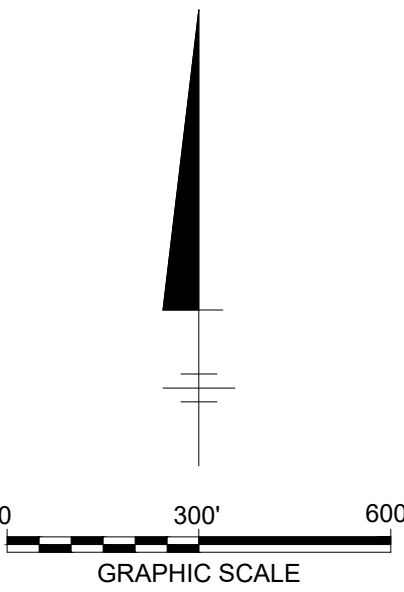
- CURRENT RACER-OWNED PROPERTIES
- FORMERLY OWNED RACER PROPERTIES
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SOURCE:

AERIAL PHOTOGRAPH FROM
GOOGLE EARTH - MAY 23, 2024.



RACER TRUST
BUICK CITY
FLINT, MICHIGAN

WORK AREAS
SOUTH END



Attachment 1

June, September, and November 2025 STCM Memo

SUBJECT

June, September, and November 2025
STCM Sampling Event Update
RACER Buick City Site
Flint, Michigan

TO

Jeremy Pepin, EGLE
Evin Maguire, EGLE
Shaun Shields, EGLE

DATE

February 11, 2026

DEPARTMENT

Environment

PROJECT NUMBER

30282188

COPIES TO

Brian Zuber, EGLE
Patrick Curry, Arcadis
Micki Maki, Arcadis
Brendan Mullen, RACER Trust
Project File

FROM

Tiffany Linder, Arcadis
Tiffany.Linder@arcadis.com, 810-225-1928

The Short-Term Construction Monitoring (STCM) Plan at the Revitalizing Auto Communities Environmental Response (RACER) Trust Buick City Site (Site) was submitted to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) on April 7, 2023, as the Short-Term Slab Construction Groundwater Monitoring Plan. EGLE provided comments to the STCM Plan on July 6, 2023, and a response to comments was provided to EGLE on July 11, 2023, and an updated STCM Plan was submitted to EGLE on March 13, 2024. The STCM was established to assess whether construction activities associated with ongoing redevelopment by Ashley Capital LLC in a 65-acre area north of Leith Street have caused a material change in Site conditions that may require a response. This memo summarizes sampling information from the June, September, and November 2025 quarterly sampling events, and the conclusion that no evidence of a material change in Site conditions has been identified.

Introduction

In June, September, and November 2025, post-construction STCM samples were collected from two storm sewer structures servicing the 65-acre parcel (East P-Trap and West P-Trap), one manhole associated with Outfall 003 storm sewer (Manhole 3-9), and six monitoring wells (RFI-12-40, RFI-23-01R, RFI-23-02R, RFI-81-12R, RFI-81-33, and RFI-86-14), located downgradient of the 65-acre parcel (**Figure 1**). This memo evaluates the results of the June, September, and November 2025 sampling events in comparison to previous STCM sampling events and baseline samples to monitor for increasing trends, as discussed below.

The baseline STCM samples were collected north of Leith Street during four sampling events, completed in May 2023, August 2023, November 2023, and January 2024, prior to the beginning of redevelopment construction activities at the Site. The redevelopment construction activities began at the 65-acre parcel located north of Leith Street in May 2024. Manhole 3-9 was added to the baseline STCM program in June 2024 at EGLE's request; therefore, the June 2024 sample is the only baseline sample for this location.

STCM samples are submitted for laboratory analysis of metals (total and dissolved), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and/or per- and polyfluoroalkyl substances (PFAS) analysis. Please note that laboratory analysis of PFAS was moved from Merit Laboratories to ALS for the June, September, and November sampling events. ALS does not include

perfluoroethylcyclohexane sulfonate (PFecHS) in their analysis; therefore, no results for this compound are available for these events. There are no Part 201 criteria available for PFecHS.

Data Evaluation

The evaluation of the groundwater data will follow the April 7, 2023 “Short-Term Slab Construction Groundwater Monitoring Plan” work plan prepared by Arcadis of Michigan, LLC (Arcadis) and will include:

- Evaluating groundwater elevations to monitor changes in elevations and/or flow directions as a result of the change in surface cover due to redevelopment activities.
- Comparing the analytical results to the baseline concentrations and to the relevant Part 201 criteria. Please note that at the time the work plan was written, only one round of baseline samples was planned. However, four rounds of baseline samples were ultimately collected. As such, the minimum and average baseline concentrations are shown, but the maximum detected baseline concentration is being used for the comparisons discussed below.
 - If the concentration of a constituent of concern (COC) increases by 25% (from the baseline sample) and/or increases to exceed the relevant Part 201 criteria in two consecutive samples then additional downgradient well(s) will be identified and added to the monitoring network.
 - If the downgradient well shows an increasing COC trend and exceeds the relevant Part 201 criteria, then relevant pathways will be evaluated to assess if any risks are present and need to be addressed.
- If a significant increase in COC concentrations or new exceedances of Part 201 criteria is identified during slab removal/construction activities, quarterly sampling will continue for up to one year after the cover is replaced over the restricted areas. However, if the concentrations of COC are stable or decreasing during slab removal/construction activities, then no monitoring will be continued following installation of the new surface cover.

To the extent that groundwater at the Site infiltrates the storm sewers on-Site groundwater surface water interface (GSI) is the only relevant pathway because groundwater is not used for drinking water, and the Flint River is not currently a drinking water supply source. Note that for a number of metals, the GSI criteria are based on the hardness of the receiving water body, in this case the Flint River. A hardness concentration of 280 milligrams per liter (mg/L) for the Flint River was used based on past sampling studies.

Due to the small dataset available, the minimum, maximum, and average concentration of the four (4) baseline sampling events (May 2023, August 2023, November 2023, and January 2024) were used for comparison of the compounds detected during the June, September, and November 2025 sampling events. Note that for the purpose of calculating baseline averages, non-detects were represented by using half of the associated reporting limit. As additional data is collected, alternative methods for comparison of baseline to post-construction data may be evaluated.

Groundwater Level Evaluation

The elevations measured during the June, September, and November 2025 events are lower than the elevations measured during baseline events. Elevations measured during the most recent event (November 2025) were approximately 0.5 to 3 feet lower than those measured during the final baseline event (January 2024). The lower elevations may be influenced by the dewatering operations being conducted as part of redevelopment activities. A summary of the groundwater elevations is presented in **Table 1**.

STCM Storm Sewer Sample Evaluation

During the June, September, and November 2025 sampling events, three samples were collected from storm sewer structures.

- One sample collected at manhole (MH) 3-9,
- One sample collected from the East P-Trap, and
- One sample collected from the West P-Trap.

Manhole 3-9 was added to the baseline STCM program in June 2024 at EGLE's request; therefore, the June 2024 sample is the only baseline sample for this location. **Table 2** presents all analytical data from storm sewer samples from December 2024 through November 2025. Please note that the East P-Trap was unable to be sampled in March 2025 due to the area being inaccessible at the time; therefore, the data from the December 2024 event were used to evaluate trends with the June 2025 data set.

Table 3A, **Table 3B**, and **Table 3C** present summaries of the detected analytes at MH 3-9, East P-Trap, and West P-Trap, respectively. Laboratory analytical reports are provided in **Attachment 1**.

Outfall 003 - Manhole 3-9 Summary

Table 3A presents a summary of the analytes detected at MH 3-9 during the June, September, and/or November 2025 events. Results from the March 2025 event and baseline sampling are also presented on **Table 3A**, for comparison purposes. Analytical results that exceed the data evaluation criteria are discussed below.

Note that due to the historic presence of mercury in the Outfall 003 storm sewer, the samples were analyzed using United States Environmental Protection Agency (USEPA) Method 1631 for low-level mercury analysis.

- Arsenic was detected at a concentration exceeding the GSI criteria during the September 2025 sampling event but was detected below criteria and back at baseline detection during the November 2025 sampling event. In addition, the arsenic detections during the June and September 2025 events exceeded the baseline detection by more than 25%; however, the arsenic concentration in November 2025 was equal to the baseline concentration.
- Barium was detected at concentrations exceeding the baseline by more than 25% during the September and November 2025 events at concentrations of 0.197 milligrams per liter (mg/L) and 0.102 mg/L, respectively. However, the results remain well below the GSI criteria of 1.3 mg/L.
- PFHxS was detected at concentrations exceeding the baseline by more than 25% during the September and November 2025 events at concentrations of 16.7 J nanograms per liter (ng/L) and 13.1 ng/L, respectively. However, the results remain well below the GSI criteria of 210 ng/L.
- PFOA was detected at concentrations exceeding the baseline by more than 25% during the September and November 2025 events at concentrations of 9.37 J ng/L and 6.61 ng/L, respectively. However, the results remain well below the GSI criteria of 170 ng/L.

The remaining detected analytes in June, September, and November 2025 samples were generally detected at concentrations consistent with baseline samples. PFOS continues to be detected at concentrations greater than the GSI criterion; however, the results were all below the baseline concentration. Mercury was also detected at a concentration exceeding the GSI criteria during all events; however, all detections were lower than the baseline sample and showed a decreasing trend from the June to November 2025 samples.

Outfall 005 - East and West P-Trap Manholes

The East and West P-traps are located in two manholes on the east and west side of the French drain along the Leith Street underpass. The French drain captures groundwater from behind the north retaining wall at the Leith Street underpass and directs the groundwater to the P-Trap manholes. The P-trap manholes then discharge the groundwater to the Outfall 005 storm sewer through laterals that connect to manholes MH 5-7 and MH 5-9.

Historically, light non-aqueous phase liquid (LNAPL) was found to be discharging to Outfall 005 through the manholes; therefore, P-traps were installed in each manhole which allowed the groundwater to discharge to the storm sewer while keeping the LNAPL in the manhole structure. The P-trap manholes were inspected quarterly and accumulated LNAPL was removed. However, in the last 15 years only occasional sheens have been observed, primarily in the West P-Trap manhole.

Outfall 005 – East P-Trap Manhole Summary

Table 3B presents a summary of the analytes detected at the East P-Trap during the June, September, and/or November 2025 events. Results from the December 2024 event and baseline sampling are also presented on **Table 3B**, for comparison purposes, as the East P-Trap was inaccessible during the March 2025 sampling event. Analytical results that exceed the data evaluation criteria are discussed below.

- Vanadium was detected at concentrations exceeding the baseline maximum of 0.011 mg/L by more than 25% during the December 2024 and June 2025 events with detections of 0.132 mg/L and 0.03 mg/L, respectively. In addition, both samples exceeded the GSI criteria of 0.027 mg/L. However, vanadium was not detected in the September or November 2025 sampling events.

The remaining detected analytes in June, September, and November 2025 samples were generally detected at concentrations consistent with baseline samples. PFOS continues to be detected at concentrations greater than the GSI criterion; however, the concentrations were similar to the baseline maximum. Also, arsenic, copper, lead, mercury, and zinc were detected above GSI criteria during the June event; however, the concentrations were lower than their respective baseline maximums.

Outfall 005 – West P-Trap Summary

Table 3C presents a summary of the analytes detected at the West P-Trap during the June, September, and/or November 2025 events. Results from the March 2025 event and baseline sampling are also presented on **Table 3C**, for comparison purposes.

The West P-Trap analytical results from the June, September, and November events do not exceed the data evaluation criteria. Concentrations of other detected analytes are generally consistent or less than the baseline maximums. PFOS continues to be detected at concentrations greater than the GSI criterion; however, the concentrations are below the baseline maximum.

STCM Monitoring Well Sample Evaluation

Groundwater samples were collected from six monitoring wells (RFI-12-40, RFI-23-01R, RFI-23-02R, RFI-81-12R, RFI-81-33, and RFI-86-14) (**Table 2**) during the June, September, and November 2025 sampling events, all of which are located downgradient of the 65-acre parcel. Monitoring wells RFI-23-02R and RFI-86-14 were added to the STCM sampling as the concentrations of select PFAS compounds were detected at concentrations greater than a 25% increase from the maximum baseline concentrations at RFI-23-01, RFI-81-12R, and RFI-81-33 during the August and December 2024 events. Monitoring well RFI-23-02R is located downgradient of RFI-23-01R, while

RFI-86-14 is located in the vicinity of RFI-81-12R and RFI-81-33. Originally RFI-07-01R2 was chosen to be sampled downgradient of RFI-81-12R but was unable to be located; therefore, it was replaced with RFI-86-14.

All analytical data is presented in **Table 2**, and the laboratory analytical reports for the June, September, and November 2025 events are included in **Attachment 1**. Groundwater Sampling logs are provided in **Attachment 2**. A summary of the analytes detected compared to previous sampling events and baseline results are presented in **Table 3D** through **Table 3G**.

Monitoring Well RFI-12-40 Summary

Table 3D presents a summary of the analytes detected at monitoring well RFI-12-40 during the June, September, and/or November 2025 events. Results from the March 2025 event and baseline sampling are also presented in **Table 3D**, for comparison purposes. Analytical results that exceed the data evaluation criteria are discussed below.

- PFBA was detected at concentrations exceeding the baseline maximum of 1.4 ng/L by more than 25% during the September and November 2025 events with detections of 19.7 ng/L and 12.6 ng/L, respectively. However, the results remain well below the GSI criteria of 670,000 ng/L.
- PFHxS was detected at concentrations exceeding the baseline maximum of 8.2 ng/L by more than 25% during the September and November 2025 events with detections of 15.2 ng/L and 14.8 ng/L, respectively. However, the results remain well below the GSI criteria of 210 ng/L.
- PFPeA was detected at concentrations exceeding the baseline maximum of 4.6 ng/L by more than 25% during the September and November 2025 events with detections of 8.99 ng/L and 7.87 ng/L, respectively. There are no GSI criteria for PFPeA.

Concentrations of other detected analytes are generally consistent or slightly above the baseline maximums. PFOS continues to be detected at concentrations greater than the GSI criterion; however, the concentrations are similar to the baseline maximum.

Monitoring Well RFI-23-01R Summary

Table 3E presents a summary of the analytes detected at monitoring well RFI-23-01R during the June, September, and/or November 2025 events. Results from the March 2025 event and baseline sampling are also presented on **Table 3E**, for comparison purposes. Analytical results that exceed the data evaluation criteria are discussed below.

- PFHxS was detected at concentrations exceeding the baseline maximum of 7.7 ng/L by more than 25% during the September and November 2025 events with detections of 35.7 ng/L and 37 ng/L, respectively. However, the results remain well below the GSI criteria of 210 ng/L.
- PFHxA and PFPeA were detected above the baseline maximum in August and December 2024. Neither analyte was detected in June or September 2025 events. PFHxA and PFPeA were both detected in the November 2025 event but continued to be below the baseline maximum.

The remaining detected analytes in June, September, and November 2025 samples were generally detected at concentrations consistent with baseline samples. PFOS continues to be detected at concentrations greater than the GSI criterion; however, the concentrations were similar to the baseline maximum.

Monitoring Well RFI-23-02R Summary

In March 2025, PFAS sampling began at monitoring well RFI-23-02R, located downgradient of RFI-23-01R to monitor concentrations of PFHxA and PFPeA. The analytes detected at RFI-23-02R during June, September, and November 2025 events are presented in **Table 3E**.

PFHxA and PFPeA were not detected in the June or September event samples. In the November 2025 sample, PFHxA and PFPeA were detected at concentrations of 4.11 ng/L and 3.16 ng/L, respectfully. There are no GSI criteria for either PFHxA or PFPeA.

PFHxS has been detected in all STCM samples collected at RFI-23-02R with increases in concentrations in the September and November events. However, the results are consistent with historic data and remain well below the GSI criteria of 210 ng/L.

Monitoring Well RFI-81-12R Summary

Table 3F presents a summary of the analytes detected at monitoring well RFI-81-12R during the June, September, and/or November 2025 events. Results from the March 2025 event and baseline sampling are also presented on **Table 3F**, for comparison purposes. Analytical results that exceed the data evaluation criteria are discussed below.

- Manganese (total) was detected at concentrations exceeding the baseline maximum of 0.009 mg/L by more than 25% during the June, September, and December 2025 events with detections of 0.053 mg/L, 0.145 mg/L, and 0.014 mg/L, respectively. However, the results are well below the GSI criteria of 4.9 mg/L.
 - Manganese (dissolved) was not detected in the baseline samples; however, detections of 0.008 mg/L, 0.126 mg/L, and 0.009 mg/L were detected during the June, September and November sampling events, respectively.
- PFBA and PFHxA were detected above the baseline maximum in the August and December 2024 events. Neither analyte was detected in June or September 2025 events. PFBA and PFHxA were both detected in November 2025 at concentrations above the baseline maximum. There are no GSI criteria for PFBA or PFHxA.

The remaining detected analytes in June, September, and November 2025 samples were generally detected at concentrations consistent with baseline samples. PFOS continues to be detected at concentrations greater than the GSI criterion; however, the concentrations were similar to the baseline maximum.

Monitoring Well RFI-86-14 Summary

In March 2025 PFAS sampling began at monitoring well RFI-86-14, located downgradient of RFI-81-12R to monitor concentrations of PFBA and PFHxA. The analytes detected at RFI-86-14 during June, September, and November 2025 events are presented in **Table 3F**. PFBA and PFHxA were not detected in the June or September event samples. In the November 2025 sample, PFBA and PFHxA were detected at concentrations of 8.73 ng/L and 34.0 J ng/L, respectively. There are no GSI criteria for either PFBA or PFHxA.

In November 2025 manganese (total and dissolved) sampling began at monitoring well RFI-86-14 (**Table 3F**), Manganese (total) was detected at a concentration of 0.416 mg/L and dissolved was detected at a concentration of 0.428 mg/L. However, the results are well below the GSI criteria of 4.9 mg/L.

Monitoring Well RFI-81-33 Summary

Table 3G presents a summary of the analytes detected at monitoring well RFI-81-33 during the June, September, and/or November 2025 events. Results from the March 2025 event and baseline sampling are also presented on **Table 3G**, for comparison purposes. Analytical results that exceed the data evaluation criteria are discussed below.

- PFBA has been detected at concentrations greater than 25% above the baseline maximum of 14 ng/L since the August event. PFBA concentrations have ranged from 18 ng/l to 25.5 ng/L. There is no GSI criteria for PFBA.
- PFPeA was initially detected at concentrations greater than 25% above the baseline maximum of 0.7 ng/L during the December 2024 (6.6 ng/L) and March 2025 (5.3 ng/L) events. PFPeA was not detected during the June 2025 event but was detected during the September 2025 and November 2025 events at concentrations (9.78 ng/L and 9.16 ng/L, respectively) greater than 25% above the baseline maximum. There are no GSI criteria for PFPeA.

The remaining detected analytes in June, September, and November 2025 samples were generally detected at concentrations consistent with baseline samples.

Conclusions

In general, the analytical results from the June, September, and November 2025 STCM sampling events were less than or consistent with the baseline sampling results. However, some new compounds were detected and increases in select metals and PFAS constituent concentrations were observed at some locations as described below.

Storm Sewer Samples

While analysis of the 2025 storm sewer STCM samples detected slightly increased concentrations of select metals (arsenic, barium) and PFAS compounds (PFHxS, PFOA) at MH 3-9 and vanadium at the East P-Trap, the data does not indicate a material change in Site conditions has been identified.

Monitoring Well Samples

During the June, September and November 2025 events increased concentrations of select PFAS compounds (RFI-12-40 - PFBA, PFHxS, PFPeA; RFI-23-01R – PFHxS; RFI-81-12R – PFBA, PFHxA; and RFI-81-33 – PFBA, PFPeA) and select metals (RFI-81-12R – manganese) were detected; however, the concentrations were well below GSI criteria.

At downgradient monitoring wells RFI-23-02R and RFI-86-14 select PFAS and manganese were detected; however, the concentrations were below GSI criteria, and no increasing trends were observed. The data does not indicate a material change in Site conditions has been identified.

Attachments

Figures

Figure 1 STCM Locations for June, September, and November 2025 Sampling Events

Tables

Table 1 STCM Groundwater Elevations

Table 2 STCM Analytical Data

Table 3A Manhole 3-9 Detected Analytes Trend Analysis

Table 3B East P-Trap Detected Analytes Trend Analysis

Table 3C West P-Trap Detected Analytes Trend Analysis

Table 3D RFI-12-40 Detected Analytes Trend Analysis

Table 3E RFI-23-01R Detected Analytes Trend Analysis and RFI-23-02R Detected Analytes

Table 3F RFI-81-12R Detected Analytes Trend Analysis and RFI-86-14 Detected Analytes

Table 3G RFI-81-33 Detected Analytes Trend Analysis and RFI-86-14 Detected Analytes

Attachments

Attachment 1 Laboratory Analytical Reports

Attachment 2 Groundwater Sampling Logs

Figures

0 120' 240'

APPROXIMATE SCALE IN FEET

FIGURE
1

Tables

Table 1
STCM Groundwater Elevations
RACER Buick City
Flint, MI



Well ID	Top of Casing Elevation¹ (ft amsl)	Screen Interval (ft bgs)	Baseline Elevation (ft amsl)												August 2024			December 2024		
			May 2023			July/August 2023			November 2023			January 2024								
			Gauging Date	Depth to Water (ft btoc)	Groundwater Elevation (ft amsl)	Gauging Date	Depth to Water (ft btoc)	Groundwater Elevation (ft amsl)	Gauging Date	Depth to Water (ft btoc)	Groundwater Elevation (ft amsl)	Gauging Date	Depth to Water (ft btoc)	Groundwater Elevation (ft amsl)	Gauging Date	Depth to Water (ft btoc)	Groundwater Elevation (ft amsl)	Gauging Date	Depth to Water (ft btoc)	Groundwater Elevation (ft amsl)
RFI-12-40	741.47	3-8	5/15/2023	5.20	736.27	7/31/2023	5.19	736.28	11/7/2023	5.17	736.30	1/12/2024	4.97	736.50	8/26/2024	5.28	736.19	12/11/2024	5.60	735.87
RFI-23-01R	742.19	4-14	5/16/2023	4.10	738.09	7/31/2023	4.35	737.84	11/7/2023	4.29	737.90	1/10/2024	4.26	737.93	8/26/2024	4.10	738.09	12/11/2024	5.64	736.55
RFI-81-12R	738.42	8-18	5/3/2023	4.23	734.19	8/1/2023	4.40	734.02	11/7/2023	4.85	733.57	1/10/2024	3.30	735.12	8/26/2024	4.67	733.75	12/11/2024	6.27	732.15
RFI-81-33	751.64	9.1-14.1	5/4/2023	4.90	746.74	8/1/2023	4.80	746.84	11/8/2023	4.64	747.00	1/10/2024	5.25	746.39	8/26/2024	4.65	746.99	12/11/2024	6.51	745.13
RFI-86-14*	731.80	9-17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RFI-23-02R*	740.08	4-14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Well ID	Top of Casing Elevation ¹ (ft amsl)	Screen Interval (ft bgs)	March 2025			June 2025			September 2025			November 2025		
			Gauging Date	Depth to Water (ft btoc)	Groundwater Elevation (ft amsl)	Gauging Date	Depth to Water (ft btoc)	Groundwater Elevation (ft amsl)	Gauging Date	Depth to Water (ft btoc)	Groundwater Elevation (ft amsl)	Gauging Date	Depth to Water (ft btoc)	Groundwater Elevation (ft amsl)
RFI-12-40	741.47	3-8	3/26/2025	5.28	736.19	6/18/2025	5.32	736.15	9/10/2025	5.51	735.96	11/25/2025	5.49	735.98
RFI-23-01R	742.19	4-14	3/26/2025	4.63	737.56	6/18/2025	4.59	737.60	9/10/2025	5.56	736.63	11/26/2025	5.56	736.63
RFI-81-12R	738.42	8-18	3/25/2025	5.29	733.13	6/17/2025	5.34	733.08	9/9/2025	5.62	732.80	11/25/2025	6.20	732.22
RFI-81-33	751.64	9.1-14.1	3/25/2025	5.42	746.22	6/17/2025	5.20	746.44	9/9/2025	6.00	745.64	11/25/2025	6.14	745.50
RFI-86-14*	731.80	9-17	3/24/2025	15.37	716.43	6/17/2025	14.57	717.23	9/8/2025	14.94	716.86	11/25/2025	15.22	716.58
RFI-23-02R*	740.08	4-14	3/26/2025	4.18	735.90	6/17/2025	4.15	735.93	9/10/2025	4.76	735.32	11/26/2025	4.95	735.13

Notes:
Water level measurements collected from top of well casing.
* Locations with an asterisk (*) were added after the December 2024 event based on data comparison.

Abbreviations:
-- not applicable
amsl above mean sea level
btoc below top of casing
ft feet
ID identification
R replacement monitoring well
RACER Revitalizing Auto Communities Environmental Response
RCRA Resource Conservation and Recovery Act
RFI RCRA facility investigation monitoring well
STCM Short-Term Construction Monitoring
bgs below ground surface

Footnotes:
¹Top of Casing Elevation is in feet National Vertical Geodetic Datum (1988)

Table 2 - STCM Analytical Data
RACER - Buick City
Flint, MI



Location: Date Collected:	Groundwater Surface Water Interface Criteria (EGLE 2023)	units	E-Trap				MH 3-9					RFI-12-40					RFI-23-01R					RFI-23-02R				
			12/10/2024	6/16/2025	9/8/2025	11/24/2025	12/10/2024	3/27/2025	6/16/2025	9/9/2025	11/24/2025	12/11/2024	3/26/2025	6/18/2025	9/10/2025	11/25/2025	12/11/2024	3/26/2025	6/18/2025	9/10/2025	11/26/2025	3/26/2025	6/17/2025	9/10/2025	11/26/2025	
Metals																										
Antimony	0.13 (X)	mg/L	0.01	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	NA	NA	NA	NA	
Arsenic	0.01	mg/L	0.059	0.014	< 0.002 U	< 0.002 U	0.004	< 0.002 U	0.006	0.014	0.003	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	0.002	< 0.002 U	< 0.002 U	0.004	< 0.002 U	NA	NA	NA	NA	
Barium	1.3 (G)	mg/L	0.66	0.249	0.063	0.066	0.029	0.046	0.077	0.197	0.102	0.035	0.034	0.039	0.052	0.045	0.061	0.069	0.048	0.063	0.069	NA	NA	NA	NA	
Beryllium	0.037 (G)	mg/L	0.003	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	NA	NA	NA	NA	
Cadmium	0.0048 (G,X)	mg/L	0.0119	0.0027	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	NA	NA	NA	NA	
Chromium	0.17 (G,X)	mg/L	0.183	0.043	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	NA	NA	NA	NA	
Cobalt	0.1	mg/L	0.046	0.012	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	NA	NA	NA	NA	
Copper	0.022 (G)	mg/L	0.367	0.103	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	NA	NA	NA	NA	
Lead	0.055 (G,X)	mg/L	0.86	0.203	< 0.003 U	< 0.003 U	0.004	< 0.003 U	< 0.003 U	0.005	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	NA	NA	NA	NA	
Manganese	4.9 (G,X)	mg/L	4.13	2.15	0.631	0.589	0.104	0.080	0.203	0.306	0.201	0.277	0.171	0.304	0.415	0.244	0.197	0.023	0.156	0.148	0.133	NA	NA	NA	NA	
Mercury (Low Level Method 1631)	0.0000013	mg/L	0.0008	0.0002	< 0.0002 U	< 0.0002 U	0.0000025*	0.0000034*	0.0000067*	0.0000045*	0.0000031*	< 0.0002 U	< 0.0002 U	< 0.0002 U	< 0.0002 U	< 0.0002 U	< 0.0002 U	< 0.0002 U	< 0.0002 U	< 0.0002 U	< 0.0002 U	NA	NA	NA	NA	
Mercury (SW7471B Method)	0.0000013	mg/L	NA	NA	NA	NA	< 0.0002 U	< 0.0002 U	< 0.0002 U	< 0.0002 U	< 0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Nickel	0.12 (G)	mg/L	0.159	0.041	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	0.006	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	NA	NA	NA	NA	
Selenium	0.005	mg/L	0.012	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	NA	NA	NA	NA	
Silver	0.0002 (M)	mg/L	0.0007	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	NA	NA	NA	NA	
Thallium	0.0037 (X)	mg/L	0.002	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	NA	NA	NA	NA	
Vanadium	0.027	mg/L	0.132	0.030	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	NA	NA	NA	NA	
Zinc	0.28 (G)	mg/L	3.83	0.906	0.005	0.005	0.011	< 0.005 U	< 0.005 U	0.011	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	NA	NA	NA	NA	
Metals (Dissolved)																										
Antimony (dissolved)	--	mg/L	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U	NA	NA	NA	NA	
Arsenic (dissolved)	--	mg/L	0.007	0.003	< 0.002 U	< 0.002 U	0.003	< 0.002 Uf	0.005	0.005	0.003	< 0.002 U	< 0.002 Uf	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 Uf	< 0.002 U	0.003	< 0.002 U	NA	NA	NA	NA	
Barium (dissolved)	--	mg/L	0.080	0.076	0.060	0.067	0.023	0.044 f	0.073	0.107	0.099	0.035	0.033 f	0.038	0.049	0.041	0.061	0.067 f	0.047	0.061	0.073	NA	NA	NA	NA	
Beryllium (dissolved)	--	mg/L	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 Uf	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 Uf	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 Uf	< 0.001 U	< 0.001 U	< 0.001 U	NA	NA	NA	NA	
Cadmium (dissolved)	--	mg/L	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 Uf	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 Uf	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 Uf	< 0.0005 U	< 0.0005 U	< 0.0005 U	NA	NA	NA	NA	
Chromium Total (dissolved)	0.17 (G,X)	mg/L	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U	NA	NA	NA	NA	
Cobalt (dissolved)	--	mg/L	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U	NA	NA	NA	NA	
Copper (dissolved)	--	mg/L	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U	NA	NA	NA	NA	
Lead (dissolved)	--	mg/L	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 Uf	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 Uf	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 Uf	< 0.003 U	< 0.003 U	< 0.003 U	NA	NA	NA	NA	
Manganese (dissolved)	--	mg/L	0.550	0.707	0.645	0.565	0.073	0.075 f	0.167	0.243	0.195	0.221	0.126 f	0.304	0.410	0.261	0.196	< 0.005 Uf	0.147	0.125	0.118	NA	NA	NA	NA	
Mercury (dissolved)	--	mg/L	< 0.0002 U	< 0.0002 U	< 0.0002 U	< 0.00																				

[illegible]

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Table 2 - STCM Analytical Data
RACER - Buick City
Flint, MI



Location: Date Collected:	Groundwater Surface Water Interface Criteria (EGLE 2023)	units	E-Trap				MH 3-9					RFI-12-40					RFI-23-01R					RFI-23-02R			
			12/10/2024	6/16/2025	9/8/2025	11/24/2025	12/10/2024	3/27/2025	6/16/2025	9/9/2025	11/24/2025	12/11/2024	3/26/2025	6/18/2025	9/10/2025	11/25/2025	12/11/2024	3/26/2025	6/18/2025	9/10/2025	11/26/2025	3/26/2025	6/17/2025	9/10/2025	11/26/2025
Acetone	1,700	ug/L	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	NA	NA	NA	NA
Benzene	200 (X)	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA
Bromodichloromethane	--	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA
Bromoform	--	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA
Bromomethane (Methyl bromide)	5.0 (M); 4.2	ug/L	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	NA	NA	NA	NA
Carbon disulfide	--	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA
Carbon tetrachloride	38 (X)	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA
Chlorobenzene	25	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA
Chloroethane	1,100 (X)	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA
Chloroform (Trichloromethane)	350	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA
Chloromethane (Methyl chloride)	--	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA
cis-1,2-Dichloroethene	620	ug/L	3	17	12	12	< 1 U	< 1 U	1	2	1	< 1 U	< 1 U	< 1 U	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA
cis-1,3-Dichloropropene	--	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA
Cyclohexane	--	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA
Dibromochloromethane	--	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA
Dichlorodifluoromethane (CFC-12)	--	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA
Ethylbenzene	18	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA
Isopropyl benzene	28	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA
m&p-Xylene	--	ug/L	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	NA	NA	NA	NA
Methyl acetate	--	ug/L	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	NA	NA	NA	NA
Methyl cyclohexane	--	ug/L	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	NA	NA	NA	NA
Methyl tert butyl ether (MTBE)	7,100 (X)	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA
Methylene chloride	1500 (X)	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA
Naphthalene	11	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA
N-Propylbenzene	--	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA
o-Xylene	--	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA
Styrene	80 (X)	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA
Tetrachloroethene	60 (X)	ug/L	< 1 U	< 1 U	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA
Toluene	270	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA
trans-1,2-Dichloroethene	1,500 (X)	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	1	< 1 U	1	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA
trans-1,3-Dichloropropene	--	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA
Trichloroethene	200 (X)	ug/L	2	12	12	9	< 1 U	< 1 U	1	< 1 U	< 1 U	10	8	8	15	10	< 1 U	2	2	< 1 U	< 1 U	NA	NA	NA	NA
Trichlorofluoromethane (CFC-11)	--	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA
Trifluorotrichloroethane (Freon 113)	32	ug/L	< 30 U	< 30 U	< 30 U	< 30 U	< 30 U	< 30 U	< 30 U	< 30 U	< 30 U	< 30 U	< 30 U	< 30 U	< 30 U	< 30 U	< 30 U	< 30 U	< 30 U	< 30 U	< 30 U	NA	NA	NA	NA
Vinyl chloride	13 (X)	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA
Xylene (total)	49	ug/L	NA	< 3 U	< 3 U	< 3 U	NA	NA	< 3 U	< 3 U	< 3 U	NA	NA	< 3 U	< 3 U	< 3 U	NA	NA	< 3 U	< 3 U	< 3 U	NA	NA	NA	NA

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Table 2 - STCM Analytical Data
RACER - Buick City
Flint, MI



Location:	Groundwater Surface Water Interface Criteria (EGLE 2023)	units	RFI-81-12R					RFI-81-33					RFI-86-14				W-Ptrap				
Date Collected:			12/11/2024	3/25/2025	6/17/2025	9/9/2025	11/25/2025	12/11/2024	3/25/2025	6/17/2025	9/9/2025	11/25/2025	3/24/2025	6/17/2025	9/8/2025	11/25/2025	12/10/2024	3/27/2025	6/16/2025	9/8/2025	11/24/2025
Metals																					
Antimony	0.13 (X)	mg/L	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	NA	NA	NA	NA	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U
Arsenic	0.01	mg/L	< 0.002 U	< 0.002 U	< 0.002 U	0.002	< 0.002 U	0.002	< 0.002 U	0.005	0.004	0.002	NA	NA	NA	NA	0.010	0.003	0.002	< 0.002 U	0.004
Barium	1.3 (G)	mg/L	0.116	0.089	0.103	0.124	0.127	0.134	0.143	0.150	0.156	0.154	NA	NA	NA	NA	0.090	0.076	0.060	0.063	0.076
Beryllium	0.037 (G)	mg/L	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	NA	NA	NA	NA	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U
Cadmium	0.0048 (G,X)	mg/L	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	NA	NA	NA	NA	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U
Chromium	0.17 (G,X)	mg/L	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	NA	NA	NA	NA	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U
Cobalt	0.1	mg/L	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	NA	NA	NA	NA	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U
Copper	0.022 (G)	mg/L	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	NA	NA	NA	NA	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U
Lead	0.055 (G,X)	mg/L	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	NA	NA	NA	NA	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U
Manganese	4.9 (G,X)	mg/L	0.04	0.007	0.053	0.145	0.014	0.994	0.897	1.43	1.30	1.25	NA	NA	NA	0.416	0.842	0.679	0.397	0.343	0.541
Mercury (Low Level Method 1631)	0.0000013	mg/L	< 0.0002 U	< 0.0002 U	< 0.0002 U	< 0.0002 U	< 0.0002 U	< 0.0002 U	< 0.0002 U	< 0.0002 U	< 0.0002 U	< 0.0002 U	NA	NA	NA	NA	< 0.0002 U	< 0.0002 U	< 0.0002 U	< 0.0002 U	< 0.0002 U
Mercury (SW7471B Method)	0.0000013	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	0.12 (G)	mg/L	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	NA	NA	NA	NA	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U
Selenium	0.005	mg/L	< 0.005 U	0.014	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	NA	NA	NA	NA	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U
Silver	0.0002 (M)	mg/L	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	NA	NA	NA	NA	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U
Thallium	0.0037 (X)	mg/L	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	NA	NA	NA	NA	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U
Vanadium	0.027	mg/L	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	NA	NA	NA	NA	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U
Zinc	0.28 (G)	mg/L	0.007	0.008	0.008	0.008	0.010	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	NA	NA	NA	NA	< 0.005 U	0.012	< 0.005 U	< 0.005 U	< 0.005 U
Metals (Dissolved)																					
Antimony (dissolved)	--	mg/L	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U	NA	NA	NA	NA	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U
Arsenic (dissolved)	--	mg/L	< 0.002 U	< 0.002 Uf	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 Uf	< 0.002 U	0.003	0.002	NA	NA	NA	NA	0.007	< 0.002 Uf	< 0.002 U	< 0.002 U	< 0.002 U
Barium (dissolved)	--	mg/L	0.113	0.084 f	0.096	0.119	0.129	0.136	0.134 f	0.141	0.162	0.157	NA	NA	NA	NA	0.085	0.070 f	0.060	0.062	0.073
Beryllium (dissolved)	--	mg/L	< 0.001 U	< 0.001 Uf	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 Uf	< 0.001 U	< 0.001 U	< 0.001 U	NA	NA	NA	NA	< 0.001 U	< 0.001 Uf	< 0.001 U	< 0.001 U	< 0.001 U
Cadmium (dissolved)	--	mg/L	< 0.0005 U	< 0.0005 Uf	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 Uf	< 0.0005 U	< 0.0005 U	< 0.0005 U	NA	NA	NA	NA	< 0.0005 U	< 0.0005 Uf	< 0.0005 U	< 0.0005 U	< 0.0005 U
Chromium Total (dissolved)	0.17 (G,X)	mg/L	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U	NA	NA	NA	NA	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U
Cobalt (dissolved)	--	mg/L	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U	NA	NA	NA	NA	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U
Copper (dissolved)	--	mg/L	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	0.011	NA	NA	NA	NA	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U
Lead (dissolved)	--	mg/L	< 0.003 U	< 0.003 Uf	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 Uf	< 0.003 U	< 0.003 U	< 0.003 U	NA	NA	NA	NA	< 0.003 U	< 0.003 Uf	< 0.003 U	< 0.003 U	< 0.003 U
Manganese (dissolved)	--	mg/L	0.027	< 0.005 Uf	0.008	0.126	0.009	1.06	0.835 f	1.30	1.37	1.26	NA	NA	NA	0.428	0.827	0.650 f	0.398	0.362	0.546
Mercury (dissolved)	--	mg/L	< 0.0002 U	< 0.0002 Uf	< 0.0002 U	< 0.0002 U	< 0.0002 U	< 0.0002 U	< 0.0002 Uf	< 0.0002 U	< 0.0002 U	< 0.0002 U	NA	NA	NA	NA	< 0.0002 U	< 0.0002 Uf	< 0.0002 U	< 0.0002 U	< 0.0002 U
Nickel (dissolved)	--	mg/L	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	0.010	NA	NA	NA	NA	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U
Selenium (dissolved)	--	mg/L	< 0.005 U	0.013 f	< 0.005 U	< 0.005 U	0.006	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U	NA	NA	NA	NA	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U
Silver (dissolved)	--	mg/L	< 0.0005 U	< 0.0005 Uf	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 U	< 0.0005 Uf	< 0.0005 U	< 0.0005 U	< 0.0005 U	NA	NA	NA	NA	< 0.0005 U	< 0.0005 Uf	< 0.0005 U	< 0.0005 U	< 0.0005 U
Thallium (dissolved)	--	mg/L	< 0.002 U	< 0.002 Uf	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 Uf	< 0.002 U	< 0.002 U	< 0.002 U	NA	NA	NA	NA	< 0.002 U	< 0.002 Uf	< 0.002 U	< 0.002 U	< 0.002 U
Vanadium (dissolved)	--	mg/L	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U	NA	NA	NA	NA	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U
Zinc (dissolved)	--	mg/L	0.008	0.009 f	0.008	0.008	0.007	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U	NA	NA	NA	NA	< 0.005 U	< 0.005 Uf	< 0.005 U	< 0.005 U	< 0.005 U
PCBs																					
Aroclor-1016 (PCB-1016)	--	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221 (PCB-1221)	--	ug/L	NA	NA																	

Table 2 - STCM Analytical Data
RACER - Buick City
Flint, MI



Location:	Groundwater Surface Water Interface Criteria (EGLE 2023)	units	RFI-81-12R					RFI-81-33					RFI-86-14				W-Ptrap					
Date Collected:			12/11/2024	3/25/2025	6/17/2025	9/9/2025	11/25/2025	12/11/2024	3/25/2025	6/17/2025	9/9/2025	11/25/2025	3/24/2025	6/17/2025	9/8/2025	11/25/2025	12/10/2024	3/27/2025	6/16/2025	9/8/2025	11/24/2025	
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	--	ng/L	< 3.9 U	< 4.2 U	< 26.8 U	< 47.1 U	< 5.00 U	< 4.2 U	< 4.0 U	< 26.8 U	< 48.1 U	< 5.00 U	< 4.2 U	< 27.0 U	< 48.4 U	< 5.00 U	< 4.0 U	< 4.0 U	< 26.3 U	< 47.9 U	< 5.00 U	
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	--	ng/L	< 2.0 U	< 2.1 U	< 21.0 U	< 47.1 U	< 5.00 U	< 2.1 U	< 2.0 U	< 21.0 U	< 48.1 U	< 5.00 U	< 2.1 U	< 21.1 U	< 48.4 U	< 5.00 U	< 2.0 U	< 2.0 U	< 20.5 U	< 47.9 U	< 5.00 U	
Perfluorobutanesulfonic acid (PFBS)	670,000 (X)	ng/L	2.2	< 2.1 U	< 8.15 U	< 8.32 U	2.15 J	< 2.1 U	< 2.0 U	< 8.14 U	< 8.50 U	2.10 J	< 2.1 U	< 8.21 U	< 8.57 U	1.99 J	2.1	2.1	< 7.98 U	< 8.48 U	3.18 J	
Perfluorobutanoic acid (PFBA)	--	ng/L	16	< 10 U	< 14.3 U	< 47.1 U	14.1	20	18	24.4 J	25.3 J	25.5	< 10 U	< 14.4 U	< 48.4 U	8.73	< 9.9 U	< 10 U	< 14.0 U	< 47.9 U	7.24	
Perfluorodecanesulfonic acid (PFDS)	--	ng/L	< 2.0 U	< 2.1 U	< 7.36 U	< 9.08 U	< 5.00 U	< 2.1 U	< 2.0 U	< 7.36 U	< 9.27 U	< 5.00 U	< 2.1 U	< 7.42 U	< 9.34 U	< 5.00 U	< 2.0 U	< 2.0 U	< 7.21 U	< 9.24 U	< 5.00 U	
Perfluorodecanoic acid (PFDA)	--	ng/L	< 2.0 U	< 2.1 U	< 14.9 U	< 47.1 U	< 5.00 U	< 2.1 U	< 2.0 U	< 14.9 U	< 48.1 U	< 5.00 U	< 2.1 U	< 15.0 U	< 48.4 U	< 5.00 U	< 2.0 U	< 2.0 U	< 14.6 U	< 47.9 U	< 5.00 U	
Perfluorododecanoic acid (PFDoA)	--	ng/L	< 2.0 U	< 2.1 U	< 29.5 U	< 47.1 U	< 5.00 U	< 2.1 U	< 2.0 U	< 29.5 U	< 48.1 U	< 5.00 U	< 2.1 U	< 29.7 U	< 48.4 U	0.706 J	< 2.0 U	< 2.0 U	< 28.9 U	< 47.9 U	< 5.00 U	
Perfluoroheptanesulfonic Acid (PFHpS)	--	ng/L	< 2.0 U	< 2.1 U	< 10.7 U	< 44.8 U	< 5.00 U	< 2.1 U	< 2.0 U	< 10.7 U	< 45.8 U	< 5.00 U	< 2.1 U	< 10.8 U	< 46.1 U	< 5.00 U	< 2.0 U	< 2.0 U	< 10.5 U	< 45.6 U	1.40 J	
Perfluoroheptanoic acid (PFHpA)	--	ng/L	3.5	< 2.1 U	< 15.4 U	< 47.1 U	2.29 J	< 2.1 U	< 2.0 U	< 15.4 U	< 48.1 U	< 5.00 U	3.3	< 15.5 U	< 48.4 U	3.53 J	2.5	< 2.0 U	< 15.1 U	< 47.9 U	2.56 J	
Perfluorohexanesulfonic acid (PFHxS)	210 (X)	ng/L	2.5	< 2.1 U	< 13.5 U	< 42.8 U	2.96 J	2.3	2.4	< 13.5 U	< 43.8 U	3.40 J	< 2.1 U	< 13.6 U	< 44.1 U	2.08 J	16	12	21.7 J	15.8 J	19.6	
Perfluorohexanoic acid (PFHxA)	--	ng/L	3.6	< 2.1 U	< 14.2 U	< 47.1 U	2.39 J	2.3	< 2.0 U	< 14.2 U	< 48.1 U	4.37 J	5.1	< 14.3 U	< 48.4 U	4.00 J	3.2	2.7	< 13.9 U	< 47.9 U	3.44 J	
Perfluorononanesulfonic acid (PFNS)	--	ng/L	< 2.0 U	< 2.1 U	< 13.3 U	< 45.2 U	< 5.00 U	< 2.1 U	< 2.0 U	< 13.3 U	< 46.2 U	< 5.00 U	< 2.1 U	< 13.4 U	< 46.5 U	< 5.00 U	< 2.0 U	< 2.0 U	< 13.0 U	< 46.0 U	< 5.00 U	
Perfluorononanoic acid (PFNA)	30 (X)	ng/L	3.0	< 2.1 U	< 9.24 U	< 9.42 U	1.25 J	< 2.1 U	< 2.0 U	< 9.24 U	< 9.62 U	< 5.00 U	< 2.1 U	< 9.31 U	< 9.69 U	< 5.00 U	2.8	< 2.0 U	< 9.05 U	< 9.59 U	1.70 J	
Perfluorooctane Sulfonamide (FOSA)	--	ng/L	< 2.0 U	< 2.1 U	< 8.14 U	< 9.42 U	< 5.00 U	< 2.1 U	< 2.0 U	< 8.13 U	< 9.62 U	< 5.00 U	< 2.1 U	< 8.20 U	< 9.69 U	< 5.00 U	< 2.0 U	< 2.0 U	< 7.97 U	< 9.59 U	< 5.00 U	
Perfluorooctane sulfonic acid (PFOS)	12 (X)	ng/L	23	13	27.6	31.9	18.4	< 2.1 U	< 2.0 U	6.64 J	< 8.93 U	1.02 J	< 2.1 U	< 4.94 U	< 8.99 U	1.14 J	61	55	61.7	69.2	70.4	
Perfluorooctanoic acid (PFOA)	170 (X)	ng/L	12	3.8	10.5	< 9.42 U	7.80	< 2.1 U	< 2.0 U	< 9.24 U	< 9.62 U	2.63	7.6	10.1	13.7	9.25	10	8.2	< 9.05 U	9.92	11.8	
Perfluoropentanesulfonic acid (PFPeS)	--	ng/L	< 2.0 U	< 2.1 U	< 5.29 U	< 8.83 U	< 5.00 U	< 2.1 U	< 2.0 U	< 5.28 U	< 9.02 U	0.691 J	< 2.1 U	< 5.32 U	< 9.09 U	0.727 J	< 2.0 U	< 2.0 U	< 5.18 U	< 8.99 U	2.02 J	
Perfluoropentanoic acid (PFPeA)	--	ng/L	< 3.9 U	< 4.2 U	< 7.95 U	< 47.1 U	2.16 J	6.6	5.3	< 7.94 U	9.78 J	9.16	4.6	< 8.01 U	< 48.4 U	3.89 J	< 4.0 U	< 4.0 U	< 7.79 U	< 47.9 U	2.55 J	
Perfluorotetradecanoic acid (PFTeA)	--	ng/L	< 3.9 U	< 4.2 U	< 37.5 U	< 47.1 U	< 5.00 U	< 4.2 U	< 4.0 U	< 37.4 U	< 48.1 U	< 5.00 U	< 4.2 U	< 37.7 U	< 48.4 U	< 5.00 U	< 4.0 U	< 4.0 U	< 36.7 U	< 47.9 U	< 5.00 U	
Perfluorotridecanoic Acid (PFTriA)	--	ng/L	< 2.0 U	< 2.1 U	< 17.6 U	< 47.1 U	< 5.00 U	< 2.1 U	< 2.0 U	< 17.6 U	< 48.1 U	< 5.00 U	< 2.1 U	< 17.8 U	< 48.4 U	< 5.00 U	< 2.0 U	< 2.0 U	< 17.3 U	< 47.9 U	< 5.00 U	
Perfluoroundecanoic acid (PFUnA)	--	ng/L	< 2.0 U	< 2.1 U	< 11.9 U	< 47.1 U	< 5.00 U	< 2.1 U	< 2.0 U	< 11.9 U	< 48.1 U	< 5.00 U	< 2.1 U	< 12.0 U	< 48.4 U	< 5.00 U	< 2.0 U	< 2.0 U	< 11.7 U	< 47.9 U	< 5.00 U	
PFBSA	--	ng/L	< 2.0 U	< 2.1 U	NA	NA	NA	< 2.1 U	< 2.0 U	NA	NA	NA	< 2.1 U	NA	NA	NA	< 2.0 U	< 2.0 U	NA	NA	NA	
PFECHS	--	ng/L	< 2.0 U	< 2.1 U	NA	NA	NA	< 2.1 U	< 2.0 U	NA	NA	NA	< 2.1 U	NA	NA	NA	< 2.0 U	< 2.0 U	NA	NA	NA	
PFHxSA	--	ng/L	< 2.0 U	< 2.1 U	NA	NA	NA	< 2.1 U	< 2.0 U	NA	NA	NA	< 2.1 U	NA	NA	NA	< 2.0 U	< 2.0 U	NA	NA	NA	
PFHxS-BR	--	ng/L	< 2.0 U	< 2.1 U	NA	NA	NA	< 2.1 U	< 2.0 U	NA	NA	NA	< 2.1 U	NA	NA	NA	2.1	2.1	NA	NA	NA	
PFHxS-LN	--	ng/L	2	< 2.1 U	NA	NA	NA	< 2.1 U	< 2.0 U	NA	NA	NA	< 2.1 U	NA	NA	NA	13	9.2	NA	NA	NA	
PFOS-BR	--	ng/L	6.2	2.3	NA	NA	NA	< 2.1 U	< 2.0 U	NA	NA	NA	< 2.1 U	NA	NA	NA	24	23	NA	NA	NA	
PFOS-LN	--	ng/L	16	9.0	NA	NA	NA	< 2.1 U	< 2.0 U	NA	NA	NA	< 2.1 U	NA	NA	NA	34	31	NA	NA	NA	
SVOCs																						
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	--	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	
2,4,5-Trichlorophenol	--	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	
2,4,6-Trichlorophenol	5	ug/L	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	NA	NA	NA	NA	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	
2,4-Dichlorophenol	11	ug/L	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	NA	NA	NA	NA	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	
2,4-Dimethylphenol	380	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	
2,4-Dinitrophenol	--	ug/L	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	NA	NA	NA	NA	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	
2,4-Dinitrotoluene	--	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	
2,6-Dinitrotoluene	--	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	
2-Chloronaphthalene	--	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	
2-Chlorophenol	18	ug/L	< 10 U	< 10 U	< 10 U	< 10 U	< 1															

Table 2 - STCM Analytical Data
RACER - Buick City
Flint, MI



Location: Date Collected:	Groundwater Surface Water Interface Criteria (EGLE 2023)	units	RFI-81-12R					RFI-81-33					RFI-86-14				W-Ptrap				
			12/11/2024	3/25/2025	6/17/2025	9/9/2025	11/25/2025	12/11/2024	3/25/2025	6/17/2025	9/9/2025	11/25/2025	3/24/2025	6/17/2025	9/8/2025	11/25/2025	12/10/2024	3/27/2025	6/16/2025	9/8/2025	11/24/2025
Acetophenone	--	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Anthracene	--	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Atrazine	7.3	ug/L	< 3 U	< 3 U	< 3 U	< 3 U	< 3 U	< 3 U	< 3 U	< 3 U	< 3 U	< 3 U	NA	NA	NA	NA	< 3 U	< 3 U	< 3 U	< 3 U	< 3 U
Benzaldehyde	--	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Benzo(a)anthracene	--	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Benzo(a)pyrene	--	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Benzo(b)fluoranthene	--	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Benzo(g,h,i)perylene	--	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Benzo(k)fluoranthene	--	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Biphenyl (1,1-Biphenyl)	--	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
bis(2-Chloroethoxy)methane	--	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
bis(2-Chloroethyl)ether	1.0 (M)	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
bis(2-Ethylhexyl)phthalate (DEHP)	14	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Butyl benzylphthalate (BBP)	67 (X)	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Caprolactam	--	ug/L	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	NA	NA	NA	NA	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Carbazole	10 (M); 4.0	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Chrysene	--	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Dibenz(a,h)anthracene	--	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Dibenzofuran	4	ug/L	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	NA	NA	NA	NA	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U
Diethyl phthalate	110	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Dimethyl phthalate	--	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Di-n-butylphthalate (DBP)	9.7	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Di-n-octyl phthalate (DnOP)	--	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Fluoranthene	1.6	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Fluorene	12	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Hexachlorobenzene	0.2 (M)	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Hexachlorobutadiene	0.053	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Hexachlorocyclopentadiene	--	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Hexachloroethane	6.7 (X)	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Indeno(1,2,3-cd)pyrene	--	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Isophorone	1,300 (X)	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Naphthalene	11	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Nitrobenzene	180 (X)	ug/L	< 3 U	< 3 U	< 3 U	< 3 U	< 3 U	< 3 U	< 3 U	< 3 U	< 3 U	< 3 U	NA	NA	NA	NA	< 3 U	< 3 U	< 3 U	< 3 U	< 3 U
N-Nitrosodi-n-propylamine	--	ug/L	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	NA	NA	NA	NA	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
N-Nitrosodiphenylamine	--	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Pentachlorophenol	--	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Phenanthrene	2.0 (M); 1.7	ug/L	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	NA	NA	NA	NA	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Phenol	450	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Pyrene	--	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
VOCs																					
1,1,1-Trichloroethane	89	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,1,2,2-Tetrachloroethane	78 (X)	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2-Trichloroethane	330 (X)	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethane	740	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethene	130	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2,4-Trichlorobenzene	99 (X)	ug/L	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	NA	NA	NA	NA	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
1,2-Dibromo-3-chloropropane (DBCP)	--	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dibromoethane (Ethylene dibromide)	5.7 (X)	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichlorobenzene	13	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethane	360 (X)	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloropropane	230 (X)	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,3-Dichlorobenzene	28	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,4-Dichlorobenzene	17	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
2-Butanone (Methyl ethyl ketone) (MEK)	2,200	ug/L	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	NA	NA	NA	NA	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U
2-Hexanone	--	ug/L	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	NA	NA	NA	NA	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	--	ug/L	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	NA	NA	NA	NA	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U

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Table 2 - STCM Analytical Data
RACER - Buick City
Flint, MI



Location:	Groundwater Surface Water Interface Criteria (EGLE 2023)	units	RFI-81-12R					RFI-81-33					RFI-86-14				W-Ptrap				
Date Collected:			12/11/2024	3/25/2025	6/17/2025	9/9/2025	11/25/2025	12/11/2024	3/25/2025	6/17/2025	9/9/2025	11/25/2025	3/24/2025	6/17/2025	9/8/2025	11/25/2025	12/10/2024	3/27/2025	6/16/2025	9/8/2025	11/24/2025
Acetone	1,700	ug/L	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	NA	NA	NA	NA	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U
Benzene	200 (X)	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromodichloromethane	--	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromoform	--	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromomethane (Methyl bromide)	5.0 (M); 4.2	ug/L	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	NA	NA	NA	NA	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbon disulfide	--	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Carbon tetrachloride	38 (X)	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chlorobenzene	25	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroethane	1,100 (X)	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroform (Trichloromethane)	350	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloromethane (Methyl chloride)	--	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,2-Dichloroethene	620	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	5	5	4	5	7
cis-1,3-Dichloropropene	--	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Cyclohexane	--	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Dibromochloromethane	--	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Dichlorodifluoromethane (CFC-12)	--	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Ethylbenzene	18	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Isopropyl benzene	28	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
m&p-Xylene	--	ug/L	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	NA	NA	NA	NA	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Methyl acetate	--	ug/L	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	NA	NA	NA	NA	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Methyl cyclohexane	--	ug/L	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	NA	NA	NA	NA	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U
Methyl tert butyl ether (MTBE)	7,100 (X)	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Methylene chloride	1500 (X)	ug/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	NA	NA	NA	NA	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Naphthalene	11	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
N-Propylbenzene	--	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
o-Xylene	--	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Styrene	80 (X)	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Tetrachloroethene	60 (X)	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Toluene	270	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,2-Dichloroethene	1,500 (X)	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,3-Dichloropropene	--	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Trichloroethene	200 (X)	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	2	2	2	2	2
Trichlorofluoromethane (CFC-11)	--	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Trifluorotrichloroethane (Freon 113)	32	ug/L	< 30 U	< 30 U	< 30 U	< 30 U	< 30 U	< 30 U	< 30 U	< 30 U	< 30 U	< 30 U	NA	NA	NA	NA	< 30 U	< 30 U	< 30 U	< 30 U	< 30 U
Vinyl chloride	13 (X)	ug/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Xylene (total)	49	ug/L	NA	NA	< 3 U	< 3 U	< 3 U	NA	NA	< 3 U	< 3 U	< 3 U	NA	NA	NA	NA	NA	NA	< 3 U	< 3 U	< 3 U

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Table 2 - STCM Analytical Data
RACER - Buick City
Flint, MI



Notes:

1. Data compared to the EGLE GSI Criteria from Table 1: Groundwater: Residential and Nonresidential, Part 201 Generic Cleanup Criteria and Screening Levels, October 12, 2023.
 2. Groundwater Surface Water Interface Criteria listed for barium, beryllium, cadmium, chromium, copper, lead, manganese, nickel and zinc are calculated based on a hardness of 150 mg/L-CaCO₃ for southern Lower Peninsula protected as a drinking water source.
 3. Bolded results indicate an exceedance in GSI criteria.
 4. Samples were analyzed via USEPA SW 846 Method 3015A, 3510C, 8260C, 6020A, 7471B, 8270D, and Method ASTM D7979 Modified.
 5. The East P-Trap was inaccessible during the March 2025 sampling event.
- * At MH 3-9, total mercury analysis performed by outside laboratory using USEPA Method 1631 for low-level mercury. Dissolved mercury is analyzed using the standard method 7471B.

Acronyms and Abbreviations:

NA	Not analyzed
--	no applicable criteria
ASTM	American Society for Testing and Materials
EGLE	Michigan Department of Environment, Great Lakes, and Energy
f	filtered and preserved in lab
ft bgs	feet below ground surface
GSI	Groundwater Surface Water Interface
J	Analyte is present at an estimated concentration between the Method Detection Limit and Reporting Limit
mg/L	milligrams per liter
ng/L	nanograms per liter
R	replacement monitoring well
RACER	Revitalizing Auto Communities Environmental Response
RCRA	Resource Conservation and Recovery Act
RFI	RCRA facility investigation monitoring well
U	The analyte was analyzed for but not detected. Associated value is either the reporting limit or the method detection limit.
USEPA	United States Environmental Protection Agency
VOCs	Volatile Organic Compounds
µg/L	microgram per liter

EGLE Footnotes:

- G - Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water.
- M - Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit.
- X - The GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source.
- In these cases, 2 numbers are present in the cell. The first number is the criterion (i.e., TDL), and the second number is the risk-based value, which ever is lower.

Table 3A - Manhole 3-9 Detected Analytes Trend Analysis
RACER Buick City
Flint, MI



Location:	Groundwater Surface Water Interface Criteria (EGLE 2023)	Units	Manhole 3-9					
Date Collected:			Baseline Result June 2024 ¹	12/10/2024	3/27/2025	6/16/2025	9/9/2025	11/24/2025
VOCs								
cis-1,2-Dichloroethene	620	µg/L	1	1 U	1 U	1	2	1
Trichloroethene	200 (X)	µg/L	1	1 U	1 U	1	1 U	1 U
Metals								
Arsenic	0.01	mg/L	0.003	0.004	0.002 U	0.006	0.014	0.003
Arsenic (dissolved)	--	mg/L	0.004	0.003	0.002 Uf	0.005	0.005	0.003
Barium	1.3 (G)	mg/L	0.074	0.029	0.046	0.077	0.197	0.102
Barium (dissolved)	--	mg/L	0.080	0.023	0.044	0.073	0.107	0.099
Lead	0.055 (G,X)	mg/L	0.003 U	0.004	0.003 U	0.003 U	0.005	0.003 U
Manganese	4.9 (G,X)	mg/L	0.181	0.104	0.080	0.203	0.306	0.201
Manganese (dissolved)	--	mg/L	0.192	0.073	0.075	0.167	0.243	0.195
Mercury	0.0000013	mg/L	0.00001*	0.0000025*	0.0000034*	0.0000067*	0.0000045*	0.0000031*
Nickel	0.12 (G)	mg/L	0.005 U	0.005 U	0.005 U	0.006	0.005 U	0.005 U
Nickel (dissolved)	--	mg/L	0.005 U	0.005 U	0.005 Uf	0.006	0.005 U	0.005 U
Zinc	0.28 (G)	mg/L	0.005	0.011	0.005 U	0.005 U	0.011	0.005 U
PFAS								
Perfluorobutanesulfonic acid (PFBS)	670,000 (X)	ng/L	2.0 U	2.0 U	2.0 U	8.23 U	8.90 U	2.24 J
Perfluorobutanoic acid (PFBA)	--	ng/L	13 UX	10 U	9.9 U	14.5 U	50.4 U	15.9
Perfluoroheptanesulfonic acid (PFHpS)	--	ng/L	2.0 U	2.0 U	2.0 U	10.8 U	47.9 U	0.910 J
Perfluoroheptanoic acid (PFHpA)	--	ng/L	2.0 U	2.0 U	2.0 U	15.6 U	50.4 U	2.50 J
Perfluorohexanesulfonic acid (PFHxS)	210 (X)	ng/L	9.1	2.0 U	3.0	13.6 U	16.7 J	13.1
Perfluorohexanoic acid (PFHxA)	--	ng/L	3.2	2.0 U	2.1	14.3 U	14.4 U	5.22
Perfluorononanoic acid (PFNA)	30 (X)	ng/L	2.3	2.0 U	2.0 U	9.34 U	10.1 U	1.98 J
Perfluorooctane sulfonic acid (PFOS)	12 (X)	ng/L	34	2.5	4.4	20.5	29.2	20.8
Perfluorooctanoic acid (PFOA)	170 (X)	ng/L	4.4	2.0 U	2.3	9.41	9.37	6.61
Perfluoropentanesulfonic acid (PFPeS)	--	ng/L	2.0 U	2.0 U	2.0 U	5.34 U	9.45 U	1.88 J
Perfluoropentanoic acid (PFPeA)	--	ng/L	4.0 U	4.1 U	4.0 U	8.03 U	50.4 U	4.08 J
Perfluoroethylcyclohexane sulphonate (PFECHS)	--	ng/L	2.3	2.0 U	2.8	NA	NA	NA

Notes:

1. Results compared to baseline samples and the EGLE GSI Criteria from Table 1: Groundwater: Residential and Nonresidential, Part 201 Generic Cleanup Criteria and Screening Levels, October 12, 2023.

2. Bolded results indicate an exceedance of GSI criteria.

3. Samples were analyzed via USEPA SW 846 Method 8270D, 6020A, and 7471B, and Method ASTM D7979 Modified.

¹ Manhole 3-9 was added to the baseline program in June 2024 at EGLE’s request; therefore, the June 2024 sample is the only baseline sample for this location.

* Analysis performed by outside laboratory using USEPA Method 1631 for low-level mercury.

Acronyms and Abbreviations:	
--	no applicable criteria
ASTM	American Society for Testing and Materials
EGLE	Michigan Department of Environment, Great Lakes, and Energy
f	filtered and preserved in lab
GSI	Groundwater Surface Water Interface
J	Analyte is present at an estimated concentration between the Method Detection Limit and Reporting Limit
mg/L	milligrams per liter
NA	not analyzed; PFechS analyte is not reported via method ASTM D7979-17M
ng/L	nanograms per liter
PFAS	Perfluoroalkyl and Polyfluoroalkyl Substances
RACER	Revitalizing Auto Communities Environmental Response
U	The analyte was analyzed for but not detected. Associated value is either the reporting limit or the method detection limit.
USEPA	United States Environmental Protection Agency
VOCs	Volatile Organic Compounds
X	elevated reporting limit due to matrix interference
µg/L	microgram per liter

EGLE Footnotes:

G - Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water.

X - The GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source.

Table 3B - East P-Trap Detected Analytes Trend Analysis
RACER Buick City
Flint, MI



Date Collected:	Location:	Groundwater Surface Water Interface Criteria (EGLE 2023)	Units	East P-Trap						
	Baseline Result ¹			12/10/2024	6/16/2025	9/8/2025	11/24/2025			
	Minimum							Maximum	Average	
VOCs										
1,1-Dichloroethane		740	µg/L	1 U	1 U	0.5 U	1 U	1	1 U	1 U
cis-1,2-Dichloroethene		620	µg/L	3	13	8.5	3	17	12	12
Tetrachloroethene		60	µg/L	1 U	1	0.75	1 U	1 U	1	1 U
Trichloroethene		200 (X)	µg/L	3	23	13.75	2	12	12	9
Metals										
Arsenic		0.01	mg/L	0.002 U	0.025	0.01075	0.059	0.014	0.002 U	0.002 U
Arsenic (dissolved)		--	mg/L	0.003	0.003	0.002	0.007	0.003	0.002 U	0.002 U
Barium		1.3 (G)	mg/L	0.063	0.433	0.19	0.66	0.249	0.063	0.066
Barium (dissolved)		--	mg/L	0.063	0.081	0.072	0.080	0.076	0.060	0.067
Cadmium		0.0048 (G,X)	mg/L	0.005 U	0.0063	0.002288	0.0119	0.0027	0.0005 U	0.0005 U
Chromium		0.17	mg/L	0.005 U	0.07	0.0245	0.183	0.043	0.005 U	0.005 U
Cobalt		0.1	mg/L	0.005 U	0.02	0.008	0.046	0.012	0.005 U	0.005 U
Copper		0.022 (G)	mg/L	0.005 U	0.163	0.055875	0.367	0.103	0.005 U	0.005 U
Lead		0.055 (G,X)	mg/L	0.003 U	0.525	0.177375	0.86	0.203	0.003 U	0.003 U
Manganese		4.9 (G,X)	mg/L	0.418	4.03	1.58	4.13	2.15	0.631	0.589
Manganese (dissolved)		--	mg/L	0.429	0.96	0.695	0.550	0.707	0.645	0.565
Mercury		0.0000013	mg/L	0.0002 U	0.0006	0.000225	0.0008	0.0002	0.0002 U	0.0002 U
Nickel		0.12	mg/L	0.005 U	0.068	0.024625	0.159	0.041	0.005 U	0.005 U
Vanadium		0.027	mg/L	0.005 U	0.011	0.15525	0.132	0.030	0.005 U	0.005 U
Zinc		0.28 (G)	mg/L	0.009	1.52	0.5	3.83	0.906	0.005	0.005
PFAS										
Perfluorobutanesulfonic acid (PFBS)		670,000 (X)	ng/L	1.9 U	3.2	2.2375	2.3	8.11 U	8.53 U	3.54 J
Perfluorobutanoic acid (PFBA)		--	ng/L	10 U	19 U	6.1 U	10 U	14.3 U	48.2 U	6.46
Perfluoroheptanesulfonic Acid (PFHpS)		--	ng/L	1.9 U	2.3	1.3125	2.1 U	10.7 U	45.9 U	1.52 J
Perfluorohexanesulfonic acid (PFHxS)		210 (X)	ng/L	3.4	20	12.85	8.9	13.4 U	18.9 J	16.8
Perfluorohexanoic acid (PFHxA)		--	ng/L	1.9 U	4.4	2.8625	2.1 U	14.1 U	48.2 U	2.44 J
Perfluorooctane sulfonic acid (PFOS)		12 (X)	ng/L	15	110	68.5	38	87.5	115	93.8
Perfluorooctanoic acid (PFOA)		170 (X)	ng/L	1.9 U	7.6	5.7125	6.4	9.20 U	9.65 U	7.29
Perfluoropentanesulfonic acid (PFPeS)		--	ng/L	1.9 U	2.9	2.3125	2.1 U	5.26 U	9.05 U	2.31 J
Perfluoropentanoic acid (PFPeA)		--	ng/L	3.9 U	4 U	1.975 U	4.2 U	7.91 U	48.2 U	1.57 J

Notes:

- Results compared to baseline samples and the EGLE GSI Criteria from Table 1: Groundwater: Residential and Nonresidential, Part 201 Generic Cleanup Criteria and Screening Levels, October 12, 2023.
- Bolded results indicate an exceedance in GSI criteria.
- Samples were analyzed via USEPA SW 846 Method 8270D, 6020A, and 7471B, and Method ASTM D7979 Modified.
- The East P-Trap was inaccessible during the March 2025 sampling event due to access restrictions.

¹ The minimum, maximum, and average concentration of the four baseline sampling events from May 2023, August 2023, November 2023, and January 2024 were used for comparison.

Acronyms and Abbreviations:

-- no applicable criteria

ASTM American Society for Testing and Materials

EGLE Michigan Department of Environment, Great Lakes, and Energy

GSI Groundwater Surface Water Interface

J Analyte is present at an estimated concentration between the Method Detection Limit and Reporting Limit

mg/L milligrams per liter

ng/L nanograms per liter

p Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak

PFAS Perfluoroalkyl and Polyfluoroalkyl Substances

RACER Revitalizing Auto Communities Environmental Response

SVOCs Semi-Volatile Organic Compounds

U The analyte was analyzed for but not detected. Associated value is either the reporting limit or the method detection limit.

USEPA United States Environmental Protection Agency

VOCs Volatile Organic Compounds

µg/L microgram per liter

EGLE Footnotes:

G - Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water.

M - Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit.

X - The GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source.

Table 3C - West P-Trap Detected Analytes Trend Analysis
RACER Buick City
Flint, MI



Location:	Groundwater Surface Water Interface Criteria (EGLE 2023)	Units	West P-Trap							
Date Collected:			Baseline Result ¹			12/10/2024	3/27/2025	6/16/2025	9/8/2025	11/24/2025
			Minimum	Maximum	Average					
VOCs										
cis-1,2-Dichloroethene	620	µg/L	1U	5	4	5	5	4	5	7
Trichloroethene	200 (X)	µg/L	2	6	4.3	2	2	2	2	2
Metals										
Arsenic	0.01	mg/L	0.007	0.013	0.009	0.01	0.003	0.002	0.005 U	0.004
Barium	1.3 (G)	mg/L	0.083	0.1	0.094	0.09	0.076	0.060	0.063	0.076
Barium (dissolved)	--	mg/L	0.093	0.093	0.093	0.085	0.070 f	0.060	0.062	0.073
Manganese	4.9 (G,X)	mg/L	0.631	0.934	0.748	0.842	0.679	0.397	0.343	0.541
Manganese (dissolved)	--	mg/L	0.696	0.895	0.796	0.827	0.650 f	0.398	0.362	0.546
PFAS										
Perfluorobutanesulfonic acid (PFBS)	670, 000 (X)	ng/L	2.8	2.8	2.8	2.1	2.1	7.98 U	7.86 U	3.18 J
Perfluorobutanoic acid (PFBA)	--	ng/L	9.8 U	20 U	7.35 U	9.9 U	10 U	14.0 U	47.9 U	7.24
Perfluoroheptanesulfonic Acid (PFHpS)	--	ng/L	2 U	2.2	1.3	2.0 U	2.0 U	10.5 U	45.6 U	1.40 J
Perfluoroheptanoic acid (PFHpA)	--	ng/L	4 U	3.2	2.2	2.5	2.0 U	15.1 U	47.9 U	2.56 J
Perfluorohexanesulfonic acid (PFHxS)	210 (X)	ng/L	13	19	15.3	16	12	21.7 J	15.8 J	19.6
Perfluorohexanoic acid (PFHxA)	--	ng/L	3.1	4.0	3.43	3.2	2.7	13.9 U	13.7 U	3.44 J
Perfluorononanoic acid (PFNA)	30 (X)	ng/L	2 U	2.2	1.4	2.8	2.0 U	9.05 U	9.59 U	1.70 J
Perfluorooctane sulfonic acid (PFOS)	12 (X)	ng/L	58	110	78.7	61	55	61.7	69.2	70.4
Perfluorooctanoic acid (PFOA)	12,000 (X)	ng/L	11	14	13	10	8.2	9.05 U	9.92	11.8
Perfluoropentanesulfonic acid (PFPeS)	--	ng/L	4.9 UX	2.7	2.4375	2.0 U	2.0 U	5.18 U	8.99 U	2.02 J
Perfluoropentanoic acid (PFPeA)	--	ng/L	3.9 U	4.3	2.55	4.0 U	4.0 U	7.79 U	47.9 U	2.55 J

Notes:

1. Results compared to baseline samples and the EGLE GSI Criteria from Table 1: Groundwater: Residential and Nonresidential, Part 201 Generic Cleanup Criteria and Screening Levels, October 12, 2023.

2. Bolded results indicate an exceedance in GSI criteria.

3. Samples were analyzed via USEPA SW 846 Method 8270D, 6020A, and 7471B, and Method ASTM D7979 Modified.

¹ The minimum, maximum, and average concentration of the four baseline sampling events from May 2023, August 2023, November 2023, and January 2024 were used for comparison.

- Acronyms and Abbreviations:**
- no applicable criteria
 - ASTM American Society for Testing and Materials
 - EGLE Michigan Department of Environment, Great Lakes, and Energy
 - f filtered and preserved in lab
 - GSI Groundwater Surface Water Interface
 - J Analyte is present at an estimated concentration between the Method Detection Limit and Reporting Limit
 - mg/L milligrams per liter
 - ng/L nanograms per liter
 - PFAS Perfluoroalkyl and Polyfluoroalkyl Substances
 - RACER Revitalizing Auto Communities Environmental Response
 - U The analyte was analyzed for but not detected. Associated value is either the reporting limit or the method detection limit.
 - USEPA United States Environmental Protection Agency
 - VOCs Volatile Organic Compounds
 - µg/L microgram per liter

EGLE Footnotes:

G - Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water.

X - The GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source.

Table 3D - RFI-12-40 Detected Analytes Trend Analysis
RACER Buick City
Flint, MI



Location (screen interval):	Groundwater Surface Water Interface Criteria (EGLE 2023)	Units	RFI-12-40 (3-8 ft bgs)							
			Baseline Result ¹			12/11/2024	3/26/2025	6/18/2025	9/10/2025	11/25/2025
			Minimum	Maximum	Average					
VOCs										
1,1,1-Trichloroethane	89	µg/L	3	8	5.25	5	4	3	7	4
1,1-Dichloroethane	740	µg/L	2	4	2.75	2	2	2	4	3
cis-1,2-Dichloroethene	620	µg/L	1 U	1	0.625	1 U	1 U	1 U	1	1 U
trans-1,2-Dichloroethene	1,500 (X)	µg/L	1 U	1	0.875	1	1 U	1	1	1 U
Trichloroethene	200 (X)	µg/L	8	21	12	10	8	8	15	10
Metals										
Barium	1.3 (G)	mg/L	0.039	0.059	0.046	0.035	0.034	0.039	0.052	0.045
Barium (dissolved)	--	mg/L	0.041	0.044	0.0425	0.035	0.033 f	0.038	0.049	0.041
Manganese	4.9 (G,X)	mg/L	0.268	0.420	0.33	0.277	0.171	0.304	0.415	0.244
Manganese (dissolved)	--	mg/L	0.266	0.282	0.274	0.221	0.126 f	0.304	0.410	0.261
Zinc (dissolved)	0.28 (G)	mg/L	0.005 U	0.005 U	0.0023 U	0.005 U	0.005 f	0.005 U	0.005 U	0.006
PFAS										
Perfluorobutanesulfonic acid (PFBS)	670, 000 (X)	ng/L	2 U	1.4	1.1	2.0 U	2.1 U	8.28 U	8.81 U	1.76 J
Perfluorobutanoic acid (PFBA)	--	ng/L	9.9 U	1.4	1.1	10 U	11 U	14.6 U	19.7 J	12.6
Perfluoroheptanoic acid (PFHpA)	--	ng/L	2 U	2.6	1.7	2.0 U	2.1 U	15.6 U	49.8 U	3.81 J
Perfluorohexanesulfonic acid (PFHxS)	210 (X)	ng/L	5.5	8.2	6.55	3.3	3.8	13.7 U	15.2 J	14.8
Perfluorohexanoic acid (PFHxA)	--	ng/L	2.1	5.2	3.25	2.0 U	2.1 U	14.4 U	49.8 U	9.50
Perfluorononanoic acid (PFNA)	30 (X)	ng/L	1.6 J	3.2	2.275	2.7	2.1 U	9.38 U	9.27 U	2.99 J
Perfluorooctane sulfonic acid (PFOS)	12 (X)	ng/L	15	23	18	12	8.0	16.1	25.0	20.0
Perfluorooctanoic acid (PFOA)	170 (X)	ng/L	4.7	9.1	6.725	3.0	2.7	9.38 U	9.27 U	10.2
Perfluoropentanesulfonic acid (PFPeS)	--	ng/L	2 U	3.9 U	1.2375 U	2.0 U	2.1 U	5.37 U	9.35 U	0.611 J
Perfluoropentanoic acid (PFPeA)	--	ng/L	4 U	4.6	2.575	4.0 U	4.2 U	8.07 U	8.99 J	7.87

Notes:

1. Results compared to baseline samples and the EGLE GSI Criteria from Table 1: Groundwater: Residential and Nonresidential, Part 201 Generic Cleanup Criteria and Screening Levels, October 12, 2023.

2. Bolded results indicate an exceedance in GSI criteria.

3. Samples were analyzed via USEPA SW 846 Method 3015A, 3510C, 8260C, 6020A, 7471B, 8270D, and Method ASTM D7979 Modified.

¹ The minimum, maximum, and average concentration of the four baseline sampling events from May 2023, August 2023, November 2023, and January 2024 were used for comparison.

- Acronyms and Abbreviations:**
- no applicable criteria
 - ASTM American Society for Testing and Materials
 - EGLE Michigan Department of Environment, Great Lakes, and Energy
 - f filtered and preserved in lab
 - ft bgs feet below ground surface
 - GSI Groundwater Surface Water Interface
 - J Analyte is present at an estimated concentration between the Method Detection Limit and Reporting Limit
 - mg/L milligrams per liter
 - ng/L nanograms per liter
 - PFAS Perfluoroalkyl and Polyfluoroalkyl Substances
 - RACER Revitalizing Auto Communities Environmental Response
 - RCRA Resource Conservation and Recovery Act
 - RFI RCRA facility investigation monitoring well
 - U The analyte was analyzed for but not detected. Associated value is either the reporting limit or the method detection limit.
 - USEPA United States Environmental Protection Agency
 - VOCs Volatile Organic Compounds
 - µg/L microgram per liter

EGLE Footnotes:

G - Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water.

X - The GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source.

Table 3E - RFI-23-01R Detected Analytes Trend Analysis and RFI-23-02R Detected Analytes
RACER Buick City
Flint, MI



Location (screen interval): Date Collected:	Groundwater Surface Water Interface Criteria (EGLE 2023)	Units	RFI-23-01R (4-14 ft bgs)							
			Baseline Result ¹			12/11/2024	3/26/2025	6/18/2025	9/10/2025	11/26/2025
			Minimum	Maximum	Average					
VOCs										
Trichloroethene	200 (X)	µg/L	2	3	2.5	1 U	2	2	1 U	1 U
Metals										
Arsenic	0.01	mg/L	0.002 U	0.003	0.0015	0.002	0.002 U	0.002 U	0.004	0.002 U
Arsenic (dissolved)	--		0.002 U	0.002	0.0015	0.002 U	0.002 Uf	0.002 U	0.003	0.002 U
Barium	1.3 (G)	mg/L	0.046	0.065	0.055	0.061	0.069	0.048	0.063	0.069
Barium (dissolved)	--	mg/L	0.048	0.064	0.056	0.061	0.067	0.047	0.061	0.073
Manganese	4.9 (G,X)	mg/L	0.005 U	0.178	0.079	0.197	0.023	0.156	0.148	0.133
Manganese (dissolved)	--	mg/L	0.084	0.168	0.126	0.196	0.005	0.147	0.125	0.118
PFAS										
Perfluorobutanesulfonic acid (PFBS)	670, 000 (X)	ng/L	2 U	1.1	1.0375	2.1 U	2.1 U	8.16 U	8.69 U	2.84 J
Perfluorobutanoic acid (PFBA)	--	ng/L	21 U	19	12.85	16	10 U	14.3 U	14.2 U	4.66 J
Perfluoroheptanoic acid (PFHpA)	--	ng/L	4.1 U	5.4	3.54	5.3	2.2	15.4 U	15.2 U	1.88 J
Perfluorohexanesulfonic acid (PFHxS)	210 (X)	ng/L	2.5	7.7	4.5	10	2.1 U	13.5 U	35.7 J	37.0
Perfluorohexanoic acid (PFHxA)	--	ng/L	2.4	7.5	4.15	10	2.1 U	14.2 U	14.0 U	3.84 J
Perfluorononanoic acid (PFNA)	30 (X)	ng/L	4.9	7.3	5.88	3.5	8.2	9.25 U	9.15 U	1.74 J
Perfluorooctane sulfonic acid (PFOS)	12 (X)	ng/L	9.1	25	14.5	17	14	28.0	39.8	15.8
Perfluorooctanoic acid (PFOA)	170 (X)	ng/L	6.0	11	8.73	7.8	6.9	9.25 U	9.15 U	5.25
Perfluoropentanesulfonic acid (PFPeS)	--	ng/L	2 U	4.1 U	1.275 U	2.1 U	2.1 U	5.29 U	9.22 U	3.02 J
Perfluoropentanoic acid (PFPeA)	--	ng/L	4 U	7.8	3.39	11	3.9 U	7.96 U	7.87 U	1.52 J

Location (screen interval):	Groundwater Surface Water Interface Criteria (EGLE 2023)	Units	RFI-23-02R (4-14 ft bgs)			
Date Collected:			3/26/2025	6/17/2025	9/10/2025	11/26/2025
PFAS						
Perfluorobutanesulfonic acid (PFBS)	670, 000 (X)	ng/L	2.0 U	8.21 U	8.27 U	3.54 J
Perfluorobutanoic acid (PFBA)	--	ng/L	10 U	14.4 U	46.8 U	7.37
Perfluorodecanoic acid (PFDA)	--	ng/L	2.0 U	15.0 U	46.8 U	3.29 J
Perfluoroheptanesulfonic Acid (PFHpS)	--	ng/L	2.0 U	10.8 U	44.5 U	0.773 J
Perfluoroheptanoic acid (PFHpA)	--	ng/L	2.0 U	15.5 U	46.8 U	4.02 J
Perfluorohexanesulfonic acid (PFHxS)	210 (X)	ng/L	23	24.4	45.0	31.6
Perfluorohexanoic acid (PFHxA)	--	ng/L	2.8	14.3 U	13.4 U	4.11 J
Perfluorononanoic acid (PFNA)	30 (X)	ng/L	2.0 U	9.31 U	9.36 U	2.55 J
Perfluorooctane sulfonic acid (PFOS)	12 (X)	ng/L	11	19.4	24.9	22.7
Perfluorooctanoic acid (PFOA)	170 (X)	ng/L	3.4	9.31 U	8.70 U	7.28
Perfluoropentanesulfonic acid (PFPeS)	--	ng/L	2.1	5.32 U	4.98 U	3.88 J
Perfluoropentanoic acid (PFPeA)	--	ng/L	4.1 U	8.01 U	46.8 U	3.16 J

Notes:

1. Results compared to baseline samples and the EGLE GSI Criteria from Table 1: Groundwater: Residential and Nonresidential, Part 201 Generic Cleanup Criteria and Screening Levels, October 12, 2023.

2. Bolded results indicate an exceedance in GSI criteria.

3. Samples were analyzed via USEPA SW 846 Method 8270D, 6020A, and 7471B, and Method ASTM D7979 Modified.

4. RFI-23-02R was added after the December 2024 event based on data comparison.

¹ The minimum, maximum, and average concentration of the four baseline sampling events from May 2023, August 2023, November 2023, and January 2024 were used for comparison.

Acronyms and Abbreviations:

-- no applicable criteria

ASTM American Society for Testing and Materials

EGLE Michigan Department of Environment, Great Lakes, and Energy

f filtered and preserved in lab

ft bgs feet below ground surface

GSI Groundwater Surface Water Interface

J Analyte is present at an estimated concentration between the Method Detection Limit and Reporting Limit

mg/L milligrams per liter

ng/L nanograms per liter

PFAS Perfluoroalkyl and Polyfluoroalkyl Substances

R replacement monitoring well

RACER Revitalizing Auto Communities Environmental Response

RCRA Resource Conservation and Recovery Act

RFI RCRA facility investigation monitoring well

U The analyte was analyzed for but not detected. Associated value is either the reporting limit or the method detection limit.

USEPA United States Environmental Protection Agency

VOCs Volatile Organic Compounds

µg/L microgram per liter

EGLE Footnotes:

G - Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water.

X - The GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source.

Table 3F - RFI-81-12R Detected Analytes Trend Analysis and RFI-86-14 Detected Analytes
RACER Buick City
Flint, MI



Location (screen interval): Date Collected:	Groundwater Surface Water Interface Criteria (EGLE 2023)	Units	RFI-81-12R (8-18 ft bgs)							
			Baseline Result ¹			12/11/2024	3/25/2025	6/17/2025	9/9/2025	11/25/2025
			Minimum	Maximum	Average					
Metals										
Arsenic	0.01	mg/L	0.002 U	0.003	0.0015	0.002 U	0.002 U	0.002 U	0.002	0.002 U
Barium	1.3 (G)	mg/L	0.053	0.136	0.0895	0.116	0.089	0.103	0.124	0.127
Barium (dissolved)	--	mg/L	0.098	0.135	0.1165	0.113	0.084	0.096	0.119	0.129
Manganese	4.9 (G,X)	mg/L	0.005 U	0.009	0.007	0.04	0.007	0.053	0.145	0.014
Manganese (dissolved)	--	mg/L	0.005 U	0.005 U	0.0025 U	0.027	0.005 Uf	0.008	0.126	0.009
Selenium (dissolved)	--	mg/L	0.005 U	0.006	0.0043	0.005 U	0.013 f	0.005 U	0.005 U	0.006
Zinc	0.28 (G)	mg/L	0.005 U	0.008	0.006	0.007	0.008	0.008	0.008	0.010
Zinc (dissolved)	--	mg/L	0.005 U	0.009	0.0075	0.008	0.009 f	0.008	0.008	0.007
PFAS										
Perfluorobutanesulfonic acid (PFBS)	670, 000 (X)	ng/L	2 U	3.8	2.05	2.2	2.1 U	8.15 U	8.32 U	2.15 J
Perfluorobutanoic acid (PFBA)	--	ng/L	10 U	10	8.03	16	10 U	14.3 U	13.6 U	14.1
Perfluoroheptanoic acid (PFHpA)	--	ng/L	2.1 U	2.0	1.6375	3.5	2.1 U	15.4 U	47.1 U	2.29 J
Perfluorohexanesulfonic acid (PFHxS)	210 (X)	ng/L	2 U	3.9	2.23	2.5	2.1 U	13.5 U	42.8 U	2.96 J
Perfluorohexanoic acid (PFHxA)	--	ng/L	1.9 U	1.6	1.15	3.6	2.1 U	14.2 U	13.4 U	2.39 J
Perfluorononanoic acid (PFNA)	30 (X)	ng/L	1.9 U	1.1	1.025	3.0	2.1 U	9.24 U	9.42 U	1.25 J
Perfluorooctane sulfonic acid (PFOS)	12 (X)	ng/L	12	24	17	23	13	27.6	31.9	18.4
Perfluorooctanoic acid (PFOA)	170 (X)	ng/L	2.6	5.6	3.83	12	3.8	10.5	8.76 U	7.80
Perfluoropentanoic acid (PFPeA)	--	ng/L	3.9 U	1.5	1.875	3.9 U	4.2 U	7.95 U	47.1 U	2.16 J

Location (screen interval):	Groundwater Surface Water Interface Criteria (EGLE 2023)	Units	RFI-86-14 (9-17 ft bgs)			
Date Collected:			3/24/2025	6/17/2025	9/8/2025	11/25/2025
Metals						
Manganese	4.9 (G,X)	mg/L	NA	NA	NA	0.416
Manganese (dissolved)	--	mg/L	NA	NA	NA	0.428
PFAS						
Perfluorobutanesulfonic acid (PFBS)	670, 000 (X)	ng/L	2.1 U	8.21 U	8.57 U	1.99 J
Perfluorobutanoic acid (PFBA)	--	ng/L	10 U	14.4 U	48.4 U	8.73
Perfluorododecanoic acid (PFDoA)	--	ng/L	2.1 U	29.7 U	48.4 U	0.706 J
Perfluoroheptanoic acid (PFHpA)	--	ng/L	3.3	15.5 U	15.0 U	3.53 J
Perfluorohexanesulfonic acid (PFHxS)	210 (X)	ng/L	2.1 U	13.6 U	44.1 U	2.08 J
Perfluorohexanoic acid (PFHxA)	--	ng/L	5.1	14.3 U	13.8 U	4.00 J
Perfluorooctane sulfonic acid (PFOS)	12 (X)	ng/L	2.1 U	4.94 U	8.99 U	1.14 J
Perfluorooctanoic acid (PFOA)	170 (X)	ng/L	7.6	10.1	13.7	9.25
Perfluoropentanesulfonic acid (PFPeS)	--	ng/L	2.1 U	5.32 U	9.09 U	0.727 J
Perfluoropentanoic acid (PFPeA)	--	ng/L	4.6	8.01 U	7.75 U	3.89 J

Notes:

- Results compared to baseline samples and the EGLE GSI Criteria from Table 1: Groundwater: Residential and Nonresidential, Part 201 Generic Cleanup Criteria and Screening Levels, October 12, 2023.
- Bolded results indicate an exceedance in GSI criteria.
- Samples were analyzed via USEPA SW 846 Method 6020A and 7471B, and Method ASTM D7979 Modified.
- RFI-86-14 was added after the December 2024 event based on data comparison.

¹ The minimum, maximum, and average concentration of the four baseline sampling events from May 2023, August 2023, November 2023, and January 2024 were used for comparison.

Acronyms and Abbreviations:

-- no applicable criteria

ASTM American Society for Testing and Materials

EGLE Michigan Department of Environment, Great Lakes, and Energy

f filtered and preserved in lab

ft bgs feet below ground surface

GSI Groundwater Surface Water Interface

J Analyte is present at an estimated concentration between the Method Detection Limit and Reporting Limit

mg/L milligrams per liter

NA not analyzed

ng/L nanograms per liter

PFAS Perfluoroalkyl and Polyfluoroalkyl Substances

R replacement monitoring well

RACER Revitalizing Auto Communities Environmental Response

RCRA Resource Conservation and Recovery Act

RFI RCRA facility investigation monitoring well

U The analyte was analyzed for but not detected. Associated value is either the reporting limit or the method detection limit.

USEPA United States Environmental Protection Agency

EGLE Footnotes:

G - Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water.

X - The GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source.

Table 3G - RFI-81-33 Detected Analytes Trend Analysis and RFI-86-14 Detected Analytes
RACER Buick City
Flint, MI



Location (screen interval): Date Collected:	Groundwater Surface Water Interface Criteria (EGLE 2023)	Units	RFI-81-33 (9.1-14.1 ft bgs)							
			Baseline Result ¹			12/11/2024	3/25/2025	6/17/2025	9/9/2025	11/25/2025
			Minimum	Maximum	Average					
Metals										
Arsenic	0.01	mg/L	0.002 U	0.004	0.0025	0.002	0.002 U	0.005	0.004	0.002
Arsenic (dissolved)	--	mg/L	0.002	0.003	0.0025	0.002 U	0.002 Uf	0.002 U	0.003	0.002
Barium	1.3 (G)	mg/L	0.124	0.143	0.135	0.134	0.143	0.150	0.156	0.154
Barium (dissolved)	--	mg/L	0.14	0.143	0.142	0.136	0.134 f	0.141	0.162	0.157
Copper (dissolved)	--	mg/L	0.005 U	0.005 U	0.0025 U	0.005 U	0.005 Uf	0.005 U	0.005 U	0.011
Manganese	4.9 (G,X)	mg/L	0.932	1.44	1.19	0.994	0.897	1.43	1.30	1.25
Manganese (dissolved)	--	mg/L	1.17	1.2	1.19	1.06	0.835	1.30	1.37	1.26
Nickel (dissolved)	--	mg/L	0.005 U	0.005 U	0.0025 U	0.005 U	0.005 Uf	0.005 U	0.005 U	0.010
PFAS										
Perfluorobutanesulfonic acid (PFBS)	670, 000 (X)	ng/L	1.9 U	2.2	1.36	2.1 U	2.0 U	8.14 U	8.50 U	2.10 J
Perfluorobutanoic acid (PFBA)	--	ng/L	9.4 U	14	9.35	20	18	24.4	25.3 J	25.5
Perfluorohexanesulfonic acid (PFHxS)	210 (X)	ng/L	1.9 U	2.4	1.5125	2.3	2.4	13.5 U	13.1 U	3.40 J
Perfluorohexanoic acid (PFHxA)	--	ng/L	1.9 U	4.1 U	1.25 U	2.3	2 U	14.2 U	13.7 U	4.37 J
Perfluorooctane sulfonic acid (PFOS)	12 (X)	ng/L	1.9 U	4.1 U	1.25 U	2.1 U	2.0 U	6.64 J	8.93 U	1.02 J
Perfluorooctanoic acid (PFOA)	170 (X)	ng/L	1.9 U	4.1 U	1.25 U	2.1 U	2.0 U	9.24 U	9.62 U	2.63
Perfluoropentanesulfonic acid (PFPeS)	--	ng/L	1.9 U	4.1 U	1.25 U	2.1 U	2.0 U	5.28 U	9.02 U	0.691 J
Perfluoropentanoic acid (PFPeA)	--	ng/L	3.8 U	0.68	1.6325	6.6	5.3	7.94 U	9.78 J	9.16

Location (screen interval):	Groundwater Surface Water Interface Criteria (EGLE 2023)	Units	RFI-86-14 (9-17 ft bgs)			
Date Collected:			3/24/2025	6/17/2025	9/8/2025	11/25/2025
Metals						
Manganese	4.9 (G,X)	mg/L	NA	NA	NA	0.416
Manganese (dissolved)	--	mg/L	NA	NA	NA	0.428
PFAS						
Perfluorobutanesulfonic acid (PFBS)	670, 000 (X)	ng/L	2.1 U	8.21 U	8.57 U	1.99 J
Perfluorobutanoic acid (PFBA)	--	ng/L	10 U	14.4 U	48.4 U	8.73
Perfluorododecanoic acid (PFDoA)	--	ng/L	2.1 U	29.7 U	48.4 U	0.706 J
Perfluoroheptanoic acid (PFHpA)	--	ng/L	3.3	15.5 U	15.0 U	3.53 J
Perfluorohexanesulfonic acid (PFHxS)	210 (X)	ng/L	2.1 U	13.6 U	44.1 U	2.08 J
Perfluorohexanoic acid (PFHxA)	--	ng/L	5.1	14.3 U	13.8 U	4.00 J
Perfluorooctane sulfonic acid (PFOS)	12 (X)	ng/L	2.1 U	4.94 U	8.99 U	1.14 J
Perfluorooctanoic acid (PFOA)	170 (X)	ng/L	7.6	10.1	13.7	9.25
Perfluoropentanesulfonic acid (PFPeS)	--	ng/L	2.1 U	5.32 U	9.09 U	0.727 J
Perfluoropentanoic acid (PFPeA)	--	ng/L	4.6	8.01 U	7.75 U	3.89 J

Notes:

1. Results compared to baseline samples and the EGLE GSI Criteria from Table 1: Groundwater: Residential and Nonresidential, Part 201 Generic Cleanup Criteria and Screening Levels, October 12, 2023.

2. Bolded results indicate an exceedance in GSI criteria.

3. Samples were analyzed via USEPA SW 846 Method 6020A and 7471B, and Method ASTM D7979 Modified.

4. RFI-86-14 was added after the December 2024 event based on data comparison.

¹ The minimum, maximum, and average concentration of the four baseline sampling events from May 2023, August 2023, November 2023, and January 2024 were used for comparison.

Acronyms and Abbreviations:

--	no applicable criteria
ASTM	American Society for Testing and Materials
EGLE	Michigan Department of Environment, Great Lakes, and Energy
f	filtered and preserved in lab
ft bgs	feet below ground surface
GSI	Groundwater Surface Water Interface
J	Analyte is present at an estimated concentration between the Method Detection Limit and Reporting Limit
mg/L	milligrams per liter
ng/L	nanograms per liter
PFAS	Perfluoroalkyl and Polyfluoroalkyl Substances
R	replacement monitoring well
RACER	Revitalizing Auto Communities Environmental Response
RCRA	Resource Conservation and Recovery Act
RFI	RCRA facility investigation monitoring well
U	The analyte was analyzed for but not detected. Associated value is either the reporting limit or the method detection limit.
USEPA	United States Environmental Protection Agency

EGLE Footnotes:

G - Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water.

X - The GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source.

Attachment 1

Laboratory Analytical Reports



Analytical Laboratory Report

Report ID: S75725.01(01)
Generated on 06/24/2025

Report to

Attention: Erin Kozak
Arcadis US, Inc.
28550 Cabot Drive
Suite 500
Novi, MI 48377

Phone: O: 810-225-1901 FAX:
Email: erin.kozak@arcadis.com

Additional Contacts: Megan Humphrey, Micki Maki, Madison Olender

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:
John Lavery (johnlavery@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S75725.01-S75725.05
Project: 30282188.01
Collected Date(s): 06/16/2025
Submitted Date/Time: 06/16/2025 15:15
Sampled by: Donnie Richmond
P.O. #: 30282188.01

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Maya Murshak
Technical Director



Analytical Laboratory Report

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.

Methods may be modified for improved performance.

Results reported on a dry weight basis where applicable.

'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).

When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.

40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile, and 2-chloroethylvinyl ether need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.

QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.

Starred (*) analytes are not NY NELAP accredited.

Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)

PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."

Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.

Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

All accreditations/certifications held by this laboratory are listed on page 3. Not all accreditations/certifications are applicable to this report.

For a specific list of accredited analytes, please feel free to contact the laboratory or visit <https://www.meritlabs.com/certifications>.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Accreditations (For Reference Only)

Authority	Accreditation ID
Michigan DEQ	#9956
DOD ELAP & ISO/IEC 17025:2017	#69699 PJLA Testing
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
o	Associated EIS outside of control limits
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
q	Qualifier ion ratio outside of control limits
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched



Analytical Laboratory Report

Method Summary

Method	Version
E1631E	EPA Method 1631 Revision E
E608.3	EPA Method 608.3 December 2016
N/A	Not Applicable
SW3015A	SW 846 Method 3015A Revision 1 February 2007
SW3510C	SW 846 Method 3510C Revision 3 December 1996
SW5030C/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5030C Revision 3 May 2003
SW6020A	SW 846 Method 6020A Revision 1 February 2007
SW7471B	SW 846 Method 7471B Revision 2 February 2007
SW8270D	SW 846 Method 8270D Revision 4 February 2007



Analytical Laboratory Report

Sample Summary (5 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S75725.01	WestP-Trap_061625	Groundwater	06/16/25 10:45
S75725.02	EastP-Trap_061625	Groundwater	06/16/25 12:20
S75725.03	MH3-9_061625	Groundwater	06/16/25 13:10
S75725.04	Trip Blank	Water	06/16/25 00:01
S75725.05	Field Blank	Water	06/16/25 13:25



Analytical Laboratory Report

Lab Sample ID: S75725.01

Sample Tag: WestP-Trap_061625

Collected Date/Time: 06/16/2025 10:45

Matrix: Groundwater

COC Reference: 181757

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40mL Glass	HCL	Yes	16.8	IR
2	1L Amber	None	Yes	16.8	IR
2	125mL Plastic	HNO3	Yes	16.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/19/25 10:35	NDK	
Metal Digestion	Completed	SW3015A	06/18/25 10:15	CCM	
Metal Digestion	Completed	SW3015A	06/18/25 10:15	CCM	
BNA Extraction	Completed	SW3510C	06/23/25 11:30	DJS	
Mercury Digestion*	Completed	SW7471B	06/17/25 10:17	CTV	
Mercury Digestion*	Completed	SW7471B	06/17/25 10:17	CTV	

Metals

Method: SW6020A, Run Date: 06/18/25 12:11, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	0.002	0.002		mg/L	5	7440-38-2	
Barium	0.060	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Copper	Not detected	0.005		mg/L	5	7440-50-8	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.397	0.005		mg/L	5	7439-96-5	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW6020A, Run Date: 06/18/25 12:15, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony, Dissolved*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic, Dissolved	Not detected	0.002		mg/L	5	7440-38-2	
Barium, Dissolved	0.060	0.005		mg/L	5	7440-39-3	
Beryllium, Dissolved	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium, Dissolved	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt, Dissolved	Not detected	0.005		mg/L	5	7440-48-4	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Lead, Dissolved	Not detected	0.003		mg/L	5	7439-92-1	
Manganese, Dissolved	0.398	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	



Analytical Laboratory Report

Lab Sample ID: S75725.01 (continued)

Sample Tag: WestP-Trap_061625

Method: SW6020A, Run Date: 06/18/25 12:15, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium, Dissolved	Not detected	0.005		mg/L	5	7782-49-2	
Silver, Dissolved	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium, Dissolved	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium, Dissolved	Not detected	0.005		mg/L	5	7440-62-2	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW7471B, Run Date: 06/17/25 13:34, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury*	Not detected	0.0002		mg/L	1	7439-97-6	

Method: SW7471B, Run Date: 06/17/25 13:38, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Dissolved*	Not detected	0.0002		mg/L	1	7439-97-6	

Organics - Semi-Volatiles

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 06/23/25 22:45, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Benzaldehyde	Not detected	5		ug/L	2	100-52-7	
Acetophenone	Not detected	5		ug/L	2	98-86-2	
Caprolactam	Not detected	10		ug/L	2	105-60-2	
1,1'-Biphenyl	Not detected	5		ug/L	2	92-52-4	
Atrazine*	Not detected	3		ug/L	2	1912-24-9	

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 06/23/25 22:45, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
4-Bromophenyl phenyl ether	Not detected	5		ug/L	2	101-55-3	
di-n-Butyl phthalate	Not detected	5		ug/L	2	84-74-2	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	5		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(ghi)perylene	Not detected	5		ug/L	2	191-24-2	
Benzo(k)fluoranthene	Not detected	5		ug/L	2	207-08-9	
Butyl benzyl phthalate	Not detected	5		ug/L	2	85-68-7	
2-Chloronaphthalene	Not detected	5		ug/L	2	91-58-7	
2-Chlorophenol	Not detected	10		ug/L	2	95-57-8	
4-Chloro-3-methylphenol	Not detected	5		ug/L	2	59-50-7	
4-Chloroaniline	Not detected	10		ug/L	2	106-47-8	
4-Chlorophenyl phenyl ether	Not detected	5		ug/L	2	7005-72-3	
bis(2-Chloroethoxy)methane	Not detected	5		ug/L	2	111-91-1	
bis(2-Chloroethyl)ether	Not detected	1		ug/L	2	111-44-4	
Chrysene	Not detected	1		ug/L	2	218-01-9	
2,4-Dichlorophenol	Not detected	10		ug/L	2	120-83-2	
2,4-Dimethylphenol	Not detected	5		ug/L	2	105-67-9	
2,4-Dinitrophenol	Not detected	25		ug/L	2	51-28-5	
2,4-Dinitrotoluene	Not detected	5		ug/L	2	121-14-2	
2,6-Dinitrotoluene	Not detected	5		ug/L	2	606-20-2	
4,6-Dinitro-2-methylphenol	Not detected	25		ug/L	2	534-52-1	



Analytical Laboratory Report

Lab Sample ID: S75725.01 (continued)

Sample Tag: WestP-Trap_061625

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 06/23/25 22:45, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibenzo(ah)anthracene	Not detected	5		ug/L	2	53-70-3	
Dibenzofuran	Not detected	4		ug/L	2	132-64-9	
Diethyl phthalate	Not detected	5		ug/L	2	84-66-2	
Dimethyl phthalate	Not detected	5		ug/L	2	131-11-3	
bis(2-Ethylhexyl)phthalate	Not detected	5		ug/L	2	117-81-7	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Hexachlorocyclopentadiene	Not detected	5		ug/L	2	77-47-4	
Hexachloroethane	Not detected	5		ug/L	2	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	5		ug/L	2	193-39-5	
Isophorone	Not detected	5		ug/L	2	78-59-1	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
2-Methylphenol (o-Cresol)	Not detected	10		ug/L	2	95-48-7	
2-Nitroaniline	Not detected	25		ug/L	2	88-74-4	
2-Nitrophenol	Not detected	5		ug/L	2	88-75-5	
3-Nitroaniline	Not detected	25		ug/L	2	99-09-2	
4-Nitroaniline	Not detected	25		ug/L	2	100-01-6	
4-Nitrophenol	Not detected	25		ug/L	2	100-02-7	
N-Nitrosodi-n-propylamine	Not detected	10		ug/L	2	621-64-7	
N-Nitrosodiphenylamine	Not detected	5		ug/L	2	86-30-6	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Nitrobenzene	Not detected	3		ug/L	2	98-95-3	
di-n-Octyl phthalate	Not detected	5		ug/L	2	117-84-0	
2,4,5-Trichlorophenol	Not detected	5		ug/L	2	95-95-4	
2,4,6-Trichlorophenol	Not detected	4		ug/L	2	88-06-2	
3,3'-Dichlorobenzidine	Not detected	10		ug/L	2	91-94-1	
3-, 4-Methylphenol (p,m-Cresol)	Not detected	10		ug/L	2	3/4-CRESOL	
Pentachlorophenol	Not detected	5		ug/L	2	87-86-5	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Phenol	Not detected	5		ug/L	2	108-95-2	
Pyrene	Not detected	5		ug/L	2	129-00-0	
Hexachlorobenzene	Not detected	5		ug/L	2	118-74-1	
Hexachlorobutadiene	Not detected	5		ug/L	2	87-68-3	
bis(2-Chloroisopropyl)ether*	Not detected	5		ug/L	2	108-60-1	
Carbazole	Not detected	5		ug/L	2	86-74-8	

Organics - Volatiles

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 06/19/25 04:28, Analyst: ACK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	30		ug/L	1	76-13-1	
Acetone	Not detected	20		ug/L	1	67-64-1	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Methyl Acetate	Not detected	10		ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	20		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1		ug/L	1	75-71-8	
Chloromethane	Not detected	1		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	2		ug/L	1	74-83-9	
Chloroethane	Not detected	1		ug/L	1	75-00-3	



Analytical Laboratory Report

Lab Sample ID: S75725.01 (continued)

Sample Tag: WestP-Trap_061625

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 06/19/25 04:28, Analyst: ACK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	4	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
Cyclohexane	Not detected	1		ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	2	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	20		ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dibromo-3-chloropropane	Not detected	1		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	2		ug/L	1	120-82-1	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Naphthalene	Not detected	1		ug/L	1	91-20-3	
Total Xylenes	Not detected	3		ug/L	1	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S75725.02

Sample Tag: EastP-Trap_061625

Collected Date/Time: 06/16/2025 12:20

Matrix: Groundwater

COC Reference: 181757

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40mL Glass	HCL	Yes	16.8	IR
2	1L Amber	None	Yes	16.8	IR
2	125mL Plastic	HNO3	Yes	16.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/19/25 10:35	NDK	
Metal Digestion	Completed	SW3015A	06/18/25 10:15	CCM	
Metal Digestion	Completed	SW3015A	06/18/25 10:15	CCM	
BNA Extraction	Completed	SW3510C	06/23/25 11:30	DJS	
Mercury Digestion*	Completed	SW7471B	06/17/25 10:17	CTV	
Mercury Digestion*	Completed	SW7471B	06/17/25 10:17	CTV	

Metals

Method: SW6020A, Run Date: 06/18/25 12:26, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	0.014	0.002		mg/L	5	7440-38-2	
Barium	0.249	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium	0.0027	0.0005		mg/L	5	7440-43-9	
Chromium	0.043	0.005		mg/L	5	7440-47-3	
Cobalt	0.012	0.005		mg/L	5	7440-48-4	
Copper	0.103	0.005		mg/L	5	7440-50-8	
Lead	0.203	0.003		mg/L	5	7439-92-1	
Manganese	2.15	0.005		mg/L	5	7439-96-5	
Nickel	0.041	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium	0.030	0.005		mg/L	5	7440-62-2	
Zinc	0.906	0.005		mg/L	5	7440-66-6	

Method: SW6020A, Run Date: 06/18/25 12:34, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony, Dissolved*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic, Dissolved	0.003	0.002		mg/L	5	7440-38-2	
Barium, Dissolved	0.076	0.005		mg/L	5	7440-39-3	
Beryllium, Dissolved	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium, Dissolved	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt, Dissolved	Not detected	0.005		mg/L	5	7440-48-4	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Lead, Dissolved	Not detected	0.003		mg/L	5	7439-92-1	
Manganese, Dissolved	0.707	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	



Analytical Laboratory Report

Lab Sample ID: S75725.02 (continued)

Sample Tag: EastP-Trap_061625

Method: SW6020A, Run Date: 06/18/25 12:34, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium, Dissolved	Not detected	0.005		mg/L	5	7782-49-2	
Silver, Dissolved	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium, Dissolved	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium, Dissolved	Not detected	0.005		mg/L	5	7440-62-2	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW7471B, Run Date: 06/17/25 13:48, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury*	0.0002	0.0002		mg/L	1	7439-97-6	

Method: SW7471B, Run Date: 06/17/25 13:51, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Dissolved*	Not detected	0.0002		mg/L	1	7439-97-6	

Organics - Semi-Volatiles

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 06/24/25 04:55, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Benzaldehyde	Not detected	5		ug/L	2	100-52-7	
Acetophenone	Not detected	5		ug/L	2	98-86-2	
Caprolactam	Not detected	10		ug/L	2	105-60-2	
1,1'-Biphenyl	Not detected	5		ug/L	2	92-52-4	
Atrazine*	Not detected	3		ug/L	2	1912-24-9	

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 06/24/25 04:55, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
4-Bromophenyl phenyl ether	Not detected	5		ug/L	2	101-55-3	
di-n-Butyl phthalate	Not detected	5		ug/L	2	84-74-2	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	5		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(ghi)perylene	Not detected	5		ug/L	2	191-24-2	
Benzo(k)fluoranthene	Not detected	5		ug/L	2	207-08-9	
Butyl benzyl phthalate	Not detected	5		ug/L	2	85-68-7	
2-Chloronaphthalene	Not detected	5		ug/L	2	91-58-7	
2-Chlorophenol	Not detected	10		ug/L	2	95-57-8	
4-Chloro-3-methylphenol	Not detected	5		ug/L	2	59-50-7	
4-Chloroaniline	Not detected	10		ug/L	2	106-47-8	
4-Chlorophenyl phenyl ether	Not detected	5		ug/L	2	7005-72-3	
bis(2-Chloroethoxy)methane	Not detected	5		ug/L	2	111-91-1	
bis(2-Chloroethyl)ether	Not detected	1		ug/L	2	111-44-4	
Chrysene	Not detected	1		ug/L	2	218-01-9	
2,4-Dichlorophenol	Not detected	10		ug/L	2	120-83-2	
2,4-Dimethylphenol	Not detected	5		ug/L	2	105-67-9	
2,4-Dinitrophenol	Not detected	25		ug/L	2	51-28-5	
2,4-Dinitrotoluene	Not detected	5		ug/L	2	121-14-2	
2,6-Dinitrotoluene	Not detected	5		ug/L	2	606-20-2	
4,6-Dinitro-2-methylphenol	Not detected	25		ug/L	2	534-52-1	



Analytical Laboratory Report

Lab Sample ID: S75725.02 (continued)

Sample Tag: EastP-Trap_061625

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 06/24/25 04:55, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibenzo(ah)anthracene	Not detected	5		ug/L	2	53-70-3	
Dibenzofuran	Not detected	4		ug/L	2	132-64-9	
Diethyl phthalate	Not detected	5		ug/L	2	84-66-2	
Dimethyl phthalate	Not detected	5		ug/L	2	131-11-3	
bis(2-Ethylhexyl)phthalate	Not detected	5		ug/L	2	117-81-7	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Hexachlorocyclopentadiene	Not detected	5		ug/L	2	77-47-4	
Hexachloroethane	Not detected	5		ug/L	2	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	5		ug/L	2	193-39-5	
Isophorone	Not detected	5		ug/L	2	78-59-1	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
2-Methylphenol (o-Cresol)	Not detected	10		ug/L	2	95-48-7	
2-Nitroaniline	Not detected	25		ug/L	2	88-74-4	
2-Nitrophenol	Not detected	5		ug/L	2	88-75-5	
3-Nitroaniline	Not detected	25		ug/L	2	99-09-2	
4-Nitroaniline	Not detected	25		ug/L	2	100-01-6	
4-Nitrophenol	Not detected	25		ug/L	2	100-02-7	
N-Nitrosodi-n-propylamine	Not detected	10		ug/L	2	621-64-7	
N-Nitrosodiphenylamine	Not detected	5		ug/L	2	86-30-6	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Nitrobenzene	Not detected	3		ug/L	2	98-95-3	
di-n-Octyl phthalate	Not detected	5		ug/L	2	117-84-0	
2,4,5-Trichlorophenol	Not detected	5		ug/L	2	95-95-4	
2,4,6-Trichlorophenol	Not detected	4		ug/L	2	88-06-2	
3,3'-Dichlorobenzidine	Not detected	10		ug/L	2	91-94-1	
3-, 4-Methylphenol (p,m-Cresol)	Not detected	10		ug/L	2	3/4-CRESOL	
Pentachlorophenol	Not detected	5		ug/L	2	87-86-5	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Phenol	Not detected	5		ug/L	2	108-95-2	
Pyrene	Not detected	5		ug/L	2	129-00-0	
Hexachlorobenzene	Not detected	5		ug/L	2	118-74-1	
Hexachlorobutadiene	Not detected	5		ug/L	2	87-68-3	
bis(2-Chloroisopropyl)ether*	Not detected	5		ug/L	2	108-60-1	
Carbazole	Not detected	5		ug/L	2	86-74-8	

Organics - Volatiles

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 06/19/25 04:52, Analyst: ACK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	30		ug/L	1	76-13-1	
Acetone	Not detected	20		ug/L	1	67-64-1	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Methyl Acetate	Not detected	10		ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	20		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1		ug/L	1	75-71-8	
Chloromethane	Not detected	1		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	2		ug/L	1	74-83-9	
Chloroethane	Not detected	1		ug/L	1	75-00-3	



Analytical Laboratory Report

Lab Sample ID: S75725.02 (continued)

Sample Tag: EastP-Trap_061625

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 06/19/25 04:52, Analyst: ACK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	1	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	17	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
Cyclohexane	Not detected	1		ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	12	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	20		ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dibromo-3-chloropropane	Not detected	1		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	2		ug/L	1	120-82-1	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Naphthalene	Not detected	1		ug/L	1	91-20-3	
Total Xylenes	Not detected	3		ug/L	1	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S75725.03

Sample Tag: MH3-9_061625

Collected Date/Time: 06/16/2025 13:10

Matrix: Groundwater

COC Reference: 181757

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40mL Glass	HCL	Yes	16.8	IR
4	1L Amber	None	Yes	16.8	IR
2	125mL Plastic	HNO3	Yes	16.8	IR
1	LLHg Kit	None	Yes	16.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/19/25 10:35	NDK	
Metal Digestion	Completed	SW3015A	06/18/25 10:15	CCM	
Metal Digestion	Completed	SW3015A	06/18/25 10:15	CCM	
BNA Extraction	Completed	SW3510C	06/23/25 11:30	DJS	
Extraction, PCB*	Completed	E608.3	06/19/25 16:00	JWR	
Mercury Digestion*	Completed	SW7471B	06/17/25 10:17	CTV	
Mercury Digestion*	Completed	SW7471B	06/17/25 10:17	CTV	

Metals

Method: SW6020A, Run Date: 06/18/25 12:19, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	0.006	0.002		mg/L	5	7440-38-2	
Barium	0.077	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Copper	Not detected	0.005		mg/L	5	7440-50-8	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.203	0.005		mg/L	5	7439-96-5	
Nickel	0.006	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW6020A, Run Date: 06/18/25 12:22, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony, Dissolved*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic, Dissolved	0.005	0.002		mg/L	5	7440-38-2	
Barium, Dissolved	0.073	0.005		mg/L	5	7440-39-3	
Beryllium, Dissolved	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium, Dissolved	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt, Dissolved	Not detected	0.005		mg/L	5	7440-48-4	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Lead, Dissolved	Not detected	0.003		mg/L	5	7439-92-1	



Analytical Laboratory Report

Lab Sample ID: S75725.03 (continued)

Sample Tag: MH3-9_061625

Method: SW6020A, Run Date: 06/18/25 12:22, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Manganese, Dissolved	0.167	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	0.006	0.005		mg/L	5	7440-02-0	
Selenium, Dissolved	Not detected	0.005		mg/L	5	7782-49-2	
Silver, Dissolved	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium, Dissolved	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium, Dissolved	Not detected	0.005		mg/L	5	7440-62-2	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW7471B, Run Date: 06/17/25 14:01, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury*	Not detected	0.0002		mg/L	1	7439-97-6	

Method: SW7471B, Run Date: 06/17/25 14:04, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Dissolved*	Not detected	0.0002		mg/L	1	7439-97-6	

Method: E1631E, Run Date: 06/20/25 11:45, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Low Level*	Completed	0.50		ng/L	1	7439-97-6	O

Organics - PCBs/Pesticides

PCB, Method: E608.3, Run Date: 06/19/25 19:34, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	0.1		ug/L	1	12674-11-2	
PCB-1221	Not detected	0.1		ug/L	1	11104-28-2	
PCB-1232	Not detected	0.1		ug/L	1	11141-16-5	
PCB-1242	Not detected	0.1		ug/L	1	53469-21-9	
PCB-1248	Not detected	0.1		ug/L	1	12672-29-6	
PCB-1254	Not detected	0.1		ug/L	1	11097-69-1	
PCB-1260	Not detected	0.1		ug/L	1	11096-82-5	
PCB, Total*	Not detected	0.1		ug/L	1	1336-36-3	

Organics - Semi-Volatiles

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 06/23/25 23:19, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Benzaldehyde	Not detected	5		ug/L	2	100-52-7	
Acetophenone	Not detected	5		ug/L	2	98-86-2	
Caprolactam	Not detected	10		ug/L	2	105-60-2	
1,1'-Biphenyl	Not detected	5		ug/L	2	92-52-4	
Atrazine*	Not detected	3		ug/L	2	1912-24-9	

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 06/23/25 23:19, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
4-Bromophenyl phenyl ether	Not detected	5		ug/L	2	101-55-3	
di-n-Butyl phthalate	Not detected	5		ug/L	2	84-74-2	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S75725.03 (continued)

Sample Tag: MH3-9_061625

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 06/23/25 23:19, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Benzo(a)pyrene	Not detected	5		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(ghi)perylene	Not detected	5		ug/L	2	191-24-2	
Benzo(k)fluoranthene	Not detected	5		ug/L	2	207-08-9	
Butyl benzyl phthalate	Not detected	5		ug/L	2	85-68-7	
2-Chloronaphthalene	Not detected	5		ug/L	2	91-58-7	
2-Chlorophenol	Not detected	10		ug/L	2	95-57-8	
4-Chloro-3-methylphenol	Not detected	5		ug/L	2	59-50-7	
4-Chloroaniline	Not detected	10		ug/L	2	106-47-8	
4-Chlorophenyl phenyl ether	Not detected	5		ug/L	2	7005-72-3	
bis(2-Chloroethoxy)methane	Not detected	5		ug/L	2	111-91-1	
bis(2-Chloroethyl)ether	Not detected	1		ug/L	2	111-44-4	
Chrysene	Not detected	1		ug/L	2	218-01-9	
2,4-Dichlorophenol	Not detected	10		ug/L	2	120-83-2	
2,4-Dimethylphenol	Not detected	5		ug/L	2	105-67-9	
2,4-Dinitrophenol	Not detected	25		ug/L	2	51-28-5	
2,4-Dinitrotoluene	Not detected	5		ug/L	2	121-14-2	
2,6-Dinitrotoluene	Not detected	5		ug/L	2	606-20-2	
4,6-Dinitro-2-methylphenol	Not detected	25		ug/L	2	534-52-1	
Dibenzo(ah)anthracene	Not detected	5		ug/L	2	53-70-3	
Dibenzofuran	Not detected	4		ug/L	2	132-64-9	
Diethyl phthalate	Not detected	5		ug/L	2	84-66-2	
Dimethyl phthalate	Not detected	5		ug/L	2	131-11-3	
bis(2-Ethylhexyl)phthalate	Not detected	5		ug/L	2	117-81-7	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Hexachlorocyclopentadiene	Not detected	5		ug/L	2	77-47-4	
Hexachloroethane	Not detected	5		ug/L	2	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	5		ug/L	2	193-39-5	
Isophorone	Not detected	5		ug/L	2	78-59-1	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
2-Methylphenol (o-Cresol)	Not detected	10		ug/L	2	95-48-7	
2-Nitroaniline	Not detected	25		ug/L	2	88-74-4	
2-Nitrophenol	Not detected	5		ug/L	2	88-75-5	
3-Nitroaniline	Not detected	25		ug/L	2	99-09-2	
4-Nitroaniline	Not detected	25		ug/L	2	100-01-6	
4-Nitrophenol	Not detected	25		ug/L	2	100-02-7	
N-Nitrosodi-n-propylamine	Not detected	10		ug/L	2	621-64-7	
N-Nitrosodiphenylamine	Not detected	5		ug/L	2	86-30-6	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Nitrobenzene	Not detected	3		ug/L	2	98-95-3	
di-n-Octyl phthalate	Not detected	5		ug/L	2	117-84-0	
2,4,5-Trichlorophenol	Not detected	5		ug/L	2	95-95-4	
2,4,6-Trichlorophenol	Not detected	4		ug/L	2	88-06-2	
3,3'-Dichlorobenzidine	Not detected	10		ug/L	2	91-94-1	
3-, 4-Methylphenol (p,m-Cresol)	Not detected	10		ug/L	2	3/4-CRESOL	
Pentachlorophenol	Not detected	5		ug/L	2	87-86-5	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Phenol	Not detected	5		ug/L	2	108-95-2	
Pyrene	Not detected	5		ug/L	2	129-00-0	



Analytical Laboratory Report

Lab Sample ID: S75725.03 (continued)

Sample Tag: MH3-9_061625

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 06/23/25 23:19, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Hexachlorobenzene	Not detected	5		ug/L	2	118-74-1	
Hexachlorobutadiene	Not detected	5		ug/L	2	87-68-3	
bis(2-Chloroisopropyl)ether*	Not detected	5		ug/L	2	108-60-1	
Carbazole	Not detected	5		ug/L	2	86-74-8	

Organics - Volatiles

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 06/19/25 05:15, Analyst: ACK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	30		ug/L	1	76-13-1	
Acetone	Not detected	20		ug/L	1	67-64-1	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Methyl Acetate	Not detected	10		ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	20		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1		ug/L	1	75-71-8	
Chloromethane	Not detected	1		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	2		ug/L	1	74-83-9	
Chloroethane	Not detected	1		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	1	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
Cyclohexane	Not detected	1		ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	1	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	20		ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	



Analytical Laboratory Report

Lab Sample ID: S75725.03 (continued)

Sample Tag: MH3-9_061625

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 06/19/25 05:15, Analyst: ACK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Isopropylbenzene	Not detected	1		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dibromo-3-chloropropane	Not detected	1		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	2		ug/L	1	120-82-1	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Naphthalene	Not detected	1		ug/L	1	91-20-3	
Total Xylenes	Not detected	3		ug/L	1	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S75725.04

Sample Tag: Trip Blank

Collected Date/Time: 06/16/2025 00:01

Matrix: Water

COC Reference: 181757

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40mL Glass	HCL	Yes	16.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/19/25 10:35	NDK	

Organics - Volatiles

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 06/19/25 01:19, Analyst: ACK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	30		ug/L	1	76-13-1	
Acetone	Not detected	20		ug/L	1	67-64-1	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Methyl Acetate	Not detected	10		ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	20		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1		ug/L	1	75-71-8	
Chloromethane	Not detected	1		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	2		ug/L	1	74-83-9	
Chloroethane	Not detected	1		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
Cyclohexane	Not detected	1		ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	20		ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	2	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	



Analytical Laboratory Report

Lab Sample ID: S75725.04 (continued)

Sample Tag: Trip Blank

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 06/19/25 01:19, Analyst: ACK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dibromo-3-chloropropane	Not detected	1		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	2		ug/L	1	120-82-1	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Naphthalene	Not detected	1		ug/L	1	91-20-3	
Total Xylenes	Not detected	3		ug/L	1	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S75725.05
Sample Tag: Field Blank
Collected Date/Time: 06/16/2025 13:25
Matrix: Water
COC Reference: 181757

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	LLHg Kit	None	Yes	16.8	IR

Metals

Method: E1631E, Run Date: 06/20/25 11:59, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Low Level*	Completed	0.50		ng/L	1	7439-97-6	O

O-Analysis performed by outside laboratory. See attached report.

Merit Laboratories Login Checklist

Lab Set ID:S75725

Client:ARCADIS_NOVI (ARCADIS U.S., Inc.)

Project: 30282188.01

Submitted:06/16/2025 15:15 Login User: MAM

Attention: Erin Kozak

Address: Arcadis US, Inc.
28550 Cabot Drive
Suite 500
Novi, MI 48377

Phone: O: 810-225-1901 FAX:

Email:erin.kozak@arcadis.com

Selection	Description	Note
Sample Receiving		
01.	☐ Yes ☒ No ☐ N/A	Samples are received at 4C +/- 2C Thermometer # 16.8 IR
02.	☒ Yes ☐ No ☐ N/A	Received on ice/ cooling process begun
03.	☐ Yes ☒ No ☐ N/A	Samples shipped
04.	☐ Yes ☒ No ☐ N/A	Samples left in 24 hr. drop box
05.	☐ Yes ☐ No ☒ N/A	Are there custody seals/tape or is the drop box locked
Chain of Custody		
06.	☒ Yes ☐ No ☐ N/A	COC adequately filled out
07.	☒ Yes ☐ No ☐ N/A	COC signed and relinquished to the lab
08.	☒ Yes ☐ No ☐ N/A	Sample tag on bottles match COC
09.	☒ Yes ☐ No ☐ N/A	Subcontracting needed? Subcontacted to: Eurofins
Preservation		
10.	☒ Yes ☐ No ☐ N/A	Do sample have correct chemical preservation
11.	☒ Yes ☐ No ☐ N/A	Completed pH checks on preserved samples? (no VOAs)
12.	☐ Yes ☒ No ☐ N/A	Did any samples need to be preserved in the lab?
Bottle Conditions		
13.	☒ Yes ☐ No ☐ N/A	All bottles intact
14.	☒ Yes ☐ No ☐ N/A	Appropriate analytical bottles are used
15.	☒ Yes ☐ No ☐ N/A	Merit bottles used
16.	☒ Yes ☐ No ☐ N/A	Sufficient sample volume received
17.	☐ Yes ☒ No ☐ N/A	Samples require laboratory filtration
18.	☒ Yes ☐ No ☐ N/A	Samples submitted within holding time
19.	☐ Yes ☒ No ☐ N/A	Do water VOC, TOX, DO or Alkalinity bottles contain

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____

Merit Laboratories Bottle Preservation Check

Lab Set ID: S75725 Submitted: 06/16/2025 15:15

Client: ARCADIS_NOVI (ARCADIS U.S., Inc.)

Project: 30282188.01

Initial Preservation Check: 06/16/2025 15:50 MAM

Preservation Recheck (E200.8): N/A

Attention: Erin Kozak

Address: Arcadis US, Inc.
28550 Cabot Drive
Suite 500
Novi, MI 48377

Phone: O: 810-225-1901 FAX:

Email: erin.kozak@arcadis.com

Sample ID	Bottle / Preservation	pH (Orig)	Add ml	pH (New)	Notes
S75725.01	125mL Plastic HNO3	<2			
S75725.01	125mL Plastic HNO3	<2			
S75725.02	125mL Plastic HNO3	<2			
S75725.02	125mL Plastic HNO3	<2			
S75725.03	125mL Plastic HNO3	<2			
S75725.03	125mL Plastic HNO3	<2			



ANALYTICAL REPORT

PREPARED FOR

Attn: Lab Results
Merit Laboratories
2680 E Lansing Drive
East Lansing, Michigan 48823

Generated 6/23/2025 8:10:16 AM

JOB DESCRIPTION

S75725 LL Hg

JOB NUMBER

190-37278-1

Eurofins Michigan

Job Notes

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Sue Schafer, Project Manager II
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(810)229-2763



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Sample Summary

Client: Merit Laboratories
Project/Site: S75725 LL Hg

Job ID: 190-37278-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
190-37278-1	S75725.03	Water	06/16/25 13:10	06/18/25 11:06
190-37278-2	S75725.05	Water	06/16/25 13:25	06/18/25 11:06

1

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Case Narrative

Client: Merit Laboratories
Project: S75725 LL Hg

Job ID: 190-37278-1

Job ID: 190-37278-1

Eurofins Michigan

Job Narrative 190-37278-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 6/18/2025 11:06 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 8.0°C.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Michigan

Client Sample Results

Client: Merit Laboratories
Project/Site: S75725 LL Hg

Job ID: 190-37278-1

Client Sample ID: S75725.03

Lab Sample ID: 190-37278-1

Date Collected: 06/16/25 13:10

Matrix: Water

Date Received: 06/18/25 11:06

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	6.7		0.50	ng/L		06/19/25 16:30	06/20/25 11:45	1

Client Sample ID: S75725.05

Lab Sample ID: 190-37278-2

Date Collected: 06/16/25 13:25

Matrix: Water

Date Received: 06/18/25 11:06

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.50		0.50	ng/L		06/19/25 16:30	06/20/25 11:59	1

QC Sample Results

Client: Merit Laboratories
Project/Site: S75725 LL Hg

Job ID: 190-37278-1

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 240-660630/1-A

Matrix: Water

Analysis Batch: 660806

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 660630

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.50		0.50	ng/L		06/19/25 16:30	06/20/25 11:35	1

Lab Sample ID: LCS 240-660630/2-A

Matrix: Water

Analysis Batch: 660806

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 660630

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.60		ng/L		92	77 - 123

Lab Sample ID: 190-37278-1 MS

Matrix: Water

Analysis Batch: 660806

Client Sample ID: S75725.03

Prep Type: Total/NA

Prep Batch: 660630

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	6.7		5.00	11.4		ng/L		95	71 - 125

Lab Sample ID: 190-37278-1 MSD

Matrix: Water

Analysis Batch: 660806

Client Sample ID: S75725.03

Prep Type: Total/NA

Prep Batch: 660630

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	6.7		5.00	11.4		ng/L		96	71 - 125	0	24

Lab Sample ID: 190-37278-2 MS

Matrix: Water

Analysis Batch: 660806

Client Sample ID: S75725.05

Prep Type: Total/NA

Prep Batch: 660630

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.50		5.00	5.17		ng/L		103	71 - 125

Lab Sample ID: 190-37278-2 MSD

Matrix: Water

Analysis Batch: 660806

Client Sample ID: S75725.05

Prep Type: Total/NA

Prep Batch: 660630

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.50		5.00	5.22		ng/L		104	71 - 125	1	24

Definitions/Glossary

Client: Merit Laboratories
Project/Site: S75725 LL Hg

Job ID: 190-37278-1

Glossary

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

QC Association Summary

Client: Merit Laboratories
Project/Site: S75725 LL Hg

Job ID: 190-37278-1

Metals

Prep Batch: 660630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
190-37278-1	S75725.03	Total/NA	Water	1631E	
190-37278-2	S75725.05	Total/NA	Water	1631E	
MB 240-660630/1-A	Method Blank	Total/NA	Water	1631E	
LCS 240-660630/2-A	Lab Control Sample	Total/NA	Water	1631E	
190-37278-1 MS	S75725.03	Total/NA	Water	1631E	
190-37278-1 MSD	S75725.03	Total/NA	Water	1631E	
190-37278-2 MS	S75725.05	Total/NA	Water	1631E	
190-37278-2 MSD	S75725.05	Total/NA	Water	1631E	

Analysis Batch: 660806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
190-37278-1	S75725.03	Total/NA	Water	1631E	660630
190-37278-2	S75725.05	Total/NA	Water	1631E	660630
MB 240-660630/1-A	Method Blank	Total/NA	Water	1631E	660630
LCS 240-660630/2-A	Lab Control Sample	Total/NA	Water	1631E	660630
190-37278-1 MS	S75725.03	Total/NA	Water	1631E	660630
190-37278-1 MSD	S75725.03	Total/NA	Water	1631E	660630
190-37278-2 MS	S75725.05	Total/NA	Water	1631E	660630
190-37278-2 MSD	S75725.05	Total/NA	Water	1631E	660630

Lab Chronicle

Client: Merit Laboratories
Project/Site: S75725 LL Hg

Job ID: 190-37278-1

Client Sample ID: S75725.03

Lab Sample ID: 190-37278-1

Date Collected: 06/16/25 13:10

Matrix: Water

Date Received: 06/18/25 11:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631E			660630	TQ6W	EET CLE	06/19/25 16:30
Total/NA	Analysis	1631E		1	660806	TQ6W	EET CLE	06/20/25 11:45

Client Sample ID: S75725.05

Lab Sample ID: 190-37278-2

Date Collected: 06/16/25 13:25

Matrix: Water

Date Received: 06/18/25 11:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631E			660630	TQ6W	EET CLE	06/19/25 16:30
Total/NA	Analysis	1631E		1	660806	TQ6W	EET CLE	06/20/25 11:59

Client Sample ID: Method Blank

Lab Sample ID: MB 240-660630/1-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631E			660630	TQ6W	EET CLE	06/19/25 16:30
Total/NA	Analysis	1631E		1	660806	TQ6W	EET CLE	06/20/25 11:35

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 240-660630/2-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631E			660630	TQ6W	EET CLE	06/19/25 16:30
Total/NA	Analysis	1631E		1	660806	TQ6W	EET CLE	06/20/25 11:40

Client Sample ID: S75725.03

Lab Sample ID: 190-37278-1 MS

Date Collected: 06/16/25 13:10

Matrix: Water

Date Received: 06/18/25 11:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631E			660630	TQ6W	EET CLE	06/19/25 16:30
Total/NA	Analysis	1631E		1	660806	TQ6W	EET CLE	06/20/25 11:50

Client Sample ID: S75725.03

Lab Sample ID: 190-37278-1 MSD

Date Collected: 06/16/25 13:10

Matrix: Water

Date Received: 06/18/25 11:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631E			660630	TQ6W	EET CLE	06/19/25 16:30
Total/NA	Analysis	1631E		1	660806	TQ6W	EET CLE	06/20/25 11:55

Eurofins Michigan

Lab Chronicle

Client: Merit Laboratories
Project/Site: S75725 LL Hg

Job ID: 190-37278-1

Client Sample ID: S75725.05
Date Collected: 06/16/25 13:25
Date Received: 06/18/25 11:06

Lab Sample ID: 190-37278-2 MS
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631E			660630	TQ6W	EET CLE	06/19/25 16:30
Total/NA	Analysis	1631E		1	660806	TQ6W	EET CLE	06/20/25 12:04

Client Sample ID: S75725.05
Date Collected: 06/16/25 13:25
Date Received: 06/18/25 11:06

Lab Sample ID: 190-37278-2 MSD
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631E			660630	TQ6W	EET CLE	06/19/25 16:30
Total/NA	Analysis	1631E		1	660806	TQ6W	EET CLE	06/20/25 12:09

Laboratory References:
EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Analyst References:
Lab: EET CLE
Batch Type: Prep
TQ6W = Bryan Perelka
Batch Type: Analysis
TQ6W = Bryan Perelka

Accreditation/Certification Summary

Client: Merit Laboratories
Project/Site: S75725 LL Hg

Job ID: 190-37278-1

Laboratory: Eurofins Cleveland

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

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-27
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-15-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

Method Summary

Client: Merit Laboratories
Project/Site: S75725 LL Hg

Job ID: 190-37278-1

Method	Method Description	Protocol	Laboratory
1631E	Mercury, Low Level (CVAFS)	EPA	EET CLE
1631E	Preparation, Mercury, Low Level	EPA	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396



2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 1

REPORT TO

CONTACT NAME Project Management Team

COMPANY Merit Laboratories

ADDRESS 2680 East Lansing Drive

CITY East Lansing

PHONE NO. 517-332-0167

E-MAIL ADDRESS Results@meritlabs.com

PROJECT NO. S75725

CHAIN OF CUSTODY RECORD

CONTACT NAME Accounting

COMPANY Merit Laboratories

ADDRESS 2680 East Lansing Drive

CITY East Lansing

PHONE NO. 517-332-0167

E-MAIL ADDRESS accounting@meritlabs.com

INVOICE TO

☒ SAME

STATE MI ZIP CODE 48823

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

DELIVERABLES REQUIRED ☒ STD ☐ LEVEL I ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ DD ☐ OTHER

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

MATRIX CODE GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID
SL=SLUDGE DW=DRINKING WATER O=OIL WP=WPIPE A=AIR W=WASTE

YEAR DATE TIME

6/16/25 1310 S75725-03

6/16/25 1325 S75725-05

W 1 1

W 1 1

W 1 1

W 1 1

W 1 1

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Certifications

☐ OHIO VAP ☐ Drinking Water

☐ DoD ☐ MPDES

Project Locations

☐ Detroit ☐ New York

☐ Other

Special Instructions

W=Water

Low-Level Mercury

✓

✓

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✓

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✓

✓

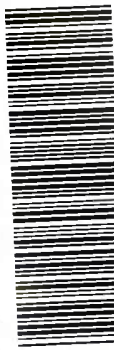
✓

✓

✓

✓

✓



190-37278 Chain of Custody

** Subcontracted to

Eurofins

RELINQUISHED BY: *My Chilton* DATE: 6/17/25 TIME: 1530
SIGNATURE ORGANIZATION: Merit Labs
RECEIVED BY: *Walter Jr* DATE: 6/17/25 TIME: 1531
SIGNATURE ORGANIZATION: Merit Labs
RELINQUISHED BY: *Walter Jr* DATE: 6/17/25 TIME: 1531
SIGNATURE ORGANIZATION: Merit Labs

RELINQUISHED BY: *Walter Jr* DATE: 6/17/25 TIME: 1532
SIGNATURE ORGANIZATION: Merit Labs
RECEIVED BY: *Walter Jr* DATE: 6/18/25 TIME: 11:06
SIGNATURE ORGANIZATION: Merit Labs
RELINQUISHED BY: *Walter Jr* DATE: 6/18/25 TIME: 11:06
SIGNATURE ORGANIZATION: Merit Labs

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY OF PREVENTING FALSIFICATION



Environment Testing
TestAmerica

- ☐ SDS or Known Hazard Information Supplied by Client
☐ Discrepancies
☐ Short Hold
☐ Rush ☐ 24 Hr ☐ 2-Day ☐ 3-Day ☐ 5-Day ☐ Other:
Receipt Evaluation Performed by: Initials: RL Date: 6/18 Time: 11:08

Client ID: Merit
Work Order #: 37278

Cooler / Sample Receipt

After hours receipt: complete gray areas. Place cooler in walk-in, place form in Receiving box. Date: _____ Time: _____

Method of Shipment:

☒ Walk-In Client Eurofins TA Field/Courier
Other Client / 3rd Party Courier: _____
Fed Ex Tracking #: _____
UPS Tracking #: _____
Other: _____

Shipping Container Type:

☒ Cooler ☐ Box
☐ None ☐ Other: _____

Packing Materials:

☒ Plastic Bags ☐ Foam
☒ Bubble Wrap ☐ Paper
☒ Packing Peanuts ☐ None
☐ Other: _____

Custody Seals Intact:

☐ Yes ☐ No
☒ NA (not used or required)

Cooling Materials:

☐ Ice (Solid) ☐ Ice (Melted)
☐ Blue Ice ☐ None
☐ Other: _____

Bacteriological Samples	Temp Corrected (°C)	Frozen?		Rec'd Within 2 Hrs?		Sample Flagged?	
		Yes	No	Yes	No	Yes	No

Received on same day sampled? Yes ☒ No ☐

Additional Sheets Required? Yes ☐ No ☒

Receipt Temperatures

Thermometer ID	Observed (°C)	Corrected (°C)	Temp Blank	Sample Temp	Acceptable	Cooler ID	Affected Samples
CP313207	8.0	8.0			Y N		
					Y N		
					Y N		

Receipt Questions**	Y	N	NA	"No" answers require additional comment
CoC present and ETA receipt signature, date, and time properly documented?	☒			
Containers and Labels in good condition? (unbroken, not leaking, appropriately filled, labels legible & attached)	☒			
Appropriate containers used and adequate volume provided?	☒			Preserved bottles checked for pH? Yes ☒ No ☐ pH strip lot # _____
Number of sample containers match CoC?	☒			
Samples received within hold?	☒			
Samples submitted for GRO and Volatiles analysis (8260, 624, 524) received without headspace?			☒	
Was a Trip Blank received with VOA samples?				
Were the samples free of any questionable physical conformities? (i.e.: field duplicates or multiple bottles of the same sample do not significantly vary in appearance - color, solid proportions, etc.)	☒			
Were the CoC bottle labels and all other items free of all other discrepancies or issues that would need to be addressed with the Project Manager and/or Client?	☒			
**May not be applicable if samples are not for compliance testing				

Client Contact Record

Contact Via: ☐ Phone ☐ Email ☐ Other: _____ Person Contacted: _____ Date/Time: _____
☐ Discrepancy allowance agreement is on record in the client project file

Discussion / Resolution

Any additional documentation and clarification from the client must be noted in the narrative and/or scanned into the CoC directory.

Reviewed by [Signature] Date: 6/18/2025

WI-MI-010_020720

[illegible]

Eurofins - Cleveland Sample Receipt Form/Narrative

Login #

Client Eurofins Nicky Site Name NA Cooler unpacked by JC

Cooler Received on 6-19-25 Opened on 6-19-25

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

Receipt After-hours Drop-off Date/Time Storage Location

Eurofins Cooler # 0 Foam Box Client Cooler Box Other

Packing material used: Wet Ice Bubble Wrap Foam Plastic Bag None Other

1 Cooler temperature upon receipt 0.5 (CF) 0.5 °C Observed Cooler Temp 0.1 °C Corrected Cooler Temp 0.6 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity Yes No No

-Were the seals on the outside of the cooler(s) signed & dated? Yes No NA

-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No NA

-Were tamper/custody seals intact and uncompromised? Yes No NA

3 Shippers' packing slip attached to the cooler(s)? Yes No NA

4 Did custody papers accompany the sample(s)? Yes No NA

5 Were the custody papers reviewed & signed in the appropriate place? Yes No NA

6 Was/were the person(s) who collected the samples clearly identified on the COC? Yes No NA

7 Did all bottles arrive in good condition (Unbroken)? Yes No NA

8 Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes No NA

9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)? Yes No NA

10 Were correct bottle(s) used for the test(s) indicated? Yes No NA

11 Sufficient quantity received to perform indicated analyses? Yes No NA

12 Are these work share samples and all listed on the COC? Yes No NA

If Yes, Questions 13-17 have been checked at the originating laboratory

13 Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC463162

14 Were VOAs on the COC? Yes No NA

15 Were air bubbles >6 mm in any VOA vials? Yes No NA

16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # Yes No NA

17 Was a LL Hg or Me Hg trip blank present? Yes No NA

Contacted PM NA Date NA by NA via Verbal Voice Mail Other

Concerning NA

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by: Labels Verified by:

19 SAMPLE CONDITION

Sample(s) NA were received after the recommended holding time had expired.

Sample(s) NA were received in a broken container

Sample(s) NA were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) NA were further preserved in the laboratory

Time preserved NA Preservative(s) added/Lot number(s) NA

VOA Sample Preservation - Date/Time VOAs Frozen NA

Tests that are not checked for pH by Receiving. VOAs Oil and Grease TOC



Analytical Laboratory Report

Report ID: S75812.01(01)
Generated on 06/25/2025

Report to
Attention: Madison Olender
Arcadis US, Inc.
28550 Cabot Drive, Suite 500
Novi, MI 48377

Phone: 248-790-1666 FAX:
Email: Madison.Olender@arcadis.com

Additional Contacts: Megan Humphrey, Tiffany Linder, Oran Day

Report produced by
Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:
John Lavery (johnlavery@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary
Lab Sample ID(s): S75812.01-S75812.05
Project: 30282188.01 / Buick City
Collected Date(s): 06/17/2025 - 06/18/2025
Submitted Date/Time: 06/18/2025 16:25
Sampled by: Donald Richmond
P.O. #: 30282188.01

Table of Contents

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- Glossary of Abbreviations (Page 3)
- Method Summary (Page 4)
- Sample Summary (Page 5)


Maya Murshak
Technical Director



Analytical Laboratory Report

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.

Methods may be modified for improved performance.

Results reported on a dry weight basis where applicable.

'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).

When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.

40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile, and 2-chloroethylvinyl ether need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.

QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.

Starred (*) analytes are not NY NELAP accredited.

Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)

PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."

Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.

Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

All accreditations/certifications held by this laboratory are listed on page 3. Not all accreditations/certifications are applicable to this report.

For a specific list of accredited analytes, please feel free to contact the laboratory or visit <https://www.meritlabs.com/certifications>.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Accreditations (For Reference Only)

Authority	Accreditation ID
Michigan DEQ	#9956
DOD ELAP & ISO/IEC 17025:2017	#69699 PJLA Testing
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
o	Associated EIS outside of control limits
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
q	Qualifier ion ratio outside of control limits
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched



Analytical Laboratory Report

Method Summary

Method	Version
N/A	Not Applicable
SW3015A	SW 846 Method 3015A Revision 1 February 2007
SW3510C	SW 846 Method 3510C Revision 3 December 1996
SW5030C/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5030C Revision 3 May 2003
SW6020A	SW 846 Method 6020A Revision 1 February 2007
SW7471B	SW 846 Method 7471B Revision 2 February 2007
SW8270D	SW 846 Method 8270D Revision 4 February 2007



Analytical Laboratory Report

Sample Summary (5 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S75812.01	RFI-81-33_061725	Groundwater	06/17/25 13:25
S75812.02	RFI-81-12R_061725	Groundwater	06/17/25 15:00
S75812.03	RFI-23-01R_061825	Groundwater	06/18/25 11:55
S75812.04	RFI-12-40_061825	Groundwater	06/18/25 13:15
S75812.05	Trip Blank	Water	06/17/25 00:01



Analytical Laboratory Report

Lab Sample ID: S75812.01

Sample Tag: RFI-81-33_061725

Collected Date/Time: 06/17/2025 13:25

Matrix: Groundwater

COC Reference: 181756

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40mL Glass	HCL	Yes	3.8	IR
2	1L Amber	None	Yes	3.8	IR
2	125mL Plastic	HNO3	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/23/25 11:10	NDK	
Metal Digestion	Completed	SW3015A	06/25/25 09:30	CCM	
Metal Digestion	Completed	SW3015A	06/25/25 09:30	CCM	
BNA Extraction	Completed	SW3510C	06/23/25 11:30	DJS	
Mercury Digestion*	Completed	SW7471B	06/20/25 11:23	CTV	
Mercury Digestion*	Completed	SW7471B	06/20/25 11:23	CTV	

Metals

Method: SW6020A, Run Date: 06/25/25 11:44, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	0.005	0.002		mg/L	5	7440-38-2	
Barium	0.150	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Copper	Not detected	0.005		mg/L	5	7440-50-8	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	1.43	0.005		mg/L	5	7439-96-5	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW6020A, Run Date: 06/25/25 11:48, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony, Dissolved*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic, Dissolved	Not detected	0.002		mg/L	5	7440-38-2	
Barium, Dissolved	0.141	0.005		mg/L	5	7440-39-3	
Beryllium, Dissolved	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium, Dissolved	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt, Dissolved	Not detected	0.005		mg/L	5	7440-48-4	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Lead, Dissolved	Not detected	0.003		mg/L	5	7439-92-1	
Manganese, Dissolved	1.30	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	



Analytical Laboratory Report

Lab Sample ID: S75812.01 (continued)

Sample Tag: RFI-81-33_061725

Method: SW6020A, Run Date: 06/25/25 11:48, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium, Dissolved	Not detected	0.005		mg/L	5	7782-49-2	
Silver, Dissolved	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium, Dissolved	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium, Dissolved	Not detected	0.005		mg/L	5	7440-62-2	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW7471B, Run Date: 06/20/25 14:49, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury*	Not detected	0.0002		mg/L	1	7439-97-6	

Method: SW7471B, Run Date: 06/20/25 14:53, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Dissolved*	Not detected	0.0002		mg/L	1	7439-97-6	

Organics - Semi-Volatiles

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 06/24/25 01:01, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Benzaldehyde	Not detected	5		ug/L	2	100-52-7	
Acetophenone	Not detected	5		ug/L	2	98-86-2	
Caprolactam	Not detected	10		ug/L	2	105-60-2	
1,1'-Biphenyl	Not detected	5		ug/L	2	92-52-4	
Atrazine*	Not detected	3		ug/L	2	1912-24-9	

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 06/24/25 01:01, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
4-Bromophenyl phenyl ether	Not detected	5		ug/L	2	101-55-3	
di-n-Butyl phthalate	Not detected	5		ug/L	2	84-74-2	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	5		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(ghi)perylene	Not detected	5		ug/L	2	191-24-2	
Benzo(k)fluoranthene	Not detected	5		ug/L	2	207-08-9	
Butyl benzyl phthalate	Not detected	5		ug/L	2	85-68-7	
2-Chloronaphthalene	Not detected	5		ug/L	2	91-58-7	
2-Chlorophenol	Not detected	10		ug/L	2	95-57-8	
4-Chloro-3-methylphenol	Not detected	5		ug/L	2	59-50-7	
4-Chloroaniline	Not detected	10		ug/L	2	106-47-8	
4-Chlorophenyl phenyl ether	Not detected	5		ug/L	2	7005-72-3	
bis(2-Chloroethoxy)methane	Not detected	5		ug/L	2	111-91-1	
bis(2-Chloroethyl)ether	Not detected	1		ug/L	2	111-44-4	
Chrysene	Not detected	1		ug/L	2	218-01-9	
2,4-Dichlorophenol	Not detected	10		ug/L	2	120-83-2	
2,4-Dimethylphenol	Not detected	5		ug/L	2	105-67-9	
2,4-Dinitrophenol	Not detected	25		ug/L	2	51-28-5	
2,4-Dinitrotoluene	Not detected	5		ug/L	2	121-14-2	
2,6-Dinitrotoluene	Not detected	5		ug/L	2	606-20-2	
4,6-Dinitro-2-methylphenol	Not detected	25		ug/L	2	534-52-1	



Analytical Laboratory Report

Lab Sample ID: S75812.01 (continued)

Sample Tag: RFI-81-33_061725

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 06/24/25 01:01, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibenzo(ah)anthracene	Not detected	5		ug/L	2	53-70-3	
Dibenzofuran	Not detected	4		ug/L	2	132-64-9	
Diethyl phthalate	Not detected	5		ug/L	2	84-66-2	
Dimethyl phthalate	Not detected	5		ug/L	2	131-11-3	
bis(2-Ethylhexyl)phthalate	Not detected	5		ug/L	2	117-81-7	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Hexachlorocyclopentadiene	Not detected	5		ug/L	2	77-47-4	
Hexachloroethane	Not detected	5		ug/L	2	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	5		ug/L	2	193-39-5	
Isophorone	Not detected	5		ug/L	2	78-59-1	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
2-Methylphenol (o-Cresol)	Not detected	10		ug/L	2	95-48-7	
2-Nitroaniline	Not detected	25		ug/L	2	88-74-4	
2-Nitrophenol	Not detected	5		ug/L	2	88-75-5	
3-Nitroaniline	Not detected	25		ug/L	2	99-09-2	
4-Nitroaniline	Not detected	25		ug/L	2	100-01-6	
4-Nitrophenol	Not detected	25		ug/L	2	100-02-7	
N-Nitrosodi-n-propylamine	Not detected	10		ug/L	2	621-64-7	
N-Nitrosodiphenylamine	Not detected	5		ug/L	2	86-30-6	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Nitrobenzene	Not detected	3		ug/L	2	98-95-3	
di-n-Octyl phthalate	Not detected	5		ug/L	2	117-84-0	
2,4,5-Trichlorophenol	Not detected	5		ug/L	2	95-95-4	
2,4,6-Trichlorophenol	Not detected	4		ug/L	2	88-06-2	
3,3'-Dichlorobenzidine	Not detected	10		ug/L	2	91-94-1	
3-, 4-Methylphenol (p,m-Cresol)	Not detected	10		ug/L	2	3/4-CRESOL	
Pentachlorophenol	Not detected	5		ug/L	2	87-86-5	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Phenol	Not detected	5		ug/L	2	108-95-2	
Pyrene	Not detected	5		ug/L	2	129-00-0	
Hexachlorobenzene	Not detected	5		ug/L	2	118-74-1	
Hexachlorobutadiene	Not detected	5		ug/L	2	87-68-3	
bis(2-Chloroisopropyl)ether*	Not detected	5		ug/L	2	108-60-1	
Carbazole	Not detected	5		ug/L	2	86-74-8	

Organics - Volatiles

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 06/20/25 18:30, Analyst: ACK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	30		ug/L	1	76-13-1	
Acetone	Not detected	20		ug/L	1	67-64-1	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Methyl Acetate	Not detected	10		ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	20		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1		ug/L	1	75-71-8	
Chloromethane	Not detected	1		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	2		ug/L	1	74-83-9	
Chloroethane	Not detected	1		ug/L	1	75-00-3	



Analytical Laboratory Report

Lab Sample ID: S75812.01 (continued)

Sample Tag: RFI-81-33_061725

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 06/20/25 18:30, Analyst: ACK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
Cyclohexane	Not detected	1		ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	20		ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dibromo-3-chloropropane	Not detected	1		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	2		ug/L	1	120-82-1	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Naphthalene	Not detected	1		ug/L	1	91-20-3	
Total Xylenes	Not detected	3		ug/L	1	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S75812.02

Sample Tag: RFI-81-12R_061725

Collected Date/Time: 06/17/2025 15:00

Matrix: Groundwater

COC Reference: 181756

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40mL Glass	HCL	Yes	3.8	IR
2	1L Amber	None	Yes	3.8	IR
2	125mL Plastic	HNO3	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/23/25 11:10	NDK	
Metal Digestion	Completed	SW3015A	06/25/25 09:30	CCM	
Metal Digestion	Completed	SW3015A	06/25/25 09:30	CCM	
BNA Extraction	Completed	SW3510C	06/23/25 11:30	DJS	
Mercury Digestion*	Completed	SW7471B	06/20/25 11:23	CTV	
Mercury Digestion*	Completed	SW7471B	06/20/25 11:23	CTV	

Metals

Method: SW6020A, Run Date: 06/25/25 11:52, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.103	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Copper	Not detected	0.005		mg/L	5	7440-50-8	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.053	0.005		mg/L	5	7439-96-5	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	0.008	0.005		mg/L	5	7440-66-6	

Method: SW6020A, Run Date: 06/25/25 11:55, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony, Dissolved*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic, Dissolved	Not detected	0.002		mg/L	5	7440-38-2	
Barium, Dissolved	0.096	0.005		mg/L	5	7440-39-3	
Beryllium, Dissolved	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium, Dissolved	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt, Dissolved	Not detected	0.005		mg/L	5	7440-48-4	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Lead, Dissolved	Not detected	0.003		mg/L	5	7439-92-1	
Manganese, Dissolved	0.008	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	



Analytical Laboratory Report

Lab Sample ID: S75812.02 (continued)

Sample Tag: RFI-81-12R_061725

Method: SW6020A, Run Date: 06/25/25 11:55, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium, Dissolved	Not detected	0.005		mg/L	5	7782-49-2	
Silver, Dissolved	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium, Dissolved	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium, Dissolved	Not detected	0.005		mg/L	5	7440-62-2	
Zinc, Dissolved	0.008	0.005		mg/L	5	7440-66-6	

Method: SW7471B, Run Date: 06/20/25 15:03, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury*	Not detected	0.0002		mg/L	1	7439-97-6	

Method: SW7471B, Run Date: 06/20/25 15:06, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Dissolved*	Not detected	0.0002		mg/L	1	7439-97-6	

Organics - Semi-Volatiles

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 06/24/25 01:34, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Benzaldehyde	Not detected	5		ug/L	2	100-52-7	
Acetophenone	Not detected	5		ug/L	2	98-86-2	
Caprolactam	Not detected	10		ug/L	2	105-60-2	
1,1'-Biphenyl	Not detected	5		ug/L	2	92-52-4	
Atrazine*	Not detected	3		ug/L	2	1912-24-9	

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 06/24/25 01:34, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
4-Bromophenyl phenyl ether	Not detected	5		ug/L	2	101-55-3	
di-n-Butyl phthalate	Not detected	5		ug/L	2	84-74-2	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	5		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(ghi)perylene	Not detected	5		ug/L	2	191-24-2	
Benzo(k)fluoranthene	Not detected	5		ug/L	2	207-08-9	
Butyl benzyl phthalate	Not detected	5		ug/L	2	85-68-7	
2-Chloronaphthalene	Not detected	5		ug/L	2	91-58-7	
2-Chlorophenol	Not detected	10		ug/L	2	95-57-8	
4-Chloro-3-methylphenol	Not detected	5		ug/L	2	59-50-7	
4-Chloroaniline	Not detected	10		ug/L	2	106-47-8	
4-Chlorophenyl phenyl ether	Not detected	5		ug/L	2	7005-72-3	
bis(2-Chloroethoxy)methane	Not detected	5		ug/L	2	111-91-1	
bis(2-Chloroethyl)ether	Not detected	1		ug/L	2	111-44-4	
Chrysene	Not detected	1		ug/L	2	218-01-9	
2,4-Dichlorophenol	Not detected	10		ug/L	2	120-83-2	
2,4-Dimethylphenol	Not detected	5		ug/L	2	105-67-9	
2,4-Dinitrophenol	Not detected	25		ug/L	2	51-28-5	
2,4-Dinitrotoluene	Not detected	5		ug/L	2	121-14-2	
2,6-Dinitrotoluene	Not detected	5		ug/L	2	606-20-2	
4,6-Dinitro-2-methylphenol	Not detected	25		ug/L	2	534-52-1	



Analytical Laboratory Report

Lab Sample ID: S75812.02 (continued)

Sample Tag: RFI-81-12R_061725

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 06/24/25 01:34, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibenzo(ah)anthracene	Not detected	5		ug/L	2	53-70-3	
Dibenzofuran	Not detected	4		ug/L	2	132-64-9	
Diethyl phthalate	Not detected	5		ug/L	2	84-66-2	
Dimethyl phthalate	Not detected	5		ug/L	2	131-11-3	
bis(2-Ethylhexyl)phthalate	Not detected	5		ug/L	2	117-81-7	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Hexachlorocyclopentadiene	Not detected	5		ug/L	2	77-47-4	
Hexachloroethane	Not detected	5		ug/L	2	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	5		ug/L	2	193-39-5	
Isophorone	Not detected	5		ug/L	2	78-59-1	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
2-Methylphenol (o-Cresol)	Not detected	10		ug/L	2	95-48-7	
2-Nitroaniline	Not detected	25		ug/L	2	88-74-4	
2-Nitrophenol	Not detected	5		ug/L	2	88-75-5	
3-Nitroaniline	Not detected	25		ug/L	2	99-09-2	
4-Nitroaniline	Not detected	25		ug/L	2	100-01-6	
4-Nitrophenol	Not detected	25		ug/L	2	100-02-7	
N-Nitrosodi-n-propylamine	Not detected	10		ug/L	2	621-64-7	
N-Nitrosodiphenylamine	Not detected	5		ug/L	2	86-30-6	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Nitrobenzene	Not detected	3		ug/L	2	98-95-3	
di-n-Octyl phthalate	Not detected	5		ug/L	2	117-84-0	
2,4,5-Trichlorophenol	Not detected	5		ug/L	2	95-95-4	
2,4,6-Trichlorophenol	Not detected	4		ug/L	2	88-06-2	
3,3'-Dichlorobenzidine	Not detected	10		ug/L	2	91-94-1	
3-, 4-Methylphenol (p,m-Cresol)	Not detected	10		ug/L	2	3/4-CRESOL	
Pentachlorophenol	Not detected	5		ug/L	2	87-86-5	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Phenol	Not detected	5		ug/L	2	108-95-2	
Pyrene	Not detected	5		ug/L	2	129-00-0	
Hexachlorobenzene	Not detected	5		ug/L	2	118-74-1	
Hexachlorobutadiene	Not detected	5		ug/L	2	87-68-3	
bis(2-Chloroisopropyl)ether*	Not detected	5		ug/L	2	108-60-1	
Carbazole	Not detected	5		ug/L	2	86-74-8	

Organics - Volatiles

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 06/20/25 18:53, Analyst: ACK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	30		ug/L	1	76-13-1	
Acetone	Not detected	20		ug/L	1	67-64-1	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Methyl Acetate	Not detected	10		ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	20		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1		ug/L	1	75-71-8	
Chloromethane	Not detected	1		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	2		ug/L	1	74-83-9	
Chloroethane	Not detected	1		ug/L	1	75-00-3	



Analytical Laboratory Report

Lab Sample ID: S75812.02 (continued)

Sample Tag: RFI-81-12R_061725

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 06/20/25 18:53, Analyst: ACK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
Cyclohexane	Not detected	1		ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	20		ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dibromo-3-chloropropane	Not detected	1		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	2		ug/L	1	120-82-1	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Naphthalene	Not detected	1		ug/L	1	91-20-3	
Total Xylenes	Not detected	3		ug/L	1	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S75812.03

Sample Tag: RFI-23-01R_061825

Collected Date/Time: 06/18/2025 11:55

Matrix: Groundwater

COC Reference: 181756

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40mL Glass	HCL	Yes	3.8	IR
2	1L Amber	None	Yes	3.8	IR
2	125mL Plastic	HNO3	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/23/25 11:10	NDK	
Metal Digestion	Completed	SW3015A	06/25/25 09:30	CCM	
Metal Digestion	Completed	SW3015A	06/25/25 09:30	CCM	
BNA Extraction	Completed	SW3510C	06/23/25 11:30	DJS	
Mercury Digestion*	Completed	SW7471B	06/20/25 11:23	CTV	
Mercury Digestion*	Completed	SW7471B	06/20/25 11:23	CTV	

Metals

Method: SW6020A, Run Date: 06/25/25 11:58, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.048	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Copper	Not detected	0.005		mg/L	5	7440-50-8	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.156	0.005		mg/L	5	7439-96-5	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW6020A, Run Date: 06/25/25 12:01, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony, Dissolved*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic, Dissolved	Not detected	0.002		mg/L	5	7440-38-2	
Barium, Dissolved	0.047	0.005		mg/L	5	7440-39-3	
Beryllium, Dissolved	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium, Dissolved	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt, Dissolved	Not detected	0.005		mg/L	5	7440-48-4	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Lead, Dissolved	Not detected	0.003		mg/L	5	7439-92-1	
Manganese, Dissolved	0.147	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	



Analytical Laboratory Report

Lab Sample ID: S75812.03 (continued)

Sample Tag: RFI-23-01R_061825

Method: SW6020A, Run Date: 06/25/25 12:01, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium, Dissolved	Not detected	0.005		mg/L	5	7782-49-2	
Silver, Dissolved	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium, Dissolved	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium, Dissolved	Not detected	0.005		mg/L	5	7440-62-2	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW7471B, Run Date: 06/20/25 15:09, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury*	Not detected	0.0002		mg/L	1	7439-97-6	

Method: SW7471B, Run Date: 06/20/25 15:13, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Dissolved*	Not detected	0.0002		mg/L	1	7439-97-6	

Organics - Semi-Volatiles

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 06/24/25 02:08, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Benzaldehyde	Not detected	5		ug/L	2	100-52-7	
Acetophenone	Not detected	5		ug/L	2	98-86-2	
Caprolactam	Not detected	10		ug/L	2	105-60-2	
1,1'-Biphenyl	Not detected	5		ug/L	2	92-52-4	
Atrazine*	Not detected	3		ug/L	2	1912-24-9	

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 06/24/25 02:08, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
4-Bromophenyl phenyl ether	Not detected	5		ug/L	2	101-55-3	
di-n-Butyl phthalate	Not detected	5		ug/L	2	84-74-2	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	5		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(ghi)perylene	Not detected	5		ug/L	2	191-24-2	
Benzo(k)fluoranthene	Not detected	5		ug/L	2	207-08-9	
Butyl benzyl phthalate	Not detected	5		ug/L	2	85-68-7	
2-Chloronaphthalene	Not detected	5		ug/L	2	91-58-7	
2-Chlorophenol	Not detected	10		ug/L	2	95-57-8	
4-Chloro-3-methylphenol	Not detected	5		ug/L	2	59-50-7	
4-Chloroaniline	Not detected	10		ug/L	2	106-47-8	
4-Chlorophenyl phenyl ether	Not detected	5		ug/L	2	7005-72-3	
bis(2-Chloroethoxy)methane	Not detected	5		ug/L	2	111-91-1	
bis(2-Chloroethyl)ether	Not detected	1		ug/L	2	111-44-4	
Chrysene	Not detected	1		ug/L	2	218-01-9	
2,4-Dichlorophenol	Not detected	10		ug/L	2	120-83-2	
2,4-Dimethylphenol	Not detected	5		ug/L	2	105-67-9	
2,4-Dinitrophenol	Not detected	25		ug/L	2	51-28-5	
2,4-Dinitrotoluene	Not detected	5		ug/L	2	121-14-2	
2,6-Dinitrotoluene	Not detected	5		ug/L	2	606-20-2	
4,6-Dinitro-2-methylphenol	Not detected	25		ug/L	2	534-52-1	



Analytical Laboratory Report

Lab Sample ID: S75812.03 (continued)

Sample Tag: RFI-23-01R_061825

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 06/24/25 02:08, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibenzo(ah)anthracene	Not detected	5		ug/L	2	53-70-3	
Dibenzofuran	Not detected	4		ug/L	2	132-64-9	
Diethyl phthalate	Not detected	5		ug/L	2	84-66-2	
Dimethyl phthalate	Not detected	5		ug/L	2	131-11-3	
bis(2-Ethylhexyl)phthalate	Not detected	5		ug/L	2	117-81-7	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Hexachlorocyclopentadiene	Not detected	5		ug/L	2	77-47-4	
Hexachloroethane	Not detected	5		ug/L	2	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	5		ug/L	2	193-39-5	
Isophorone	Not detected	5		ug/L	2	78-59-1	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
2-Methylphenol (o-Cresol)	Not detected	10		ug/L	2	95-48-7	
2-Nitroaniline	Not detected	25		ug/L	2	88-74-4	
2-Nitrophenol	Not detected	5		ug/L	2	88-75-5	
3-Nitroaniline	Not detected	25		ug/L	2	99-09-2	
4-Nitroaniline	Not detected	25		ug/L	2	100-01-6	
4-Nitrophenol	Not detected	25		ug/L	2	100-02-7	
N-Nitrosodi-n-propylamine	Not detected	10		ug/L	2	621-64-7	
N-Nitrosodiphenylamine	Not detected	5		ug/L	2	86-30-6	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Nitrobenzene	Not detected	3		ug/L	2	98-95-3	
di-n-Octyl phthalate	Not detected	5		ug/L	2	117-84-0	
2,4,5-Trichlorophenol	Not detected	5		ug/L	2	95-95-4	
2,4,6-Trichlorophenol	Not detected	4		ug/L	2	88-06-2	
3,3'-Dichlorobenzidine	Not detected	10		ug/L	2	91-94-1	
3-, 4-Methylphenol (p,m-Cresol)	Not detected	10		ug/L	2	3/4-CRESOL	
Pentachlorophenol	Not detected	5		ug/L	2	87-86-5	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Phenol	Not detected	5		ug/L	2	108-95-2	
Pyrene	Not detected	5		ug/L	2	129-00-0	
Hexachlorobenzene	Not detected	5		ug/L	2	118-74-1	
Hexachlorobutadiene	Not detected	5		ug/L	2	87-68-3	
bis(2-Chloroisopropyl)ether*	Not detected	5		ug/L	2	108-60-1	
Carbazole	Not detected	5		ug/L	2	86-74-8	

Organics - Volatiles

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 06/20/25 19:17, Analyst: ACK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	30		ug/L	1	76-13-1	
Acetone	Not detected	20		ug/L	1	67-64-1	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Methyl Acetate	Not detected	10		ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	20		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1		ug/L	1	75-71-8	
Chloromethane	Not detected	1		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	2		ug/L	1	74-83-9	
Chloroethane	Not detected	1		ug/L	1	75-00-3	



Analytical Laboratory Report

Lab Sample ID: S75812.03 (continued)

Sample Tag: RFI-23-01R_061825

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 06/20/25 19:17, Analyst: ACK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
Cyclohexane	Not detected	1		ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	2	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	20		ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dibromo-3-chloropropane	Not detected	1		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	2		ug/L	1	120-82-1	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Naphthalene	Not detected	1		ug/L	1	91-20-3	
Total Xylenes	Not detected	3		ug/L	1	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S75812.04

Sample Tag: RFI-12-40_061825

Collected Date/Time: 06/18/2025 13:15

Matrix: Groundwater

COC Reference: 181756

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40mL Glass	HCL	Yes	3.8	IR
2	1L Amber	None	Yes	3.8	IR
2	125mL Plastic	HNO3	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/23/25 11:10	NDK	
Metal Digestion	Completed	SW3015A	06/25/25 09:30	CCM	
Metal Digestion	Completed	SW3015A	06/25/25 09:30	CCM	
BNA Extraction	Completed	SW3510C	06/23/25 11:30	DJS	
Mercury Digestion*	Completed	SW7471B	06/20/25 11:23	CTV	
Mercury Digestion*	Completed	SW7471B	06/20/25 11:23	CTV	

Metals

Method: SW6020A, Run Date: 06/25/25 12:04, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.039	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Copper	Not detected	0.005		mg/L	5	7440-50-8	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.304	0.005		mg/L	5	7439-96-5	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW6020A, Run Date: 06/25/25 12:07, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony, Dissolved*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic, Dissolved	Not detected	0.002		mg/L	5	7440-38-2	
Barium, Dissolved	0.038	0.005		mg/L	5	7440-39-3	
Beryllium, Dissolved	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium, Dissolved	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt, Dissolved	Not detected	0.005		mg/L	5	7440-48-4	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Lead, Dissolved	Not detected	0.003		mg/L	5	7439-92-1	
Manganese, Dissolved	0.304	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	



Analytical Laboratory Report

Lab Sample ID: S75812.04 (continued)

Sample Tag: RFI-12-40_061825

Method: SW6020A, Run Date: 06/25/25 12:07, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium, Dissolved	Not detected	0.005		mg/L	5	7782-49-2	
Silver, Dissolved	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium, Dissolved	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium, Dissolved	Not detected	0.005		mg/L	5	7440-62-2	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW7471B, Run Date: 06/20/25 15:16, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury*	Not detected	0.0002		mg/L	1	7439-97-6	

Method: SW7471B, Run Date: 06/20/25 15:19, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Dissolved*	Not detected	0.0002		mg/L	1	7439-97-6	

Organics - Semi-Volatiles

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 06/24/25 02:41, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Benzaldehyde	Not detected	5		ug/L	2	100-52-7	
Acetophenone	Not detected	5		ug/L	2	98-86-2	
Caprolactam	Not detected	10		ug/L	2	105-60-2	
1,1'-Biphenyl	Not detected	5		ug/L	2	92-52-4	
Atrazine*	Not detected	3		ug/L	2	1912-24-9	

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 06/24/25 02:41, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
4-Bromophenyl phenyl ether	Not detected	5		ug/L	2	101-55-3	
di-n-Butyl phthalate	Not detected	5		ug/L	2	84-74-2	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	5		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(ghi)perylene	Not detected	5		ug/L	2	191-24-2	
Benzo(k)fluoranthene	Not detected	5		ug/L	2	207-08-9	
Butyl benzyl phthalate	Not detected	5		ug/L	2	85-68-7	
2-Chloronaphthalene	Not detected	5		ug/L	2	91-58-7	
2-Chlorophenol	Not detected	10		ug/L	2	95-57-8	
4-Chloro-3-methylphenol	Not detected	5		ug/L	2	59-50-7	
4-Chloroaniline	Not detected	10		ug/L	2	106-47-8	
4-Chlorophenyl phenyl ether	Not detected	5		ug/L	2	7005-72-3	
bis(2-Chloroethoxy)methane	Not detected	5		ug/L	2	111-91-1	
bis(2-Chloroethyl)ether	Not detected	1		ug/L	2	111-44-4	
Chrysene	Not detected	1		ug/L	2	218-01-9	
2,4-Dichlorophenol	Not detected	10		ug/L	2	120-83-2	
2,4-Dimethylphenol	Not detected	5		ug/L	2	105-67-9	
2,4-Dinitrophenol	Not detected	25		ug/L	2	51-28-5	
2,4-Dinitrotoluene	Not detected	5		ug/L	2	121-14-2	
2,6-Dinitrotoluene	Not detected	5		ug/L	2	606-20-2	
4,6-Dinitro-2-methylphenol	Not detected	25		ug/L	2	534-52-1	



Analytical Laboratory Report

Lab Sample ID: S75812.04 (continued)

Sample Tag: RFI-12-40_061825

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 06/24/25 02:41, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibenzo(ah)anthracene	Not detected	5		ug/L	2	53-70-3	
Dibenzofuran	Not detected	4		ug/L	2	132-64-9	
Diethyl phthalate	Not detected	5		ug/L	2	84-66-2	
Dimethyl phthalate	Not detected	5		ug/L	2	131-11-3	
bis(2-Ethylhexyl)phthalate	Not detected	5		ug/L	2	117-81-7	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Hexachlorocyclopentadiene	Not detected	5		ug/L	2	77-47-4	
Hexachloroethane	Not detected	5		ug/L	2	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	5		ug/L	2	193-39-5	
Isophorone	Not detected	5		ug/L	2	78-59-1	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
2-Methylphenol (o-Cresol)	Not detected	10		ug/L	2	95-48-7	
2-Nitroaniline	Not detected	25		ug/L	2	88-74-4	
2-Nitrophenol	Not detected	5		ug/L	2	88-75-5	
3-Nitroaniline	Not detected	25		ug/L	2	99-09-2	
4-Nitroaniline	Not detected	25		ug/L	2	100-01-6	
4-Nitrophenol	Not detected	25		ug/L	2	100-02-7	
N-Nitrosodi-n-propylamine	Not detected	10		ug/L	2	621-64-7	
N-Nitrosodiphenylamine	Not detected	5		ug/L	2	86-30-6	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Nitrobenzene	Not detected	3		ug/L	2	98-95-3	
di-n-Octyl phthalate	Not detected	5		ug/L	2	117-84-0	
2,4,5-Trichlorophenol	Not detected	5		ug/L	2	95-95-4	
2,4,6-Trichlorophenol	Not detected	4		ug/L	2	88-06-2	
3,3'-Dichlorobenzidine	Not detected	10		ug/L	2	91-94-1	
3-, 4-Methylphenol (p,m-Cresol)	Not detected	10		ug/L	2	3/4-CRESOL	
Pentachlorophenol	Not detected	5		ug/L	2	87-86-5	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Phenol	Not detected	5		ug/L	2	108-95-2	
Pyrene	Not detected	5		ug/L	2	129-00-0	
Hexachlorobenzene	Not detected	5		ug/L	2	118-74-1	
Hexachlorobutadiene	Not detected	5		ug/L	2	87-68-3	
bis(2-Chloroisopropyl)ether*	Not detected	5		ug/L	2	108-60-1	
Carbazole	Not detected	5		ug/L	2	86-74-8	

Organics - Volatiles

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 06/20/25 19:41, Analyst: ACK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	30		ug/L	1	76-13-1	
Acetone	Not detected	20		ug/L	1	67-64-1	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Methyl Acetate	Not detected	10		ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	20		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1		ug/L	1	75-71-8	
Chloromethane	Not detected	1		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	2		ug/L	1	74-83-9	
Chloroethane	Not detected	1		ug/L	1	75-00-3	



Analytical Laboratory Report

Lab Sample ID: S75812.04 (continued)

Sample Tag: RFI-12-40_061825

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 06/20/25 19:41, Analyst: ACK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	1	1		ug/L	1	156-60-5	
1,1-Dichloroethane	2	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	3	1		ug/L	1	71-55-6	
Cyclohexane	Not detected	1		ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	8	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	20		ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dibromo-3-chloropropane	Not detected	1		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	2		ug/L	1	120-82-1	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Naphthalene	Not detected	1		ug/L	1	91-20-3	
Total Xylenes	Not detected	3		ug/L	1	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S75812.05

Sample Tag: Trip Blank

Collected Date/Time: 06/17/2025 00:01

Matrix: Water

COC Reference: 181756

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40mL Glass	HCL	Yes	3.8	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	06/23/25 11:10	NDK	

Organics - Volatiles

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 06/20/25 14:09, Analyst: ACK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	30		ug/L	1	76-13-1	
Acetone	Not detected	20		ug/L	1	67-64-1	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Methyl Acetate	Not detected	10		ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	20		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1		ug/L	1	75-71-8	
Chloromethane	Not detected	1		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	2		ug/L	1	74-83-9	
Chloroethane	Not detected	1		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
Cyclohexane	Not detected	1		ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	20		ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	2	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	



Analytical Laboratory Report

Lab Sample ID: S75812.05 (continued)

Sample Tag: Trip Blank

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 06/20/25 14:09, Analyst: ACK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dibromo-3-chloropropane	Not detected	1		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	2		ug/L	1	120-82-1	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Naphthalene	Not detected	1		ug/L	1	91-20-3	
Total Xylenes	Not detected	3		ug/L	1	1330-20-7	

Merit Laboratories Login Checklist

Lab Set ID:S75812

Client:ARCADIS_NOVI (ARCADIS U.S., Inc.)

Project: 30282188.01 / Buick City

Submitted:06/18/2025 16:25 Login User: MMC

Attention: Madison Olender

Address: Arcadis US, Inc.
28550 Cabot Drive, Suite 500
Novi, MI 48377

Phone: 248-790-1666 FAX:
Email: Madison.Olender@arcadis.com

Selection	Description	Note
Sample Receiving		
01.	☒ Yes ☐ No ☐ N/A	Samples are received at 4C +/- 2C Thermometer # IR 3.8
02.	☒ Yes ☐ No ☐ N/A	Received on ice/ cooling process begun
03.	☐ Yes ☒ No ☐ N/A	Samples shipped
04.	☐ Yes ☒ No ☐ N/A	Samples left in 24 hr. drop box
05.	☐ Yes ☐ No ☒ N/A	Are there custody seals/tape or is the drop box locked
Chain of Custody		
06.	☒ Yes ☐ No ☐ N/A	COC adequately filled out
07.	☒ Yes ☐ No ☐ N/A	COC signed and relinquished to the lab
08.	☒ Yes ☐ No ☐ N/A	Sample tag on bottles match COC
09.	☐ Yes ☒ No ☐ N/A	Subcontracting needed? Subcontacted to:
Preservation		
10.	☒ Yes ☐ No ☐ N/A	Do sample have correct chemical preservation
11.	☒ Yes ☐ No ☐ N/A	Completed pH checks on preserved samples? (no VOAs)
12.	☐ Yes ☒ No ☐ N/A	Did any samples need to be preserved in the lab?
Bottle Conditions		
13.	☒ Yes ☐ No ☐ N/A	All bottles intact
14.	☒ Yes ☐ No ☐ N/A	Appropriate analytical bottles are used
15.	☒ Yes ☐ No ☐ N/A	Merit bottles used
16.	☒ Yes ☐ No ☐ N/A	Sufficient sample volume received
17.	☐ Yes ☒ No ☐ N/A	Samples require laboratory filtration
18.	☒ Yes ☐ No ☐ N/A	Samples submitted within holding time
19.	☐ Yes ☒ No ☐ N/A	Do water VOC, TOX, DO or Alkalinity bottles contain

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____

Merit Laboratories Bottle Preservation Check

Lab Set ID: S75812 Submitted: 06/18/2025 16:25

Client: ARCADIS_NOVI (ARCADIS U.S., Inc.)

Project: 30282188.01 / Buick City

Initial Preservation Check: 06/18/2025 16:31 MMC

Preservation Recheck (E200.8): N/A

Attention: Madison Olender

Address: Arcadis US, Inc.

28550 Cabot Drive, Suite 500
Novi, MI 48377

Phone: 248-790-1666

FAX:

Email: Madison.Olender@arcadis.com

Sample ID	Bottle / Preservation	pH (Orig)	Add ml	pH (New)	Notes
S75812.01	125mL Plastic HNO3	<2			
S75812.01	125mL Plastic HNO3	<2			
S75812.02	125mL Plastic HNO3	<2			
S75812.02	125mL Plastic HNO3	<2			
S75812.03	125mL Plastic HNO3	<2			
S75812.03	125mL Plastic HNO3	<2			
S75812.04	125mL Plastic HNO3	<2			
S75812.04	125mL Plastic HNO3	<2			



2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 1

181756

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME Tiffany Linder, Megan Humphrey, Oran Day, Madison Olander			
COMPANY Arcadis			
ADDRESS 28550 Cabot Dr Suite 500			
CITY Novi		STATE MI	ZIP CODE 48377
PHONE NO. 248 790 1666	CELL NO.	PO. NO.	
E-MAIL ADDRESS Oran.Day@arcadis.com, madison.olerander@arcadis.com Tiffany.Linder@arcadis.com		QUOTE NO.	

CONTACT NAME		NAME	
COMPANY			
ADDRESS			
CITY		STATE	ZIP CODE
PHONE NO.		E-MAIL ADDRESS	

PROJECT NO./NAME 30282188-01 / Buick city	SAMPLER(S) - PLEASE PRINT/SIGN NAME Donald Richmond
TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER	
DELIVERABLES REQUIRED ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER	

MATRIX W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID CODE: SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIFE A=AIR WS=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)									
Dissolved PAL Metals Total PAL Metals VOCs SVOCs									
Certifications ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES Project Locations ☐ Detroit ☐ New York ☐ Other Special Instructions									

MERIT LAB NO. FOR LAB USE ONLY	COLLECTION		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives								D:500	Total	VOLUME	500																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							

RELINQUISHED BY: SIGNATURE/ORGANIZATION RECEIVED BY: SIGNATURE/ORGANIZATION	DATE 6/18/25 TIME 1625
RELINQUISHED BY: SIGNATURE/ORGANIZATION RECEIVED BY: SIGNATURE/ORGANIZATION	DATE 6/18/25 TIME 1825

RELINQUISHED BY: SIGNATURE/ORGANIZATION RECEIVED BY: SIGNATURE/ORGANIZATION	DATE 6/18/25 TIME 1825			
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	ICE (SOLID) ☒ ICE (MELTED) ☐	TEMP ON ARRIVAL BLUE ICE ☐ NONE ☐
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	3.8	

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

July 10, 2025

Tiffany Linder
Arcadis US, Inc.
120 N. Washington Square
Suite 300
Lansing, MI 48933

Re: **RACER Buick City**

Work Order: **HN2508386**

Revision: **1**

Dear Tiffany,

Enclosed are the results of the sample(s) submitted to our laboratory.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Alex Csaszar

/S/ ALEX CSASZAR

Project Manager



Client: Arcadis US, Inc.
Project: RACER Buick City

Work Order: HN2508386
Date Received: 19-Jun-2025

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt

9 water samples were received for analysis at ALS Environmental on 19-Jun-2025. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

SAMPLE DETECTION SUMMARY

This form includes only detections above the limits as presented.

For a full listing of sample results, continue to the Sample Results section of this Report.



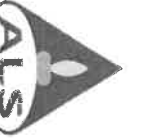
CLIENT ID: West P-Trap_061625				Lab ID: HN2508386-001		
Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorohexane sulfonic acid (PFHxS)	21.7	J	13.2	44.3	ng/L	ASTM D7979-19
Perfluorooctane sulfonic acid (PFOS)	61.7		5.19	9.51	ng/L	ASTM D7979-19
CLIENT ID: East P-Trap_061625				Lab ID: HN2508386-002		
Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorooctane sulfonic acid (PFOS)	87.5		4.99	9.13	ng/L	ASTM D7979-19
CLIENT ID: MH3-9_061625				Lab ID: HN2508386-003		
Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorooctane sulfonic acid (PFOS)	20.5		5.15	9.43	ng/L	ASTM D7979-19
Perfluorooctanoic acid (PFOA)	9.41		9.34	10.0	ng/L	ASTM D7979-19
CLIENT ID: RFI-86-14_061725				Lab ID: HN2508386-004		
Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorooctanoic acid (PFOA)	10.1		9.31	10.0	ng/L	ASTM D7979-19
CLIENT ID: RFI-81-33_061725				Lab ID: HN2508386-005		
Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorobutanoic acid (PFBA)	24.4		14.3	49.6	ng/L	ASTM D7979-19
Perfluorooctane sulfonic acid (PFOS)	6.64	J	5.11	9.35	ng/L	ASTM D7979-19
CLIENT ID: RFI-81-12R_061725				Lab ID: HN2508386-006		
Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorooctane sulfonic acid (PFOS)	27.6		5.08	9.30	ng/L	ASTM D7979-19
Perfluorooctanoic acid (PFOA)	10.5		9.24	9.94	ng/L	ASTM D7979-19
CLIENT ID: RFI-23-02R-061725				Lab ID: HN2508386-007		
Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorohexane sulfonic acid (PFHxS)	24.4		13.6	45.5	ng/L	ASTM D7979-19
Perfluorooctane sulfonic acid (PFOS)	19.4		5.14	9.41	ng/L	ASTM D7979-19
CLIENT ID: RFI-23-01R_061825				Lab ID: HN2508386-008		
Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorooctane sulfonic acid (PFOS)	28.0		5.18	9.49	ng/L	ASTM D7979-19
CLIENT ID: RFI-12-40_061825				Lab ID: HN2508386-009		
Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorooctane sulfonic acid (PFOS)	16.1		5.13	9.39	ng/L	ASTM D7979-19

SAMPLE SUMMARY



Client: Arcadis US, Inc.
Project: RACER Buick City
Workorder: HN2508386

Laboratory Sample ID	Client Sample ID	Sample Matrix	Collection Date	Date Received
HN2508386-001	West P-Trap_061625	WATER	06/16/25 10:45	06/19/25 09:30
HN2508386-002	East P-Trap_061625	WATER	06/16/25 12:20	06/19/25 09:30
HN2508386-003	MH3-9_061625	WATER	06/16/25 13:10	06/19/25 09:30
HN2508386-004	RFI-86-14_061725	WATER	06/17/25 12:30	06/19/25 09:30
HN2508386-005	RFI-81-33_061725	WATER	06/17/25 13:25	06/19/25 09:30
HN2508386-006	RFI-81-12R_061725	WATER	06/17/25 15:00	06/19/25 09:30
HN2508386-007	RFI-23-02R-061725	WATER	06/17/25 16:25	06/19/25 09:30
HN2508386-008	RFI-23-01R_061825	WATER	06/18/25 11:55	06/19/25 09:30
HN2508386-009	RFI-12-40_061825	WATER	06/18/25 13:15	06/19/25 09:30



Chain of Custody Form

ALS Group USA, Corp

Work Order

Parameter/Method Request for Analysis

Company Name		Arcadis U.S., Inc.		Purchase Order		Arcadis U.S., Inc.		A		537M, MI List of 28									
Send Report To		RACER Buck City		Invoice Attn		3025629.03300		B		ASTM D7979									
Project Name		28550 Cabot Drive Suite 500		Project #		28550 Cabot Drive Suite 500		C											
Address		28550 Cabot Drive Suite 500		Address		28550 Cabot Drive Suite 500		D											
City/State/Zip		Novi, MI 48377		City/State/Zip		Novi, MI 48377		E											
Phone		2489942240		Phone		2489942240		F											
e-Mail Address		m156n.01@arcadis.com Tiffany.Lindley@arcadis.com Dyan.Dag@arcadis.com		e-Mail Address				G											
								H											
								I											
								J											
#	Sample Description	Date	Time	Matrix	Preservative	# Bottles	A	B	C	D	E	F	G	H	I	J	Sample Notes		
1	West P-Trap-061625	6/16/25	1045	None	None	3													
2	East P-Trap-061625	6/16/25	1220	None	None	3													
3	M#3-9-061625	6/16/25	1310	None	None	3													
4	RFI-8C-14-061725	6/17/25	1230	None	None	3													
5	RFI-81-33-061725	6/17/25	1325	None	None	3													
6	RFI-81-12R-061725	6/17/25	1500	None	None	3													
7	RFI-23-02R-061725	6/17/25	1625	None	None	3													
8	RFI-23-01R-061825	6/18/25	1155	None	None	3													
9	RFI-12-40-061825	6/18/25	1315	None	None	3													
10																			

Notes: Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035
Required Turnaround Time: ☒ Std 10 Wk days ☐ 5 Wk days ☐ 2 Wk days ☐ 24 hr
Results Due: _____
Relinquished by: _____ Date: _____ Time: _____ Received by: _____ Date: _____ Time: _____
Donnell David Arcadis C/18/25 1530
6-19-25 930
32778
Environmental Division
Holland
Work Order Reference
HN2508386
Telephone : +1 616 399 6070
QC Reporting Level: (check box below)
Level I: Standard QC
Level II: Std QC + Raw data
Level III: Std QC + Raw data
Level IV: SW846 CLP-Like
Other: _____



ALS Holland Sample Receiving Checklist

Received by:

Date/Time:

Carrier Name:

Shipping container/cooler in good condition?

Custody seals intact on shipping container/cooler?

Custody seals intact on sample bottles?

Chain of Custody present?

COC signed when relinquished and received?

COC agrees with sample labels?

Samples in proper container/bottle?

Sample containers intact?

Sufficient sample volume for indicated test?

All samples received within holding time?

Container/Temp Blank temperature in compliance?

Temperature(s) (°C):

Thermometer(s):

Sample(s) received on ice?

Matrix/Matrices:

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage:

Water – VOA vials have zero headspace?

Water – pH acceptable upon receipt?

pH strip lot #: _____ < 2 _____ > 12 _____ Other _____

pH adjusted (note adjustments below)?

pH adjusted by:

Login Notes:

REPORT QUALIFIERS AND DEFINITIONS

*	Value exceeds Regulatory Limit (if MCL displayed)
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
NC	Not Calculated
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
V	The Continuing Calibration Verification was outside of control criteria
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

Holland Laboratory Certifications¹

Agency	Type	ID	Issued	Expires
Alabama	Drinking Water (Secondary)	42500	12/17/2024	12/31/2025
Colorado	UST		07/01/2025	06/30/2026
Connecticut	Drinking Water (Secondary)	PH-0155	12/10/2024	12/31/2026
Florida	NELAP (Primary)	E871106	07/01/2025	06/30/2026
Illinois	NELAP (Secondary)	200076	11/14/2024	12/31/2025
Indiana	Drinking Water (Secondary)	C-MI-08	12/31/2024	09/04/2026
Iowa	State Specific	403	09/18/2023	09/01/2025
Kansas	NELAP (Secondary)	E-10411	07/09/2024	07/31/2025
Kentucky	Waste Water	KY98004	12/20/2024	12/31/2025
Kentucky	UST	120474	06/24/2024	06/30/2025
Michigan	Drinking Water (Primary)	0022	12/19/2023	09/04/2026
Minnesota	NELAP (Secondary)	026-999-449	12/17/2024	12/31/2025
Missouri	Drinking Water (Secondary)	01262	11/14/2024	12/30/2027
New Jersey	NELAP (Secondary)	MI015	07/01/2024	6/30/2025
New York	NELAP (Secondary)	12128	04/01/2025	04/01/2026
North Dakota	State Specific	R-192	11/18/2024	06/30/2025
Ohio	Drinking Water (Secondary)	87783	06/26/2025	6/30/2026
Pennsylvania	NELAP (Secondary)	68-03827	06/14/2024	07/31/2025
Texas	NELAP (Secondary)	T104704494	02/12/2025	01/31/2026
USDA	Domestic CA	Soil-MI-007	02/06/2025	08/07/2026
USDA	Soil Import	525-23-62-77572	03/03/2023	03/03/2026
West Virginia	State Specific	355	06/07/2025	08/31/2026
Wisconsin	State Specific	399084510	08/15/2024	08/31/2025

¹ - Scope available upon request

ANALYST SUMMARY



Client: Arcadis US, Inc.
Project: RACER Buick City

Work Order: HN2508386

Sample Name: West P-Trap_061625
Laboratory Code: HN2508386-001
Sample Matrix: WATER

Date Collected: 06/16/25
Date Received: 06/19/25

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D7979-19	2063696	Clayton Rzepka	3249243	Emily Smith
ASTM D7979-19	2063696	Clayton Rzepka	3271661	Emily Smith
ASTM D7979-19	2063696	Clayton Rzepka	3274268	Emily Smith
ASTM D7979-19	2084086	Derek Haveman	3279693	Emily Smith

Sample Name: East P-Trap_061625
Laboratory Code: HN2508386-002
Sample Matrix: WATER

Date Collected: 06/16/25
Date Received: 06/19/25

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D7979-19	2063696	Clayton Rzepka	3249243	Emily Smith
ASTM D7979-19	2063696	Clayton Rzepka	3271781	Emily Smith
ASTM D7979-19	2084086	Derek Haveman	3279693	Emily Smith

Sample Name: MH3-9_061625
Laboratory Code: HN2508386-003
Sample Matrix: WATER

Date Collected: 06/16/25
Date Received: 06/19/25

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D7979-19	2063696	Clayton Rzepka	3249243	Emily Smith
ASTM D7979-19	2063696	Clayton Rzepka	3271661	Emily Smith
ASTM D7979-19	2063696	Clayton Rzepka	3271781	Emily Smith
ASTM D7979-19	2084086	Clayton Rzepka	3280939	Emily Smith

ANALYST SUMMARY



Client: Arcadis US, Inc.
Project: RACER Buick City

Work Order: HN2508386

Sample Name: RFI-86-14_061725
Laboratory Code: HN2508386-004
Sample Matrix: WATER

Date Collected: 06/17/25
Date Received: 06/19/25

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D7979-19	2063696	Clayton Rzepka	3249243	Emily Smith
ASTM D7979-19	2063696	Clayton Rzepka	3271781	Emily Smith
ASTM D7979-19	2084086	Clayton Rzepka	3279693	Emily Smith

Sample Name: RFI-81-33_061725
Laboratory Code: HN2508386-005
Sample Matrix: WATER

Date Collected: 06/17/25
Date Received: 06/19/25

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D7979-19	2063696	Clayton Rzepka	3249243	Emily Smith
ASTM D7979-19	2063696	Clayton Rzepka	3271781	Emily Smith
ASTM D7979-19	2084086	Derek Haveman	3279693	Emily Smith

Sample Name: RFI-81-12R_061725
Laboratory Code: HN2508386-006
Sample Matrix: WATER

Date Collected: 06/17/25
Date Received: 06/19/25

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D7979-19	2063696	Clayton Rzepka	3249243	Emily Smith
ASTM D7979-19	2063696	Clayton Rzepka	3271781	Emily Smith
ASTM D7979-19	2084086	Derek Haveman	3279693	Emily Smith

Sample Name: RFI-23-02R-061725
Laboratory Code: HN2508386-007
Sample Matrix: WATER

Date Collected: 06/17/25
Date Received: 06/19/25

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D7979-19	2063696	Clayton Rzepka	3249243	Emily Smith
ASTM D7979-19	2063696	Clayton Rzepka	3271781	Emily Smith

ANALYST SUMMARY



Client: Arcadis US, Inc.
Project: RACER Buick City

Work Order: HN2508386

Sample Name: RFI-23-02R-061725
Laboratory Code: HN2508386-007
Sample Matrix: WATER

Date Collected: 06/17/25
Date Received: 06/19/25

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D7979-19	2084086	Derek Haveman	3279693	Emily Smith

Sample Name: RFI-23-01R_061825
Laboratory Code: HN2508386-008
Sample Matrix: WATER

Date Collected: 06/18/25
Date Received: 06/19/25

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D7979-19	2063696	Clayton Rzepka	3249243	Emily Smith
ASTM D7979-19	2063696	Clayton Rzepka	3271781	Emily Smith
ASTM D7979-19	2084086	Derek Haveman	3279693	Emily Smith

Sample Name: RFI-12-40_061825
Laboratory Code: HN2508386-009
Sample Matrix: WATER

Date Collected: 06/18/25
Date Received: 06/19/25

Analysis Method	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D7979-19	2063696	Clayton Rzepka	3249243	Emily Smith
ASTM D7979-19	2063696	Clayton Rzepka	3271781	Emily Smith
ASTM D7979-19	2084086	Derek Haveman	3279693	Emily Smith

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/16/25 10:45
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: West P-Trap_061625 **Lab ID:** HN2508386-001

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ASTM D7979-19	<8.59	U	ng/L	8.59	9.17	1	06/22/25 01:22	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ASTM D7979-19	<26.7	U	ng/L	26.7	46.6	1	06/22/25 01:22	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ASTM D7979-19	<36.1	U	ng/L	36.1	45.5	1	06/22/25 01:22	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ASTM D7979-19	<19.2	U	ng/L	19.2	45.5	1	06/22/25 01:22	06/20/25 10:56
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ASTM D7979-19	<7.28	U	ng/L	7.28	9.17	1	06/22/25 01:22	06/20/25 10:56
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ASTM D7979-19	<2.96	U	ng/L	2.96	9.07	1	06/22/25 01:22	06/20/25 10:56
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ASTM D7979-19	<38.1	U	ng/L	38.1	48.7	1	06/22/25 01:22	06/20/25 10:56
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ASTM D7979-19	<26.3	U	ng/L	26.3	48.7	1	06/22/25 01:22	06/20/25 10:56
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ASTM D7979-19	<20.5	U	ng/L	20.5	48.7	1	06/22/25 01:22	06/20/25 10:56
Perfluorobutane sulfonic acid (PFBS)	ASTM D7979-19	<7.98	U	ng/L	7.98	8.60	1	06/22/25 01:22	06/20/25 10:56
Perfluorobutanoic acid (PFBA)	ASTM D7979-19	<14.0	U	ng/L	14.0	48.7	1	06/22/25 01:22	06/20/25 10:56
Perfluorodecane sulfonic acid (PFDS)	ASTM D7979-19	<7.21	U	ng/L	7.21	9.38	1	07/01/25 04:43	06/20/25 10:56
Perfluorodecanoic acid (PFDA)	ASTM D7979-19	<14.6	U	ng/L	14.6	48.7	1	06/22/25 01:22	06/20/25 10:56
Perfluorododecanoic acid (PFDOA)	ASTM D7979-19	<28.9	U	ng/L	28.9	48.7	1	06/22/25 01:22	06/20/25 10:56
Perfluoroheptane sulfonic acid (PFHpS)	ASTM D7979-19	<10.5	U	ng/L	10.5	46.3	1	06/22/25 01:22	06/20/25 10:56
Perfluoroheptanoic acid (PFHpA)	ASTM D7979-19	<15.1	U	ng/L	15.1	48.7	1	06/22/25 01:22	06/20/25 10:56
Perfluorohexane sulfonic acid (PFHxS)	ASTM D7979-19	21.7	J	ng/L	13.2	44.3	1	06/27/25 15:26	06/20/25 10:56
Perfluorohexanoic acid (PFHxA)	ASTM D7979-19	<13.9	U	ng/L	13.9	48.7	1	06/22/25 01:22	06/20/25 10:56

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/16/25 10:45
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: West P-Trap_061625

Lab ID: HN2508386-001

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononane sulfonic acid (PFNS)	ASTM D7979-19	<13.0	U	ng/L	13.0	46.7	1	06/22/25 01:22	06/20/25 10:56
Perfluorononanoic acid (PFNA)	ASTM D7979-19	<9.05	U	ng/L	9.05	9.73	1	06/22/25 01:22	06/20/25 10:56
Perfluorooctane sulfonamide (PFOSAm)	ASTM D7979-19	<7.97	U	ng/L	7.97	9.73	1	06/22/25 01:22	06/20/25 10:56
Perfluorooctane sulfonic acid (PFOS)	ASTM D7979-19	61.7		ng/L	5.19	9.51	1	07/02/25 17:30	07/01/25 12:24
Perfluorooctanoic acid (PFOA)	ASTM D7979-19	<9.05	U	ng/L	9.05	9.73	1	06/22/25 01:22	06/20/25 10:56
Perfluoropentane sulfonic acid (PFPeS)	ASTM D7979-19	<5.18	U	ng/L	5.18	9.13	1	06/22/25 01:22	06/20/25 10:56
Perfluoropentanoic acid (PFPeA)	ASTM D7979-19	<7.79	U	ng/L	7.79	48.7	1	06/22/25 01:22	06/20/25 10:56
Perfluorotetradecanoic acid (PFTDA)	ASTM D7979-19	<36.7	U	ng/L	36.7	48.7	1	06/22/25 01:22	06/20/25 10:56
Perfluorotridecanoic acid (PFTrDA)	ASTM D7979-19	<17.3	U	ng/L	17.3	48.7	1	06/22/25 01:22	06/20/25 10:56
Perfluoroundecanoic acid (PFUnDA)	ASTM D7979-19	<11.7	U	ng/L	11.7	48.7	1	06/22/25 01:22	06/20/25 10:56
<i>Surr: 13C2-FtS 4:2</i>	<i>ASTM D7979-19</i>	104		%REC		50-130	1	06/22/25 01:22	06/20/25 10:56
<i>Surr: 13C2-FtS 6:2</i>	<i>ASTM D7979-19</i>	103		%REC		50-130	1	06/22/25 01:22	06/20/25 10:56
<i>Surr: 13C2-FtS 8:2</i>	<i>ASTM D7979-19</i>	109		%REC		50-130	1	06/22/25 01:22	06/20/25 10:56
<i>Surr: 13C2-PFDA</i>	<i>ASTM D7979-19</i>	97.6		%REC		70-130	1	06/22/25 01:22	06/20/25 10:56
<i>Surr: 13C2-PFDoA</i>	<i>ASTM D7979-19</i>	103		%REC		70-130	1	06/22/25 01:22	06/20/25 10:56
<i>Surr: 13C2-PFHxA</i>	<i>ASTM D7979-19</i>	107		%REC		50-130	1	06/22/25 01:22	06/20/25 10:56
<i>Surr: 13C2-PFTeDA</i>	<i>ASTM D7979-19</i>	89.3		%REC		50-130	1	06/22/25 01:22	06/20/25 10:56
<i>Surr: 13C2-PFUnDA</i>	<i>ASTM D7979-19</i>	102		%REC		70-130	1	06/22/25 01:22	06/20/25 10:56
<i>Surr: 13C3-HFPO-DA</i>	<i>ASTM D7979-19</i>	92.2		%REC		50-130	1	06/22/25 01:22	06/20/25 10:56
<i>Surr: 13C3-PFBS</i>	<i>ASTM D7979-19</i>	99.9		%REC		50-130	1	06/22/25 01:22	06/20/25 10:56
<i>Surr: 13C4-PFBA</i>	<i>ASTM D7979-19</i>	107		%REC		50-130	1	06/22/25 01:22	06/20/25 10:56
<i>Surr: 13C4-PFHpA</i>	<i>ASTM D7979-19</i>	108		%REC		50-130	1	06/22/25 01:22	06/20/25 10:56
<i>Surr: 13C4-PFOA</i>	<i>ASTM D7979-19</i>	99.5		%REC		70-130	1	06/22/25 01:22	06/20/25 10:56
<i>Surr: 13C4-PFOS</i>	<i>ASTM D7979-19</i>	114		%REC		70-130	1	07/02/25 17:30	07/01/25 12:24
<i>Surr: 13C5-PFNA</i>	<i>ASTM D7979-19</i>	103		%REC		70-130	1	06/22/25 01:22	06/20/25 10:56
<i>Surr: 13C5-PFPeA</i>	<i>ASTM D7979-19</i>	99.7		%REC		50-130	1	06/22/25 01:22	06/20/25 10:56
<i>Surr: 13C8-FOSA</i>	<i>ASTM D7979-19</i>	99.0		%REC		50-130	1	06/22/25 01:22	06/20/25 10:56
<i>Surr: 18O2-PFHxS</i>	<i>ASTM D7979-19</i>	110		%REC		70-130	1	06/27/25 15:26	06/20/25 10:56

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/16/25 10:45
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: West P-Trap_061625

Lab ID: HN2508386-001

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Surr: d3-N-MeFOSAA	ASTM D7979-19	97.6		%REC		50-130	1	06/22/25 01:22	06/20/25 10:56
Surr: d5-N-EtFOSAA	ASTM D7979-19	103		%REC		50-130	1	06/22/25 01:22	06/20/25 10:56

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/16/25 12:20
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: East P-Trap_061625	Lab ID: HN2508386-002

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ASTM D7979-19	<8.72	U	ng/L	8.72	9.32	1	06/22/25 01:51	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ASTM D7979-19	<27.1	U	ng/L	27.1	47.4	1	06/22/25 01:51	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ASTM D7979-19	<36.7	U	ng/L	36.7	46.2	1	06/22/25 01:51	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ASTM D7979-19	<19.5	U	ng/L	19.5	46.2	1	06/22/25 01:51	06/20/25 10:56
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ASTM D7979-19	<7.40	U	ng/L	7.40	9.32	1	06/22/25 01:51	06/20/25 10:56
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ASTM D7979-19	<3.01	U	ng/L	3.01	9.22	1	06/22/25 01:51	06/20/25 10:56
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ASTM D7979-19	<38.7	U	ng/L	38.7	49.5	1	06/22/25 01:51	06/20/25 10:56
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ASTM D7979-19	<26.7	U	ng/L	26.7	49.5	1	06/22/25 01:51	06/20/25 10:56
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ASTM D7979-19	<20.9	U	ng/L	20.9	49.5	1	06/22/25 01:51	06/20/25 10:56
Perfluorobutane sulfonic acid (PFBS)	ASTM D7979-19	<8.11	U	ng/L	8.11	8.74	1	06/22/25 01:51	06/20/25 10:56
Perfluorobutanoic acid (PFBA)	ASTM D7979-19	<14.3	U	ng/L	14.3	49.5	1	06/22/25 01:51	06/20/25 10:56
Perfluorodecane sulfonic acid (PFDS)	ASTM D7979-19	<7.33	U	ng/L	7.33	9.54	1	06/28/25 22:59	06/20/25 10:56
Perfluorodecanoic acid (PFDA)	ASTM D7979-19	<14.8	U	ng/L	14.8	49.5	1	06/22/25 01:51	06/20/25 10:56
Perfluorododecanoic acid (PFDOA)	ASTM D7979-19	<29.4	U	ng/L	29.4	49.5	1	06/22/25 01:51	06/20/25 10:56
Perfluoroheptane sulfonic acid (PFHpS)	ASTM D7979-19	<10.7	U	ng/L	10.7	47.1	1	06/22/25 01:51	06/20/25 10:56
Perfluoroheptanoic acid (PFHpA)	ASTM D7979-19	<15.3	U	ng/L	15.3	49.5	1	06/22/25 01:51	06/20/25 10:56
Perfluorohexane sulfonic acid (PFHxS)	ASTM D7979-19	<13.4	U	ng/L	13.4	45.0	1	06/22/25 01:51	06/20/25 10:56
Perfluorohexanoic acid (PFHxA)	ASTM D7979-19	<14.1	U	ng/L	14.1	49.5	1	06/22/25 01:51	06/20/25 10:56

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/16/25 12:20
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: East P-Trap_061625

Lab ID: HN2508386-002

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononane sulfonic acid (PFNS)	ASTM D7979-19	<13.2	U	ng/L	13.2	47.5	1	06/22/25 01:51	06/20/25 10:56
Perfluorononanoic acid (PFNA)	ASTM D7979-19	<9.20	U	ng/L	9.20	9.89	1	06/22/25 01:51	06/20/25 10:56
Perfluorooctane sulfonamide (PFOSAm)	ASTM D7979-19	<8.10	U	ng/L	8.10	9.89	1	06/22/25 01:51	06/20/25 10:56
Perfluorooctane sulfonic acid (PFOS)	ASTM D7979-19	87.5		ng/L	4.99	9.13	1	07/02/25 18:14	07/01/25 12:24
Perfluorooctanoic acid (PFOA)	ASTM D7979-19	<9.20	U	ng/L	9.20	9.89	1	06/22/25 01:51	06/20/25 10:56
Perfluoropentane sulfonic acid (PFPeS)	ASTM D7979-19	<5.26	U	ng/L	5.26	9.28	1	06/22/25 01:51	06/20/25 10:56
Perfluoropentanoic acid (PFPeA)	ASTM D7979-19	<7.91	U	ng/L	7.91	49.5	1	06/22/25 01:51	06/20/25 10:56
Perfluorotetradecanoic acid (PFTDA)	ASTM D7979-19	<37.3	U	ng/L	37.3	49.5	1	06/22/25 01:51	06/20/25 10:56
Perfluorotridecanoic acid (PFTrDA)	ASTM D7979-19	<17.6	U	ng/L	17.6	49.5	1	06/22/25 01:51	06/20/25 10:56
Perfluoroundecanoic acid (PFUnDA)	ASTM D7979-19	<11.9	U	ng/L	11.9	49.5	1	06/22/25 01:51	06/20/25 10:56
<i>Surr: 13C2-FtS 4:2</i>	<i>ASTM D7979-19</i>	100		%REC		50-130	1	06/22/25 01:51	06/20/25 10:56
<i>Surr: 13C2-FtS 6:2</i>	<i>ASTM D7979-19</i>	86.7		%REC		50-130	1	06/22/25 01:51	06/20/25 10:56
<i>Surr: 13C2-FtS 8:2</i>	<i>ASTM D7979-19</i>	106		%REC		50-130	1	06/22/25 01:51	06/20/25 10:56
<i>Surr: 13C2-PFDA</i>	<i>ASTM D7979-19</i>	96.4		%REC		70-130	1	06/22/25 01:51	06/20/25 10:56
<i>Surr: 13C2-PFDoA</i>	<i>ASTM D7979-19</i>	105		%REC		70-130	1	06/22/25 01:51	06/20/25 10:56
<i>Surr: 13C2-PFHxA</i>	<i>ASTM D7979-19</i>	107		%REC		50-130	1	06/22/25 01:51	06/20/25 10:56
<i>Surr: 13C2-PFTeDA</i>	<i>ASTM D7979-19</i>	112		%REC		50-130	1	06/22/25 01:51	06/20/25 10:56
<i>Surr: 13C2-PFUnDA</i>	<i>ASTM D7979-19</i>	109		%REC		70-130	1	06/22/25 01:51	06/20/25 10:56
<i>Surr: 13C3-HFPO-DA</i>	<i>ASTM D7979-19</i>	94.9		%REC		50-130	1	06/22/25 01:51	06/20/25 10:56
<i>Surr: 13C3-PFBS</i>	<i>ASTM D7979-19</i>	109		%REC		50-130	1	06/22/25 01:51	06/20/25 10:56
<i>Surr: 13C4-PFBA</i>	<i>ASTM D7979-19</i>	107		%REC		50-130	1	06/22/25 01:51	06/20/25 10:56
<i>Surr: 13C4-PFHpA</i>	<i>ASTM D7979-19</i>	97.6		%REC		50-130	1	06/22/25 01:51	06/20/25 10:56
<i>Surr: 13C4-PFOA</i>	<i>ASTM D7979-19</i>	97.0		%REC		70-130	1	06/22/25 01:51	06/20/25 10:56
<i>Surr: 13C4-PFOS</i>	<i>ASTM D7979-19</i>	113		%REC		70-130	1	07/02/25 18:14	07/01/25 12:24
<i>Surr: 13C5-PFNA</i>	<i>ASTM D7979-19</i>	102		%REC		70-130	1	06/22/25 01:51	06/20/25 10:56
<i>Surr: 13C5-PFPeA</i>	<i>ASTM D7979-19</i>	102		%REC		50-130	1	06/22/25 01:51	06/20/25 10:56
<i>Surr: 13C8-FOSA</i>	<i>ASTM D7979-19</i>	106		%REC		50-130	1	06/22/25 01:51	06/20/25 10:56
<i>Surr: 18O2-PFHxS</i>	<i>ASTM D7979-19</i>	105		%REC		70-130	1	06/22/25 01:51	06/20/25 10:56

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/16/25 12:20
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: East P-Trap_061625

Lab ID: HN2508386-002

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Surr: d3-N-MeFOSAA	ASTM D7979-19	104		%REC		50-130	1	06/22/25 01:51	06/20/25 10:56
Surr: d5-N-EtFOSAA	ASTM D7979-19	100		%REC		50-130	1	06/22/25 01:51	06/20/25 10:56

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/16/25 13:10
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: MH3-9_061625	Lab ID: HN2508386-003

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ASTM D7979-19	<8.86	U	ng/L	8.86	9.46	1	06/22/25 02:06	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ASTM D7979-19	<27.5	U	ng/L	27.5	48.1	1	06/22/25 02:06	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ASTM D7979-19	<37.2	U	ng/L	37.2	46.9	1	06/22/25 02:06	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ASTM D7979-19	<19.8	U	ng/L	19.8	46.9	1	06/22/25 02:06	06/20/25 10:56
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ASTM D7979-19	<7.51	U	ng/L	7.51	9.46	1	06/22/25 02:06	06/20/25 10:56
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ASTM D7979-19	<3.06	U	ng/L	3.06	9.36	1	06/22/25 02:06	06/20/25 10:56
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ASTM D7979-19	<39.3	U	ng/L	39.3	50.2	1	06/22/25 02:06	06/20/25 10:56
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ASTM D7979-19	<27.1	U	ng/L	27.1	50.2	1	06/22/25 02:06	06/20/25 10:56
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ASTM D7979-19	<21.2	U	ng/L	21.2	50.2	1	06/22/25 02:06	06/20/25 10:56
Perfluorobutane sulfonic acid (PFBS)	ASTM D7979-19	<8.23	U	ng/L	8.23	8.88	1	06/22/25 02:06	06/20/25 10:56
Perfluorobutanoic acid (PFBA)	ASTM D7979-19	<14.5	U	ng/L	14.5	50.2	1	06/22/25 02:06	06/20/25 10:56
Perfluorodecane sulfonic acid (PFDS)	ASTM D7979-19	<7.44	U	ng/L	7.44	9.68	1	06/28/25 23:40	06/20/25 10:56
Perfluorodecanoic acid (PFDA)	ASTM D7979-19	<15.1	U	ng/L	15.1	50.2	1	06/22/25 02:06	06/20/25 10:56
Perfluorododecanoic acid (PFDOA)	ASTM D7979-19	<29.8	U	ng/L	29.8	50.2	1	06/22/25 02:06	06/20/25 10:56
Perfluoroheptane sulfonic acid (PFHpS)	ASTM D7979-19	<10.8	U	ng/L	10.8	47.8	1	06/22/25 02:06	06/20/25 10:56
Perfluoroheptanoic acid (PFHpA)	ASTM D7979-19	<15.6	U	ng/L	15.6	50.2	1	06/22/25 02:06	06/20/25 10:56
Perfluorohexane sulfonic acid (PFHxS)	ASTM D7979-19	<13.6	U	ng/L	13.6	45.7	1	06/27/25 16:48	06/20/25 10:56
Perfluorohexanoic acid (PFHxA)	ASTM D7979-19	<14.3	U	ng/L	14.3	50.2	1	06/22/25 02:06	06/20/25 10:56

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/16/25 13:10
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: MH3-9_061625	Lab ID: HN2508386-003

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononane sulfonic acid (PFNS)	ASTM D7979-19	<13.4	U	ng/L	13.4	48.2	1	06/22/25 02:06	06/20/25 10:56
Perfluorononanoic acid (PFNA)	ASTM D7979-19	<9.34	U	ng/L	9.34	10.0	1	06/22/25 02:06	06/20/25 10:56
Perfluorooctane sulfonamide (PFOSAm)	ASTM D7979-19	<8.22	U	ng/L	8.22	10.0	1	06/22/25 02:06	06/20/25 10:56
Perfluorooctane sulfonic acid (PFOS)	ASTM D7979-19	20.5		ng/L	5.15	9.43	1	07/03/25 13:13	07/01/25 12:24
Perfluorooctanoic acid (PFOA)	ASTM D7979-19	9.41		ng/L	9.34	10.0	1	06/22/25 02:06	06/20/25 10:56
Perfluoropentane sulfonic acid (PFPeS)	ASTM D7979-19	<5.34	U	ng/L	5.34	9.42	1	06/22/25 02:06	06/20/25 10:56
Perfluoropentanoic acid (PFPeA)	ASTM D7979-19	<8.03	U	ng/L	8.03	50.2	1	06/22/25 02:06	06/20/25 10:56
Perfluorotetradecanoic acid (PFTDA)	ASTM D7979-19	<37.8	U	ng/L	37.8	50.2	1	06/22/25 02:06	06/20/25 10:56
Perfluorotridecanoic acid (PFTrDA)	ASTM D7979-19	<17.8	U	ng/L	17.8	50.2	1	06/22/25 02:06	06/20/25 10:56
Perfluoroundecanoic acid (PFUnDA)	ASTM D7979-19	<12.1	U	ng/L	12.1	50.2	1	06/22/25 02:06	06/20/25 10:56
<i>Surr: 13C2-FtS 4:2</i>	<i>ASTM D7979-19</i>	99.2		%REC		50-130	1	06/22/25 02:06	06/20/25 10:56
<i>Surr: 13C2-FtS 6:2</i>	<i>ASTM D7979-19</i>	89.4		%REC		50-130	1	06/22/25 02:06	06/20/25 10:56
<i>Surr: 13C2-FtS 8:2</i>	<i>ASTM D7979-19</i>	91.1		%REC		50-130	1	06/22/25 02:06	06/20/25 10:56
<i>Surr: 13C2-PFDA</i>	<i>ASTM D7979-19</i>	94.3		%REC		70-130	1	06/22/25 02:06	06/20/25 10:56
<i>Surr: 13C2-PFDoA</i>	<i>ASTM D7979-19</i>	100.0		%REC		70-130	1	06/22/25 02:06	06/20/25 10:56
<i>Surr: 13C2-PFHxA</i>	<i>ASTM D7979-19</i>	103		%REC		50-130	1	06/22/25 02:06	06/20/25 10:56
<i>Surr: 13C2-PFTeDA</i>	<i>ASTM D7979-19</i>	91.1		%REC		50-130	1	06/22/25 02:06	06/20/25 10:56
<i>Surr: 13C2-PFUnDA</i>	<i>ASTM D7979-19</i>	92.0		%REC		70-130	1	06/22/25 02:06	06/20/25 10:56
<i>Surr: 13C3-HFPO-DA</i>	<i>ASTM D7979-19</i>	95.5		%REC		50-130	1	06/22/25 02:06	06/20/25 10:56
<i>Surr: 13C3-PFBS</i>	<i>ASTM D7979-19</i>	97.6		%REC		50-130	1	06/22/25 02:06	06/20/25 10:56
<i>Surr: 13C4-PFBA</i>	<i>ASTM D7979-19</i>	96.5		%REC		50-130	1	06/22/25 02:06	06/20/25 10:56
<i>Surr: 13C4-PFHpA</i>	<i>ASTM D7979-19</i>	108		%REC		50-130	1	06/22/25 02:06	06/20/25 10:56
<i>Surr: 13C4-PFOA</i>	<i>ASTM D7979-19</i>	98.9		%REC		70-130	1	06/22/25 02:06	06/20/25 10:56
<i>Surr: 13C4-PFOS</i>	<i>ASTM D7979-19</i>	111		%REC		70-130	1	07/03/25 13:13	07/01/25 12:24
<i>Surr: 13C5-PFNA</i>	<i>ASTM D7979-19</i>	93.2		%REC		70-130	1	06/22/25 02:06	06/20/25 10:56
<i>Surr: 13C5-PFPeA</i>	<i>ASTM D7979-19</i>	103		%REC		50-130	1	06/22/25 02:06	06/20/25 10:56
<i>Surr: 13C8-FOSA</i>	<i>ASTM D7979-19</i>	102		%REC		50-130	1	06/22/25 02:06	06/20/25 10:56
<i>Surr: 18O2-PFHxS</i>	<i>ASTM D7979-19</i>	102		%REC		70-130	1	06/27/25 16:48	06/20/25 10:56

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/16/25 13:10
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: MH3-9_061625

Lab ID: HN2508386-003

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Surr: d3-N-MeFOSAA	ASTM D7979-19	85.9		%REC		50-130	1	06/22/25 02:06	06/20/25 10:56
Surr: d5-N-EtFOSAA	ASTM D7979-19	101		%REC		50-130	1	06/22/25 02:06	06/20/25 10:56

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/17/25 12:30
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: RFI-86-14_061725	Lab ID: HN2508386-004

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ASTM D7979-19	<8.83	U	ng/L	8.83	9.43	1	06/22/25 02:20	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ASTM D7979-19	<27.4	U	ng/L	27.4	47.9	1	06/22/25 02:20	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ASTM D7979-19	<37.1	U	ng/L	37.1	46.7	1	06/22/25 02:20	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ASTM D7979-19	<19.8	U	ng/L	19.8	46.7	1	06/22/25 02:20	06/20/25 10:56
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ASTM D7979-19	<7.49	U	ng/L	7.49	9.43	1	06/22/25 02:20	06/20/25 10:56
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ASTM D7979-19	<3.05	U	ng/L	3.05	9.33	1	06/22/25 02:20	06/20/25 10:56
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ASTM D7979-19	<39.2	U	ng/L	39.2	50.0	1	06/22/25 02:20	06/20/25 10:56
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ASTM D7979-19	<27.0	U	ng/L	27.0	50.0	1	06/22/25 02:20	06/20/25 10:56
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ASTM D7979-19	<21.1	U	ng/L	21.1	50.0	1	06/22/25 02:20	06/20/25 10:56
Perfluorobutane sulfonic acid (PFBS)	ASTM D7979-19	<8.21	U	ng/L	8.21	8.85	1	06/22/25 02:20	06/20/25 10:56
Perfluorobutanoic acid (PFBA)	ASTM D7979-19	<14.4	U	ng/L	14.4	50.0	1	06/22/25 02:20	06/20/25 10:56
Perfluorodecane sulfonic acid (PFDS)	ASTM D7979-19	<7.42	U	ng/L	7.42	9.65	1	06/28/25 23:54	06/20/25 10:56
Perfluorodecanoic acid (PFDA)	ASTM D7979-19	<15.0	U	ng/L	15.0	50.0	1	06/22/25 02:20	06/20/25 10:56
Perfluorododecanoic acid (PFDOA)	ASTM D7979-19	<29.7	U	ng/L	29.7	50.0	1	06/22/25 02:20	06/20/25 10:56
Perfluoroheptane sulfonic acid (PFHpS)	ASTM D7979-19	<10.8	U	ng/L	10.8	47.6	1	06/22/25 02:20	06/20/25 10:56
Perfluoroheptanoic acid (PFHpA)	ASTM D7979-19	<15.5	U	ng/L	15.5	50.0	1	06/22/25 02:20	06/20/25 10:56
Perfluorohexane sulfonic acid (PFHxS)	ASTM D7979-19	<13.6	U	ng/L	13.6	45.5	1	06/22/25 02:20	06/20/25 10:56
Perfluorohexanoic acid (PFHxA)	ASTM D7979-19	<14.3	U	ng/L	14.3	50.0	1	06/22/25 02:20	06/20/25 10:56

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/17/25 12:30
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: RFI-86-14_061725

Lab ID: HN2508386-004

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononane sulfonic acid (PFNS)	ASTM D7979-19	<13.4	U	ng/L	13.4	48.0	1	06/22/25 02:20	06/20/25 10:56
Perfluorononanoic acid (PFNA)	ASTM D7979-19	<9.31	U	ng/L	9.31	10.0	1	06/22/25 02:20	06/20/25 10:56
Perfluorooctane sulfonamide (PFOSAm)	ASTM D7979-19	<8.20	U	ng/L	8.20	10.0	1	06/22/25 02:20	06/20/25 10:56
Perfluorooctane sulfonic acid (PFOS)	ASTM D7979-19	<4.94	U	ng/L	4.94	9.04	1	07/02/25 17:16	07/01/25 12:24
Perfluorooctanoic acid (PFOA)	ASTM D7979-19	10.1		ng/L	9.31	10.0	1	06/22/25 02:20	06/20/25 10:56
Perfluoropentane sulfonic acid (PFPeS)	ASTM D7979-19	<5.32	U	ng/L	5.32	9.39	1	06/22/25 02:20	06/20/25 10:56
Perfluoropentanoic acid (PFPeA)	ASTM D7979-19	<8.01	U	ng/L	8.01	50.0	1	06/22/25 02:20	06/20/25 10:56
Perfluorotetradecanoic acid (PFTDA)	ASTM D7979-19	<37.7	U	ng/L	37.7	50.0	1	06/22/25 02:20	06/20/25 10:56
Perfluorotridecanoic acid (PFTrDA)	ASTM D7979-19	<17.8	U	ng/L	17.8	50.0	1	06/22/25 02:20	06/20/25 10:56
Perfluoroundecanoic acid (PFUnDA)	ASTM D7979-19	<12.0	U	ng/L	12.0	50.0	1	06/22/25 02:20	06/20/25 10:56
<i>Surr: 13C2-FtS 4:2</i>	<i>ASTM D7979-19</i>	104		%REC		50-130	1	06/22/25 02:20	06/20/25 10:56
<i>Surr: 13C2-FtS 6:2</i>	<i>ASTM D7979-19</i>	107		%REC		50-130	1	06/22/25 02:20	06/20/25 10:56
<i>Surr: 13C2-FtS 8:2</i>	<i>ASTM D7979-19</i>	91.8		%REC		50-130	1	06/22/25 02:20	06/20/25 10:56
<i>Surr: 13C2-PFDA</i>	<i>ASTM D7979-19</i>	105		%REC		70-130	1	06/22/25 02:20	06/20/25 10:56
<i>Surr: 13C2-PFDoA</i>	<i>ASTM D7979-19</i>	113		%REC		70-130	1	06/22/25 02:20	06/20/25 10:56
<i>Surr: 13C2-PFHxA</i>	<i>ASTM D7979-19</i>	111		%REC		50-130	1	06/22/25 02:20	06/20/25 10:56
<i>Surr: 13C2-PFTeDA</i>	<i>ASTM D7979-19</i>	94.5		%REC		50-130	1	06/22/25 02:20	06/20/25 10:56
<i>Surr: 13C2-PFUnDA</i>	<i>ASTM D7979-19</i>	100		%REC		70-130	1	06/22/25 02:20	06/20/25 10:56
<i>Surr: 13C3-HFPO-DA</i>	<i>ASTM D7979-19</i>	110		%REC		50-130	1	06/22/25 02:20	06/20/25 10:56
<i>Surr: 13C3-PFBS</i>	<i>ASTM D7979-19</i>	96.0		%REC		50-130	1	06/22/25 02:20	06/20/25 10:56
<i>Surr: 13C4-PFBA</i>	<i>ASTM D7979-19</i>	107		%REC		50-130	1	06/22/25 02:20	06/20/25 10:56
<i>Surr: 13C4-PFHpA</i>	<i>ASTM D7979-19</i>	101		%REC		50-130	1	06/22/25 02:20	06/20/25 10:56
<i>Surr: 13C4-PFOA</i>	<i>ASTM D7979-19</i>	109		%REC		70-130	1	06/22/25 02:20	06/20/25 10:56
<i>Surr: 13C4-PFOS</i>	<i>ASTM D7979-19</i>	113		%REC		70-130	1	07/02/25 17:16	07/01/25 12:24
<i>Surr: 13C5-PFNA</i>	<i>ASTM D7979-19</i>	102		%REC		70-130	1	06/22/25 02:20	06/20/25 10:56
<i>Surr: 13C5-PFPeA</i>	<i>ASTM D7979-19</i>	111		%REC		50-130	1	06/22/25 02:20	06/20/25 10:56
<i>Surr: 13C8-FOSA</i>	<i>ASTM D7979-19</i>	106		%REC		50-130	1	06/22/25 02:20	06/20/25 10:56
<i>Surr: 18O2-PFHxS</i>	<i>ASTM D7979-19</i>	118		%REC		70-130	1	06/22/25 02:20	06/20/25 10:56

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/17/25 12:30
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: RFI-86-14_061725

Lab ID: HN2508386-004

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Surr: d3-N-MeFOSAA	ASTM D7979-19	102		%REC		50-130	1	06/22/25 02:20	06/20/25 10:56
Surr: d5-N-EtFOSAA	ASTM D7979-19	108		%REC		50-130	1	06/22/25 02:20	06/20/25 10:56

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/17/25 13:25
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: RFI-81-33_061725	Lab ID: HN2508386-005

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ASTM D7979-19	<8.76	U	ng/L	8.76	9.35	1	06/22/25 02:35	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ASTM D7979-19	<27.2	U	ng/L	27.2	47.6	1	06/22/25 02:35	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ASTM D7979-19	<36.8	U	ng/L	36.8	46.4	1	06/22/25 02:35	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ASTM D7979-19	<19.6	U	ng/L	19.6	46.4	1	06/22/25 02:35	06/20/25 10:56
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ASTM D7979-19	<7.43	U	ng/L	7.43	9.35	1	06/22/25 02:35	06/20/25 10:56
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ASTM D7979-19	<3.02	U	ng/L	3.02	9.26	1	06/22/25 02:35	06/20/25 10:56
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ASTM D7979-19	<38.9	U	ng/L	38.9	49.6	1	06/22/25 02:35	06/20/25 10:56
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ASTM D7979-19	<26.8	U	ng/L	26.8	49.6	1	06/22/25 02:35	06/20/25 10:56
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ASTM D7979-19	<21.0	U	ng/L	21.0	49.6	1	06/22/25 02:35	06/20/25 10:56
Perfluorobutane sulfonic acid (PFBS)	ASTM D7979-19	<8.14	U	ng/L	8.14	8.78	1	06/22/25 02:35	06/20/25 10:56
Perfluorobutanoic acid (PFBA)	ASTM D7979-19	24.4		ng/L	14.3	49.6	1	06/22/25 02:35	06/20/25 10:56
Perfluorodecane sulfonic acid (PFDS)	ASTM D7979-19	<7.36	U	ng/L	7.36	9.57	1	06/29/25 00:08	06/20/25 10:56
Perfluorodecanoic acid (PFDA)	ASTM D7979-19	<14.9	U	ng/L	14.9	49.6	1	06/22/25 02:35	06/20/25 10:56
Perfluorododecanoic acid (PFDOA)	ASTM D7979-19	<29.5	U	ng/L	29.5	49.6	1	06/22/25 02:35	06/20/25 10:56
Perfluoroheptane sulfonic acid (PFHpS)	ASTM D7979-19	<10.7	U	ng/L	10.7	47.3	1	06/22/25 02:35	06/20/25 10:56
Perfluoroheptanoic acid (PFHpA)	ASTM D7979-19	<15.4	U	ng/L	15.4	49.6	1	06/22/25 02:35	06/20/25 10:56
Perfluorohexane sulfonic acid (PFHxS)	ASTM D7979-19	<13.5	U	ng/L	13.5	45.2	1	06/22/25 02:35	06/20/25 10:56
Perfluorohexanoic acid (PFHxA)	ASTM D7979-19	<14.2	U	ng/L	14.2	49.6	1	06/22/25 02:35	06/20/25 10:56

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/17/25 13:25
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: RFI-81-33_061725

Lab ID: HN2508386-005

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononane sulfonic acid (PFNS)	ASTM D7979-19	<13.3	U	ng/L	13.3	47.7	1	06/22/25 02:35	06/20/25 10:56
Perfluorononanoic acid (PFNA)	ASTM D7979-19	<9.24	U	ng/L	9.24	9.93	1	06/22/25 02:35	06/20/25 10:56
Perfluorooctane sulfonamide (PFOSAm)	ASTM D7979-19	<8.13	U	ng/L	8.13	9.93	1	06/22/25 02:35	06/20/25 10:56
Perfluorooctane sulfonic acid (PFOS)	ASTM D7979-19	6.64	J	ng/L	5.11	9.35	1	07/02/25 18:29	07/01/25 12:24
Perfluorooctanoic acid (PFOA)	ASTM D7979-19	<9.24	U	ng/L	9.24	9.93	1	06/22/25 02:35	06/20/25 10:56
Perfluoropentane sulfonic acid (PFPeS)	ASTM D7979-19	<5.28	U	ng/L	5.28	9.32	1	06/22/25 02:35	06/20/25 10:56
Perfluoropentanoic acid (PFPeA)	ASTM D7979-19	<7.94	U	ng/L	7.94	49.6	1	06/22/25 02:35	06/20/25 10:56
Perfluorotetradecanoic acid (PFTDA)	ASTM D7979-19	<37.4	U	ng/L	37.4	49.6	1	06/22/25 02:35	06/20/25 10:56
Perfluorotridecanoic acid (PFTrDA)	ASTM D7979-19	<17.6	U	ng/L	17.6	49.6	1	06/22/25 02:35	06/20/25 10:56
Perfluoroundecanoic acid (PFUnDA)	ASTM D7979-19	<11.9	U	ng/L	11.9	49.6	1	06/22/25 02:35	06/20/25 10:56
<i>Surr: 13C2-FtS 4:2</i>	<i>ASTM D7979-19</i>	102		%REC		50-130	1	06/22/25 02:35	06/20/25 10:56
<i>Surr: 13C2-FtS 6:2</i>	<i>ASTM D7979-19</i>	101		%REC		50-130	1	06/22/25 02:35	06/20/25 10:56
<i>Surr: 13C2-FtS 8:2</i>	<i>ASTM D7979-19</i>	102		%REC		50-130	1	06/22/25 02:35	06/20/25 10:56
<i>Surr: 13C2-PFDA</i>	<i>ASTM D7979-19</i>	105		%REC		70-130	1	06/22/25 02:35	06/20/25 10:56
<i>Surr: 13C2-PFDoA</i>	<i>ASTM D7979-19</i>	102		%REC		70-130	1	06/22/25 02:35	06/20/25 10:56
<i>Surr: 13C2-PFHxA</i>	<i>ASTM D7979-19</i>	101		%REC		50-130	1	06/22/25 02:35	06/20/25 10:56
<i>Surr: 13C2-PFTeDA</i>	<i>ASTM D7979-19</i>	86.7		%REC		50-130	1	06/22/25 02:35	06/20/25 10:56
<i>Surr: 13C2-PFUnDA</i>	<i>ASTM D7979-19</i>	93.1		%REC		70-130	1	06/22/25 02:35	06/20/25 10:56
<i>Surr: 13C3-HFPO-DA</i>	<i>ASTM D7979-19</i>	101		%REC		50-130	1	06/22/25 02:35	06/20/25 10:56
<i>Surr: 13C3-PFBS</i>	<i>ASTM D7979-19</i>	98.9		%REC		50-130	1	06/22/25 02:35	06/20/25 10:56
<i>Surr: 13C4-PFBA</i>	<i>ASTM D7979-19</i>	101		%REC		50-130	1	06/22/25 02:35	06/20/25 10:56
<i>Surr: 13C4-PFHpA</i>	<i>ASTM D7979-19</i>	96.4		%REC		50-130	1	06/22/25 02:35	06/20/25 10:56
<i>Surr: 13C4-PFOA</i>	<i>ASTM D7979-19</i>	101		%REC		70-130	1	06/22/25 02:35	06/20/25 10:56
<i>Surr: 13C4-PFOS</i>	<i>ASTM D7979-19</i>	113		%REC		70-130	1	07/02/25 18:29	07/01/25 12:24
<i>Surr: 13C5-PFNA</i>	<i>ASTM D7979-19</i>	97.6		%REC		70-130	1	06/22/25 02:35	06/20/25 10:56
<i>Surr: 13C5-PFPeA</i>	<i>ASTM D7979-19</i>	105		%REC		50-130	1	06/22/25 02:35	06/20/25 10:56
<i>Surr: 13C8-FOSA</i>	<i>ASTM D7979-19</i>	91.5		%REC		50-130	1	06/22/25 02:35	06/20/25 10:56
<i>Surr: 18O2-PFHxS</i>	<i>ASTM D7979-19</i>	106		%REC		70-130	1	06/22/25 02:35	06/20/25 10:56

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/17/25 13:25
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: RFI-81-33_061725

Lab ID: HN2508386-005

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Surr: d3-N-MeFOSAA	ASTM D7979-19	80.7		%REC		50-130	1	06/22/25 02:35	06/20/25 10:56
Surr: d5-N-EtFOSAA	ASTM D7979-19	98.6		%REC		50-130	1	06/22/25 02:35	06/20/25 10:56

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/17/25 15:00
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: RFI-81-12R_061725	Lab ID: HN2508386-006

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ASTM D7979-19	<8.77	U	ng/L	8.77	9.36	1	06/22/25 02:49	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ASTM D7979-19	<27.2	U	ng/L	27.2	47.6	1	06/22/25 02:49	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ASTM D7979-19	<36.9	U	ng/L	36.9	46.4	1	06/22/25 02:49	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ASTM D7979-19	<19.6	U	ng/L	19.6	46.4	1	06/22/25 02:49	06/20/25 10:56
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ASTM D7979-19	<7.44	U	ng/L	7.44	9.36	1	06/22/25 02:49	06/20/25 10:56
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ASTM D7979-19	<3.03	U	ng/L	3.03	9.26	1	06/22/25 02:49	06/20/25 10:56
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ASTM D7979-19	<38.9	U	ng/L	38.9	49.7	1	06/22/25 02:49	06/20/25 10:56
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ASTM D7979-19	<26.8	U	ng/L	26.8	49.7	1	06/22/25 02:49	06/20/25 10:56
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ASTM D7979-19	<21.0	U	ng/L	21.0	49.7	1	06/22/25 02:49	06/20/25 10:56
Perfluorobutane sulfonic acid (PFBS)	ASTM D7979-19	<8.15	U	ng/L	8.15	8.79	1	06/22/25 02:49	06/20/25 10:56
Perfluorobutanoic acid (PFBA)	ASTM D7979-19	<14.3	U	ng/L	14.3	49.7	1	06/22/25 02:49	06/20/25 10:56
Perfluorodecane sulfonic acid (PFDS)	ASTM D7979-19	<7.36	U	ng/L	7.36	9.58	1	06/29/25 00:22	06/20/25 10:56
Perfluorodecanoic acid (PFDA)	ASTM D7979-19	<14.9	U	ng/L	14.9	49.7	1	06/22/25 02:49	06/20/25 10:56
Perfluorododecanoic acid (PFDOA)	ASTM D7979-19	<29.5	U	ng/L	29.5	49.7	1	06/22/25 02:49	06/20/25 10:56
Perfluoroheptane sulfonic acid (PFHpS)	ASTM D7979-19	<10.7	U	ng/L	10.7	47.3	1	06/22/25 02:49	06/20/25 10:56
Perfluoroheptanoic acid (PFHpA)	ASTM D7979-19	<15.4	U	ng/L	15.4	49.7	1	06/22/25 02:49	06/20/25 10:56
Perfluorohexane sulfonic acid (PFHxS)	ASTM D7979-19	<13.5	U	ng/L	13.5	45.2	1	06/22/25 02:49	06/20/25 10:56
Perfluorohexanoic acid (PFHxA)	ASTM D7979-19	<14.2	U	ng/L	14.2	49.7	1	06/22/25 02:49	06/20/25 10:56

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/17/25 15:00
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: RFI-81-12R_061725	Lab ID: HN2508386-006

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononane sulfonic acid (PFNS)	ASTM D7979-19	<13.3	U	ng/L	13.3	47.7	1	06/22/25 02:49	06/20/25 10:56
Perfluorononanoic acid (PFNA)	ASTM D7979-19	<9.24	U	ng/L	9.24	9.94	1	06/22/25 02:49	06/20/25 10:56
Perfluorooctane sulfonamide (PFOSAm)	ASTM D7979-19	<8.14	U	ng/L	8.14	9.94	1	06/22/25 02:49	06/20/25 10:56
Perfluorooctane sulfonic acid (PFOS)	ASTM D7979-19	27.6		ng/L	5.08	9.30	1	07/02/25 18:43	07/01/25 12:24
Perfluorooctanoic acid (PFOA)	ASTM D7979-19	10.5		ng/L	9.24	9.94	1	06/22/25 02:49	06/20/25 10:56
Perfluoropentane sulfonic acid (PFPeS)	ASTM D7979-19	<5.29	U	ng/L	5.29	9.32	1	06/22/25 02:49	06/20/25 10:56
Perfluoropentanoic acid (PFPeA)	ASTM D7979-19	<7.95	U	ng/L	7.95	49.7	1	06/22/25 02:49	06/20/25 10:56
Perfluorotetradecanoic acid (PFTDA)	ASTM D7979-19	<37.5	U	ng/L	37.5	49.7	1	06/22/25 02:49	06/20/25 10:56
Perfluorotridecanoic acid (PFTrDA)	ASTM D7979-19	<17.6	U	ng/L	17.6	49.7	1	06/22/25 02:49	06/20/25 10:56
Perfluoroundecanoic acid (PFUnDA)	ASTM D7979-19	<11.9	U	ng/L	11.9	49.7	1	06/22/25 02:49	06/20/25 10:56
<i>Surr: 13C2-FtS 4:2</i>	<i>ASTM D7979-19</i>	105		%REC		50-130	1	06/22/25 02:49	06/20/25 10:56
<i>Surr: 13C2-FtS 6:2</i>	<i>ASTM D7979-19</i>	99.3		%REC		50-130	1	06/22/25 02:49	06/20/25 10:56
<i>Surr: 13C2-FtS 8:2</i>	<i>ASTM D7979-19</i>	97.2		%REC		50-130	1	06/22/25 02:49	06/20/25 10:56
<i>Surr: 13C2-PFDA</i>	<i>ASTM D7979-19</i>	108		%REC		70-130	1	06/22/25 02:49	06/20/25 10:56
<i>Surr: 13C2-PFDoA</i>	<i>ASTM D7979-19</i>	106		%REC		70-130	1	06/22/25 02:49	06/20/25 10:56
<i>Surr: 13C2-PFHxA</i>	<i>ASTM D7979-19</i>	108		%REC		50-130	1	06/22/25 02:49	06/20/25 10:56
<i>Surr: 13C2-PFTeDA</i>	<i>ASTM D7979-19</i>	94.9		%REC		50-130	1	06/22/25 02:49	06/20/25 10:56
<i>Surr: 13C2-PFUnDA</i>	<i>ASTM D7979-19</i>	103		%REC		70-130	1	06/22/25 02:49	06/20/25 10:56
<i>Surr: 13C3-HFPO-DA</i>	<i>ASTM D7979-19</i>	103		%REC		50-130	1	06/22/25 02:49	06/20/25 10:56
<i>Surr: 13C3-PFBS</i>	<i>ASTM D7979-19</i>	105		%REC		50-130	1	06/22/25 02:49	06/20/25 10:56
<i>Surr: 13C4-PFBA</i>	<i>ASTM D7979-19</i>	110		%REC		50-130	1	06/22/25 02:49	06/20/25 10:56
<i>Surr: 13C4-PFHpA</i>	<i>ASTM D7979-19</i>	108		%REC		50-130	1	06/22/25 02:49	06/20/25 10:56
<i>Surr: 13C4-PFOA</i>	<i>ASTM D7979-19</i>	110		%REC		70-130	1	06/22/25 02:49	06/20/25 10:56
<i>Surr: 13C4-PFOS</i>	<i>ASTM D7979-19</i>	104		%REC		70-130	1	07/02/25 18:43	07/01/25 12:24
<i>Surr: 13C5-PFNA</i>	<i>ASTM D7979-19</i>	110		%REC		70-130	1	06/22/25 02:49	06/20/25 10:56
<i>Surr: 13C5-PFPeA</i>	<i>ASTM D7979-19</i>	108		%REC		50-130	1	06/22/25 02:49	06/20/25 10:56
<i>Surr: 13C8-FOSA</i>	<i>ASTM D7979-19</i>	99.6		%REC		50-130	1	06/22/25 02:49	06/20/25 10:56
<i>Surr: 18O2-PFHxS</i>	<i>ASTM D7979-19</i>	105		%REC		70-130	1	06/22/25 02:49	06/20/25 10:56

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/17/25 15:00
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: RFI-81-12R_061725

Lab ID: HN2508386-006

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Surr: d3-N-MeFOSAA	ASTM D7979-19	90.6		%REC		50-130	1	06/22/25 02:49	06/20/25 10:56
Surr: d5-N-EtFOSAA	ASTM D7979-19	103		%REC		50-130	1	06/22/25 02:49	06/20/25 10:56

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/17/25 16:25
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: RFI-23-02R-061725	Lab ID: HN2508386-007

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ASTM D7979-19	<8.83	U	ng/L	8.83	9.43	1	06/22/25 03:04	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ASTM D7979-19	<27.4	U	ng/L	27.4	47.9	1	06/22/25 03:04	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ASTM D7979-19	<37.1	U	ng/L	37.1	46.7	1	06/22/25 03:04	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ASTM D7979-19	<19.8	U	ng/L	19.8	46.7	1	06/22/25 03:04	06/20/25 10:56
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ASTM D7979-19	<7.49	U	ng/L	7.49	9.43	1	06/22/25 03:04	06/20/25 10:56
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ASTM D7979-19	<3.05	U	ng/L	3.05	9.33	1	06/22/25 03:04	06/20/25 10:56
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ASTM D7979-19	<39.2	U	ng/L	39.2	50.0	1	06/22/25 03:04	06/20/25 10:56
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ASTM D7979-19	<27.0	U	ng/L	27.0	50.0	1	06/22/25 03:04	06/20/25 10:56
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ASTM D7979-19	<21.1	U	ng/L	21.1	50.0	1	06/22/25 03:04	06/20/25 10:56
Perfluorobutane sulfonic acid (PFBS)	ASTM D7979-19	<8.21	U	ng/L	8.21	8.85	1	06/22/25 03:04	06/20/25 10:56
Perfluorobutanoic acid (PFBA)	ASTM D7979-19	<14.4	U	ng/L	14.4	50.0	1	06/22/25 03:04	06/20/25 10:56
Perfluorodecane sulfonic acid (PFDS)	ASTM D7979-19	<7.42	U	ng/L	7.42	9.65	1	06/29/25 00:35	06/20/25 10:56
Perfluorodecanoic acid (PFDA)	ASTM D7979-19	<15.0	U	ng/L	15.0	50.0	1	06/22/25 03:04	06/20/25 10:56
Perfluorododecanoic acid (PFDOA)	ASTM D7979-19	<29.7	U	ng/L	29.7	50.0	1	06/22/25 03:04	06/20/25 10:56
Perfluoroheptane sulfonic acid (PFHpS)	ASTM D7979-19	<10.8	U	ng/L	10.8	47.6	1	06/22/25 03:04	06/20/25 10:56
Perfluoroheptanoic acid (PFHpA)	ASTM D7979-19	<15.5	U	ng/L	15.5	50.0	1	06/22/25 03:04	06/20/25 10:56
Perfluorohexane sulfonic acid (PFHxS)	ASTM D7979-19	24.4		ng/L	13.6	45.5	1	06/22/25 03:04	06/20/25 10:56
Perfluorohexanoic acid (PFHxA)	ASTM D7979-19	<14.3	U	ng/L	14.3	50.0	1	06/22/25 03:04	06/20/25 10:56

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/17/25 16:25
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: RFI-23-02R-061725	Lab ID: HN2508386-007

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononane sulfonic acid (PFNS)	ASTM D7979-19	<13.4	U	ng/L	13.4	48.0	1	06/22/25 03:04	06/20/25 10:56
Perfluorononanoic acid (PFNA)	ASTM D7979-19	<9.31	U	ng/L	9.31	10.0	1	06/22/25 03:04	06/20/25 10:56
Perfluorooctane sulfonamide (PFOSAm)	ASTM D7979-19	<8.20	U	ng/L	8.20	10.0	1	06/22/25 03:04	06/20/25 10:56
Perfluorooctane sulfonic acid (PFOS)	ASTM D7979-19	19.4		ng/L	5.14	9.41	1	07/02/25 18:58	07/01/25 12:24
Perfluorooctanoic acid (PFOA)	ASTM D7979-19	<9.31	U	ng/L	9.31	10.0	1	06/22/25 03:04	06/20/25 10:56
Perfluoropentane sulfonic acid (PFPeS)	ASTM D7979-19	<5.32	U	ng/L	5.32	9.39	1	06/22/25 03:04	06/20/25 10:56
Perfluoropentanoic acid (PFPeA)	ASTM D7979-19	<8.01	U	ng/L	8.01	50.0	1	06/22/25 03:04	06/20/25 10:56
Perfluorotetradecanoic acid (PFTDA)	ASTM D7979-19	<37.7	U	ng/L	37.7	50.0	1	06/22/25 03:04	06/20/25 10:56
Perfluorotridecanoic acid (PFTrDA)	ASTM D7979-19	<17.8	U	ng/L	17.8	50.0	1	06/22/25 03:04	06/20/25 10:56
Perfluoroundecanoic acid (PFUnDA)	ASTM D7979-19	<12.0	U	ng/L	12.0	50.0	1	06/22/25 03:04	06/20/25 10:56
<i>Surr: 13C2-FtS 4:2</i>	<i>ASTM D7979-19</i>	110		%REC		50-130	1	06/22/25 03:04	06/20/25 10:56
<i>Surr: 13C2-FtS 6:2</i>	<i>ASTM D7979-19</i>	92.8		%REC		50-130	1	06/22/25 03:04	06/20/25 10:56
<i>Surr: 13C2-FtS 8:2</i>	<i>ASTM D7979-19</i>	82.9		%REC		50-130	1	06/22/25 03:04	06/20/25 10:56
<i>Surr: 13C2-PFDA</i>	<i>ASTM D7979-19</i>	100		%REC		70-130	1	06/22/25 03:04	06/20/25 10:56
<i>Surr: 13C2-PFDoA</i>	<i>ASTM D7979-19</i>	97.1		%REC		70-130	1	06/22/25 03:04	06/20/25 10:56
<i>Surr: 13C2-PFHxA</i>	<i>ASTM D7979-19</i>	105		%REC		50-130	1	06/22/25 03:04	06/20/25 10:56
<i>Surr: 13C2-PFTeDA</i>	<i>ASTM D7979-19</i>	100		%REC		50-130	1	06/22/25 03:04	06/20/25 10:56
<i>Surr: 13C2-PFUnDA</i>	<i>ASTM D7979-19</i>	99.0		%REC		70-130	1	06/22/25 03:04	06/20/25 10:56
<i>Surr: 13C3-HFPO-DA</i>	<i>ASTM D7979-19</i>	114		%REC		50-130	1	06/22/25 03:04	06/20/25 10:56
<i>Surr: 13C3-PFBS</i>	<i>ASTM D7979-19</i>	108		%REC		50-130	1	06/22/25 03:04	06/20/25 10:56
<i>Surr: 13C4-PFBA</i>	<i>ASTM D7979-19</i>	112		%REC		50-130	1	06/22/25 03:04	06/20/25 10:56
<i>Surr: 13C4-PFHpA</i>	<i>ASTM D7979-19</i>	103		%REC		50-130	1	06/22/25 03:04	06/20/25 10:56
<i>Surr: 13C4-PFOA</i>	<i>ASTM D7979-19</i>	98.9		%REC		70-130	1	06/22/25 03:04	06/20/25 10:56
<i>Surr: 13C4-PFOS</i>	<i>ASTM D7979-19</i>	106		%REC		70-130	1	07/02/25 18:58	07/01/25 12:24
<i>Surr: 13C5-PFNA</i>	<i>ASTM D7979-19</i>	95.7		%REC		70-130	1	06/22/25 03:04	06/20/25 10:56
<i>Surr: 13C5-PFPeA</i>	<i>ASTM D7979-19</i>	104		%REC		50-130	1	06/22/25 03:04	06/20/25 10:56
<i>Surr: 13C8-FOSA</i>	<i>ASTM D7979-19</i>	101		%REC		50-130	1	06/22/25 03:04	06/20/25 10:56
<i>Surr: 18O2-PFHxS</i>	<i>ASTM D7979-19</i>	110		%REC		70-130	1	06/22/25 03:04	06/20/25 10:56

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/17/25 16:25
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: RFI-23-02R-061725	Lab ID: HN2508386-007

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Surr: d3-N-MeFOSAA	ASTM D7979-19	95.2		%REC		50-130	1	06/22/25 03:04	06/20/25 10:56
Surr: d5-N-EtFOSAA	ASTM D7979-19	103		%REC		50-130	1	06/22/25 03:04	06/20/25 10:56

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/18/25 11:55
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: RFI-23-01R_061825 **Lab ID:** HN2508386-008

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ASTM D7979-19	<8.78	U	ng/L	8.78	9.37	1	06/22/25 03:19	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ASTM D7979-19	<27.3	U	ng/L	27.3	47.7	1	06/22/25 03:19	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ASTM D7979-19	<36.9	U	ng/L	36.9	46.5	1	06/22/25 03:19	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ASTM D7979-19	<19.6	U	ng/L	19.6	46.5	1	06/22/25 03:19	06/20/25 10:56
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ASTM D7979-19	<7.44	U	ng/L	7.44	9.37	1	06/22/25 03:19	06/20/25 10:56
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ASTM D7979-19	<3.03	U	ng/L	3.03	9.27	1	06/22/25 03:19	06/20/25 10:56
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ASTM D7979-19	<39.0	U	ng/L	39.0	49.8	1	06/22/25 03:19	06/20/25 10:56
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ASTM D7979-19	<26.8	U	ng/L	26.8	49.8	1	06/22/25 03:19	06/20/25 10:56
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ASTM D7979-19	<21.0	U	ng/L	21.0	49.8	1	06/22/25 03:19	06/20/25 10:56
Perfluorobutane sulfonic acid (PFBS)	ASTM D7979-19	<8.16	U	ng/L	8.16	8.80	1	06/22/25 03:19	06/20/25 10:56
Perfluorobutanoic acid (PFBA)	ASTM D7979-19	<14.3	U	ng/L	14.3	49.8	1	06/22/25 03:19	06/20/25 10:56
Perfluorodecane sulfonic acid (PFDS)	ASTM D7979-19	<7.37	U	ng/L	7.37	9.59	1	06/29/25 00:49	06/20/25 10:56
Perfluorodecanoic acid (PFDA)	ASTM D7979-19	<14.9	U	ng/L	14.9	49.8	1	06/22/25 03:19	06/20/25 10:56
Perfluorododecanoic acid (PFDOA)	ASTM D7979-19	<29.5	U	ng/L	29.5	49.8	1	06/22/25 03:19	06/20/25 10:56
Perfluoroheptane sulfonic acid (PFHpS)	ASTM D7979-19	<10.8	U	ng/L	10.8	47.4	1	06/22/25 03:19	06/20/25 10:56
Perfluoroheptanoic acid (PFHpA)	ASTM D7979-19	<15.4	U	ng/L	15.4	49.8	1	06/22/25 03:19	06/20/25 10:56
Perfluorohexane sulfonic acid (PFHxS)	ASTM D7979-19	<13.5	U	ng/L	13.5	45.3	1	06/22/25 03:19	06/20/25 10:56
Perfluorohexanoic acid (PFHxA)	ASTM D7979-19	<14.2	U	ng/L	14.2	49.8	1	06/22/25 03:19	06/20/25 10:56

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/18/25 11:55
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: RFI-23-01R_061825

Lab ID: HN2508386-008

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononane sulfonic acid (PFNS)	ASTM D7979-19	<13.3	U	ng/L	13.3	47.8	1	06/22/25 03:19	06/20/25 10:56
Perfluorononanoic acid (PFNA)	ASTM D7979-19	<9.25	U	ng/L	9.25	9.95	1	06/22/25 03:19	06/20/25 10:56
Perfluorooctane sulfonamide (PFOSAm)	ASTM D7979-19	<8.15	U	ng/L	8.15	9.95	1	06/22/25 03:19	06/20/25 10:56
Perfluorooctane sulfonic acid (PFOS)	ASTM D7979-19	28.0		ng/L	5.18	9.49	1	07/02/25 19:12	07/01/25 12:24
Perfluorooctanoic acid (PFOA)	ASTM D7979-19	<9.25	U	ng/L	9.25	9.95	1	06/22/25 03:19	06/20/25 10:56
Perfluoropentane sulfonic acid (PFPeS)	ASTM D7979-19	<5.29	U	ng/L	5.29	9.33	1	06/22/25 03:19	06/20/25 10:56
Perfluoropentanoic acid (PFPeA)	ASTM D7979-19	<7.96	U	ng/L	7.96	49.8	1	06/22/25 03:19	06/20/25 10:56
Perfluorotetradecanoic acid (PFTDA)	ASTM D7979-19	<37.5	U	ng/L	37.5	49.8	1	06/22/25 03:19	06/20/25 10:56
Perfluorotridecanoic acid (PFTTrDA)	ASTM D7979-19	<17.7	U	ng/L	17.7	49.8	1	06/22/25 03:19	06/20/25 10:56
Perfluoroundecanoic acid (PFUnDA)	ASTM D7979-19	<12.0	U	ng/L	12.0	49.8	1	06/22/25 03:19	06/20/25 10:56
<i>Surr: 13C2-FtS 4:2</i>	<i>ASTM D7979-19</i>	110		%REC		50-130	1	06/22/25 03:19	06/20/25 10:56
<i>Surr: 13C2-FtS 6:2</i>	<i>ASTM D7979-19</i>	84.0		%REC		50-130	1	06/22/25 03:19	06/20/25 10:56
<i>Surr: 13C2-FtS 8:2</i>	<i>ASTM D7979-19</i>	88.8		%REC		50-130	1	06/22/25 03:19	06/20/25 10:56
<i>Surr: 13C2-PFDA</i>	<i>ASTM D7979-19</i>	100		%REC		70-130	1	06/22/25 03:19	06/20/25 10:56
<i>Surr: 13C2-PFDoA</i>	<i>ASTM D7979-19</i>	103		%REC		70-130	1	06/22/25 03:19	06/20/25 10:56
<i>Surr: 13C2-PFHxA</i>	<i>ASTM D7979-19</i>	105		%REC		50-130	1	06/22/25 03:19	06/20/25 10:56
<i>Surr: 13C2-PFTeDA</i>	<i>ASTM D7979-19</i>	98.2		%REC		50-130	1	06/22/25 03:19	06/20/25 10:56
<i>Surr: 13C2-PFUnDA</i>	<i>ASTM D7979-19</i>	92.1		%REC		70-130	1	06/22/25 03:19	06/20/25 10:56
<i>Surr: 13C3-HFPO-DA</i>	<i>ASTM D7979-19</i>	104		%REC		50-130	1	06/22/25 03:19	06/20/25 10:56
<i>Surr: 13C3-PFBS</i>	<i>ASTM D7979-19</i>	98.9		%REC		50-130	1	06/22/25 03:19	06/20/25 10:56
<i>Surr: 13C4-PFBA</i>	<i>ASTM D7979-19</i>	102		%REC		50-130	1	06/22/25 03:19	06/20/25 10:56
<i>Surr: 13C4-PFHpA</i>	<i>ASTM D7979-19</i>	109		%REC		50-130	1	06/22/25 03:19	06/20/25 10:56
<i>Surr: 13C4-PFOA</i>	<i>ASTM D7979-19</i>	108		%REC		70-130	1	06/22/25 03:19	06/20/25 10:56
<i>Surr: 13C4-PFOS</i>	<i>ASTM D7979-19</i>	109		%REC		70-130	1	07/02/25 19:12	07/01/25 12:24
<i>Surr: 13C5-PFNA</i>	<i>ASTM D7979-19</i>	97.7		%REC		70-130	1	06/22/25 03:19	06/20/25 10:56
<i>Surr: 13C5-PFPeA</i>	<i>ASTM D7979-19</i>	101		%REC		50-130	1	06/22/25 03:19	06/20/25 10:56
<i>Surr: 13C8-FOSA</i>	<i>ASTM D7979-19</i>	92.0		%REC		50-130	1	06/22/25 03:19	06/20/25 10:56
<i>Surr: 18O2-PFHxS</i>	<i>ASTM D7979-19</i>	105		%REC		70-130	1	06/22/25 03:19	06/20/25 10:56

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/18/25 11:55
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: RFI-23-01R_061825

Lab ID: HN2508386-008

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Surr: d3-N-MeFOSAA	ASTM D7979-19	93.0		%REC		50-130	1	06/22/25 03:19	06/20/25 10:56
Surr: d5-N-EtFOSAA	ASTM D7979-19	98.9		%REC		50-130	1	06/22/25 03:19	06/20/25 10:56

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/18/25 13:15
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: RFI-12-40_061825	Lab ID: HN2508386-009

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ASTM D7979-19	<8.90	U	ng/L	8.90	9.51	1	06/22/25 04:02	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ASTM D7979-19	<27.7	U	ng/L	27.7	48.3	1	06/22/25 04:02	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ASTM D7979-19	<37.4	U	ng/L	37.4	47.1	1	06/22/25 04:02	06/20/25 10:56
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ASTM D7979-19	<19.9	U	ng/L	19.9	47.1	1	06/22/25 04:02	06/20/25 10:56
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ASTM D7979-19	<7.55	U	ng/L	7.55	9.51	1	06/22/25 04:02	06/20/25 10:56
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ASTM D7979-19	<3.07	U	ng/L	3.07	9.40	1	06/22/25 04:02	06/20/25 10:56
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ASTM D7979-19	<39.5	U	ng/L	39.5	50.4	1	06/22/25 04:02	06/20/25 10:56
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ASTM D7979-19	<27.2	U	ng/L	27.2	50.4	1	06/22/25 04:02	06/20/25 10:56
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ASTM D7979-19	<21.3	U	ng/L	21.3	50.4	1	06/22/25 04:02	06/20/25 10:56
Perfluorobutane sulfonic acid (PFBS)	ASTM D7979-19	<8.28	U	ng/L	8.28	8.92	1	06/22/25 04:02	06/20/25 10:56
Perfluorobutanoic acid (PFBA)	ASTM D7979-19	<14.6	U	ng/L	14.6	50.4	1	06/22/25 04:02	06/20/25 10:56
Perfluorodecane sulfonic acid (PFDS)	ASTM D7979-19	<7.48	U	ng/L	7.48	9.73	1	06/29/25 01:03	06/20/25 10:56
Perfluorodecanoic acid (PFDA)	ASTM D7979-19	<15.2	U	ng/L	15.2	50.4	1	06/22/25 04:02	06/20/25 10:56
Perfluorododecanoic acid (PFDOA)	ASTM D7979-19	<30.0	U	ng/L	30.0	50.4	1	06/22/25 04:02	06/20/25 10:56
Perfluoroheptane sulfonic acid (PFHpS)	ASTM D7979-19	<10.9	U	ng/L	10.9	48.0	1	06/22/25 04:02	06/20/25 10:56
Perfluoroheptanoic acid (PFHpA)	ASTM D7979-19	<15.6	U	ng/L	15.6	50.4	1	06/22/25 04:02	06/20/25 10:56
Perfluorohexane sulfonic acid (PFHxS)	ASTM D7979-19	<13.7	U	ng/L	13.7	45.9	1	06/22/25 04:02	06/20/25 10:56
Perfluorohexanoic acid (PFHxA)	ASTM D7979-19	<14.4	U	ng/L	14.4	50.4	1	06/22/25 04:02	06/20/25 10:56

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/18/25 13:15
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: RFI-12-40_061825	Lab ID: HN2508386-009

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononane sulfonic acid (PFNS)	ASTM D7979-19	<13.5	U	ng/L	13.5	48.4	1	06/22/25 04:02	06/20/25 10:56
Perfluorononanoic acid (PFNA)	ASTM D7979-19	<9.38	U	ng/L	9.38	10.1	1	06/22/25 04:02	06/20/25 10:56
Perfluorooctane sulfonamide (PFOSAm)	ASTM D7979-19	<8.26	U	ng/L	8.26	10.1	1	06/22/25 04:02	06/20/25 10:56
Perfluorooctane sulfonic acid (PFOS)	ASTM D7979-19	16.1		ng/L	5.13	9.39	1	07/02/25 19:27	07/01/25 12:24
Perfluorooctanoic acid (PFOA)	ASTM D7979-19	<9.38	U	ng/L	9.38	10.1	1	06/22/25 04:02	06/20/25 10:56
Perfluoropentane sulfonic acid (PFPeS)	ASTM D7979-19	<5.37	U	ng/L	5.37	9.46	1	06/22/25 04:02	06/20/25 10:56
Perfluoropentanoic acid (PFPeA)	ASTM D7979-19	<8.07	U	ng/L	8.07	50.4	1	06/22/25 04:02	06/20/25 10:56
Perfluorotetradecanoic acid (PFTDA)	ASTM D7979-19	<38.0	U	ng/L	38.0	50.4	1	06/22/25 04:02	06/20/25 10:56
Perfluorotridecanoic acid (PFTrDA)	ASTM D7979-19	<17.9	U	ng/L	17.9	50.4	1	06/22/25 04:02	06/20/25 10:56
Perfluoroundecanoic acid (PFUnDA)	ASTM D7979-19	<12.1	U	ng/L	12.1	50.4	1	06/22/25 04:02	06/20/25 10:56
<i>Surr: 13C2-FtS 4:2</i>	<i>ASTM D7979-19</i>	107		%REC		50-130	1	06/22/25 04:02	06/20/25 10:56
<i>Surr: 13C2-FtS 6:2</i>	<i>ASTM D7979-19</i>	95.4		%REC		50-130	1	06/22/25 04:02	06/20/25 10:56
<i>Surr: 13C2-FtS 8:2</i>	<i>ASTM D7979-19</i>	90.2		%REC		50-130	1	06/22/25 04:02	06/20/25 10:56
<i>Surr: 13C2-PFDA</i>	<i>ASTM D7979-19</i>	104		%REC		70-130	1	06/22/25 04:02	06/20/25 10:56
<i>Surr: 13C2-PFDoA</i>	<i>ASTM D7979-19</i>	106		%REC		70-130	1	06/22/25 04:02	06/20/25 10:56
<i>Surr: 13C2-PFHxA</i>	<i>ASTM D7979-19</i>	104		%REC		50-130	1	06/22/25 04:02	06/20/25 10:56
<i>Surr: 13C2-PFTeDA</i>	<i>ASTM D7979-19</i>	103		%REC		50-130	1	06/22/25 04:02	06/20/25 10:56
<i>Surr: 13C2-PFUnDA</i>	<i>ASTM D7979-19</i>	107		%REC		70-130	1	06/22/25 04:02	06/20/25 10:56
<i>Surr: 13C3-HFPO-DA</i>	<i>ASTM D7979-19</i>	79.6		%REC		50-130	1	06/22/25 04:02	06/20/25 10:56
<i>Surr: 13C3-PFBS</i>	<i>ASTM D7979-19</i>	108		%REC		50-130	1	06/22/25 04:02	06/20/25 10:56
<i>Surr: 13C4-PFBA</i>	<i>ASTM D7979-19</i>	101		%REC		50-130	1	06/22/25 04:02	06/20/25 10:56
<i>Surr: 13C4-PFHpA</i>	<i>ASTM D7979-19</i>	111		%REC		50-130	1	06/22/25 04:02	06/20/25 10:56
<i>Surr: 13C4-PFOA</i>	<i>ASTM D7979-19</i>	107		%REC		70-130	1	06/22/25 04:02	06/20/25 10:56
<i>Surr: 13C4-PFOS</i>	<i>ASTM D7979-19</i>	109		%REC		70-130	1	07/02/25 19:27	07/01/25 12:24
<i>Surr: 13C5-PFNA</i>	<i>ASTM D7979-19</i>	108		%REC		70-130	1	06/22/25 04:02	06/20/25 10:56
<i>Surr: 13C5-PFPeA</i>	<i>ASTM D7979-19</i>	104		%REC		50-130	1	06/22/25 04:02	06/20/25 10:56
<i>Surr: 13C8-FOSA</i>	<i>ASTM D7979-19</i>	103		%REC		50-130	1	06/22/25 04:02	06/20/25 10:56
<i>Surr: 18O2-PFHxS</i>	<i>ASTM D7979-19</i>	114		%REC		70-130	1	06/22/25 04:02	06/20/25 10:56

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/18/25 13:15
Date Received: 06/19/25 09:30
Run ID: 3249243

CLIENT ID: RFI-12-40_061825

Lab ID: HN2508386-009

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Surr: d3-N-MeFOSAA	ASTM D7979-19	102		%REC		50-130	1	06/22/25 04:02	06/20/25 10:56
Surr: d5-N-EtFOSAA	ASTM D7979-19	106		%REC		50-130	1	06/22/25 04:02	06/20/25 10:56



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: NA
Date Received: NA
Run ID: 3249243

Per- and Polyfluorinated Alkyl Substances by LC-MS

MB	CLIENT ID: Method Blank	Lab ID: QC-2063696-001

Method: ASTM D7979-19**Dilution:** 1**Analysis Date:** 06/21/25 22:13**Prep Date:** 06/20/25 10:57

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	<8.82	ng/L	8.82	9.42							U
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	<27.4	ng/L	27.4	47.9							U
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	<37.1	ng/L	37.1	46.7							U
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	<19.7	ng/L	19.7	47.4							U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	<7.48	ng/L	7.48	9.42							U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	<3.04	ng/L	3.04	9.32							U
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	<39.2	ng/L	39.2	50.0							U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	<27.0	ng/L	27.0	50.0							U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	<21.1	ng/L	21.1	50.0							U
Perfluorobutane sulfonic acid (PFBS)	<8.20	ng/L	8.20	8.84							U
Perfluorobutanoic acid (PFBA)	<14.4	ng/L	14.4	50.0							U
Perfluorodecanoic acid (PFDA)	<15.0	ng/L	15.0	50.0							U
Perfluorododecanoic acid (PFDOA)	<29.7	ng/L	29.7	50.0							U
Perfluoroheptane sulfonic acid (PFHpS)	<10.8	ng/L	10.8	47.6							U
Perfluoroheptanoic acid (PFHpA)	<15.5	ng/L	15.5	50.0							U
Perfluorohexane sulfonic acid (PFHxS)	<13.6	ng/L	13.6	45.5							U
Perfluorohexanoic acid (PFHxA)	<14.3	ng/L	14.3	50.0							U
Perfluorononane sulfonic acid (PFNS)	<13.4	ng/L	13.4	48.0							U
Perfluorononanoic acid (PFNA)	<9.30	ng/L	9.30	10.0							U
Perfluorooctane sulfonamide (PFOSAm)	<8.19	ng/L	8.19	10.0							U
Perfluorooctanoic acid (PFOA)	<9.30	ng/L	9.30	10.0							U
Perfluoropentane sulfonic acid (PFPeS)	<5.32	ng/L	5.32	9.38							U
Perfluoropentanoic acid (PFPeA)	<8.00	ng/L	8.00	50.0							U
Perfluorotetradecanoic acid (PFTDA)	<37.7	ng/L	37.7	50.0							U
Perfluorotridecanoic acid (PFTrDA)	<17.8	ng/L	17.8	50.0							U
Perfluoroundecanoic acid (PFUnDA)	<12.0	ng/L	12.0	50.0							U
Surr: 13C2-FtS 4:2	177	ng/L			149		119	50-130			
Surr: 13C2-FtS 6:2	164	ng/L			152		108	50-130			
Surr: 13C2-FtS 8:2	166	ng/L			153		109	50-130			
Surr: 13C2-PFDA	174	ng/L			160		108	70-130			
Surr: 13C2-PFDoA	172	ng/L			160		108	70-130			



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: NA
Date Received: NA
Run ID: 3249243

MB	CLIENT ID: Method Blank	Lab ID: QC-2063696-001

Method: ASTM D7979-19

Dilution: 1

Analysis Date: 06/21/25 22:13

Prep Date: 06/20/25 10:57

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Surr: 13C2-PFHxA	183	ng/L			160		114	50-130			
Surr: 13C2-PFTeDA	169	ng/L			160		105	50-130			
Surr: 13C2-PFUnDA	177	ng/L			160		111	70-130			
Surr: 13C3-HFPO-DA	177	ng/L			160		111	50-130			
Surr: 13C3-PFBS	151	ng/L			149		101	50-130			
Surr: 13C4-PFBA	173	ng/L			160		108	50-130			
Surr: 13C4-PFHpA	171	ng/L			160		107	50-130			
Surr: 13C4-PFOA	164	ng/L			160		103	70-130			
Surr: 13C5-PFNA	160	ng/L			160		100	70-130			
Surr: 13C5-PFPeA	177	ng/L			160		111	50-130			
Surr: 13C8-FOSA	161	ng/L			160		101	50-130			
Surr: 18O2-PFHxS	151	ng/L			151		99.8	70-130			
Surr: d3-N-MeFOSAA	156	ng/L			160		97.9	50-130			
Surr: d5-N-EtFOSAA	191	ng/L			160		119	50-130			

MB	CLIENT ID: Method Blank	Lab ID: QC-2063696-002

Method: ASTM D7979-19

Dilution: 1

Analysis Date: 06/21/25 22:42

Prep Date: 06/20/25 10:57

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	<8.82	ng/L	8.82	9.42							U
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	<27.4	ng/L	27.4	47.9							U
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	<37.1	ng/L	37.1	46.7							U
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	<19.7	ng/L	19.7	47.4							U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	<7.48	ng/L	7.48	9.42							U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	<3.04	ng/L	3.04	9.32							U
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	<39.2	ng/L	39.2	50.0							U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	<27.0	ng/L	27.0	50.0							U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	<21.1	ng/L	21.1	50.0							U
Perfluorobutane sulfonic acid (PFBS)	<8.20	ng/L	8.20	8.84							U
Perfluorobutanoic acid (PFBA)	<14.4	ng/L	14.4	50.0							U
Perfluorodecanoic acid (PFDA)	<15.0	ng/L	15.0	50.0							U
Perfluorododecanoic acid (PFDOA)	<29.7	ng/L	29.7	50.0							U
Perfluoroheptane sulfonic acid (PFHpS)	<10.8	ng/L	10.8	47.6							U

QA/QC Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: NA
Date Received: NA
Run ID: 3249243

MB	CLIENT ID: Method Blank	Lab ID: QC-2063696-002

Method: ASTM D7979-19**Dilution:** 1**Analysis Date:** 06/21/25 22:42**Prep Date:** 06/20/25 10:57

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Perfluoroheptanoic acid (PFHpA)	<15.5	ng/L	15.5	50.0							U
Perfluorohexane sulfonic acid (PFHxS)	<13.6	ng/L	13.6	45.5							U
Perfluorohexanoic acid (PFHxA)	<14.3	ng/L	14.3	50.0							U
Perfluorononane sulfonic acid (PFNS)	<13.4	ng/L	13.4	48.0							U
Perfluorononanoic acid (PFNA)	<9.30	ng/L	9.30	10.0							U
Perfluorooctane sulfonamide (PFOSAm)	<8.19	ng/L	8.19	10.0							U
Perfluorooctanoic acid (PFOA)	<9.30	ng/L	9.30	10.0							U
Perfluoropentane sulfonic acid (PFPeS)	<5.32	ng/L	5.32	9.38							U
Perfluoropentanoic acid (PFPeA)	<8.00	ng/L	8.00	50.0							U
Perfluorotetradecanoic acid (PFTDA)	<37.7	ng/L	37.7	50.0							U
Perfluorotridecanoic acid (PFTrDA)	<17.8	ng/L	17.8	50.0							U
Perfluoroundecanoic acid (PFUnDA)	<12.0	ng/L	12.0	50.0							U
Surr: 13C2-FtS 4:2	150	ng/L			149		101	50-130			
Surr: 13C2-FtS 6:2	137	ng/L			152		90.1	50-130			
Surr: 13C2-FtS 8:2	135	ng/L			153		88.2	50-130			
Surr: 13C2-PFDA	165	ng/L			160		103	70-130			
Surr: 13C2-PFDoA	176	ng/L			160		110	70-130			
Surr: 13C2-PFHxA	167	ng/L			160		104	50-130			
Surr: 13C2-PFTeDA	155	ng/L			160		97.1	50-130			
Surr: 13C2-PFUnDA	168	ng/L			160		105	70-130			
Surr: 13C3-HFPO-DA	164	ng/L			160		103	50-130			
Surr: 13C3-PFBS	159	ng/L			149		106	50-130			
Surr: 13C4-PFBA	162	ng/L			160		101	50-130			
Surr: 13C4-PFHpA	167	ng/L			160		104	50-130			
Surr: 13C4-PFOA	161	ng/L			160		101	70-130			
Surr: 13C5-PFNA	167	ng/L			160		104	70-130			
Surr: 13C5-PFPeA	159	ng/L			160		99.4	50-130			
Surr: 13C8-FOSA	158	ng/L			160		98.7	50-130			
Surr: 18O2-PFHxS	149	ng/L			151		98.6	70-130			
Surr: d3-N-MeFOSAA	162	ng/L			160		101	50-130			
Surr: d5-N-EtFOSAA	176	ng/L			160		110	50-130			

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2063696-003

Method: ASTM D7979-19**Dilution:** 1**Analysis Date:** 06/21/25 23:11**Prep Date:** 06/20/25 10:57

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	454	ng/L	8.82	9.42	471		96.4	70-130			
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	394	ng/L	27.4	47.9	479		82.3	70-130			

QA/QC Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: NA
Date Received: NA
Run ID: 3249243

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2063696-003

Method: ASTM D7979-19

Dilution: 1

Analysis Date: 06/21/25 23:11

Prep Date: 06/20/25 10:57

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	447	ng/L	37.1	46.7	467		95.8	70-130			
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	452	ng/L	19.7	47.4	474		95.4	70-130			
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	456	ng/L	7.48	9.42	471		96.8	70-130			
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	474	ng/L	3.04	9.32	466		102	70-130			
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	480	ng/L	39.2	50.0	500		96.0	50-130			
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	493	ng/L	27.0	50.0	500		98.5	70-130			
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	446	ng/L	21.1	50.0	500		89.2	70-130			
Perfluorobutane sulfonic acid (PFBS)	468	ng/L	8.20	8.84	442		106	70-130			
Perfluorobutanoic acid (PFBA)	486	ng/L	14.4	50.0	500		97.1	50-130			
Perfluorodecanoic acid (PFDA)	481	ng/L	15.0	50.0	500		96.2	70-130			
Perfluorododecanoic acid (PFDOA)	485	ng/L	29.7	50.0	500		97.0	70-130			
Perfluoroheptane sulfonic acid (PFHpS)	438	ng/L	10.8	47.6	476		92.0	70-130			
Perfluoroheptanoic acid (PFHpA)	507	ng/L	15.5	50.0	500		101	50-130			
Perfluorohexane sulfonic acid (PFHxS)	454	ng/L	13.6	45.5	455		99.7	70-130			
Perfluorohexanoic acid (PFHxA)	487	ng/L	14.3	50.0	500		97.4	50-130			
Perfluorononane sulfonic acid (PFNS)	456	ng/L	13.4	48.0	480		95.0	70-130			
Perfluorononanoic acid (PFNA)	495	ng/L	9.30	10.0	500		99.1	70-130			
Perfluorooctane sulfonamide (PFOSAm)	487	ng/L	8.19	10.0	500		97.4	70-130			
Perfluorooctanoic acid (PFOA)	508	ng/L	9.30	10.0	500		102	70-130			
Perfluoropentane sulfonic acid (PFPeS)	481	ng/L	8.19	9.38	469		103	70-130			
Perfluoropentanoic acid (PFPeA)	510	ng/L	5.07	50.0	500		102	70-130			
Perfluorotetradecanoic acid (PFTDA)	549	ng/L	9.30	50.0	500		110	70-130			
Perfluorotridecanoic acid (PFTrDA)	545	ng/L	5.32	50.0	500		109	70-130			
Perfluoroundecanoic acid (PFUnDA)	493	ng/L	12.0	50.0	500		98.6	70-130			
Surr: 13C2-FtS 4:2	172	ng/L			149		116	50-130			
Surr: 13C2-FtS 6:2	162	ng/L			152		107	50-130			
Surr: 13C2-FtS 8:2	183	ng/L			153		119	50-130			
Surr: 13C2-PFDA	155	ng/L			160		96.9	70-130			
Surr: 13C2-PFDoA	161	ng/L			160		101	70-130			
Surr: 13C2-PFHxA	164	ng/L			160		103	50-130			
Surr: 13C2-PFTeDA	182	ng/L			160		114	50-130			
Surr: 13C2-PFUnDA	166	ng/L			160		104	70-130			
Surr: 13C3-HFPO-DA	162	ng/L			160		101	50-130			
Surr: 13C3-PFBS	141	ng/L			149		94.4	50-130			
Surr: 13C4-PFBA	169	ng/L			160		105	50-130			

QA/QC Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: NA
Date Received: NA
Run ID: 3249243

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2063696-003

Method: ASTM D7979-19

Dilution: 1

Analysis Date: 06/21/25 23:11

Prep Date: 06/20/25 10:57

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Surr: 13C4-PFH _p A	163	ng/L			160		102	50-130			
Surr: 13C4-PFOA	158	ng/L			160		98.4	70-130			
Surr: 13C5-PFNA	156	ng/L			160		97.3	70-130			
Surr: 13C5-PFPeA	155	ng/L			160		96.7	50-130			
Surr: 13C8-FOSA	162	ng/L			160		101	50-130			
Surr: 18O2-PFH _x S	153	ng/L			151		101	70-130			
Surr: d3-N-MeFOSAA	145	ng/L			160		90.4	50-130			
Surr: d5-N-EtFOSAA	148	ng/L			160		92.7	50-130			

MS	CLIENT ID: West P-Trap_061625	Lab ID: QC-2063696-008

Method: ASTM D7979-19

Dilution: 1

Analysis Date: 06/22/25 01:07

Prep Date: 06/20/25 10:57

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	442	ng/L	8.75	9.34	463.58	<8.59	95.3	70-130			
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	435	ng/L	27.2	47.5	471.46	<26.7	92.2	70-130			
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	483	ng/L	36.8	46.3	459.65	<36.1	105	70-130			
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	509	ng/L	19.6	46.3	466.54	<19.2	109	70-130			
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	446	ng/L	7.42	9.34	463.58	<7.28	96.0	70-130			
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	484	ng/L	3.02	9.25	458.66	<2.96	105	70-130			
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	470	ng/L	38.8	49.6	492.13	<38.1	95.4	50-130			
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	460	ng/L	26.8	49.6	492.13	<26.3	91.8	70-130			
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	456	ng/L	20.9	49.6	492.13	<20.5	92.7	70-130			
Perfluorobutane sulfonic acid (PFBS)	478	ng/L	8.14	8.77	435.04	<7.98	109	70-130			
Perfluorobutanoic acid (PFBA)	488	ng/L	14.3	49.6	492.13	<14.0	98.5	50-130			
Perfluorodecanoic acid (PFDA)	494	ng/L	14.9	49.6	492.13	<14.6	99.4	70-130			
Perfluorododecanoic acid (PFDOA)	467	ng/L	29.4	49.6	492.13	<28.9	94.2	70-130			
Perfluoroheptane sulfonic acid (PFHpS)	428	ng/L	10.7	47.2	468.5	<10.5	91.1	70-130			
Perfluoroheptanoic acid (PFHpA)	499	ng/L	15.4	49.6	492.13	<15.1	101	50-130			
Perfluorohexanoic acid (PFHxA)	514	ng/L	14.2	49.6	492.13	<13.9	103	50-130			
Perfluorononane sulfonic acid (PFNS)	462	ng/L	13.3	47.6	472.44	<13.0	96.7	70-130			
Perfluorononanoic acid (PFNA)	486	ng/L	9.23	9.92	492.13	<9.05	98.2	70-130			
Perfluorooctane sulfonamide (PFOSAm)	471	ng/L	8.12	9.92	492.13	<7.97	95.1	70-130			
Perfluorooctanoic acid (PFOA)	480	ng/L	9.23	9.92	492.13	<9.05	95.8	70-130			

QA/QC Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: NA
Date Received: NA
Run ID: 3249243

MS	CLIENT ID: West P-Trap_061625	Lab ID: QC-2063696-008

Method: ASTM D7979-19

Dilution: 1

Analysis Date: 06/22/25 01:07

Prep Date: 06/20/25 10:57

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Perfluoropentane sulfonic acid (PFPeS)	473	ng/L	5.28	9.31	461.61	<5.18	102	70-130			
Perfluoropentanoic acid (PFPeA)	510	ng/L	7.94	49.6	492.13	<7.79	103	70-130			
Perfluorotetradecanoic acid (PFTDA)	491	ng/L	37.4	49.6	492.13	<36.7	99.2	70-130			
Perfluorotridecanoic acid (PFTrDA)	511	ng/L	17.6	49.6	492.13	<17.3	104	70-130			
Perfluoroundecanoic acid (PFUnDA)	456	ng/L	11.9	49.6	492.13	<11.7	92.2	70-130			
Surr: 13C2-FtS 4:2	180	ng/L			146.65		122	50-130			
Surr: 13C2-FtS 6:2	189	ng/L			149.61		126	50-130			
Surr: 13C2-FtS 8:2	136	ng/L			150.59		90.4	50-130			
Surr: 13C2-PFDA	164	ng/L			157.48		104	70-130			
Surr: 13C2-PFDoA	162	ng/L			157.48		103	70-130			
Surr: 13C2-PFHxA	177	ng/L			157.48		112	50-130			
Surr: 13C2-PFTeDA	182	ng/L			157.48		115	50-130			
Surr: 13C2-PFUnDA	163	ng/L			157.48		104	70-130			
Surr: 13C3-HFPO-DA	156	ng/L			157.48		98.9	50-130			
Surr: 13C3-PFBS	168	ng/L			146.65		114	50-130			
Surr: 13C4-PFBA	161	ng/L			157.48		102	50-130			
Surr: 13C4-PFHpA	159	ng/L			157.48		101	50-130			
Surr: 13C4-PFOA	163	ng/L			157.48		103	70-130			
Surr: 13C5-PFNA	159	ng/L			157.48		101	70-130			
Surr: 13C5-PFPeA	163	ng/L			157.48		103	50-130			
Surr: 13C8-FOSA	158	ng/L			157.48		100	50-130			
Surr: d3-N-MeFOSAA	141	ng/L			157.48		89.5	50-130			
Surr: d5-N-EtFOSAA	166	ng/L			157.48		105	50-130			

DUP	CLIENT ID: East P-Trap_061625	Lab ID: QC-2063696-010

Method: ASTM D7979-19

Dilution: 1

Analysis Date: 06/22/25 01:37

Prep Date: 06/20/25 10:57

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	<8.67	ng/L	8.67	9.26		<8.72			0.576	30	U
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	<27.0	ng/L	27.0	47.1		<27.1			0.576	30	U
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	<36.5	ng/L	36.5	45.9		<36.7			0.576	30	U
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	<19.4	ng/L	19.4	45.9		<19.5			0.576	30	U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	<7.36	ng/L	7.36	9.26		<7.40			0.576	30	U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	<2.99	ng/L	2.99	9.17		<3.01			0		U
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	<38.5	ng/L	38.5	49.2		<38.7			0		U

QA/QC Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: NA
Date Received: NA
Run ID: 3249243

DUP	CLIENT ID: East P-Trap_061625	Lab ID: QC-2063696-010

Method: ASTM D7979-19

Dilution: 1

Analysis Date: 06/22/25 01:37

Prep Date: 06/20/25 10:57

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	<26.5	ng/L	26.5	49.2		<26.7			0		U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	<20.8	ng/L	20.8	49.2		<20.9			0		U
Perfluorobutane sulfonic acid (PFBS)	<8.06	ng/L	8.06	8.69		<8.11			0.576	30	U
Perfluorobutanoic acid (PFBA)	<14.2	ng/L	14.2	49.2		<14.3			0		U
Perfluorodecanoic acid (PFDA)	<14.8	ng/L	14.8	49.2		<14.8			0		U
Perfluorododecanoic acid (PFDOA)	<39.0	ng/L	39.0	49.2		<29.4			0		U
Perfluoroheptane sulfonic acid (PFHpS)	<10.6	ng/L	10.6	46.8		<10.7			0.576	30	U
Perfluoroheptanoic acid (PFHpA)	<15.2	ng/L	15.2	49.2		<15.3			0		U
Perfluorohexane sulfonic acid (PFHxS)	17.1	ng/L	13.4	44.8		<13.4			0.576	30	J
Perfluorohexanoic acid (PFHxA)	<14.0	ng/L	14.0	49.2		<14.1			0		U
Perfluorononane sulfonic acid (PFNS)	<13.2	ng/L	13.2	47.2		<13.2			0.576	30	U
Perfluorononanoic acid (PFNA)	<9.15	ng/L	9.15	9.84		<9.20			0.576	30	U
Perfluorooctane sulfonamide (PFOSAm)	<8.06	ng/L	8.06	9.84		<8.10			0.576	30	U
Perfluorooctanoic acid (PFOA)	<9.15	ng/L	9.15	9.84		<9.20			0.576	30	U
Perfluoropentane sulfonic acid (PFPeS)	<5.23	ng/L	5.23	9.22		<5.26			0.576	30	U
Perfluoropentanoic acid (PFPeA)	<7.87	ng/L	7.87	49.2		<7.91			0		U
Perfluorotetradecanoic acid (PFTDA)	<37.1	ng/L	37.1	49.2		<37.3			0		U
Perfluorotridecanoic acid (PFTrDA)	<17.5	ng/L	17.5	49.2		<17.6			0		U
Perfluoroundecanoic acid (PFUnDA)	<11.8	ng/L	11.8	49.2		<11.9			0		U
Surr: 13C2-FtS 4:2	124	ng/L			149		86.0	50-130	15.0	30	
Surr: 13C2-FtS 6:2	136	ng/L			152		92.6	50-130	6.58	30	
Surr: 13C2-FtS 8:2	156	ng/L			153		105	50-130	0.948	30	
Surr: 13C2-PFDA	154	ng/L			160		99.3	70-130	2.96	30	
Surr: 13C2-PFDoA	157	ng/L			160		102	70-130	2.90	30	
Surr: 13C2-PFHxA	158	ng/L			160		102	50-130	4.78	30	
Surr: 13C2-PFTeDA	163	ng/L			160		105	50-130	6.45	30	
Surr: 13C2-PFUnDA	163	ng/L			160		105	70-130	3.74	30	
Surr: 13C3-HFPO-DA	149	ng/L			160		96.4	50-130	1.57	30	
Surr: 13C3-PFBS	146	ng/L			149		101	50-130	7.62	30	
Surr: 13C4-PFBA	161	ng/L			160		104	50-130	2.84	30	
Surr: 13C4-PFHpA	160	ng/L			160		104	50-130	6.35	30	
Surr: 13C4-PFOA	156	ng/L			160		101	70-130	4.04	30	
Surr: 13C5-PFNA	153	ng/L			160		99.2	70-130	2.78	30	
Surr: 13C5-PFPeA	159	ng/L			160		103	50-130	0.976	30	
Surr: 13C8-FOSA	147	ng/L			160		95.3	50-130	10.6	30	
Surr: 18O2-PFHxS	143	ng/L			151		97.8	70-130	7.10	30	
Surr: d3-N-MeFOSAA	140	ng/L			160		90.4	50-130	14.0	30	
Surr: d5-N-EtFOSAA	149	ng/L			160		96.4	50-130	3.66	30	

The following samples were analyzed in this batch: HN2508386-001, HN2508386-002, HN2508386-003, HN2508386-004, HN2508386-005, HN2508386-006, HN2508386-007, HN2508386-008, HN2508386-009



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/16/25 10:45
Date Received: 06/19/25 09:30
Run ID: 3271661

Per- and Polyfluorinated Alkyl Substances by LC-MS

MB	CLIENT ID: Method Blank				Lab ID: QC-2063696-001			

Method: ASTM D7979-19 **Dilution:** 1 **Analysis Date:** 06/27/25 14:03
Prep Date: 06/20/25 10:57

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Perfluorooctane sulfonic acid (PFOS)	<5.07	ng/L	5.07	9.28							U
Surr: 13C4-PFOS	170	ng/L			153		111	70-130			

MB	CLIENT ID: Method Blank				Lab ID: QC-2063696-002			

Method: ASTM D7979-19 **Dilution:** 1 **Analysis Date:** 06/27/25 14:44
Prep Date: 06/20/25 10:57

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Perfluorooctane sulfonic acid (PFOS)	<5.07	ng/L	5.07	9.28							U
Surr: 13C4-PFOS	174	ng/L			153		114	70-130			

LCS	CLIENT ID: Laboratory Control Sample				Lab ID: QC-2063696-003			

Method: ASTM D7979-19 **Dilution:** 1 **Analysis Date:** 06/27/25 14:58
Prep Date: 06/20/25 10:57

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Perfluorooctane sulfonic acid (PFOS)	482	ng/L	5.07	9.28	464		104	70-130			
Surr: 13C4-PFOS	167	ng/L			153		109	70-130			

MS	CLIENT ID: West P-Trap_061625				Lab ID: QC-2063696-008			

Method: ASTM D7979-19 **Dilution:** 1 **Analysis Date:** 06/27/25 16:07
Prep Date: 06/20/25 10:57

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Perfluorohexane sulfonic acid (PFHxS)	429	ng/L	13.5	45.1	447.83	21.7	90.9	70-130			
Surr: 18O2-PFHxS	151	ng/L			148.62		102	70-130			

The following samples were analyzed in this batch: HN2508386-001, HN2508386-002, HN2508386-003, HN2508386-004, HN2508386-005, HN2508386-006, HN2508386-007, HN2508386-008, HN2508386-009



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: NA
Date Received: NA
Run ID: 3271781

Per- and Polyfluorinated Alkyl Substances by LC-MS

MB	CLIENT ID: Method Blank				Lab ID: QC-2063696-001			

Method: ASTM D7979-19 **Dilution:** 1 **Analysis Date:** 06/28/25 21:23
Prep Date: 06/20/25 10:57

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Perfluorodecane sulfonic acid (PFDS)	<7.41	ng/L	7.41	9.64							U

MB	CLIENT ID: Method Blank				Lab ID: QC-2063696-002			

Method: ASTM D7979-19 **Dilution:** 1 **Analysis Date:** 06/28/25 21:50
Prep Date: 06/20/25 10:57

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Perfluorodecane sulfonic acid (PFDS)	<7.41	ng/L	7.41	9.64							U

LCS	CLIENT ID: Laboratory Control Sample				Lab ID: QC-2063696-003			

Method: ASTM D7979-19 **Dilution:** 1 **Analysis Date:** 06/28/25 22:04
Prep Date: 06/20/25 10:57

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Perfluorodecane sulfonic acid (PFDS)	463	ng/L	7.41	9.64	482		96.2	70-130			

DUP	CLIENT ID: East P-Trap_061625				Lab ID: QC-2063696-010			

Method: ASTM D7979-19 **Dilution:** 1 **Analysis Date:** 06/28/25 22:45
Prep Date: 06/20/25 10:57

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Perfluorodecane sulfonic acid (PFDS)	<7.29	ng/L	7.29	9.48		<7.33			0.576	30	U

The following samples were analyzed in this batch: HN2508386-001, HN2508386-002, HN2508386-003, HN2508386-004,
 HN2508386-005, HN2508386-006, HN2508386-007, HN2508386-008,
 HN2508386-009



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2063696

Work Order: HN2508386
Date Collected: 06/16/25 10:45
Date Received: 06/19/25 09:30
Run ID: 3274268

Per- and Polyfluorinated Alkyl Substances by LC-MS

MS	CLIENT ID: West P-Trap_061625	Lab ID: QC-2063696-008

Method: ASTM D7979-19**Dilution:** 1**Analysis Date:** 07/01/25 04:56**Prep Date:** 06/20/25 10:57

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Perfluorodecane sulfonic acid (PFDS)	458	ng/L	7.35	9.56	474.41	<7.35	96.6	70-130			

The following samples were analyzed in this batch: HN2508386-001, HN2508386-002, HN2508386-003, HN2508386-004, HN2508386-005, HN2508386-006, HN2508386-007, HN2508386-008, HN2508386-009



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2084086

Work Order: HN2508386
Date Collected: NA
Date Received: NA
Run ID: 3279693

Per- and Polyfluorinated Alkyl Substances by LC-MS

MB	CLIENT ID: Method Blank	Lab ID: QC-2084086-001

Method: ASTM D7979-19**Dilution:** 1**Analysis Date:** 07/02/25 15:34**Prep Date:** 07/01/25 12:25

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	<8.82	ng/L	8.82	9.42							U
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	<27.4	ng/L	27.4	47.9							U
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	<37.1	ng/L	37.1	46.7							U
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	<19.7	ng/L	19.7	47.4							U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	<7.48	ng/L	7.48	9.42							U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	<3.04	ng/L	3.04	9.32							U
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	<39.2	ng/L	39.2	50.0							U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	<27.0	ng/L	27.0	50.0							U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	<21.1	ng/L	21.1	50.0							U
Perfluorobutane sulfonic acid (PFBS)	<8.20	ng/L	8.20	8.84							U
Perfluorobutanoic acid (PFBA)	<14.4	ng/L	14.4	50.0							U
Perfluorodecane sulfonic acid (PFDS)	<7.41	ng/L	7.41	9.64							U
Perfluorodecanoic acid (PFDA)	<15.0	ng/L	15.0	50.0							U
Perfluorododecanoic acid (PFDOA)	<29.7	ng/L	29.7	50.0							U
Perfluoroheptane sulfonic acid (PFHpS)	<10.8	ng/L	10.8	47.6							U
Perfluoroheptanoic acid (PFHpA)	<15.5	ng/L	15.5	50.0							U
Perfluorohexane sulfonic acid (PFHxS)	<13.6	ng/L	13.6	45.5							U
Perfluorohexanoic acid (PFHxA)	<14.3	ng/L	14.3	50.0							U
Perfluorononane sulfonic acid (PFNS)	<13.4	ng/L	13.4	48.0							U
Perfluorononanoic acid (PFNA)	<9.30	ng/L	9.30	10.0							U
Perfluorooctane sulfonamide (PFOSAm)	<8.19	ng/L	8.19	10.0							U
Perfluorooctane sulfonic acid (PFOS)	<5.07	ng/L	5.07	9.28							U
Perfluorooctanoic acid (PFOA)	<9.30	ng/L	9.30	10.0							U
Perfluoropentanoic acid (PFPeA)	<8.00	ng/L	8.00	50.0							U
Perfluorotetradecanoic acid (PFTDA)	<37.7	ng/L	37.7	50.0							U
Perfluorotridecanoic acid (PFTrDA)	<17.8	ng/L	17.8	50.0							U
Perfluoroundecanoic acid (PFUnDA)	<12.0	ng/L	12.0	50.0							U
Surr: 13C2-FtS 4:2	163	ng/L			149		109	50-130			
Surr: 13C2-FtS 6:2	163	ng/L			152		107	50-130			
Surr: 13C2-FtS 8:2	163	ng/L			153		106	50-130			
Surr: 13C2-PFDA	185	ng/L			160		115	70-130			
Surr: 13C2-PFDoA	175	ng/L			160		109	70-130			



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2084086

Work Order: HN2508386
Date Collected: NA
Date Received: NA
Run ID: 3279693

MB	CLIENT ID: Method Blank	Lab ID: QC-2084086-001

Method: ASTM D7979-19

Dilution: 1

Analysis Date: 07/02/25 15:34

Prep Date: 07/01/25 12:25

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Surr: 13C2-PFHxA	171	ng/L			160		107	50-130			
Surr: 13C2-PFTeDA	142	ng/L			160		88.5	50-130			
Surr: 13C2-PFUnDA	175	ng/L			160		109	70-130			
Surr: 13C3-HFPO-DA	163	ng/L			160		102	50-130			
Surr: 13C3-PFBS	154	ng/L			149		103	50-130			
Surr: 13C4-PFBA	168	ng/L			160		105	50-130			
Surr: 13C4-PFHpA	176	ng/L			160		110	50-130			
Surr: 13C4-PFOA	180	ng/L			160		113	70-130			
Surr: 13C4-PFOS	168	ng/L			153		110	70-130			
Surr: 13C5-PFNA	182	ng/L			160		114	70-130			
Surr: 13C5-PFPeA	165	ng/L			160		103	50-130			
Surr: 13C8-FOSA	185	ng/L			160		116	50-130			
Surr: 18O2-PFHxS	158	ng/L			151		105	70-130			
Surr: d3-N-MeFOSAA	171	ng/L			160		107	50-130			
Surr: d5-N-EtFOSAA	181	ng/L			160		113	50-130			

MB	CLIENT ID: Method Blank	Lab ID: QC-2084086-002

Method: ASTM D7979-19

Dilution: 1

Analysis Date: 07/02/25 15:48

Prep Date: 07/01/25 12:25

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	<8.82	ng/L	8.82	9.42							U
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	<27.4	ng/L	27.4	47.9							U
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	<37.1	ng/L	37.1	46.7							U
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	<19.7	ng/L	19.7	47.4							U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	<7.48	ng/L	7.48	9.42							U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	<3.04	ng/L	3.04	9.32							U
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	<39.2	ng/L	39.2	50.0							U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	<27.0	ng/L	27.0	50.0							U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	<21.1	ng/L	21.1	50.0							U
Perfluorobutane sulfonic acid (PFBS)	<8.20	ng/L	8.20	8.84							U
Perfluorobutanoic acid (PFBA)	<14.4	ng/L	14.4	50.0							U
Perfluorodecane sulfonic acid (PFDS)	<7.41	ng/L	7.41	9.64							U
Perfluorodecanoic acid (PFDA)	<15.0	ng/L	15.0	50.0							U
Perfluorododecanoic acid (PFDOA)	<29.7	ng/L	29.7	50.0							U

QA/QC Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2084086

Work Order: HN2508386
Date Collected: NA
Date Received: NA
Run ID: 3279693

MB	CLIENT ID: Method Blank	Lab ID: QC-2084086-002

Method: ASTM D7979-19**Dilution:** 1**Analysis Date:** 07/02/25 15:48**Prep Date:** 07/01/25 12:25

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Perfluoroheptane sulfonic acid (PFHpS)	<10.8	ng/L	10.8	47.6							U
Perfluoroheptanoic acid (PFHpA)	<15.5	ng/L	15.5	50.0							U
Perfluorohexane sulfonic acid (PFHxS)	<13.6	ng/L	13.6	45.5							U
Perfluorohexanoic acid (PFHxA)	<14.3	ng/L	14.3	50.0							U
Perfluorononane sulfonic acid (PFNS)	<13.4	ng/L	13.4	48.0							U
Perfluorononanoic acid (PFNA)	<9.30	ng/L	9.30	10.0							U
Perfluorooctane sulfonamide (PFOSAm)	<8.19	ng/L	8.19	10.0							U
Perfluorooctane sulfonic acid (PFOS)	<5.07	ng/L	5.07	9.28							U
Perfluorooctanoic acid (PFOA)	<9.30	ng/L	9.30	10.0							U
Perfluoropentanoic acid (PFPeA)	<8.00	ng/L	8.00	50.0							U
Perfluorotetradecanoic acid (PFTDA)	<37.7	ng/L	37.7	50.0							U
Perfluorotridecanoic acid (PFTrDA)	<17.8	ng/L	17.8	50.0							U
Perfluoroundecanoic acid (PFUnDA)	<12.0	ng/L	12.0	50.0							U
Surr: 13C2-FtS 4:2	146	ng/L			149		98.0	50-130			
Surr: 13C2-FtS 6:2	180	ng/L			152		118	50-130			
Surr: 13C2-FtS 8:2	174	ng/L			153		113	50-130			
Surr: 13C2-PFDA	185	ng/L			160		116	70-130			
Surr: 13C2-PFDoA	197	ng/L			160		123	70-130			
Surr: 13C2-PFHxA	179	ng/L			160		112	50-130			
Surr: 13C2-PFTeDA	171	ng/L			160		107	50-130			
Surr: 13C2-PFUnDA	200	ng/L			160		125	70-130			
Surr: 13C3-HFPO-DA	191	ng/L			160		119	50-130			
Surr: 13C3-PFBS	163	ng/L			149		110	50-130			
Surr: 13C4-PFBA	173	ng/L			160		108	50-130			
Surr: 13C4-PFHpA	180	ng/L			160		112	50-130			
Surr: 13C4-PFOA	184	ng/L			160		115	70-130			
Surr: 13C4-PFOS	174	ng/L			153		114	70-130			
Surr: 13C5-PFNA	186	ng/L			160		117	70-130			
Surr: 13C5-PFPeA	163	ng/L			160		102	50-130			
Surr: 13C8-FOSA	184	ng/L			160		115	50-130			
Surr: 18O2-PFHxS	168	ng/L			151		112	70-130			
Surr: d3-N-MeFOSAA	199	ng/L			160		124	50-130			
Surr: d5-N-EtFOSAA	197	ng/L			160		123	50-130			

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2084086-003

Method: ASTM D7979-19**Dilution:** 1**Analysis Date:** 07/02/25 16:18**Prep Date:** 07/01/25 12:25

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	491	ng/L	8.82	9.42	471		104	70-130			

QA/QC Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2084086

Work Order: HN2508386
Date Collected: NA
Date Received: NA
Run ID: 3279693

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2084086-003

Method: ASTM D7979-19

Dilution: 1

Analysis Date: 07/02/25 16:18

Prep Date: 07/01/25 12:25

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	522	ng/L	27.4	47.9	479		109	70-130			
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	464	ng/L	19.7	47.4	474		98.0	70-130			
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	470	ng/L	7.48	9.42	471		99.8	70-130			
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	497	ng/L	3.04	9.32	466		107	70-130			
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	500	ng/L	39.2	50.0	500		100	50-130			
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	558	ng/L	27.0	50.0	500		112	70-130			
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	547	ng/L	21.1	50.0	500		109	70-130			
Perfluorobutane sulfonic acid (PFBS)	478	ng/L	8.20	8.84	442		108	70-130			
Perfluorobutanoic acid (PFBA)	510	ng/L	14.4	50.0	500		102	50-130			
Perfluorodecane sulfonic acid (PFDS)	516	ng/L	7.41	9.64	482		107	70-130			
Perfluorodecanoic acid (PFDA)	532	ng/L	15.0	50.0	500		106	70-130			
Perfluorododecanoic acid (PFDOA)	568	ng/L	29.7	50.0	500		114	70-130			
Perfluoroheptane sulfonic acid (PFHpS)	485	ng/L	10.8	47.6	476		102	70-130			
Perfluoroheptanoic acid (PFHpA)	514	ng/L	15.5	50.0	500		103	50-130			
Perfluorohexane sulfonic acid (PFHxS)	470	ng/L	13.6	45.5	455		103	70-130			
Perfluorohexanoic acid (PFHxA)	508	ng/L	14.3	50.0	500		102	50-130			
Perfluorononane sulfonic acid (PFNS)	506	ng/L	13.4	48.0	480		105	70-130			
Perfluorononanoic acid (PFNA)	533	ng/L	9.30	10.0	500		106	70-130			
Perfluorooctane sulfonamide (PFOSAm)	536	ng/L	8.19	10.0	500		107	70-130			
Perfluorooctane sulfonic acid (PFOS)	445	ng/L	5.07	9.28	464		95.9	70-130			
Perfluorooctanoic acid (PFOA)	523	ng/L	9.30	10.0	500		104	70-130			
Perfluoropentanoic acid (PFPeA)	531	ng/L	5.07	50.0	500		106	70-130			
Perfluorotetradecanoic acid (PFTDA)	547	ng/L	9.30	50.0	500		109	70-130			
Perfluorotridecanoic acid (PFTrDA)	548	ng/L	5.32	50.0	500		110	70-130			
Perfluoroundecanoic acid (PFUnDA)	546	ng/L	12.0	50.0	500		109	70-130			
Surr: 13C2-FtS 6:2	194	ng/L			152		127	50-130			
Surr: 13C2-FtS 8:2	186	ng/L			153		121	50-130			
Surr: 13C2-PFDA	179	ng/L			160		112	70-130			
Surr: 13C2-PFDoA	183	ng/L			160		114	70-130			
Surr: 13C2-PFHxA	175	ng/L			160		109	50-130			
Surr: 13C2-PFTeDA	188	ng/L			160		118	50-130			
Surr: 13C2-PFUnDA	177	ng/L			160		111	70-130			
Surr: 13C3-HFPO-DA	187	ng/L			160		117	50-130			
Surr: 13C3-PFBS	156	ng/L			149		105	50-130			
Surr: 13C4-PFBA	172	ng/L			160		108	50-130			
Surr: 13C4-PFHpA	178	ng/L			160		111	50-130			

QA/QC Report



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2084086

Work Order: HN2508386
Date Collected: NA
Date Received: NA
Run ID: 3279693

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2084086-003

Method: ASTM D7979-19

Dilution: 1

Analysis Date: 07/02/25 16:18

Prep Date: 07/01/25 12:25

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Surr: 13C4-PFOA	180	ng/L			160		113	70-130			
Surr: 13C4-PFOS	164	ng/L			153		107	70-130			
Surr: 13C5-PFNA	179	ng/L			160		112	70-130			
Surr: 13C5-PFPeA	164	ng/L			160		102	50-130			
Surr: 13C8-FOSA	173	ng/L			160		108	50-130			
Surr: 18O2-PFHxS	165	ng/L			151		109	70-130			
Surr: d3-N-MeFOSAA	178	ng/L			160		111	50-130			
Surr: d5-N-EtFOSAA	200	ng/L			160		125	50-130			

DUP	CLIENT ID: RFI-86-14_061725	Lab ID: QC-2084086-010

Method: ASTM D7979-19

Dilution: 1

Analysis Date: 07/02/25 17:01

Prep Date: 07/01/25 12:25

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Perfluorooctane sulfonic acid (PFOS)	5.97	ng/L	5.06	9.26		<4.94			2.37	30	J
Surr: 13C4-PFOS	168	ng/L			153		110	70-130	2.69	30	

The following samples were analyzed in this batch: HN2508386-001, HN2508386-002, HN2508386-003, HN2508386-004, HN2508386-005, HN2508386-006, HN2508386-007, HN2508386-008, HN2508386-009



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2084086

Work Order: HN2508386
Date Collected: 06/16/25 13:10
Date Received: 06/19/25 09:30
Run ID: 3280939

Per- and Polyfluorinated Alkyl Substances by LC-MS

MS	CLIENT ID: MH3-9_061625	Lab ID: QC-2084086-008

Method: ASTM D7979-19**Dilution:** 1**Analysis Date:** 07/03/25 12:58**Prep Date:** 07/01/25 12:25

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Perfluorooctane sulfonic acid (PFOS)	488	ng/L	5.09	9.32	465.86	20.5	100	70-130			
<i>Surr: 13C4-PFOS</i>	<i>170</i>	<i>ng/L</i>			153.61		110	70-130			

The following samples were analyzed in this batch: HN2508386-001, HN2508386-002, HN2508386-003, HN2508386-004, HN2508386-005, HN2508386-006, HN2508386-007, HN2508386-008, HN2508386-009



Client: Arcadis US, Inc.
Project: RACER Buick City
Matrix: WATER
QC Lot: 2084086

Work Order: HN2508386
Date Collected: NA
Date Received: NA
Run ID: 3289637

Per- and Polyfluorinated Alkyl Substances by LC-MS

MB	CLIENT ID: Method Blank	Lab ID: QC-2084086-001

Method: ASTM D7979-19 **Dilution:** 1 **Analysis Date:** 07/04/25 22:46
Prep Date: 07/01/25 12:25

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Perfluoropentane sulfonic acid (PFPeS)	<5.32	ng/L	5.32	9.38							U

MB	CLIENT ID: Method Blank	Lab ID: QC-2084086-002

Method: ASTM D7979-19 **Dilution:** 1 **Analysis Date:** 07/04/25 23:30
Prep Date: 07/01/25 12:25

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Perfluoropentane sulfonic acid (PFPeS)	<5.32	ng/L	5.32	9.38							U

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2084086-003

Method: ASTM D7979-19 **Dilution:** 1 **Analysis Date:** 07/04/25 23:59
Prep Date: 07/01/25 12:25

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	496	ng/L	37.1	46.7	467		106	70-130			
Perfluoropentane sulfonic acid (PFPeS)	489	ng/L	8.19	9.38	469		104	70-130			
Surr: 13C2-FtS 4:2	186	ng/L			149		125	0-0			

The following samples were analyzed in this batch: HN2508386-001, HN2508386-002, HN2508386-003, HN2508386-004, HN2508386-005, HN2508386-006, HN2508386-007, HN2508386-008, HN2508386-009



Analytical Laboratory Report

Report ID: S78711.01(01)
Generated on 09/18/2025

Report to
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Arcadis US, Inc.
28550 Cabot Drive, Suite 500
Novi, MI 48377

Phone: 248-994-2272 FAX:
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Report Summary
Lab Sample ID(s): S78711.01-S78711.09
Project: 30282188.01 / Buick City
Collected Date(s): 09/08/2025 - 09/10/2025
Submitted Date/Time: 09/10/2025 15:35
Sampled by: Donald Richmond
P.O. #: 30282188.01

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- General Report Notes (Page 2)
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- Sample Summary (Page 5)


Maya Murshak
Technical Director



Analytical Laboratory Report

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.

Methods may be modified for improved performance.

Results reported on a dry weight basis where applicable.

'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).

When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.

40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile, and 2-chloroethylvinyl ether need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.

QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.

Starred (*) analytes are not NY NELAP accredited.

Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)

PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."

Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.

Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

All accreditations/certifications held by this laboratory are listed on page 3. Not all accreditations/certifications are applicable to this report.

For a specific list of accredited analytes, please feel free to contact the laboratory or visit <https://www.meritlabs.com/certifications>.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Accreditations (For Reference Only)

Authority	Accreditation ID
Michigan DEQ	#9956
DOD ELAP & ISO/IEC 17025:2017	#69699 PJLA Testing
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
o	Associated EIS outside of control limits
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
q	Qualifier ion ratio outside of control limits
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched



Analytical Laboratory Report

Method Summary

Method	Version
E1631E	EPA Method 1631 Revision E
E608.3	EPA Method 608.3 December 2016
N/A	Not Applicable
SW3015A	SW 846 Method 3015A Revision 1 February 2007
SW3510C	SW 846 Method 3510C Revision 3 December 1996
SW5030C/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5030C Revision 3 May 2003
SW6020A	SW 846 Method 6020A Revision 1 February 2007
SW7471B	SW 846 Method 7471B Revision 2 February 2007
SW8270D	SW 846 Method 8270D Revision 4 February 2007



Analytical Laboratory Report

Sample Summary (9 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S78711.01	WestP-Trap_090825	Groundwater	09/08/25 12:45
S78711.02	EastP-Trap_090825	Groundwater	09/08/25 14:30
S78711.03	MH3-9_090925	Groundwater	09/09/25 11:00
S78711.04	RFI-81-33_090925	Groundwater	09/09/25 13:15
S78711.05	RFI-86-14_090825	Groundwater	09/08/25 15:50
S78711.06	RFI-81-12R_090925	Groundwater	09/09/25 15:00
S78711.07	RFI-12-40_091025	Groundwater	09/10/25 10:50
S78711.08	RFI-23-01R_091025	Groundwater	09/10/25 12:50
S78711.09	EquipmentBlank_090925	Groundwater	09/09/25 11:15



Analytical Laboratory Report

Lab Sample ID: S78711.01

Sample Tag: WestP-Trap_090825

Collected Date/Time: 09/08/2025 12:45

Matrix: Groundwater

COC Reference: 181395

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40mL Glass	HCL	Yes	9.0	IR
2	1L Amber	None	Yes	9.0	IR
2	125mL Plastic	HNO3	Yes	9.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	09/12/25 11:40	NDK	
Metal Digestion	Completed	SW3015A	09/16/25 09:45	CCM	
Metal Digestion	Completed	SW3015A	09/16/25 09:45	CCM	
BNA Extraction	Completed	SW3510C	09/15/25 12:00	JWR	
Mercury Digestion*	Completed	SW7471B	09/11/25 11:32	CTV	
Mercury Digestion*	Completed	SW7471B	09/11/25 11:32	CTV	

Metals

Method: SW6020A, Run Date: 09/16/25 11:22, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.063	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Copper	Not detected	0.005		mg/L	5	7440-50-8	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.343	0.005		mg/L	5	7439-96-5	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW6020A, Run Date: 09/16/25 11:24, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony, Dissolved*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic, Dissolved	Not detected	0.002		mg/L	5	7440-38-2	
Barium, Dissolved	0.062	0.005		mg/L	5	7440-39-3	
Beryllium, Dissolved	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium, Dissolved	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt, Dissolved	Not detected	0.005		mg/L	5	7440-48-4	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Lead, Dissolved	Not detected	0.003		mg/L	5	7439-92-1	
Manganese, Dissolved	0.362	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	



Analytical Laboratory Report

Lab Sample ID: S78711.01 (continued)

Sample Tag: WestP-Trap_090825

Method: SW6020A, Run Date: 09/16/25 11:24, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium, Dissolved	Not detected	0.005		mg/L	5	7782-49-2	
Silver, Dissolved	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium, Dissolved	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium, Dissolved	Not detected	0.005		mg/L	5	7440-62-2	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW7471B, Run Date: 09/11/25 16:42, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury*	Not detected	0.0002		mg/L	1	7439-97-6	

Method: SW7471B, Run Date: 09/11/25 16:45, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Dissolved*	Not detected	0.0002		mg/L	1	7439-97-6	

Organics - Semi-Volatiles

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 09/15/25 16:42, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Benzaldehyde	Not detected	5		ug/L	2	100-52-7	
Acetophenone	Not detected	5		ug/L	2	98-86-2	
Caprolactam	Not detected	10		ug/L	2	105-60-2	
1,1'-Biphenyl	Not detected	5		ug/L	2	92-52-4	
Atrazine*	Not detected	3		ug/L	2	1912-24-9	

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 09/15/25 16:42, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
4-Bromophenyl phenyl ether	Not detected	5		ug/L	2	101-55-3	
di-n-Butyl phthalate	Not detected	5		ug/L	2	84-74-2	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	5		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(ghi)perylene	Not detected	5		ug/L	2	191-24-2	
Benzo(k)fluoranthene	Not detected	5		ug/L	2	207-08-9	
Butyl benzyl phthalate	Not detected	5		ug/L	2	85-68-7	
2-Chloronaphthalene	Not detected	5		ug/L	2	91-58-7	
2-Chlorophenol	Not detected	10		ug/L	2	95-57-8	
4-Chloro-3-methylphenol	Not detected	5		ug/L	2	59-50-7	
4-Chloroaniline	Not detected	10		ug/L	2	106-47-8	
4-Chlorophenyl phenyl ether	Not detected	5		ug/L	2	7005-72-3	
bis(2-Chloroethoxy)methane	Not detected	5		ug/L	2	111-91-1	
bis(2-Chloroethyl)ether	Not detected	1		ug/L	2	111-44-4	
Chrysene	Not detected	1		ug/L	2	218-01-9	
2,4-Dichlorophenol	Not detected	10		ug/L	2	120-83-2	
2,4-Dimethylphenol	Not detected	5		ug/L	2	105-67-9	
2,4-Dinitrophenol	Not detected	25		ug/L	2	51-28-5	
2,4-Dinitrotoluene	Not detected	5		ug/L	2	121-14-2	
2,6-Dinitrotoluene	Not detected	5		ug/L	2	606-20-2	
4,6-Dinitro-2-methylphenol	Not detected	25		ug/L	2	534-52-1	



Analytical Laboratory Report

Lab Sample ID: S78711.01 (continued)

Sample Tag: WestP-Trap_090825

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 09/15/25 16:42, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibenzo(ah)anthracene	Not detected	5		ug/L	2	53-70-3	
Dibenzofuran	Not detected	4		ug/L	2	132-64-9	
Diethyl phthalate	Not detected	5		ug/L	2	84-66-2	
Dimethyl phthalate	Not detected	5		ug/L	2	131-11-3	
bis(2-Ethylhexyl)phthalate	Not detected	5		ug/L	2	117-81-7	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Hexachlorocyclopentadiene	Not detected	5		ug/L	2	77-47-4	
Hexachloroethane	Not detected	5		ug/L	2	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	5		ug/L	2	193-39-5	
Isophorone	Not detected	5		ug/L	2	78-59-1	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
2-Methylphenol (o-Cresol)	Not detected	10		ug/L	2	95-48-7	
2-Nitroaniline	Not detected	25		ug/L	2	88-74-4	
2-Nitrophenol	Not detected	5		ug/L	2	88-75-5	
3-Nitroaniline	Not detected	25		ug/L	2	99-09-2	
4-Nitroaniline	Not detected	25		ug/L	2	100-01-6	
4-Nitrophenol	Not detected	25		ug/L	2	100-02-7	
N-Nitrosodi-n-propylamine	Not detected	10		ug/L	2	621-64-7	
N-Nitrosodiphenylamine	Not detected	5		ug/L	2	86-30-6	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Nitrobenzene	Not detected	3		ug/L	2	98-95-3	
di-n-Octyl phthalate	Not detected	5		ug/L	2	117-84-0	
2,4,5-Trichlorophenol	Not detected	5		ug/L	2	95-95-4	
2,4,6-Trichlorophenol	Not detected	4		ug/L	2	88-06-2	
3,3'-Dichlorobenzidine	Not detected	10		ug/L	2	91-94-1	
3-, 4-Methylphenol (p,m-Cresol)	Not detected	10		ug/L	2	3/4-CRESOL	
Pentachlorophenol	Not detected	5		ug/L	2	87-86-5	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Phenol	Not detected	5		ug/L	2	108-95-2	
Pyrene	Not detected	5		ug/L	2	129-00-0	
Hexachlorobenzene	Not detected	5		ug/L	2	118-74-1	
Hexachlorobutadiene	Not detected	5		ug/L	2	87-68-3	
bis(2-Chloroisopropyl)ether*	Not detected	5		ug/L	2	108-60-1	
Carbazole	Not detected	5		ug/L	2	86-74-8	

Organics - Volatiles

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 09/12/25 07:16, Analyst: ACK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	30		ug/L	1	76-13-1	
Acetone	Not detected	20		ug/L	1	67-64-1	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Methyl Acetate	Not detected	10		ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	20		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1		ug/L	1	75-71-8	
Chloromethane	Not detected	1		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	2		ug/L	1	74-83-9	
Chloroethane	Not detected	1		ug/L	1	75-00-3	



Analytical Laboratory Report

Lab Sample ID: S78711.01 (continued)

Sample Tag: WestP-Trap_090825

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 09/12/25 07:16, Analyst: ACK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	5	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
Cyclohexane	Not detected	1		ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	2	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	20		ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dibromo-3-chloropropane	Not detected	1		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	2		ug/L	1	120-82-1	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Naphthalene	Not detected	1		ug/L	1	91-20-3	
Total Xylenes	Not detected	3		ug/L	1	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S78711.02

Sample Tag: EastP-Trap_090825

Collected Date/Time: 09/08/2025 14:30

Matrix: Groundwater

COC Reference: 181395

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40mL Glass	HCL	Yes	9.0	IR
2	1L Amber	None	Yes	9.0	IR
2	125mL Plastic	HNO3	Yes	9.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	09/12/25 11:40	NDK	
Metal Digestion	Completed	SW3015A	09/16/25 09:45	CCM	
Metal Digestion	Completed	SW3015A	09/16/25 09:45	CCM	
BNA Extraction	Completed	SW3510C	09/15/25 12:00	JWR	
Mercury Digestion*	Completed	SW7471B	09/11/25 11:32	CTV	
Mercury Digestion*	Completed	SW7471B	09/11/25 11:32	CTV	

Metals

Method: SW6020A, Run Date: 09/16/25 11:25, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.063	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Copper	Not detected	0.005		mg/L	5	7440-50-8	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.631	0.005		mg/L	5	7439-96-5	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	0.005	0.005		mg/L	5	7440-66-6	

Method: SW6020A, Run Date: 09/16/25 11:27, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony, Dissolved*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic, Dissolved	Not detected	0.002		mg/L	5	7440-38-2	
Barium, Dissolved	0.060	0.005		mg/L	5	7440-39-3	
Beryllium, Dissolved	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium, Dissolved	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt, Dissolved	Not detected	0.005		mg/L	5	7440-48-4	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Lead, Dissolved	Not detected	0.003		mg/L	5	7439-92-1	
Manganese, Dissolved	0.645	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	



Analytical Laboratory Report

Lab Sample ID: S78711.02 (continued)

Sample Tag: EastP-Trap_090825

Method: SW6020A, Run Date: 09/16/25 11:27, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium, Dissolved	Not detected	0.005		mg/L	5	7782-49-2	
Silver, Dissolved	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium, Dissolved	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium, Dissolved	Not detected	0.005		mg/L	5	7440-62-2	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW7471B, Run Date: 09/11/25 16:48, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury*	Not detected	0.0002		mg/L	1	7439-97-6	

Method: SW7471B, Run Date: 09/11/25 16:52, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Dissolved*	Not detected	0.0002		mg/L	1	7439-97-6	

Organics - Semi-Volatiles

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 09/15/25 17:13, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Benzaldehyde	Not detected	5		ug/L	2	100-52-7	
Acetophenone	Not detected	5		ug/L	2	98-86-2	
Caprolactam	Not detected	10		ug/L	2	105-60-2	
1,1'-Biphenyl	Not detected	5		ug/L	2	92-52-4	
Atrazine*	Not detected	3		ug/L	2	1912-24-9	

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 09/15/25 17:13, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
4-Bromophenyl phenyl ether	Not detected	5		ug/L	2	101-55-3	
di-n-Butyl phthalate	Not detected	5		ug/L	2	84-74-2	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	5		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(ghi)perylene	Not detected	5		ug/L	2	191-24-2	
Benzo(k)fluoranthene	Not detected	5		ug/L	2	207-08-9	
Butyl benzyl phthalate	Not detected	5		ug/L	2	85-68-7	
2-Chloronaphthalene	Not detected	5		ug/L	2	91-58-7	
2-Chlorophenol	Not detected	10		ug/L	2	95-57-8	
4-Chloro-3-methylphenol	Not detected	5		ug/L	2	59-50-7	
4-Chloroaniline	Not detected	10		ug/L	2	106-47-8	
4-Chlorophenyl phenyl ether	Not detected	5		ug/L	2	7005-72-3	
bis(2-Chloroethoxy)methane	Not detected	5		ug/L	2	111-91-1	
bis(2-Chloroethyl)ether	Not detected	1		ug/L	2	111-44-4	
Chrysene	Not detected	1		ug/L	2	218-01-9	
2,4-Dichlorophenol	Not detected	10		ug/L	2	120-83-2	
2,4-Dimethylphenol	Not detected	5		ug/L	2	105-67-9	
2,4-Dinitrophenol	Not detected	25		ug/L	2	51-28-5	
2,4-Dinitrotoluene	Not detected	5		ug/L	2	121-14-2	
2,6-Dinitrotoluene	Not detected	5		ug/L	2	606-20-2	
4,6-Dinitro-2-methylphenol	Not detected	25		ug/L	2	534-52-1	



Analytical Laboratory Report

Lab Sample ID: S78711.02 (continued)

Sample Tag: EastP-Trap_090825

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 09/15/25 17:13, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibenzo(ah)anthracene	Not detected	5		ug/L	2	53-70-3	
Dibenzofuran	Not detected	4		ug/L	2	132-64-9	
Diethyl phthalate	Not detected	5		ug/L	2	84-66-2	
Dimethyl phthalate	Not detected	5		ug/L	2	131-11-3	
bis(2-Ethylhexyl)phthalate	Not detected	5		ug/L	2	117-81-7	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Hexachlorocyclopentadiene	Not detected	5		ug/L	2	77-47-4	
Hexachloroethane	Not detected	5		ug/L	2	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	5		ug/L	2	193-39-5	
Isophorone	Not detected	5		ug/L	2	78-59-1	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
2-Methylphenol (o-Cresol)	Not detected	10		ug/L	2	95-48-7	
2-Nitroaniline	Not detected	25		ug/L	2	88-74-4	
2-Nitrophenol	Not detected	5		ug/L	2	88-75-5	
3-Nitroaniline	Not detected	25		ug/L	2	99-09-2	
4-Nitroaniline	Not detected	25		ug/L	2	100-01-6	
4-Nitrophenol	Not detected	25		ug/L	2	100-02-7	
N-Nitrosodi-n-propylamine	Not detected	10		ug/L	2	621-64-7	
N-Nitrosodiphenylamine	Not detected	5		ug/L	2	86-30-6	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Nitrobenzene	Not detected	3		ug/L	2	98-95-3	
di-n-Octyl phthalate	Not detected	5		ug/L	2	117-84-0	
2,4,5-Trichlorophenol	Not detected	5		ug/L	2	95-95-4	
2,4,6-Trichlorophenol	Not detected	4		ug/L	2	88-06-2	
3,3'-Dichlorobenzidine	Not detected	10		ug/L	2	91-94-1	
3-, 4-Methylphenol (p,m-Cresol)	Not detected	10		ug/L	2	3/4-CRESOL	
Pentachlorophenol	Not detected	5		ug/L	2	87-86-5	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Phenol	Not detected	5		ug/L	2	108-95-2	
Pyrene	Not detected	5		ug/L	2	129-00-0	
Hexachlorobenzene	Not detected	5		ug/L	2	118-74-1	
Hexachlorobutadiene	Not detected	5		ug/L	2	87-68-3	
bis(2-Chloroisopropyl)ether*	Not detected	5		ug/L	2	108-60-1	
Carbazole	Not detected	5		ug/L	2	86-74-8	

Organics - Volatiles

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 09/12/25 07:40, Analyst: ACK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	30		ug/L	1	76-13-1	
Acetone	Not detected	20		ug/L	1	67-64-1	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Methyl Acetate	Not detected	10		ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	20		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1		ug/L	1	75-71-8	
Chloromethane	Not detected	1		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	2		ug/L	1	74-83-9	
Chloroethane	Not detected	1		ug/L	1	75-00-3	



Analytical Laboratory Report

Lab Sample ID: S78711.02 (continued)

Sample Tag: EastP-Trap_090825

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 09/12/25 07:40, Analyst: ACK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	12	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
Cyclohexane	Not detected	1		ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	12	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	20		ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	1	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dibromo-3-chloropropane	Not detected	1		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	2		ug/L	1	120-82-1	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Naphthalene	Not detected	1		ug/L	1	91-20-3	
Total Xylenes	Not detected	3		ug/L	1	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S78711.03

Sample Tag: MH3-9_090925

Collected Date/Time: 09/09/2025 11:00

Matrix: Groundwater

COC Reference: 181395

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40mL Glass	HCL	Yes	9.0	IR
4	1L Amber	None	Yes	9.0	IR
2	125mL Plastic	HNO3	Yes	9.0	IR
1	LLHg Kit	None	Yes	9.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	09/12/25 11:40	NDK	
Metal Digestion	Completed	SW3015A	09/16/25 09:45	CCM	
Metal Digestion	Completed	SW3015A	09/16/25 09:45	CCM	
BNA Extraction	Completed	SW3510C	09/15/25 12:00	JWR	
Extraction, PCB*	Completed	E608.3	09/16/25 11:00	JWR	
Mercury Digestion*	Completed	SW7471B	09/11/25 11:32	CTV	
Mercury Digestion*	Completed	SW7471B	09/12/25 12:09	CTV	

Metals

Method: SW6020A, Run Date: 09/16/25 11:28, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	0.014	0.002		mg/L	5	7440-38-2	
Barium	0.197	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Copper	Not detected	0.005		mg/L	5	7440-50-8	
Lead	0.005	0.003		mg/L	5	7439-92-1	
Manganese	0.306	0.005		mg/L	5	7439-96-5	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	0.011	0.005		mg/L	5	7440-66-6	

Method: SW6020A, Run Date: 09/16/25 11:29, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony, Dissolved*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic, Dissolved	0.005	0.002		mg/L	5	7440-38-2	
Barium, Dissolved	0.107	0.005		mg/L	5	7440-39-3	
Beryllium, Dissolved	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium, Dissolved	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt, Dissolved	Not detected	0.005		mg/L	5	7440-48-4	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Lead, Dissolved	Not detected	0.003		mg/L	5	7439-92-1	



Analytical Laboratory Report

Lab Sample ID: S78711.03 (continued)

Sample Tag: MH3-9_090925

Method: SW6020A, Run Date: 09/16/25 11:29, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Manganese, Dissolved	0.243	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	
Selenium, Dissolved	Not detected	0.005		mg/L	5	7782-49-2	
Silver, Dissolved	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium, Dissolved	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium, Dissolved	Not detected	0.005		mg/L	5	7440-62-2	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW7471B, Run Date: 09/15/25 17:31, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury*	Not detected	0.0002		mg/L	1	7439-97-6	

Method: SW7471B, Run Date: 09/12/25 16:28, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Dissolved*	Not detected	0.0002		mg/L	1	7439-97-6	

Method: E1631E, Run Date: 09/16/25 17:20, Analyst: EURO

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Low Level*	Completed	0.50		ng/L	1	7439-97-6	O

Organics - PCBs/Pesticides

PCB, Method: E608.3, Run Date: 09/17/25 15:32, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	0.1		ug/L	1	12674-11-2	
PCB-1221	Not detected	0.1		ug/L	1	11104-28-2	
PCB-1232	Not detected	0.1		ug/L	1	11141-16-5	
PCB-1242	Not detected	0.1		ug/L	1	53469-21-9	
PCB-1248	Not detected	0.1		ug/L	1	12672-29-6	
PCB-1254	Not detected	0.1		ug/L	1	11097-69-1	
PCB-1260	Not detected	0.1		ug/L	1	11096-82-5	
PCB, Total*	Not detected	0.1		ug/L	1	1336-36-3	

Organics - Semi-Volatiles

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 09/15/25 17:44, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Benzaldehyde	Not detected	5		ug/L	2	100-52-7	
Acetophenone	Not detected	5		ug/L	2	98-86-2	
Caprolactam	Not detected	10		ug/L	2	105-60-2	
1,1'-Biphenyl	Not detected	5		ug/L	2	92-52-4	
Atrazine*	Not detected	3		ug/L	2	1912-24-9	

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 09/15/25 17:44, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
4-Bromophenyl phenyl ether	Not detected	5		ug/L	2	101-55-3	
di-n-Butyl phthalate	Not detected	5		ug/L	2	84-74-2	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S78711.03 (continued)

Sample Tag: MH3-9_090925

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 09/15/25 17:44, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Benzo(a)pyrene	Not detected	5		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(ghi)perylene	Not detected	5		ug/L	2	191-24-2	
Benzo(k)fluoranthene	Not detected	5		ug/L	2	207-08-9	
Butyl benzyl phthalate	Not detected	5		ug/L	2	85-68-7	
2-Chloronaphthalene	Not detected	5		ug/L	2	91-58-7	
2-Chlorophenol	Not detected	10		ug/L	2	95-57-8	
4-Chloro-3-methylphenol	Not detected	5		ug/L	2	59-50-7	
4-Chloroaniline	Not detected	10		ug/L	2	106-47-8	
4-Chlorophenyl phenyl ether	Not detected	5		ug/L	2	7005-72-3	
bis(2-Chloroethoxy)methane	Not detected	5		ug/L	2	111-91-1	
bis(2-Chloroethyl)ether	Not detected	1		ug/L	2	111-44-4	
Chrysene	Not detected	1		ug/L	2	218-01-9	
2,4-Dichlorophenol	Not detected	10		ug/L	2	120-83-2	
2,4-Dimethylphenol	Not detected	5		ug/L	2	105-67-9	
2,4-Dinitrophenol	Not detected	25		ug/L	2	51-28-5	
2,4-Dinitrotoluene	Not detected	5		ug/L	2	121-14-2	
2,6-Dinitrotoluene	Not detected	5		ug/L	2	606-20-2	
4,6-Dinitro-2-methylphenol	Not detected	25		ug/L	2	534-52-1	
Dibenzo(ah)anthracene	Not detected	5		ug/L	2	53-70-3	
Dibenzofuran	Not detected	4		ug/L	2	132-64-9	
Diethyl phthalate	Not detected	5		ug/L	2	84-66-2	
Dimethyl phthalate	Not detected	5		ug/L	2	131-11-3	
bis(2-Ethylhexyl)phthalate	Not detected	5		ug/L	2	117-81-7	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Hexachlorocyclopentadiene	Not detected	5		ug/L	2	77-47-4	
Hexachloroethane	Not detected	5		ug/L	2	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	5		ug/L	2	193-39-5	
Isophorone	Not detected	5		ug/L	2	78-59-1	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
2-Methylphenol (o-Cresol)	Not detected	10		ug/L	2	95-48-7	
2-Nitroaniline	Not detected	25		ug/L	2	88-74-4	
2-Nitrophenol	Not detected	5		ug/L	2	88-75-5	
3-Nitroaniline	Not detected	25		ug/L	2	99-09-2	
4-Nitroaniline	Not detected	25		ug/L	2	100-01-6	
4-Nitrophenol	Not detected	25		ug/L	2	100-02-7	
N-Nitrosodi-n-propylamine	Not detected	10		ug/L	2	621-64-7	
N-Nitrosodiphenylamine	Not detected	5		ug/L	2	86-30-6	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Nitrobenzene	Not detected	3		ug/L	2	98-95-3	
di-n-Octyl phthalate	Not detected	5		ug/L	2	117-84-0	
2,4,5-Trichlorophenol	Not detected	5		ug/L	2	95-95-4	
2,4,6-Trichlorophenol	Not detected	4		ug/L	2	88-06-2	
3,3'-Dichlorobenzidine	Not detected	10		ug/L	2	91-94-1	
3-, 4-Methylphenol (p,m-Cresol)	Not detected	10		ug/L	2	3/4-CRESOL	
Pentachlorophenol	Not detected	5		ug/L	2	87-86-5	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Phenol	Not detected	5		ug/L	2	108-95-2	
Pyrene	Not detected	5		ug/L	2	129-00-0	



Analytical Laboratory Report

Lab Sample ID: S78711.03 (continued)

Sample Tag: MH3-9_090925

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 09/15/25 17:44, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Hexachlorobenzene	Not detected	5		ug/L	2	118-74-1	
Hexachlorobutadiene	Not detected	5		ug/L	2	87-68-3	
bis(2-Chloroisopropyl)ether*	Not detected	5		ug/L	2	108-60-1	
Carbazole	Not detected	5		ug/L	2	86-74-8	

Organics - Volatiles

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 09/12/25 08:04, Analyst: ACK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	30		ug/L	1	76-13-1	
Acetone	Not detected	20		ug/L	1	67-64-1	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Methyl Acetate	Not detected	10		ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	20		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1		ug/L	1	75-71-8	
Chloromethane	Not detected	1		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	2		ug/L	1	74-83-9	
Chloroethane	Not detected	1		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	2	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
Cyclohexane	Not detected	1		ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	20		ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	



Analytical Laboratory Report

Lab Sample ID: S78711.03 (continued)

Sample Tag: MH3-9_090925

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 09/12/25 08:04, Analyst: ACK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Isopropylbenzene	Not detected	1		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dibromo-3-chloropropane	Not detected	1		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	2		ug/L	1	120-82-1	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Naphthalene	Not detected	1		ug/L	1	91-20-3	
Total Xylenes	Not detected	3		ug/L	1	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S78711.04

Sample Tag: RFI-81-33_090925

Collected Date/Time: 09/09/2025 13:15

Matrix: Groundwater

COC Reference: 181395

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40mL Glass	HCL	Yes	9.0	IR
2	1L Amber	None	Yes	9.0	IR
2	125mL Plastic	HNO3	Yes	9.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	09/12/25 11:40	NDK	
Metal Digestion	Completed	SW3015A	09/16/25 09:45	CCM	
Metal Digestion	Completed	SW3015A	09/16/25 09:45	CCM	
BNA Extraction	Completed	SW3510C	09/15/25 12:00	JWR	
Mercury Digestion*	Completed	SW7471B	09/16/25 12:10	CTV	
Mercury Digestion*	Completed	SW7471B	09/16/25 12:10	CTV	

Metals

Method: SW6020A, Run Date: 09/16/25 11:31, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	0.004	0.002		mg/L	5	7440-38-2	
Barium	0.156	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Copper	Not detected	0.005		mg/L	5	7440-50-8	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	1.30	0.005		mg/L	5	7439-96-5	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW6020A, Run Date: 09/16/25 11:32, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony, Dissolved*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic, Dissolved	0.003	0.002		mg/L	5	7440-38-2	
Barium, Dissolved	0.162	0.005		mg/L	5	7440-39-3	
Beryllium, Dissolved	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium, Dissolved	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt, Dissolved	Not detected	0.005		mg/L	5	7440-48-4	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Lead, Dissolved	Not detected	0.003		mg/L	5	7439-92-1	
Manganese, Dissolved	1.37	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	



Analytical Laboratory Report

Lab Sample ID: S78711.04 (continued)

Sample Tag: RFI-81-33_090925

Method: SW6020A, Run Date: 09/16/25 11:32, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium, Dissolved	Not detected	0.005		mg/L	5	7782-49-2	
Silver, Dissolved	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium, Dissolved	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium, Dissolved	Not detected	0.005		mg/L	5	7440-62-2	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW7471B, Run Date: 09/16/25 15:45, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury*	Not detected	0.0002		mg/L	1	7439-97-6	

Method: SW7471B, Run Date: 09/16/25 15:48, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Dissolved*	Not detected	0.0002		mg/L	1	7439-97-6	

Organics - Semi-Volatiles

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 09/15/25 18:15, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Benzaldehyde	Not detected	5		ug/L	2	100-52-7	
Acetophenone	Not detected	5		ug/L	2	98-86-2	
Caprolactam	Not detected	10		ug/L	2	105-60-2	
1,1'-Biphenyl	Not detected	5		ug/L	2	92-52-4	
Atrazine*	Not detected	3		ug/L	2	1912-24-9	

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 09/15/25 18:15, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
4-Bromophenyl phenyl ether	Not detected	5		ug/L	2	101-55-3	
di-n-Butyl phthalate	Not detected	5		ug/L	2	84-74-2	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	5		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(ghi)perylene	Not detected	5		ug/L	2	191-24-2	
Benzo(k)fluoranthene	Not detected	5		ug/L	2	207-08-9	
Butyl benzyl phthalate	Not detected	5		ug/L	2	85-68-7	
2-Chloronaphthalene	Not detected	5		ug/L	2	91-58-7	
2-Chlorophenol	Not detected	10		ug/L	2	95-57-8	
4-Chloro-3-methylphenol	Not detected	5		ug/L	2	59-50-7	
4-Chloroaniline	Not detected	10		ug/L	2	106-47-8	
4-Chlorophenyl phenyl ether	Not detected	5		ug/L	2	7005-72-3	
bis(2-Chloroethoxy)methane	Not detected	5		ug/L	2	111-91-1	
bis(2-Chloroethyl)ether	Not detected	1		ug/L	2	111-44-4	
Chrysene	Not detected	1		ug/L	2	218-01-9	
2,4-Dichlorophenol	Not detected	10		ug/L	2	120-83-2	
2,4-Dimethylphenol	Not detected	5		ug/L	2	105-67-9	
2,4-Dinitrophenol	Not detected	25		ug/L	2	51-28-5	
2,4-Dinitrotoluene	Not detected	5		ug/L	2	121-14-2	
2,6-Dinitrotoluene	Not detected	5		ug/L	2	606-20-2	
4,6-Dinitro-2-methylphenol	Not detected	25		ug/L	2	534-52-1	



Analytical Laboratory Report

Lab Sample ID: S78711.04 (continued)

Sample Tag: RFI-81-33_090925

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 09/15/25 18:15, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibenzo(ah)anthracene	Not detected	5		ug/L	2	53-70-3	
Dibenzofuran	Not detected	4		ug/L	2	132-64-9	
Diethyl phthalate	Not detected	5		ug/L	2	84-66-2	
Dimethyl phthalate	Not detected	5		ug/L	2	131-11-3	
bis(2-Ethylhexyl)phthalate	Not detected	5		ug/L	2	117-81-7	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Hexachlorocyclopentadiene	Not detected	5		ug/L	2	77-47-4	
Hexachloroethane	Not detected	5		ug/L	2	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	5		ug/L	2	193-39-5	
Isophorone	Not detected	5		ug/L	2	78-59-1	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
2-Methylphenol (o-Cresol)	Not detected	10		ug/L	2	95-48-7	
2-Nitroaniline	Not detected	25		ug/L	2	88-74-4	
2-Nitrophenol	Not detected	5		ug/L	2	88-75-5	
3-Nitroaniline	Not detected	25		ug/L	2	99-09-2	
4-Nitroaniline	Not detected	25		ug/L	2	100-01-6	
4-Nitrophenol	Not detected	25		ug/L	2	100-02-7	
N-Nitrosodi-n-propylamine	Not detected	10		ug/L	2	621-64-7	
N-Nitrosodiphenylamine	Not detected	5		ug/L	2	86-30-6	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Nitrobenzene	Not detected	3		ug/L	2	98-95-3	
di-n-Octyl phthalate	Not detected	5		ug/L	2	117-84-0	
2,4,5-Trichlorophenol	Not detected	5		ug/L	2	95-95-4	
2,4,6-Trichlorophenol	Not detected	4		ug/L	2	88-06-2	
3,3'-Dichlorobenzidine	Not detected	10		ug/L	2	91-94-1	
3-, 4-Methylphenol (p,m-Cresol)	Not detected	10		ug/L	2	3/4-CRESOL	
Pentachlorophenol	Not detected	5		ug/L	2	87-86-5	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Phenol	Not detected	5		ug/L	2	108-95-2	
Pyrene	Not detected	5		ug/L	2	129-00-0	
Hexachlorobenzene	Not detected	5		ug/L	2	118-74-1	
Hexachlorobutadiene	Not detected	5		ug/L	2	87-68-3	
bis(2-Chloroisopropyl)ether*	Not detected	5		ug/L	2	108-60-1	
Carbazole	Not detected	5		ug/L	2	86-74-8	

Organics - Volatiles

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 09/12/25 08:27, Analyst: ACK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	30		ug/L	1	76-13-1	
Acetone	Not detected	20		ug/L	1	67-64-1	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Methyl Acetate	Not detected	10		ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	20		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1		ug/L	1	75-71-8	
Chloromethane	Not detected	1		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	2		ug/L	1	74-83-9	
Chloroethane	Not detected	1		ug/L	1	75-00-3	



Analytical Laboratory Report

Lab Sample ID: S78711.04 (continued)

Sample Tag: RFI-81-33_090925

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 09/12/25 08:27, Analyst: ACK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
Cyclohexane	Not detected	1		ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	20		ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dibromo-3-chloropropane	Not detected	1		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	2		ug/L	1	120-82-1	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Naphthalene	Not detected	1		ug/L	1	91-20-3	
Total Xylenes	Not detected	3		ug/L	1	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S78711.05
Sample Tag: RFI-86-14_090825
Collected Date/Time: 09/08/2025 15:50
Matrix: Groundwater
COC Reference: 181395

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	n/a	n/a	Yes	n/a	n/a

Other / Misc.

Method: , Run Date: 09/18/25 08:00, Analyst: MMC

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
No Analyses*	Completed				1		



Analytical Laboratory Report

Lab Sample ID: S78711.06

Sample Tag: RFI-81-12R_090925

Collected Date/Time: 09/09/2025 15:00

Matrix: Groundwater

COC Reference: 181395

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40mL Glass	HCL	Yes	9.0	IR
2	1L Amber	None	Yes	9.0	IR
2	125mL Plastic	HNO3	Yes	9.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	09/12/25 11:40	NDK	
Metal Digestion	Completed	SW3015A	09/16/25 09:45	CCM	
Metal Digestion	Completed	SW3015A	09/16/25 09:45	CCM	
BNA Extraction	Completed	SW3510C	09/15/25 12:00	JWR	
Mercury Digestion*	Completed	SW7471B	09/16/25 12:10	CTV	
Mercury Digestion*	Completed	SW7471B	09/16/25 12:10	CTV	

Metals

Method: SW6020A, Run Date: 09/16/25 11:33, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	0.002	0.002		mg/L	5	7440-38-2	
Barium	0.124	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Copper	Not detected	0.005		mg/L	5	7440-50-8	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.145	0.005		mg/L	5	7439-96-5	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	0.008	0.005		mg/L	5	7440-66-6	

Method: SW6020A, Run Date: 09/16/25 11:34, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony, Dissolved*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic, Dissolved	Not detected	0.002		mg/L	5	7440-38-2	
Barium, Dissolved	0.119	0.005		mg/L	5	7440-39-3	
Beryllium, Dissolved	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium, Dissolved	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt, Dissolved	Not detected	0.005		mg/L	5	7440-48-4	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Lead, Dissolved	Not detected	0.003		mg/L	5	7439-92-1	
Manganese, Dissolved	0.126	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	



Analytical Laboratory Report

Lab Sample ID: S78711.06 (continued)

Sample Tag: RFI-81-12R_090925

Method: SW6020A, Run Date: 09/16/25 11:34, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium, Dissolved	Not detected	0.005		mg/L	5	7782-49-2	
Silver, Dissolved	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium, Dissolved	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium, Dissolved	Not detected	0.005		mg/L	5	7440-62-2	
Zinc, Dissolved	0.008	0.005		mg/L	5	7440-66-6	

Method: SW7471B, Run Date: 09/16/25 15:51, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury*	Not detected	0.0002		mg/L	1	7439-97-6	

Method: SW7471B, Run Date: 09/16/25 15:55, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Dissolved*	Not detected	0.0002		mg/L	1	7439-97-6	

Organics - Semi-Volatiles

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 09/15/25 18:46, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Benzaldehyde	Not detected	5		ug/L	2	100-52-7	
Acetophenone	Not detected	5		ug/L	2	98-86-2	
Caprolactam	Not detected	10		ug/L	2	105-60-2	
1,1'-Biphenyl	Not detected	5		ug/L	2	92-52-4	
Atrazine*	Not detected	3		ug/L	2	1912-24-9	

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 09/15/25 18:46, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
4-Bromophenyl phenyl ether	Not detected	5		ug/L	2	101-55-3	
di-n-Butyl phthalate	Not detected	5		ug/L	2	84-74-2	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	5		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(ghi)perylene	Not detected	5		ug/L	2	191-24-2	
Benzo(k)fluoranthene	Not detected	5		ug/L	2	207-08-9	
Butyl benzyl phthalate	Not detected	5		ug/L	2	85-68-7	
2-Chloronaphthalene	Not detected	5		ug/L	2	91-58-7	
2-Chlorophenol	Not detected	10		ug/L	2	95-57-8	
4-Chloro-3-methylphenol	Not detected	5		ug/L	2	59-50-7	
4-Chloroaniline	Not detected	10		ug/L	2	106-47-8	
4-Chlorophenyl phenyl ether	Not detected	5		ug/L	2	7005-72-3	
bis(2-Chloroethoxy)methane	Not detected	5		ug/L	2	111-91-1	
bis(2-Chloroethyl)ether	Not detected	1		ug/L	2	111-44-4	
Chrysene	Not detected	1		ug/L	2	218-01-9	
2,4-Dichlorophenol	Not detected	10		ug/L	2	120-83-2	
2,4-Dimethylphenol	Not detected	5		ug/L	2	105-67-9	
2,4-Dinitrophenol	Not detected	25		ug/L	2	51-28-5	
2,4-Dinitrotoluene	Not detected	5		ug/L	2	121-14-2	
2,6-Dinitrotoluene	Not detected	5		ug/L	2	606-20-2	
4,6-Dinitro-2-methylphenol	Not detected	25		ug/L	2	534-52-1	



Analytical Laboratory Report

Lab Sample ID: S78711.06 (continued)

Sample Tag: RFI-81-12R_090925

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 09/15/25 18:46, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibenzo(ah)anthracene	Not detected	5		ug/L	2	53-70-3	
Dibenzofuran	Not detected	4		ug/L	2	132-64-9	
Diethyl phthalate	Not detected	5		ug/L	2	84-66-2	
Dimethyl phthalate	Not detected	5		ug/L	2	131-11-3	
bis(2-Ethylhexyl)phthalate	Not detected	5		ug/L	2	117-81-7	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Hexachlorocyclopentadiene	Not detected	5		ug/L	2	77-47-4	
Hexachloroethane	Not detected	5		ug/L	2	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	5		ug/L	2	193-39-5	
Isophorone	Not detected	5		ug/L	2	78-59-1	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
2-Methylphenol (o-Cresol)	Not detected	10		ug/L	2	95-48-7	
2-Nitroaniline	Not detected	25		ug/L	2	88-74-4	
2-Nitrophenol	Not detected	5		ug/L	2	88-75-5	
3-Nitroaniline	Not detected	25		ug/L	2	99-09-2	
4-Nitroaniline	Not detected	25		ug/L	2	100-01-6	
4-Nitrophenol	Not detected	25		ug/L	2	100-02-7	
N-Nitrosodi-n-propylamine	Not detected	10		ug/L	2	621-64-7	
N-Nitrosodiphenylamine	Not detected	5		ug/L	2	86-30-6	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Nitrobenzene	Not detected	3		ug/L	2	98-95-3	
di-n-Octyl phthalate	Not detected	5		ug/L	2	117-84-0	
2,4,5-Trichlorophenol	Not detected	5		ug/L	2	95-95-4	
2,4,6-Trichlorophenol	Not detected	4		ug/L	2	88-06-2	
3,3'-Dichlorobenzidine	Not detected	10		ug/L	2	91-94-1	
3-, 4-Methylphenol (p,m-Cresol)	Not detected	10		ug/L	2	3/4-CRESOL	
Pentachlorophenol	Not detected	5		ug/L	2	87-86-5	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Phenol	Not detected	5		ug/L	2	108-95-2	
Pyrene	Not detected	5		ug/L	2	129-00-0	
Hexachlorobenzene	Not detected	5		ug/L	2	118-74-1	
Hexachlorobutadiene	Not detected	5		ug/L	2	87-68-3	
bis(2-Chloroisopropyl)ether*	Not detected	5		ug/L	2	108-60-1	
Carbazole	Not detected	5		ug/L	2	86-74-8	

Organics - Volatiles

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 09/12/25 08:51, Analyst: ACK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	30		ug/L	1	76-13-1	
Acetone	Not detected	20		ug/L	1	67-64-1	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Methyl Acetate	Not detected	10		ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	20		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1		ug/L	1	75-71-8	
Chloromethane	Not detected	1		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	2		ug/L	1	74-83-9	
Chloroethane	Not detected	1		ug/L	1	75-00-3	



Analytical Laboratory Report

Lab Sample ID: S78711.06 (continued)

Sample Tag: RFI-81-12R_090925

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 09/12/25 08:51, Analyst: ACK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
Cyclohexane	Not detected	1		ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	20		ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dibromo-3-chloropropane	Not detected	1		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	2		ug/L	1	120-82-1	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Naphthalene	Not detected	1		ug/L	1	91-20-3	
Total Xylenes	Not detected	3		ug/L	1	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S78711.07

Sample Tag: RFI-12-40_091025

Collected Date/Time: 09/10/2025 10:50

Matrix: Groundwater

COC Reference: 181395

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40mL Glass	HCL	Yes	9.0	IR
2	1L Amber	None	Yes	9.0	IR
2	125mL Plastic	HNO3	Yes	9.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	09/12/25 11:40	NDK	
Metal Digestion	Completed	SW3015A	09/16/25 09:45	CCM	
Metal Digestion	Completed	SW3015A	09/16/25 09:45	CCM	
BNA Extraction	Completed	SW3510C	09/15/25 12:00	JWR	
Mercury Digestion*	Completed	SW7471B	09/16/25 12:10	CTV	
Mercury Digestion*	Completed	SW7471B	09/16/25 12:10	CTV	

Metals

Method: SW6020A, Run Date: 09/16/25 11:45, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.052	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Copper	Not detected	0.005		mg/L	5	7440-50-8	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.415	0.005		mg/L	5	7439-96-5	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW6020A, Run Date: 09/16/25 11:47, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony, Dissolved*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic, Dissolved	Not detected	0.002		mg/L	5	7440-38-2	
Barium, Dissolved	0.049	0.005		mg/L	5	7440-39-3	
Beryllium, Dissolved	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium, Dissolved	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt, Dissolved	Not detected	0.005		mg/L	5	7440-48-4	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Lead, Dissolved	Not detected	0.003		mg/L	5	7439-92-1	
Manganese, Dissolved	0.410	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	



Analytical Laboratory Report

Lab Sample ID: S78711.07 (continued)

Sample Tag: RFI-12-40_091025

Method: SW6020A, Run Date: 09/16/25 11:47, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium, Dissolved	Not detected	0.005		mg/L	5	7782-49-2	
Silver, Dissolved	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium, Dissolved	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium, Dissolved	Not detected	0.005		mg/L	5	7440-62-2	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW7471B, Run Date: 09/16/25 15:58, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury*	Not detected	0.0002		mg/L	1	7439-97-6	

Method: SW7471B, Run Date: 09/16/25 16:01, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Dissolved*	Not detected	0.0002		mg/L	1	7439-97-6	

Organics - Semi-Volatiles

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 09/15/25 19:17, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Benzaldehyde	Not detected	5		ug/L	2	100-52-7	
Acetophenone	Not detected	5		ug/L	2	98-86-2	
Caprolactam	Not detected	10		ug/L	2	105-60-2	
1,1'-Biphenyl	Not detected	5		ug/L	2	92-52-4	
Atrazine*	Not detected	3		ug/L	2	1912-24-9	

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 09/15/25 19:17, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
4-Bromophenyl phenyl ether	Not detected	5		ug/L	2	101-55-3	
di-n-Butyl phthalate	Not detected	5		ug/L	2	84-74-2	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	5		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(ghi)perylene	Not detected	5		ug/L	2	191-24-2	
Benzo(k)fluoranthene	Not detected	5		ug/L	2	207-08-9	
Butyl benzyl phthalate	Not detected	5		ug/L	2	85-68-7	
2-Chloronaphthalene	Not detected	5		ug/L	2	91-58-7	
2-Chlorophenol	Not detected	10		ug/L	2	95-57-8	
4-Chloro-3-methylphenol	Not detected	5		ug/L	2	59-50-7	
4-Chloroaniline	Not detected	10		ug/L	2	106-47-8	
4-Chlorophenyl phenyl ether	Not detected	5		ug/L	2	7005-72-3	
bis(2-Chloroethoxy)methane	Not detected	5		ug/L	2	111-91-1	
bis(2-Chloroethyl)ether	Not detected	1		ug/L	2	111-44-4	
Chrysene	Not detected	1		ug/L	2	218-01-9	
2,4-Dichlorophenol	Not detected	10		ug/L	2	120-83-2	
2,4-Dimethylphenol	Not detected	5		ug/L	2	105-67-9	
2,4-Dinitrophenol	Not detected	25		ug/L	2	51-28-5	
2,4-Dinitrotoluene	Not detected	5		ug/L	2	121-14-2	
2,6-Dinitrotoluene	Not detected	5		ug/L	2	606-20-2	
4,6-Dinitro-2-methylphenol	Not detected	25		ug/L	2	534-52-1	



Analytical Laboratory Report

Lab Sample ID: S78711.07 (continued)

Sample Tag: RFI-12-40_091025

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 09/15/25 19:17, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibenzo(ah)anthracene	Not detected	5		ug/L	2	53-70-3	
Dibenzofuran	Not detected	4		ug/L	2	132-64-9	
Diethyl phthalate	Not detected	5		ug/L	2	84-66-2	
Dimethyl phthalate	Not detected	5		ug/L	2	131-11-3	
bis(2-Ethylhexyl)phthalate	Not detected	5		ug/L	2	117-81-7	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Hexachlorocyclopentadiene	Not detected	5		ug/L	2	77-47-4	
Hexachloroethane	Not detected	5		ug/L	2	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	5		ug/L	2	193-39-5	
Isophorone	Not detected	5		ug/L	2	78-59-1	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
2-Methylphenol (o-Cresol)	Not detected	10		ug/L	2	95-48-7	
2-Nitroaniline	Not detected	25		ug/L	2	88-74-4	
2-Nitrophenol	Not detected	5		ug/L	2	88-75-5	
3-Nitroaniline	Not detected	25		ug/L	2	99-09-2	
4-Nitroaniline	Not detected	25		ug/L	2	100-01-6	
4-Nitrophenol	Not detected	25		ug/L	2	100-02-7	
N-Nitrosodi-n-propylamine	Not detected	10		ug/L	2	621-64-7	
N-Nitrosodiphenylamine	Not detected	5		ug/L	2	86-30-6	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Nitrobenzene	Not detected	3		ug/L	2	98-95-3	
di-n-Octyl phthalate	Not detected	5		ug/L	2	117-84-0	
2,4,5-Trichlorophenol	Not detected	5		ug/L	2	95-95-4	
2,4,6-Trichlorophenol	Not detected	4		ug/L	2	88-06-2	
3,3'-Dichlorobenzidine	Not detected	10		ug/L	2	91-94-1	
3-, 4-Methylphenol (p,m-Cresol)	Not detected	10		ug/L	2	3/4-CRESOL	
Pentachlorophenol	Not detected	5		ug/L	2	87-86-5	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Phenol	Not detected	5		ug/L	2	108-95-2	
Pyrene	Not detected	5		ug/L	2	129-00-0	
Hexachlorobenzene	Not detected	5		ug/L	2	118-74-1	
Hexachlorobutadiene	Not detected	5		ug/L	2	87-68-3	
bis(2-Chloroisopropyl)ether*	Not detected	5		ug/L	2	108-60-1	
Carbazole	Not detected	5		ug/L	2	86-74-8	

Organics - Volatiles

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 09/12/25 09:14, Analyst: ACK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	30		ug/L	1	76-13-1	
Acetone	Not detected	20		ug/L	1	67-64-1	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Methyl Acetate	Not detected	10		ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	20		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1		ug/L	1	75-71-8	
Chloromethane	Not detected	1		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	2		ug/L	1	74-83-9	
Chloroethane	Not detected	1		ug/L	1	75-00-3	



Analytical Laboratory Report

Lab Sample ID: S78711.07 (continued)

Sample Tag: RFI-12-40_091025

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 09/12/25 09:14, Analyst: ACK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	1	1		ug/L	1	156-60-5	
1,1-Dichloroethane	4	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	1	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	7	1		ug/L	1	71-55-6	
Cyclohexane	Not detected	1		ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	15	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	20		ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dibromo-3-chloropropane	Not detected	1		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	2		ug/L	1	120-82-1	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Naphthalene	Not detected	1		ug/L	1	91-20-3	
Total Xylenes	Not detected	3		ug/L	1	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S78711.08

Sample Tag: RFI-23-01R_091025

Collected Date/Time: 09/10/2025 12:50

Matrix: Groundwater

COC Reference: 181395

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40mL Glass	HCL	Yes	9.0	IR
2	1L Amber	None	Yes	9.0	IR
2	125mL Plastic	HNO3	Yes	9.0	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	09/12/25 11:40	NDK	
Metal Digestion	Completed	SW3015A	09/16/25 09:45	CCM	
Metal Digestion	Completed	SW3015A	09/16/25 09:45	CCM	
BNA Extraction	Completed	SW3510C	09/15/25 12:00	JWR	
Mercury Digestion*	Completed	SW7471B	09/16/25 12:10	CTV	
Mercury Digestion*	Completed	SW7471B	09/16/25 12:10	CTV	

Metals

Method: SW6020A, Run Date: 09/16/25 11:48, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	0.004	0.002		mg/L	5	7440-38-2	
Barium	0.063	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Copper	Not detected	0.005		mg/L	5	7440-50-8	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.148	0.005		mg/L	5	7439-96-5	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW6020A, Run Date: 09/16/25 11:50, Analyst: CCM

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony, Dissolved*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic, Dissolved	0.003	0.002		mg/L	5	7440-38-2	
Barium, Dissolved	0.061	0.005		mg/L	5	7440-39-3	
Beryllium, Dissolved	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium, Dissolved	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt, Dissolved	Not detected	0.005		mg/L	5	7440-48-4	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Lead, Dissolved	Not detected	0.003		mg/L	5	7439-92-1	
Manganese, Dissolved	0.125	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	



Analytical Laboratory Report

Lab Sample ID: S78711.08 (continued)

Sample Tag: RFI-23-01R_091025

Method: SW6020A, Run Date: 09/16/25 11:50, Analyst: CCM (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium, Dissolved	Not detected	0.005		mg/L	5	7782-49-2	
Silver, Dissolved	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium, Dissolved	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium, Dissolved	Not detected	0.005		mg/L	5	7440-62-2	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW7471B, Run Date: 09/16/25 16:05, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury*	Not detected	0.0002		mg/L	1	7439-97-6	

Method: SW7471B, Run Date: 09/16/25 16:08, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Dissolved*	Not detected	0.0002		mg/L	1	7439-97-6	

Organics - Semi-Volatiles

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 09/15/25 19:48, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Benzaldehyde	Not detected	5		ug/L	2	100-52-7	
Acetophenone	Not detected	5		ug/L	2	98-86-2	
Caprolactam	Not detected	10		ug/L	2	105-60-2	
1,1'-Biphenyl	Not detected	5		ug/L	2	92-52-4	
Atrazine*	Not detected	3		ug/L	2	1912-24-9	

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 09/15/25 19:48, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
4-Bromophenyl phenyl ether	Not detected	5		ug/L	2	101-55-3	
di-n-Butyl phthalate	Not detected	5		ug/L	2	84-74-2	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	5		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(ghi)perylene	Not detected	5		ug/L	2	191-24-2	
Benzo(k)fluoranthene	Not detected	5		ug/L	2	207-08-9	
Butyl benzyl phthalate	Not detected	5		ug/L	2	85-68-7	
2-Chloronaphthalene	Not detected	5		ug/L	2	91-58-7	
2-Chlorophenol	Not detected	10		ug/L	2	95-57-8	
4-Chloro-3-methylphenol	Not detected	5		ug/L	2	59-50-7	
4-Chloroaniline	Not detected	10		ug/L	2	106-47-8	
4-Chlorophenyl phenyl ether	Not detected	5		ug/L	2	7005-72-3	
bis(2-Chloroethoxy)methane	Not detected	5		ug/L	2	111-91-1	
bis(2-Chloroethyl)ether	Not detected	1		ug/L	2	111-44-4	
Chrysene	Not detected	1		ug/L	2	218-01-9	
2,4-Dichlorophenol	Not detected	10		ug/L	2	120-83-2	
2,4-Dimethylphenol	Not detected	5		ug/L	2	105-67-9	
2,4-Dinitrophenol	Not detected	25		ug/L	2	51-28-5	
2,4-Dinitrotoluene	Not detected	5		ug/L	2	121-14-2	
2,6-Dinitrotoluene	Not detected	5		ug/L	2	606-20-2	
4,6-Dinitro-2-methylphenol	Not detected	25		ug/L	2	534-52-1	



Analytical Laboratory Report

Lab Sample ID: S78711.08 (continued)

Sample Tag: RFI-23-01R_091025

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 09/15/25 19:48, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibenzo(ah)anthracene	Not detected	5		ug/L	2	53-70-3	
Dibenzofuran	Not detected	4		ug/L	2	132-64-9	
Diethyl phthalate	Not detected	5		ug/L	2	84-66-2	
Dimethyl phthalate	Not detected	5		ug/L	2	131-11-3	
bis(2-Ethylhexyl)phthalate	Not detected	5		ug/L	2	117-81-7	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Hexachlorocyclopentadiene	Not detected	5		ug/L	2	77-47-4	
Hexachloroethane	Not detected	5		ug/L	2	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	5		ug/L	2	193-39-5	
Isophorone	Not detected	5		ug/L	2	78-59-1	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
2-Methylphenol (o-Cresol)	Not detected	10		ug/L	2	95-48-7	
2-Nitroaniline	Not detected	25		ug/L	2	88-74-4	
2-Nitrophenol	Not detected	5		ug/L	2	88-75-5	
3-Nitroaniline	Not detected	25		ug/L	2	99-09-2	
4-Nitroaniline	Not detected	25		ug/L	2	100-01-6	
4-Nitrophenol	Not detected	25		ug/L	2	100-02-7	
N-Nitrosodi-n-propylamine	Not detected	10		ug/L	2	621-64-7	
N-Nitrosodiphenylamine	Not detected	5		ug/L	2	86-30-6	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Nitrobenzene	Not detected	3		ug/L	2	98-95-3	
di-n-Octyl phthalate	Not detected	5		ug/L	2	117-84-0	
2,4,5-Trichlorophenol	Not detected	5		ug/L	2	95-95-4	
2,4,6-Trichlorophenol	Not detected	4		ug/L	2	88-06-2	
3,3'-Dichlorobenzidine	Not detected	10		ug/L	2	91-94-1	
3-, 4-Methylphenol (p,m-Cresol)	Not detected	10		ug/L	2	3/4-CRESOL	
Pentachlorophenol	Not detected	5		ug/L	2	87-86-5	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Phenol	Not detected	5		ug/L	2	108-95-2	
Pyrene	Not detected	5		ug/L	2	129-00-0	
Hexachlorobenzene	Not detected	5		ug/L	2	118-74-1	
Hexachlorobutadiene	Not detected	5		ug/L	2	87-68-3	
bis(2-Chloroisopropyl)ether*	Not detected	5		ug/L	2	108-60-1	
Carbazole	Not detected	5		ug/L	2	86-74-8	

Organics - Volatiles

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 09/12/25 09:38, Analyst: ACK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	30		ug/L	1	76-13-1	
Acetone	Not detected	20		ug/L	1	67-64-1	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Methyl Acetate	Not detected	10		ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	20		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1		ug/L	1	75-71-8	
Chloromethane	Not detected	1		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	2		ug/L	1	74-83-9	
Chloroethane	Not detected	1		ug/L	1	75-00-3	



Analytical Laboratory Report

Lab Sample ID: S78711.08 (continued)

Sample Tag: RFI-23-01R_091025

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 09/12/25 09:38, Analyst: ACK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
Cyclohexane	Not detected	1		ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	20		ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene	Not detected	2		ug/L	1		
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dibromo-3-chloropropane	Not detected	1		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	2		ug/L	1	120-82-1	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Naphthalene	Not detected	1		ug/L	1	91-20-3	
Total Xylenes	Not detected	3		ug/L	1	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S78711.09
Sample Tag: EquipmentBlank_090925
Collected Date/Time: 09/09/2025 11:15
Matrix: Groundwater
COC Reference: 181395

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	LLHg Kit	None	Yes	9.0	IR

Metals

Method: E1631E, Run Date: 09/16/25 17:25, Analyst: EURO

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Low Level*	Completed	0.50		ng/L	1	7439-97-6	O

O-Analysis performed by outside laboratory. See attached report.

Merit Laboratories Login Checklist

Lab Set ID:S78711

Client:ARCADIS_NOVI (Arcadis US, Inc.)

Project: 30282188.01 / Buick City

Submitted:09/10/2025 15:35 Login User: MMC

Attention: Tiffany Linder

Address: Arcadis US, Inc.
28550 Cabot Drive, Suite 500
Novi, MI 48377

Phone: 248-994-2272 FAX:

Email: tiffany.linder@arcadis.com

Selection	Description	Note
Sample Receiving		
01.	☐ Yes ☒ No ☐ N/A	Samples are received at 4C +/- 2C Thermometer # IR 9.0
02.	☒ Yes ☐ No ☐ N/A	Received on ice/ cooling process begun
03.	☐ Yes ☒ No ☐ N/A	Samples shipped
04.	☐ Yes ☒ No ☐ N/A	Samples left in 24 hr. drop box
05.	☐ Yes ☐ No ☒ N/A	Are there custody seals/tape or is the drop box locked
Chain of Custody		
06.	☒ Yes ☐ No ☐ N/A	COC adequately filled out
07.	☒ Yes ☐ No ☐ N/A	COC signed and relinquished to the lab
08.	☒ Yes ☐ No ☐ N/A	Sample tag on bottles match COC
09.	☒ Yes ☐ No ☐ N/A	Subcontracting needed? Subcontacted to: Eurofins
Preservation		
10.	☒ Yes ☐ No ☐ N/A	Do sample have correct chemical preservation
11.	☒ Yes ☐ No ☐ N/A	Completed pH checks on preserved samples? (no VOAs)
12.	☐ Yes ☒ No ☐ N/A	Did any samples need to be preserved in the lab?
Bottle Conditions		
13.	☒ Yes ☐ No ☐ N/A	All bottles intact
14.	☒ Yes ☐ No ☐ N/A	Appropriate analytical bottles are used
15.	☒ Yes ☐ No ☐ N/A	Merit bottles used
16.	☒ Yes ☐ No ☐ N/A	Sufficient sample volume received
17.	☐ Yes ☒ No ☐ N/A	Samples require laboratory filtration
18.	☒ Yes ☐ No ☐ N/A	Samples submitted within holding time
19.	☐ Yes ☒ No ☐ N/A	Do water VOC, TOX, DO or Alkalinity bottles contain

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____

Merit Laboratories Bottle Preservation Check

Lab Set ID: S78711 Submitted: 09/10/2025 15:35

Client: ARCADIS_NOVI (Arcadis US, Inc.)

Project: 30282188.01 / Buick City

Initial Preservation Check: 09/10/2025 16:56 MMC

Preservation Recheck (E200.8): N/A

Attention: Tiffany Linder

Address: Arcadis US, Inc.

28550 Cabot Drive, Suite 500
Novi, MI 48377

Phone: 248-994-2272

FAX:

Email: tiffany.linder@arcadis.com

Sample ID	Bottle / Preservation	pH (Orig)	Add ml	pH (New)	Notes
S78711.01	125mL Plastic HNO3	<2			
S78711.01	125mL Plastic HNO3	<2			
S78711.02	125mL Plastic HNO3	<2			
S78711.02	125mL Plastic HNO3	<2			
S78711.03	125mL Plastic HNO3	<2			
S78711.03	125mL Plastic HNO3	<2			
S78711.04	125mL Plastic HNO3	<2			
S78711.04	125mL Plastic HNO3	<2			
S78711.06	125mL Plastic HNO3	<2			
S78711.06	125mL Plastic HNO3	<2			
S78711.07	125mL Plastic HNO3	<2			
S78711.07	125mL Plastic HNO3	<2			
S78711.08	125mL Plastic HNO3	<2			
S78711.08	125mL Plastic HNO3	<2			



2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 1

181395

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME
Madison Olender, Tiffany Linder

COMPANY
Arcadis

ADDRESS
28550 Cabot Dr. Suite 500

CITY
Novi STATE
MI ZIP CODE
48377

PHONE NO.
248 790 1666 CELL NO.
 P.O. NO.

E-MAIL ADDRESS
Tiffany.Linder@arcadis.com
madison.olender@arcadis.com QUOTE NO.

CONTACT NAME
SAME

COMPANY

ADDRESS

CITY
 STATE
 ZIP CODE

PHONE NO.
 E-MAIL ADDRESS

PROJECT NO./NAME
30282188.01 / Buick City SAMPLER(S) - PLEASE PRINT/SIGN NAME
Donald Richmond / Donald Richmond

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER

MATRIX W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID
CODE: SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIFE A=AIR WS=WASTE

Containers & Preservatives

MERIT LAB NO. FOR LAB USE ONLY	COLLECTION		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER	PAL Tot	VOC's	SVOC	PCB's	LLH																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															

RELINQUISHED BY: Donald Richmond/Arcadis to Sampler DATE 9/10/25 TIME 1535

SIGNATURE/ORGANIZATION M Chilcote DATE 9/10/25 TIME 1535

RECEIVED BY: DATE TIME

SIGNATURE/ORGANIZATION DATE TIME

RELINQUISHED BY: DATE TIME

SIGNATURE/ORGANIZATION DATE TIME

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS TEMP. ON ARRIVAL 9.0

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS ☐ ICE (SOLID) ☐ BLUE ICE ☐ ICE (MELTED) ☐ NONE

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

TABLE 2

PROJECT ANALYTE LIST (PAL) AND TCLP CONSTITUENTS

MODIFIED TCL ANALYTES

SEMIVOLATILE COMPOUNDS BY 8270C

Analyte	CAS No.	Analyte	CAS No.
Acenaphthene	83-32-9	3,3'-Dichlorobenzidine	91-94-1
Acenaphthylene	208-96-8	2,4-Dichlorophenol	120-83-2
Acetophenone	98-86-2	Diethyl phthalate	84-66-2
Anthracene	120-12-7	Dimethyl phthalate	131-11-3
Atrazine	1912-24-9	2,4-Dimethylphenol	105-67-9
Benzaldehyde	100-52-7	4,6-Dinitro-2-methylphenol	534-52-1
Benzo(a)anthracene	56-55-3	2,4-Dinitrophenol	51-28-5
Benzo(a)pyrene	50-32-8	2,4-Dinitrotoluene	121-14-2
Benzo(b)fluoranthene	205-99-2	2,6-Dinitrotoluene	606-20-2
Benzo(g,h,i)perylene	191-24-2	Fluoranthene	206-44-0
Benzo(k)fluoranthene	207-08-9	Fluorene	86-73-7
1,1'-Biphenyl	92-52-4	Hexachlorobenzene	118-74-1
bis(2-chloroethoxy)methane	111-91-1	Hexachlorobutadiene	87-68-3
bis(2-chloroethyl)ether	111-44-4	Hexachlorocyclopentadiene	77-47-4
bis(2-chloroisopropyl)ether	108-60-1	Hexachloroethane	67-72-1
bis(2-ethylhexyl)phthalate	117-81-7	Indeno(1,2,3-cd)pyrene	193-39-5
4-Bromophenyl phenylether	101-55-3	Isophorone	78-59-1
Butyl benzyl phthalate	85-68-7	2-Methylnaphthalene	91-57-6
Caprolactam	105-60-2	Naphthalene	91-20-3
Carbazole	86-74-8	2-Nitroaniline	88-74-4
4-Chloro-3-methylphenol	59-50-7	3-Nitroaniline	99-09-2
4-Chloroaniline	106-47-8	4-Nitroaniline	100-01-6
2-Chloronaphthalene	91-58-7	Nitrobenzene	98-95-3
2-Chlorophenol	95-57-8	2-Nitrophenol	88-75-5
4-Chlorophenyl-phenylether	7005-72-3	4-Nitrophenol	100-02-7
2,2'-oxybis(1-Chloropropane)	108-60-1	N-Nitrosodi-n-propylamine	621-64-7
Chrysene	218-01-9	N-Nitrosodiphenylamine	86-30-6
2-Methylphenol (o-Cresol)	95-48-7	Pentachlorophenol	87-86-5
4-Methylphenol (p-Cresol)	106-44-5	Phenanthrene	85-01-8
Di-n-butylphthalate	84-74-2	Phenol	108-95-2
Di-n-octylphthalate	117-84-0	Pyrene	129-00-0
Dibenz(a,h)anthracene	53-70-3	2,4,5-Trichlorophenol	95-95-4
Dibenzofuran	132-64-9	2,4,6-Trichlorophenol	88-06-2

VOLATILE ORGANICS BY 8260B

Analyte	CAS No.	Analyte	CAS No.
Acetone	67-64-1	trans-1,2-Dichloroethene	156-60-5
Benzene	71-43-2	1,2-Dichloropropane	78-87-5
Bromodichloromethane	75-27-4	cis-1,3-Dichloropropene	10061-01-5
Bromoform	75-25-2	trans-1,3-Dichloropropene	10061-02-6
Bromomethane	74-83-9	Ethylbenzene	100-41-4
2-Butanone	78-93-3	2-Hexanone	591-78-6
Carbon Disulfide	75-15-0	Isopropylbenzene	98-82-8
Carbon Tetrachloride	56-23-5	Methyl Acetate	79-20-9
Chlorobenzene	108-90-7	Methyl Cyclohexane	108-87-2
Chloroethane	75-00-3	4-Methyl-2-pentanone	108-10-1
Chloroform	67-66-3	Methylene Chloride	75-09-2
Chloromethane	74-87-3	Methyl tert-Butyl Ether	1634-04-4
Cyclohexane	110-82-7	Styrene	100-42-5
Dibromochloromethane	124-48-1	1,1,2,2-Tetrachloroethane	79-34-5
1,2-Dibromo-3-chloropropane	96-12-8	Tetrachloroethene	127-18-4
1,2-Dibromoethane	106-93-4	Toluene	108-88-3
1,2-Dichlorobenzene	95-50-1	1,2,4-Trichlorobenzene	120-82-1
1,3-Dichlorobenzene	541-73-1	1,1,1-Trichloroethane	71-55-6
1,4-Dichlorobenzene	106-46-7	1,1,2-Trichloroethane	79-00-5
Dichlorodifluoromethane	75-71-8	Trichloroethene	79-01-6
1,1-Dichloroethane	75-34-3	Trichlorofluoromethane	75-69-4
1,2-Dichloroethane	107-06-2	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1
1,1-Dichloroethene	75-35-4	Vinyl Chloride	75-01-4
cis-1,2-Dichloroethene	156-59-2	Xylenes (total)	1330-20-7

TABLE 2

PROJECT ANALYTE LIST (PAL) AND TCLP CONSTITUENTS

MODIFIED TCL ANALYTESAROCLORS BY 8082

<u>Analyte</u>	<u>CAS No.</u>	<u>Analyte</u>	<u>CAS No.</u>
Aroclor-1016	12674-11-2	Aroclor-1248	12672-29-6
Aroclor-1221	11104-28-2	Aroclor-1254	11097-69-1
Aroclor-1232	11141-16-5	Aroclor-1260	11096-82-5
Aroclor-1242	53469-21-9		

MODIFIED TAL LIST (TOXIC TAL ANALYTES PLUS ADDITIONAL CONSTITUENTS)INORGANICS BY 6010B/7000A

<u>Analyte</u>	<u>CAS No.</u>	<u>Analyte</u>	<u>CAS No.</u>
Antimony	7440-36-0	Lead	7439-92-1
Arsenic	7440-38-2	Manganese	7439-96-5
Barium	7440-39-3	Mercury	7439-97-6
Beryllium	7440-41-7	Nickel	7440-02-0
Cadmium	7440-43-9	Selenium	7782-49-2
Chromium	7440-47-3	Silver	7440-22-4
Cobalt	7440-48-4	Thallium	7440-28-0
Copper	7440-50-8	Vanadium	7440-62-2
Cyanide	7440-50-7	Zinc	7440-66-6

TCLP ANALYTESSEMIVOLATILE COMPOUNDS BY 8270C - 1311 (TCLP)

<u>Analyte</u>	<u>CAS No.</u>	<u>Analyte</u>	<u>CAS No.</u>
Antimony	7440-36-0	4-Methylphenol (p-Cresol)	106-44-5
2,4-Dinitrotoluene	121-14-2	Nitrobenzene	98-95-3
Hexachlorobenzene	118-74-1	Pentachlorophenol	87-86-5
Hexachlorobutadiene	87-68-3	Pyridine	110-86-1
Hexachloroethane	67-72-1	2,4,5-Trichlorophenol	95-95-4
2-Methylphenol (o-Cresol)	95-48-7	2,4,6-Trichlorophenol	88-06-2
3-Methylphenol (m-Cresol)	108-39-4		

VOLATILE COMPOUNDS BY 8260B - 1311 (TCLP)

<u>Analyte</u>	<u>CAS No.</u>	<u>Analyte</u>	<u>CAS No.</u>
Benzene	71-43-2	1,1-Dichloroethene	75-35-4
Carbon Tetrachloride	56-23-5	2-Butanone	78-93-3
Chlorobenzene	108-90-7	Tetrachloroethene	127-18-4
Chloroform	67-66-3	Trichloroethene	79-01-6
1,4-Dichlorobenzene	106-46-7	Vinyl Chloride	75-01-4
1,2-Dichloroethane	107-06-2		

AROCLORS BY 8082 - 1311 (TCLP)

<u>Analyte</u>	<u>CAS No.</u>	<u>Analyte</u>	<u>CAS No.</u>
Aroclor-1016	12674-11-2	Aroclor-1248	12672-29-6
Aroclor-1221	11104-28-2	Aroclor-1254	11097-69-1
Aroclor-1232	11141-16-5	Aroclor-1260	11096-82-5
Aroclor-1242	53469-21-9		

INORGANICS BY 6010B/7000A, 9010B, 9030B - TCLP

<u>Analyte</u>	<u>CAS No.</u>	<u>Analyte</u>	<u>CAS No.</u>
Arsenic	7440-38-2	Lead	7439-92-1
Barium	7440-39-3	Mercury	7439-97-6
Cadmium	7440-43-9	Selenium	7782-49-2
Chromium	7440-47-3	Silver	7440-22-4

Notes:

- 1) This list summarizes the compounds by fraction which are analyzed in accordance with the Superfund Target Compound List (TCL) for volatile and semivolatile organics, and Superfund toxic Target Analyte List (toxic TAL) for inorganics. Additional compounds have been added to this list based on prior Site analytical data.



ANALYTICAL REPORT

PREPARED FOR

Attn: Lab Results
Merit Laboratories
2680 E Lansing Drive
East Lansing, Michigan 48823

Generated 9/17/2025 9:37:45 PM

JOB DESCRIPTION

S78711

JOB NUMBER

190-37945-1

Eurofins Michigan

Job Notes

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

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

Authorization



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9/17/2025 9:37:45 PM

Authorized for release by
Sue Schafer, Project Manager II
Sue.Schafer@et.eurofinsus.com
(810)229-2763

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Sample Summary

Client: Merit Laboratories
Project/Site: S78711

Job ID: 190-37945-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
190-37945-1	S78711.03	Water	09/08/25 11:00	09/12/25 11:20	Michigan
190-37945-2	S78711.09	Water	09/09/25 11:15	09/12/25 11:20	Michigan

- 1
- 2
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- 10
- 11
- 12

Case Narrative

Client: Merit Laboratories
Project: S78711

Job ID: 190-37945-1

Job ID: 190-37945-1

Eurofins Michigan

Job Narrative 190-37945-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 9/12/2025 11:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 10.0°C.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Michigan

Client Sample Results

Client: Merit Laboratories
Project/Site: S78711

Job ID: 190-37945-1

Client Sample ID: S78711.03

Lab Sample ID: 190-37945-1

Date Collected: 09/08/25 11:00

Matrix: Water

Date Received: 09/12/25 11:20

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	4.5		0.50	ng/L		09/15/25 11:45	09/16/25 17:20	1

Client Sample ID: S78711.09

Lab Sample ID: 190-37945-2

Date Collected: 09/09/25 11:15

Matrix: Water

Date Received: 09/12/25 11:20

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.50		0.50	ng/L		09/15/25 11:45	09/16/25 17:25	1

QC Sample Results

Client: Merit Laboratories
Project/Site: S78711

Job ID: 190-37945-1

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 240-671713/1-A
Matrix: Water
Analysis Batch: 671946

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 671713

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.50		0.50	ng/L		09/15/25 11:45	09/16/25 15:38	1

Lab Sample ID: LCS 240-671713/2-A
Matrix: Water
Analysis Batch: 671946

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 671713

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.09		ng/L		102	77 - 123

Definitions/Glossary

Client: Merit Laboratories
Project/Site: S78711

Job ID: 190-37945-1

Glossary

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

QC Association Summary

Client: Merit Laboratories
Project/Site: S78711

Job ID: 190-37945-1

Metals

Prep Batch: 671713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
190-37945-1	S78711.03	Total/NA	Water	1631E	
190-37945-2	S78711.09	Total/NA	Water	1631E	
MB 240-671713/1-A	Method Blank	Total/NA	Water	1631E	
LCS 240-671713/2-A	Lab Control Sample	Total/NA	Water	1631E	

Analysis Batch: 671946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
190-37945-1	S78711.03	Total/NA	Water	1631E	671713
190-37945-2	S78711.09	Total/NA	Water	1631E	671713
MB 240-671713/1-A	Method Blank	Total/NA	Water	1631E	671713
LCS 240-671713/2-A	Lab Control Sample	Total/NA	Water	1631E	671713

Lab Chronicle

Client: Merit Laboratories
Project/Site: S78711

Job ID: 190-37945-1

Client Sample ID: S78711.03

Lab Sample ID: 190-37945-1

Date Collected: 09/08/25 11:00

Matrix: Water

Date Received: 09/12/25 11:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631E			671713	TQ6W	EET CLE	09/15/25 11:45
Total/NA	Analysis	1631E		1	671946	TQ6W	EET CLE	09/16/25 17:20

Client Sample ID: S78711.09

Lab Sample ID: 190-37945-2

Date Collected: 09/09/25 11:15

Matrix: Water

Date Received: 09/12/25 11:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631E			671713	TQ6W	EET CLE	09/15/25 11:45
Total/NA	Analysis	1631E		1	671946	TQ6W	EET CLE	09/16/25 17:25

Client Sample ID: Method Blank

Lab Sample ID: MB 240-671713/1-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631E			671713	TQ6W	EET CLE	09/15/25 11:45
Total/NA	Analysis	1631E		1	671946	TQ6W	EET CLE	09/16/25 15:38

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 240-671713/2-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631E			671713	TQ6W	EET CLE	09/15/25 11:45
Total/NA	Analysis	1631E		1	671946	TQ6W	EET CLE	09/16/25 15:43

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Analyst References:

Lab: EET CLE

Batch Type: Prep

TQ6W = Bryan Perelka

Batch Type: Analysis

TQ6W = Bryan Perelka

Accreditation/Certification Summary

Client: Merit Laboratories
Project/Site: S78711

Job ID: 190-37945-1

Laboratory: Eurofins Cleveland

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

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-26
Iowa	State	421	06-01-27
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	06-30-26
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-26
Texas	NELAP	T104704517	08-31-26
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-26
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-26

Method Summary

Client: Merit Laboratories
Project/Site: S78711

Job ID: 190-37945-1

Method	Method Description	Protocol	Laboratory
1631E	Mercury, Low Level (CVAFS)	EPA	EET CLE
1631E	Preparation, Mercury, Low Level	EPA	EET CLE

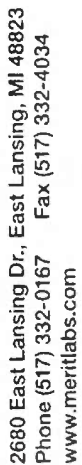
Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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12



C.O.C. PAGE # 1 OF 1

[illegible]

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

12

9

8



5

4



Environment Testing
TestAmerica

- ☐ SDS or Known Hazard Information Supplied by Client
☐ Discrepancies
☐ Short Hold
☐ Rush ☐ 24 Hr ☐ 2-Day ☐ 3-Day ☐ 5-Day ☐ Other:
Receipt Evaluation Performed by: Initials: JE Date: 9/12 Time: 11:20

Client ID: Merit
Work Order #: 37945

Cooler / Sample Receipt

After hours receipt: complete gray areas. Place cooler in walk-in, place form in Receiving box. Date: _____ Time: _____

Method of Shipment:

Walk-In Client Eurofins TA Field/Courier
Other Client / 3rd Party Courier: _____
Fed Ex Tracking #: _____
UPS Tracking #: _____
Other: _____

Shipping Container Type:

☒ Cooler ☐ Box
☐ None ☐ Other: _____

Packing Materials:

☒ Plastic Bags ☐ Foam
☐ Bubble Wrap ☐ Paper
☐ Packing Peanuts ☐ None
☐ Other: _____

Custody Seals Intact:

☐ Yes ☒ No
☐ NA (not used or required)

Cooling Materials:

☐ Ice (Solid) ☒ Ice (Melted)
☐ Blue Ice ☐ None
☐ Other: _____

Bacteriological Samples	Temp Corrected (°C)	Frozen?		Rec'd Within 2 Hrs?		Sample Flagged?	
		Yes	No	Yes	No	Yes	No

Received on same day sampled? Yes ☐ No ☒

Additional Sheets Required? Yes ☐ No ☒

Receipt Temperatures

Thermometer ID	Observed (°C)	Corrected (°C)	Temp Blank	Sample Temp	Acceptable	Cooler ID	Affected Samples
<u>CP313267</u>	<u>10.0</u>	<u>10.0</u>			☒ Y ☐ N		
					☐ Y ☐ N		
					☐ Y ☐ N		

Receipt Questions**	Y	N	NA	"No" answers require additional comment
CoC present and ETA receipt signature, date, and time properly documented?	☒			
Containers and Labels in good condition? (unbroken, not leaking, appropriately filled, labels legible & attached)	☒			
Appropriate containers used and adequate volume provided?	☒			Preserved bottles checked for pH? Yes ☐ No ☒ pH strip lot # _____
Number of sample containers match CoC?	☒			
Samples received within hold?	☒			
Samples submitted for GRO and Volatiles analysis (8260, 624, 524) received without headspace?			☒	<u>CP313267</u>
Was a Trip Blank received with VOA samples?				
Were the samples free of any questionable physical conformities? (i.e.: field duplicates or multiple bottles of the same sample do not significantly vary in appearance - color, solid proportions, etc.)	☒			
Were the CoC bottle labels and all other items free of all other discrepancies or issues that would need to be addressed with the Project Manager and/or Client?	☒			

**May not be applicable if samples are not for compliance testing

Client Contact Record

Contact Via: ☐ Phone ☐ Email ☐ Other: _____ Person Contacted: _____ Date/Time: _____
☐ Discrepancy allowance agreement is on record in the client project file

Discussion / Resolution

Any additional documentation and clarification from the client must be noted in the narrative and/or scanned into the CoC directory.

Reviewed by [Signature] Date: 9/12/25

WI-MI-010_020720

Chain of Custody Record

[illegible]

Eurofins - Cleveland Sample Receipt Form/Narrative Login # _____

Client Eurofins Midhogan Site Name _____ Cooler unpacked by: JC

Cooler Received on 9-13-25 Opened on 9-13-25

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # 26 Foam Box Client Cooler Box Other _____

Packing material used Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # 13 (CF 03 °C) Observed Cooler Temp. 0.3 °C Corrected Cooler Temp 0.5 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity _____

-Were the seals on the outside of the cooler(s) signed & dated? Yes No NA

-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No NA

-Were tamper/custody seals intact and uncompromised? Yes No NA

3 Shippers' packing slip attached to the cooler(s)? Yes No NA

4 Did custody papers accompany the sample(s)? Yes No NA

5 Were the custody papers relinquished & signed in the appropriate place? Yes No NA

6 Was/were the person(s) who collected the samples clearly identified on the COC? Yes No NA

7 Did all bottles arrive in good condition (Unbroken)? Yes No NA

8 Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes No NA

9 For each sample, does the COC specify preservatives (Y/N), # of containers (N), and sample type of grab/comp (N)? Yes No NA

10 Were correct bottle(s) used for the test(s) indicated? Yes No NA

11 Sufficient quantity received to perform indicated analyses? Yes No NA

12 Are these work share samples and all listed on the COC? Yes No NA

If yes, Questions 13-17 have been checked at the originating laboratory

13 Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC461227

14 Were VOAs on the COC? Yes No NA

15 Were air bubbles >6 mm in any VOA vials? Yes No NA

16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____

17 Was a LL Hg or Me Hg trip blank present? Yes No NA

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____

Concerning _____

Tests that are not checked for pH by Receiving: VOAs Oil and Grease TOC

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by: _____

Labels Verified by: _____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20 SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation - Date/Time VOAs Frozen. _____

September 18, 2025

Madison Olender
Arcadis US, Inc.
120 N. Washington Square
Suite 300
Lansing, MI 48933

Re: **RACER PFAS Analysis**

Date Received: **09/11/2025**

Work Order: **HN2513292**

Dear Madison,

Enclosed are the results of the sample(s) submitted to our laboratory.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Alex Csaszar

/S/ **ALEX CSASZAR**

Project Manager



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis

Work Order: HN2513292
Date Received: 11-Sep-2025

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt

9 water samples were received for analysis at ALS Environmental on 11-Sep-2025. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Organics

ASTM D7979-W

Run ID: 3507587

The Independent Calibration Verification did not meet acceptance criteria with high bias, however, all sample/MBLK results were non-detect for the following analytes: PFDoA

The Independent Calibration Verification did not meet method acceptance criteria for the following analytes, results are to be considered estimated: PFDoA, High bias, RLVS/LCS recoveries within range.

HN2513292-004: Perfluorooctane sulfonic acid (PFOS) - Ion transition ratios did not meet acceptance criteria due to matrix interference and/or the presence of branched isomers not represented in the quantitation standards.

SAMPLE DETECTION SUMMARY

This form includes only detections above the limits as presented.

For a full listing of sample results, continue to the Sample Results section of this Report.



CLIENT ID: West P-Trap_090825 Lab ID: HN2513292-001

Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorohexane sulfonic acid (PFHxS)	15.8	J	13.0	43.6	ng/L	ASTM D7979-19
Perfluorooctane sulfonic acid (PFOS)	69.2		4.86	8.90	ng/L	ASTM D7979-19
Perfluorooctanoic acid (PFOA)	9.92		8.92	9.59	ng/L	ASTM D7979-19

CLIENT ID: East P-Trap_090825 Lab ID: HN2513292-002

Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorohexane sulfonic acid (PFHxS)	18.9	J	13.1	43.9	ng/L	ASTM D7979-19
Perfluorooctane sulfonic acid (PFOS)	115		4.89	8.95	ng/L	ASTM D7979-19

CLIENT ID: RFI-86-14_090825 Lab ID: HN2513292-003

Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorooctanoic acid (PFOA)	13.7		9.01	9.69	ng/L	ASTM D7979-19

CLIENT ID: MH3-9_090925 Lab ID: HN2513292-004

Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorohexane sulfonic acid (PFHxS)	16.7	J	13.7	45.8	ng/L	ASTM D7979-19
Perfluorooctane sulfonic acid (PFOS)	29.2		5.10	9.34	ng/L	ASTM D7979-19

CLIENT ID: RFI-81-33_090925 Lab ID: HN2513292-005

Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorobutanoic acid (PFBA)	25.3	J	13.9	48.1	ng/L	ASTM D7979-19
Perfluoropentanoic acid (PFPeA)	9.78	J	7.70	48.1	ng/L	ASTM D7979-19

CLIENT ID: RFI-81-12R_090925 Lab ID: HN2513292-006

Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorooctane sulfonic acid (PFOS)	31.9		4.77	8.74	ng/L	ASTM D7979-19

CLIENT ID: RFI-12-40_091025 Lab ID: HN2513292-007

Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorobutanoic acid (PFBA)	19.7	J	14.4	49.8	ng/L	ASTM D7979-19
Perfluorohexane sulfonic acid (PFHxS)	15.2	J	13.5	45.4	ng/L	ASTM D7979-19
Perfluorooctane sulfonic acid (PFOS)	25.0		5.05	9.25	ng/L	ASTM D7979-19
Perfluoropentanoic acid (PFPeA)	8.99	J	7.98	49.8	ng/L	ASTM D7979-19

CLIENT ID: RFI-23-01R_091025 Lab ID: HN2513292-008

Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorohexane sulfonic acid (PFHxS)	35.7	J	13.4	44.8	ng/L	ASTM D7979-19
Perfluorooctane sulfonic acid (PFOS)	39.8		4.98	9.13	ng/L	ASTM D7979-19

CLIENT ID: RFI-23-02R_091025 Lab ID: HN2513292-009

Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorohexane sulfonic acid (PFHxS)	45.0		12.7	42.6	ng/L	ASTM D7979-19
Perfluorooctane sulfonic acid (PFOS)	24.9		4.74	8.68	ng/L	ASTM D7979-19

SAMPLE SUMMARY



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Workorder: HN2513292

Laboratory Sample ID	Client Sample ID	Sample Matrix	Collection Date	Date Received
HN2513292-001	West P-Trap_090825	WATER	09/08/25 12:45	09/11/25 09:30
HN2513292-002	East P-Trap_090825	WATER	09/08/25 14:30	09/11/25 09:30
HN2513292-003	RFI-86-14_090825	WATER	09/08/25 15:50	09/11/25 09:30
HN2513292-004	MH3-9_090925	WATER	09/09/25 11:00	09/11/25 09:30
HN2513292-005	RFI-81-33_090925	WATER	09/09/25 13:15	09/11/25 09:30
HN2513292-006	RFI-81-12R_090925	WATER	09/09/25 15:00	09/11/25 09:30
HN2513292-007	RFI-12-40_091025	WATER	09/10/25 10:50	09/11/25 09:30
HN2513292-008	RFI-23-01R_091025	WATER	09/10/25 12:50	09/11/25 09:30
HN2513292-009	RFI-23-02R_091025	WATER	09/10/25 14:10	09/11/25 09:30



ALS Group USA, Corp

3

Company Name		Purchase Order		Parameter/Method Request for Analysis	
Arcadis U.S., Inc.		Company Name		A 537M, MI List of 28	
Send Report To		Invoice Attn		B ASTM D7979	
Project Name		Project #		C	
Address		Address		D	
City State Zip		City State Zip		E	
Phone		Phone		F	
e-Mail Address		e-Mail Address		G	
				H	
				I	
				J	

Environmental Division
Holland
Work Order Reference
HN2513292



Telephone : +1 616 399 6070

#	Sample Description	Date	Time	Matrix	Preservative	# Bottles	A	B	C	D	E	F	G
1	West P-Trap-090825	9/8/25	1245		None	3							
2	East P-Trap-090825	9/8/25	1430		None	3							
3	RFT-86-14-090825	9/8/25	1550		None	3							
4	MH3-9-090925	9/9/25	1100		None	3							
5	RFT-81-33-090925	9/9/25	1315		None	3							
6	RFT-81-12R-090925	9/9/25	1500		None	3							
7	RFT-12-40-091025	9/10/25	1050		None	3							
8	RFT-23-01R-091025	9/10/25	1250		None	3							
9	RFT-23-02R-091025	9/10/25	1410		None	3							
10													



Telephone : +1 616 399 6070

Notes: Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.

Preservative Key: 1-HCL 2-HNO₃ 3-H₂SO₄ 4-NaOH 5-Na₂SO₃ 6-NaHSO₄ 7-Other 8-4 degrees C 9-50/35

Required Turnaround Time:

Std 10 wk days 5 wk days 2 wk days 24 hr

Results Due:

Relinquished by

Date: _____

Time

Received by

ate

Time

NOTES:

Donald Dickson / Arcadis

9/10/25

16

1

9/11/25

0930

QC Reporting Level: (check box below)

Other:

Level II: Standard QC

Level III: Std QC + Raw data

1
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ALS Group USA, Corp | 3352 128th Ave | Holland Michigan 49424 | TEL. (616) 399-6070



ALS Holland Sample Receiving Checklist

Received by: Kerry

Date/Time: 9/11/25 0930

Carrier Name: FEDEX

Shipping container/cooler in good condition? Yes / No / Not Present

Custody seals intact on shipping container/cooler? Yes / No / Not Present

Custody seals intact on sample bottles? Yes / No / Not Present

Chain of Custody present? Yes / No

COC signed when relinquished and received? Yes / No

COC agrees with sample labels? Yes / No

Samples in proper container/bottle? Yes / No

Sample containers intact? Yes / No

Sufficient sample volume for indicated test? Yes / No

All samples received within holding time? Yes / No

Container/Temp Blank temperature in compliance? Yes / No

Temperature(s) (°C): 4.2/4.2°

Thermometer(s): 127

Sample(s) received on ice? Yes / No

Matrix/Matrices: Water

Cooler(s)/Kit(s): _____

Date/Time sample(s) sent to storage: 9/11/25 1630

Water – VOA vials have zero headspace? Yes / No / No Vials

Water – pH acceptable upon receipt? Yes / No / N/A

pH strip lot #: _____ < 2 _____ > 12 _____ Other _____

pH adjusted (note adjustments below)? Yes / No / N/A

pH adjusted by: _____

Login Notes:

REPORT QUALIFIERS AND DEFINITIONS

*	Value exceeds Regulatory Limit (if MCL displayed)
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
NC	Not Calculated
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
V	The Continuing Calibration Verification was outside of control criteria
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

Holland Laboratory Certifications¹

Agency	Type	ID	Issued	Expires
Alabama	Drinking Water (Secondary)	42500	12/17/2024	12/31/2025
Colorado	UST		07/01/2025	06/30/2026
Connecticut	Drinking Water (Secondary)	PH-0155	12/10/2024	12/31/2026
Florida	NELAP (Primary)	E871106	07/01/2025	06/30/2026
Illinois	NELAP (Secondary)	200076	11/14/2024	12/31/2025
Indiana	Drinking Water (Secondary)	C-MI-08	12/31/2024	09/04/2026
Iowa	State Specific	403	09/18/2023	09/01/2025
Kansas	NELAP (Secondary)	E-10411	07/09/2024	07/31/2025
Kentucky	Waste Water	KY98004	12/20/2024	12/31/2025
Kentucky	UST	120474	06/24/2024	06/30/2025
Michigan	Drinking Water (Primary)	0022	12/19/2023	09/04/2026
Minnesota	NELAP (Secondary)	026-999-449	12/17/2024	12/31/2025
Missouri	Drinking Water (Secondary)	01262	11/14/2024	12/30/2027
New Jersey	NELAP (Secondary)	MI015	07/01/2024	6/30/2025
New York	NELAP (Secondary)	12128	04/01/2025	04/01/2026
North Dakota	State Specific	R-192	11/18/2024	06/30/2025
Ohio	Drinking Water (Secondary)	87783	06/26/2025	6/30/2026
Pennsylvania	NELAP (Secondary)	68-03827	06/14/2024	07/31/2025
Texas	NELAP (Secondary)	T104704494	02/12/2025	01/31/2026
USDA	Domestic CA	Soil-MI-007	02/06/2025	08/07/2026
USDA	Soil Import	525-23-62-77572	03/03/2023	03/03/2026
West Virginia	State Specific	355	06/07/2025	08/31/2026
Wisconsin	State Specific	399084510	08/15/2024	08/31/2025

¹ - Scope available upon request

ANALYST SUMMARY



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis

Work Order: HN2513292

Sample Name: West P-Trap_090825
Laboratory Code: HN2513292-001
Sample Matrix: WATER

Date Collected: 09/08/25
Date Received: 09/11/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D7979-19	ASTM D7979-19	001-AA	2215509	Audrey	3507587	Morgan Morehouse

Sample Name: East P-Trap_090825
Laboratory Code: HN2513292-002
Sample Matrix: WATER

Date Collected: 09/08/25
Date Received: 09/11/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D7979-19	ASTM D7979-19	002-AA	2215509	Audrey	3507587	Morgan Morehouse

Sample Name: RFI-86-14_090825
Laboratory Code: HN2513292-003
Sample Matrix: WATER

Date Collected: 09/08/25
Date Received: 09/11/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D7979-19	ASTM D7979-19	003-AA	2215509	Audrey	3507587	Morgan Morehouse

Sample Name: MH3-9_090925
Laboratory Code: HN2513292-004
Sample Matrix: WATER

Date Collected: 09/09/25
Date Received: 09/11/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D7979-19	ASTM D7979-19	004-AA	2215509	Audrey	3507587	Morgan Morehouse

ANALYST SUMMARY



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis

Work Order: HN2513292

Sample Name: RFI-81-33_090925
Laboratory Code: HN2513292-005
Sample Matrix: WATER

Date Collected: 09/09/25
Date Received: 09/11/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D7979-19	ASTM D7979-19	005-AA	2215509	Audrey	3507587	Morgan Morehouse

Sample Name: RFI-81-12R_090925
Laboratory Code: HN2513292-006
Sample Matrix: WATER

Date Collected: 09/09/25
Date Received: 09/11/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D7979-19	ASTM D7979-19	006-AA	2215509	Audrey	3507587	Morgan Morehouse

Sample Name: RFI-12-40_091025
Laboratory Code: HN2513292-007
Sample Matrix: WATER

Date Collected: 09/10/25
Date Received: 09/11/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D7979-19	ASTM D7979-19	007-AA	2215509	Audrey	3507587	Morgan Morehouse

Sample Name: RFI-23-01R_091025
Laboratory Code: HN2513292-008
Sample Matrix: WATER

Date Collected: 09/10/25
Date Received: 09/11/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D7979-19	ASTM D7979-19	008-AA	2215509	Audrey	3507587	Morgan Morehouse

ANALYST SUMMARY



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis

Work Order: HN2513292

Sample Name: RFI-23-02R_091025
Laboratory Code: HN2513292-009
Sample Matrix: WATER

Date Collected: 09/10/25
Date Received: 09/11/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D7979-19	ASTM D7979-19	009-AA	2215509	Audrey	3507587	Morgan Morehouse

Analytical Report



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Matrix: WATER

Work Order: HN2513292
Date Collected: 09/08/25 12:45
Date Received: 09/11/25 09:30

CLIENT ID: West P-Trap_090825

Lab ID: HN2513292-001

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ASTM D7979-19	<8.46	U	ng/L	8.46	9.03	1	09/17/25 10:45	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ASTM D7979-19	<26.3	U	ng/L	26.3	45.9	1	09/17/25 10:45	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ASTM D7979-19	<35.5	U	ng/L	35.5	44.8	1	09/17/25 10:45	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ASTM D7979-19	<18.9	U	ng/L	18.9	44.8	1	09/17/25 10:45	09/12/25 17:22
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ASTM D7979-19	<7.17	U	ng/L	7.17	9.03	1	09/17/25 10:45	09/12/25 17:22
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ASTM D7979-19	<2.92	U	ng/L	2.92	8.94	1	09/17/25 10:45	09/12/25 17:22
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ASTM D7979-19	<37.5	U	ng/L	37.5	47.9	1	09/17/25 10:45	09/12/25 17:22
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ASTM D7979-19	<25.9	U	ng/L	25.9	47.9	1	09/17/25 10:45	09/12/25 17:22
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ASTM D7979-19	<20.2	U	ng/L	20.2	47.9	1	09/17/25 10:45	09/12/25 17:22
Perfluorobutane sulfonic acid (PFBS)	ASTM D7979-19	<7.86	U	ng/L	7.86	8.48	1	09/17/25 10:45	09/12/25 17:22
Perfluorobutanoic acid (PFBA)	ASTM D7979-19	<13.8	U	ng/L	13.8	47.9	1	09/17/25 10:45	09/12/25 17:22
Perfluorodecane sulfonic acid (PFDS)	ASTM D7979-19	<7.10	U	ng/L	7.10	9.24	1	09/17/25 10:45	09/12/25 17:22
Perfluorodecanoic acid (PFDA)	ASTM D7979-19	<14.4	U	ng/L	14.4	47.9	1	09/17/25 10:45	09/12/25 17:22
Perfluorododecanoic acid (PFDOA)	ASTM D7979-19	<28.4	U	ng/L	28.4	47.9	1	09/17/25 10:45	09/12/25 17:22
Perfluoroheptane sulfonic acid (PFHpS)	ASTM D7979-19	<10.4	U	ng/L	10.4	45.6	1	09/17/25 10:45	09/12/25 17:22
Perfluoroheptanoic acid (PFHpA)	ASTM D7979-19	<14.9	U	ng/L	14.9	47.9	1	09/17/25 10:45	09/12/25 17:22
Perfluorohexane sulfonic acid (PFHxS)	ASTM D7979-19	15.8	J	ng/L	13.0	43.6	1	09/17/25 10:45	09/12/25 17:22
Perfluorohexanoic acid (PFHxA)	ASTM D7979-19	<13.7	U	ng/L	13.7	47.9	1	09/17/25 10:45	09/12/25 17:22
Perfluorononane sulfonic acid (PFNS)	ASTM D7979-19	<12.8	U	ng/L	12.8	46.0	1	09/17/25 10:45	09/12/25 17:22

Analytical Report



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Matrix: WATER

Work Order: HN2513292
Date Collected: 09/08/25 12:45
Date Received: 09/11/25 09:30

CLIENT ID: West P-Trap_090825

Lab ID: HN2513292-001

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononanoic acid (PFNA)	ASTM D7979-19	<8.92	U	ng/L	8.92	9.59	1	09/17/25 10:45	09/12/25 17:22
Perfluorooctane sulfonamide (PFOSAm)	ASTM D7979-19	<7.85	U	ng/L	7.85	9.59	1	09/17/25 10:45	09/12/25 17:22
Perfluorooctane sulfonic acid (PFOS)	ASTM D7979-19	69.2		ng/L	4.86	8.90	1	09/17/25 10:45	09/12/25 17:22
Perfluorooctanoic acid (PFOA)	ASTM D7979-19	9.92		ng/L	8.92	9.59	1	09/17/25 10:45	09/12/25 17:22
Perfluoropentane sulfonic acid (PFPeS)	ASTM D7979-19	<5.10	U	ng/L	5.10	8.99	1	09/17/25 10:45	09/12/25 17:22
Perfluoropentanoic acid (PFPeA)	ASTM D7979-19	<7.67	U	ng/L	7.67	47.9	1	09/17/25 10:45	09/12/25 17:22
Perfluorotetradecanoic acid (PFTDA)	ASTM D7979-19	<36.1	U	ng/L	36.1	47.9	1	09/17/25 10:45	09/12/25 17:22
Perfluorotridecanoic acid (PFTrDA)	ASTM D7979-19	<17.0	U	ng/L	17.0	47.9	1	09/17/25 10:45	09/12/25 17:22
Perfluoroundecanoic acid (PFUnDA)	ASTM D7979-19	<11.5	U	ng/L	11.5	47.9	1	09/17/25 10:45	09/12/25 17:22
Surr: 13C2-FtS 4:2	ASTM D7979-19	109		%REC		50-130	1	09/17/25 10:45	09/12/25 17:22
Surr: 13C2-FtS 6:2	ASTM D7979-19	115		%REC		50-130	1	09/17/25 10:45	09/12/25 17:22
Surr: 13C2-FtS 8:2	ASTM D7979-19	115		%REC		50-130	1	09/17/25 10:45	09/12/25 17:22
Surr: 13C2-PFDA	ASTM D7979-19	97.8		%REC		70-130	1	09/17/25 10:45	09/12/25 17:22
Surr: 13C2-PFDoA	ASTM D7979-19	96.2		%REC		70-130	1	09/17/25 10:45	09/12/25 17:22
Surr: 13C2-PFHxA	ASTM D7979-19	97.4		%REC		50-130	1	09/17/25 10:45	09/12/25 17:22
Surr: 13C2-PFTeDA	ASTM D7979-19	75.4		%REC		50-130	1	09/17/25 10:45	09/12/25 17:22
Surr: 13C2-PFUnDA	ASTM D7979-19	99.8		%REC		70-130	1	09/17/25 10:45	09/12/25 17:22
Surr: 13C3-HFPO-DA	ASTM D7979-19	105		%REC		50-130	1	09/17/25 10:45	09/12/25 17:22
Surr: 13C3-PFBS	ASTM D7979-19	100		%REC		50-130	1	09/17/25 10:45	09/12/25 17:22
Surr: 13C4-PFBA	ASTM D7979-19	112		%REC		50-130	1	09/17/25 10:45	09/12/25 17:22
Surr: 13C4-PFHpA	ASTM D7979-19	107		%REC		50-130	1	09/17/25 10:45	09/12/25 17:22
Surr: 13C4-PFOA	ASTM D7979-19	106		%REC		70-130	1	09/17/25 10:45	09/12/25 17:22
Surr: 13C4-PFOS	ASTM D7979-19	99.3		%REC		70-130	1	09/17/25 10:45	09/12/25 17:22
Surr: 13C5-PFNA	ASTM D7979-19	101		%REC		70-130	1	09/17/25 10:45	09/12/25 17:22
Surr: 13C5-PFPeA	ASTM D7979-19	101		%REC		50-130	1	09/17/25 10:45	09/12/25 17:22
Surr: 13C8-FOSA	ASTM D7979-19	98.7		%REC		50-130	1	09/17/25 10:45	09/12/25 17:22
Surr: 18O2-PFHxS	ASTM D7979-19	102		%REC		70-130	1	09/17/25 10:45	09/12/25 17:22
Surr: d3-N-MeFOSAA	ASTM D7979-19	114		%REC		50-130	1	09/17/25 10:45	09/12/25 17:22
Surr: d5-N-EtFOSAA	ASTM D7979-19	113		%REC		50-130	1	09/17/25 10:45	09/12/25 17:22

Analytical Report



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Matrix: WATER

Work Order: HN2513292
Date Collected: 09/08/25 14:30
Date Received: 09/11/25 09:30

CLIENT ID: East P-Trap_090825

Lab ID: HN2513292-002

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ASTM D7979-19	<8.51	U	ng/L	8.51	9.09	1	09/17/25 11:14	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ASTM D7979-19	<26.4	U	ng/L	26.4	46.2	1	09/17/25 11:14	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ASTM D7979-19	<35.8	U	ng/L	35.8	45.0	1	09/17/25 11:14	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ASTM D7979-19	<19.0	U	ng/L	19.0	45.0	1	09/17/25 11:14	09/12/25 17:22
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ASTM D7979-19	<7.22	U	ng/L	7.22	9.09	1	09/17/25 11:14	09/12/25 17:22
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ASTM D7979-19	<2.94	U	ng/L	2.94	8.99	1	09/17/25 11:14	09/12/25 17:22
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ASTM D7979-19	<37.8	U	ng/L	37.8	48.2	1	09/17/25 11:14	09/12/25 17:22
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ASTM D7979-19	<26.0	U	ng/L	26.0	48.2	1	09/17/25 11:14	09/12/25 17:22
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ASTM D7979-19	<20.4	U	ng/L	20.4	48.2	1	09/17/25 11:14	09/12/25 17:22
Perfluorobutane sulfonic acid (PFBS)	ASTM D7979-19	<7.91	U	ng/L	7.91	8.53	1	09/17/25 11:14	09/12/25 17:22
Perfluorobutanoic acid (PFBA)	ASTM D7979-19	<13.9	U	ng/L	13.9	48.2	1	09/17/25 11:14	09/12/25 17:22
Perfluorodecane sulfonic acid (PFDS)	ASTM D7979-19	<7.15	U	ng/L	7.15	9.30	1	09/17/25 11:14	09/12/25 17:22
Perfluorodecanoic acid (PFDA)	ASTM D7979-19	<14.5	U	ng/L	14.5	48.2	1	09/17/25 11:14	09/12/25 17:22
Perfluorododecanoic acid (PFDOA)	ASTM D7979-19	<28.6	U	ng/L	28.6	48.2	1	09/17/25 11:14	09/12/25 17:22
Perfluoroheptane sulfonic acid (PFHpS)	ASTM D7979-19	<10.4	U	ng/L	10.4	45.9	1	09/17/25 11:14	09/12/25 17:22
Perfluoroheptanoic acid (PFHpA)	ASTM D7979-19	<15.0	U	ng/L	15.0	48.2	1	09/17/25 11:14	09/12/25 17:22
Perfluorohexane sulfonic acid (PFHxS)	ASTM D7979-19	18.9	J	ng/L	13.1	43.9	1	09/17/25 11:14	09/12/25 17:22
Perfluorohexanoic acid (PFHxA)	ASTM D7979-19	<13.8	U	ng/L	13.8	48.2	1	09/17/25 11:14	09/12/25 17:22
Perfluorononane sulfonic acid (PFNS)	ASTM D7979-19	<12.9	U	ng/L	12.9	46.3	1	09/17/25 11:14	09/12/25 17:22

Analytical Report



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Matrix: WATER

Work Order: HN2513292
Date Collected: 09/08/25 14:30
Date Received: 09/11/25 09:30

CLIENT ID: East P-Trap_090825

Lab ID: HN2513292-002

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononanoic acid (PFNA)	ASTM D7979-19	<8.97	U	ng/L	8.97	9.65	1	09/17/25 11:14	09/12/25 17:22
Perfluorooctane sulfonamide (PFOSAm)	ASTM D7979-19	<7.90	U	ng/L	7.90	9.65	1	09/17/25 11:14	09/12/25 17:22
Perfluorooctane sulfonic acid (PFOS)	ASTM D7979-19	115		ng/L	4.89	8.95	1	09/17/25 11:14	09/12/25 17:22
Perfluorooctanoic acid (PFOA)	ASTM D7979-19	<8.97	U	ng/L	8.97	9.65	1	09/17/25 11:14	09/12/25 17:22
Perfluoropentane sulfonic acid (PFPeS)	ASTM D7979-19	<5.13	U	ng/L	5.13	9.05	1	09/17/25 11:14	09/12/25 17:22
Perfluoropentanoic acid (PFPeA)	ASTM D7979-19	<7.72	U	ng/L	7.72	48.2	1	09/17/25 11:14	09/12/25 17:22
Perfluorotetradecanoic acid (PFTDA)	ASTM D7979-19	<36.4	U	ng/L	36.4	48.2	1	09/17/25 11:14	09/12/25 17:22
Perfluorotridecanoic acid (PFTrDA)	ASTM D7979-19	<17.1	U	ng/L	17.1	48.2	1	09/17/25 11:14	09/12/25 17:22
Perfluoroundecanoic acid (PFUnDA)	ASTM D7979-19	<11.6	U	ng/L	11.6	48.2	1	09/17/25 11:14	09/12/25 17:22
<i>Surr: 13C2-FtS 4:2</i>	<i>ASTM D7979-19</i>	105		%REC		50-130	1	09/17/25 11:14	09/12/25 17:22
<i>Surr: 13C2-FtS 6:2</i>	<i>ASTM D7979-19</i>	95.2		%REC		50-130	1	09/17/25 11:14	09/12/25 17:22
<i>Surr: 13C2-FtS 8:2</i>	<i>ASTM D7979-19</i>	106		%REC		50-130	1	09/17/25 11:14	09/12/25 17:22
<i>Surr: 13C2-PFDA</i>	<i>ASTM D7979-19</i>	102		%REC		70-130	1	09/17/25 11:14	09/12/25 17:22
<i>Surr: 13C2-PFDoA</i>	<i>ASTM D7979-19</i>	98.5		%REC		70-130	1	09/17/25 11:14	09/12/25 17:22
<i>Surr: 13C2-PFHxA</i>	<i>ASTM D7979-19</i>	104		%REC		50-130	1	09/17/25 11:14	09/12/25 17:22
<i>Surr: 13C2-PFTeDA</i>	<i>ASTM D7979-19</i>	72.8		%REC		50-130	1	09/17/25 11:14	09/12/25 17:22
<i>Surr: 13C2-PFUnDA</i>	<i>ASTM D7979-19</i>	96.0		%REC		70-130	1	09/17/25 11:14	09/12/25 17:22
<i>Surr: 13C3-HFPO-DA</i>	<i>ASTM D7979-19</i>	109		%REC		50-130	1	09/17/25 11:14	09/12/25 17:22
<i>Surr: 13C3-PFBS</i>	<i>ASTM D7979-19</i>	106		%REC		50-130	1	09/17/25 11:14	09/12/25 17:22
<i>Surr: 13C4-PFBA</i>	<i>ASTM D7979-19</i>	110		%REC		50-130	1	09/17/25 11:14	09/12/25 17:22
<i>Surr: 13C4-PFHpA</i>	<i>ASTM D7979-19</i>	109		%REC		50-130	1	09/17/25 11:14	09/12/25 17:22
<i>Surr: 13C4-PFOA</i>	<i>ASTM D7979-19</i>	103		%REC		70-130	1	09/17/25 11:14	09/12/25 17:22
<i>Surr: 13C4-PFOS</i>	<i>ASTM D7979-19</i>	107		%REC		70-130	1	09/17/25 11:14	09/12/25 17:22
<i>Surr: 13C5-PFNA</i>	<i>ASTM D7979-19</i>	101		%REC		70-130	1	09/17/25 11:14	09/12/25 17:22
<i>Surr: 13C5-PFPeA</i>	<i>ASTM D7979-19</i>	102		%REC		50-130	1	09/17/25 11:14	09/12/25 17:22
<i>Surr: 13C8-FOSA</i>	<i>ASTM D7979-19</i>	99.3		%REC		50-130	1	09/17/25 11:14	09/12/25 17:22
<i>Surr: 18O2-PFHxS</i>	<i>ASTM D7979-19</i>	106		%REC		70-130	1	09/17/25 11:14	09/12/25 17:22
<i>Surr: d3-N-MeFOSAA</i>	<i>ASTM D7979-19</i>	103		%REC		50-130	1	09/17/25 11:14	09/12/25 17:22
<i>Surr: d5-N-EtFOSAA</i>	<i>ASTM D7979-19</i>	106		%REC		50-130	1	09/17/25 11:14	09/12/25 17:22

Analytical Report



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Matrix: WATER

Work Order: HN2513292
Date Collected: 09/08/25 15:50
Date Received: 09/11/25 09:30

CLIENT ID: RFI-86-14_090825

Lab ID: HN2513292-003

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ASTM D7979-19	<8.55	U	ng/L	8.55	9.13	1	09/17/25 11:28	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ASTM D7979-19	<26.6	U	ng/L	26.6	46.4	1	09/17/25 11:28	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ASTM D7979-19	<35.9	U	ng/L	35.9	45.2	1	09/17/25 11:28	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ASTM D7979-19	<19.1	U	ng/L	19.1	45.2	1	09/17/25 11:28	09/12/25 17:22
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ASTM D7979-19	<7.25	U	ng/L	7.25	9.13	1	09/17/25 11:28	09/12/25 17:22
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ASTM D7979-19	<2.95	U	ng/L	2.95	9.03	1	09/17/25 11:28	09/12/25 17:22
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ASTM D7979-19	<37.9	U	ng/L	37.9	48.4	1	09/17/25 11:28	09/12/25 17:22
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ASTM D7979-19	<26.1	U	ng/L	26.1	48.4	1	09/17/25 11:28	09/12/25 17:22
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ASTM D7979-19	<20.4	U	ng/L	20.4	48.4	1	09/17/25 11:28	09/12/25 17:22
Perfluorobutane sulfonic acid (PFBS)	ASTM D7979-19	<7.95	U	ng/L	7.95	8.57	1	09/17/25 11:28	09/12/25 17:22
Perfluorobutanoic acid (PFBA)	ASTM D7979-19	<14.0	U	ng/L	14.0	48.4	1	09/17/25 11:28	09/12/25 17:22
Perfluorodecane sulfonic acid (PFDS)	ASTM D7979-19	<7.18	U	ng/L	7.18	9.34	1	09/17/25 11:28	09/12/25 17:22
Perfluorodecanoic acid (PFDA)	ASTM D7979-19	<14.6	U	ng/L	14.6	48.4	1	09/17/25 11:28	09/12/25 17:22
Perfluorododecanoic acid (PFDOA)	ASTM D7979-19	<28.8	U	ng/L	28.8	48.4	1	09/17/25 11:28	09/12/25 17:22
Perfluoroheptane sulfonic acid (PFHpS)	ASTM D7979-19	<10.5	U	ng/L	10.5	46.1	1	09/17/25 11:28	09/12/25 17:22
Perfluoroheptanoic acid (PFHpA)	ASTM D7979-19	<15.0	U	ng/L	15.0	48.4	1	09/17/25 11:28	09/12/25 17:22
Perfluorohexane sulfonic acid (PFHxS)	ASTM D7979-19	<13.2	U	ng/L	13.2	44.1	1	09/17/25 11:28	09/12/25 17:22
Perfluorohexanoic acid (PFHxA)	ASTM D7979-19	<13.8	U	ng/L	13.8	48.4	1	09/17/25 11:28	09/12/25 17:22
Perfluorononane sulfonic acid (PFNS)	ASTM D7979-19	<13.0	U	ng/L	13.0	46.5	1	09/17/25 11:28	09/12/25 17:22

Analytical Report



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Matrix: WATER

Work Order: HN2513292
Date Collected: 09/08/25 15:50
Date Received: 09/11/25 09:30

CLIENT ID: RFI-86-14_090825	Lab ID: HN2513292-003

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononanoic acid (PFNA)	ASTM D7979-19	<9.01	U	ng/L	9.01	9.69	1	09/17/25 11:28	09/12/25 17:22
Perfluorooctane sulfonamide (PFOSAm)	ASTM D7979-19	<7.94	U	ng/L	7.94	9.69	1	09/17/25 11:28	09/12/25 17:22
Perfluorooctane sulfonic acid (PFOS)	ASTM D7979-19	<4.91	U	ng/L	4.91	8.99	1	09/17/25 11:28	09/12/25 17:22
Perfluorooctanoic acid (PFOA)	ASTM D7979-19	13.7		ng/L	9.01	9.69	1	09/17/25 11:28	09/12/25 17:22
Perfluoropentane sulfonic acid (PFPeS)	ASTM D7979-19	<5.16	U	ng/L	5.16	9.09	1	09/17/25 11:28	09/12/25 17:22
Perfluoropentanoic acid (PFPeA)	ASTM D7979-19	<7.75	U	ng/L	7.75	48.4	1	09/17/25 11:28	09/12/25 17:22
Perfluorotetradecanoic acid (PFTDA)	ASTM D7979-19	<36.5	U	ng/L	36.5	48.4	1	09/17/25 11:28	09/12/25 17:22
Perfluorotridecanoic acid (PFTrDA)	ASTM D7979-19	<17.2	U	ng/L	17.2	48.4	1	09/17/25 11:28	09/12/25 17:22
Perfluoroundecanoic acid (PFUnDA)	ASTM D7979-19	<11.6	U	ng/L	11.6	48.4	1	09/17/25 11:28	09/12/25 17:22
Surr: 13C2-FtS 4:2	ASTM D7979-19	106		%REC		50-130	1	09/17/25 11:28	09/12/25 17:22
Surr: 13C2-FtS 6:2	ASTM D7979-19	94.4		%REC		50-130	1	09/17/25 11:28	09/12/25 17:22
Surr: 13C2-FtS 8:2	ASTM D7979-19	84.1		%REC		50-130	1	09/17/25 11:28	09/12/25 17:22
Surr: 13C2-PFDA	ASTM D7979-19	98.7		%REC		70-130	1	09/17/25 11:28	09/12/25 17:22
Surr: 13C2-PFDoA	ASTM D7979-19	97.9		%REC		70-130	1	09/17/25 11:28	09/12/25 17:22
Surr: 13C2-PFHxA	ASTM D7979-19	102		%REC		50-130	1	09/17/25 11:28	09/12/25 17:22
Surr: 13C2-PFTeDA	ASTM D7979-19	78.6		%REC		50-130	1	09/17/25 11:28	09/12/25 17:22
Surr: 13C2-PFUnDA	ASTM D7979-19	95.6		%REC		70-130	1	09/17/25 11:28	09/12/25 17:22
Surr: 13C3-HFPO-DA	ASTM D7979-19	102		%REC		50-130	1	09/17/25 11:28	09/12/25 17:22
Surr: 13C3-PFBS	ASTM D7979-19	99.7		%REC		50-130	1	09/17/25 11:28	09/12/25 17:22
Surr: 13C4-PFBA	ASTM D7979-19	108		%REC		50-130	1	09/17/25 11:28	09/12/25 17:22
Surr: 13C4-PFHpA	ASTM D7979-19	104		%REC		50-130	1	09/17/25 11:28	09/12/25 17:22
Surr: 13C4-PFOA	ASTM D7979-19	105		%REC		70-130	1	09/17/25 11:28	09/12/25 17:22
Surr: 13C4-PFOS	ASTM D7979-19	110		%REC		70-130	1	09/17/25 11:28	09/12/25 17:22
Surr: 13C5-PFNA	ASTM D7979-19	99.6		%REC		70-130	1	09/17/25 11:28	09/12/25 17:22
Surr: 13C5-PFPeA	ASTM D7979-19	100		%REC		50-130	1	09/17/25 11:28	09/12/25 17:22
Surr: 13C8-FOSA	ASTM D7979-19	96.3		%REC		50-130	1	09/17/25 11:28	09/12/25 17:22
Surr: 18O2-PFHxS	ASTM D7979-19	103		%REC		70-130	1	09/17/25 11:28	09/12/25 17:22
Surr: d3-N-MeFOSAA	ASTM D7979-19	102		%REC		50-130	1	09/17/25 11:28	09/12/25 17:22
Surr: d5-N-EtFOSAA	ASTM D7979-19	114		%REC		50-130	1	09/17/25 11:28	09/12/25 17:22

Analytical Report



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Matrix: WATER

Work Order: HN2513292
Date Collected: 09/09/25 11:00
Date Received: 09/11/25 09:30

CLIENT ID: MH3-9_090925

Lab ID: HN2513292-004

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ASTM D7979-19	<8.88	U	ng/L	8.88	9.49	1	09/17/25 11:43	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ASTM D7979-19	<27.6	U	ng/L	27.6	48.2	1	09/17/25 11:43	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ASTM D7979-19	<37.3	U	ng/L	37.3	47.0	1	09/17/25 11:43	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ASTM D7979-19	<19.9	U	ng/L	19.9	47.0	1	09/17/25 11:43	09/12/25 17:22
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ASTM D7979-19	<7.53	U	ng/L	7.53	9.49	1	09/17/25 11:43	09/12/25 17:22
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ASTM D7979-19	<3.07	U	ng/L	3.07	9.39	1	09/17/25 11:43	09/12/25 17:22
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ASTM D7979-19	<39.4	U	ng/L	39.4	50.4	1	09/17/25 11:43	09/12/25 17:22
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ASTM D7979-19	<27.2	U	ng/L	27.2	50.4	1	09/17/25 11:43	09/12/25 17:22
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ASTM D7979-19	<21.2	U	ng/L	21.2	50.4	1	09/17/25 11:43	09/12/25 17:22
Perfluorobutane sulfonic acid (PFBS)	ASTM D7979-19	<8.26	U	ng/L	8.26	8.90	1	09/17/25 11:43	09/12/25 17:22
Perfluorobutanoic acid (PFBA)	ASTM D7979-19	<14.5	U	ng/L	14.5	50.4	1	09/17/25 11:43	09/12/25 17:22
Perfluorodecane sulfonic acid (PFDS)	ASTM D7979-19	<7.46	U	ng/L	7.46	9.71	1	09/17/25 11:43	09/12/25 17:22
Perfluorodecanoic acid (PFDA)	ASTM D7979-19	<15.1	U	ng/L	15.1	50.4	1	09/17/25 11:43	09/12/25 17:22
Perfluorododecanoic acid (PFDOA)	ASTM D7979-19	<29.9	U	ng/L	29.9	50.4	1	09/17/25 11:43	09/12/25 17:22
Perfluoroheptane sulfonic acid (PFHpS)	ASTM D7979-19	<10.9	U	ng/L	10.9	47.9	1	09/17/25 11:43	09/12/25 17:22
Perfluoroheptanoic acid (PFHpA)	ASTM D7979-19	<15.6	U	ng/L	15.6	50.4	1	09/17/25 11:43	09/12/25 17:22
Perfluorohexane sulfonic acid (PFHxS)	ASTM D7979-19	16.7	J	ng/L	13.7	45.8	1	09/17/25 11:43	09/12/25 17:22
Perfluorohexanoic acid (PFHxA)	ASTM D7979-19	<14.4	U	ng/L	14.4	50.4	1	09/17/25 11:43	09/12/25 17:22
Perfluorononane sulfonic acid (PFNS)	ASTM D7979-19	<13.5	U	ng/L	13.5	48.3	1	09/17/25 11:43	09/12/25 17:22

Analytical Report



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Matrix: WATER

Work Order: HN2513292
Date Collected: 09/09/25 11:00
Date Received: 09/11/25 09:30

CLIENT ID: MH3-9_090925

Lab ID: HN2513292-004

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononanoic acid (PFNA)	ASTM D7979-19	<9.37	U	ng/L	9.37	10.1	1	09/17/25 11:43	09/12/25 17:22
Perfluorooctane sulfonamide (PFOSAm)	ASTM D7979-19	<8.25	U	ng/L	8.25	10.1	1	09/17/25 11:43	09/12/25 17:22
Perfluorooctane sulfonic acid (PFOS)	ASTM D7979-19	29.2		ng/L	5.10	9.34	1	09/17/25 11:43	09/12/25 17:22
Perfluorooctanoic acid (PFOA)	ASTM D7979-19	<9.37	U	ng/L	9.37	10.1	1	09/17/25 11:43	09/12/25 17:22
Perfluoropentane sulfonic acid (PFPeS)	ASTM D7979-19	<5.36	U	ng/L	5.36	9.45	1	09/17/25 11:43	09/12/25 17:22
Perfluoropentanoic acid (PFPeA)	ASTM D7979-19	<8.06	U	ng/L	8.06	50.4	1	09/17/25 11:43	09/12/25 17:22
Perfluorotetradecanoic acid (PFTDA)	ASTM D7979-19	<38.0	U	ng/L	38.0	50.4	1	09/17/25 11:43	09/12/25 17:22
Perfluorotridecanoic acid (PFTrDA)	ASTM D7979-19	<17.9	U	ng/L	17.9	50.4	1	09/17/25 11:43	09/12/25 17:22
Perfluoroundecanoic acid (PFUnDA)	ASTM D7979-19	<12.1	U	ng/L	12.1	50.4	1	09/17/25 11:43	09/12/25 17:22
Surr: 13C2-FtS 4:2	ASTM D7979-19	110		%REC		50-130	1	09/17/25 11:43	09/12/25 17:22
Surr: 13C2-FtS 6:2	ASTM D7979-19	104		%REC		50-130	1	09/17/25 11:43	09/12/25 17:22
Surr: 13C2-FtS 8:2	ASTM D7979-19	80.4		%REC		50-130	1	09/17/25 11:43	09/12/25 17:22
Surr: 13C2-PFDA	ASTM D7979-19	101		%REC		70-130	1	09/17/25 11:43	09/12/25 17:22
Surr: 13C2-PFDoA	ASTM D7979-19	103		%REC		70-130	1	09/17/25 11:43	09/12/25 17:22
Surr: 13C2-PFHxA	ASTM D7979-19	108		%REC		50-130	1	09/17/25 11:43	09/12/25 17:22
Surr: 13C2-PFTeDA	ASTM D7979-19	93.9		%REC		50-130	1	09/17/25 11:43	09/12/25 17:22
Surr: 13C2-PFUnDA	ASTM D7979-19	101		%REC		70-130	1	09/17/25 11:43	09/12/25 17:22
Surr: 13C3-HFPO-DA	ASTM D7979-19	102		%REC		50-130	1	09/17/25 11:43	09/12/25 17:22
Surr: 13C3-PFBS	ASTM D7979-19	100		%REC		50-130	1	09/17/25 11:43	09/12/25 17:22
Surr: 13C4-PFBA	ASTM D7979-19	111		%REC		50-130	1	09/17/25 11:43	09/12/25 17:22
Surr: 13C4-PFHpA	ASTM D7979-19	99.2		%REC		50-130	1	09/17/25 11:43	09/12/25 17:22
Surr: 13C4-PFOA	ASTM D7979-19	103		%REC		70-130	1	09/17/25 11:43	09/12/25 17:22
Surr: 13C4-PFOS	ASTM D7979-19	103		%REC		70-130	1	09/17/25 11:43	09/12/25 17:22
Surr: 13C5-PFNA	ASTM D7979-19	98.5		%REC		70-130	1	09/17/25 11:43	09/12/25 17:22
Surr: 13C5-PFPeA	ASTM D7979-19	98.8		%REC		50-130	1	09/17/25 11:43	09/12/25 17:22
Surr: 13C8-FOSA	ASTM D7979-19	98.2		%REC		50-130	1	09/17/25 11:43	09/12/25 17:22
Surr: 18O2-PFHxS	ASTM D7979-19	94.3		%REC		70-130	1	09/17/25 11:43	09/12/25 17:22
Surr: d3-N-MeFOSAA	ASTM D7979-19	116		%REC		50-130	1	09/17/25 11:43	09/12/25 17:22
Surr: d5-N-EtFOSAA	ASTM D7979-19	110		%REC		50-130	1	09/17/25 11:43	09/12/25 17:22

Analytical Report



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Matrix: WATER

Work Order: HN2513292
Date Collected: 09/09/25 13:15
Date Received: 09/11/25 09:30

CLIENT ID: RFI-81-33_090925

Lab ID: HN2513292-005

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ASTM D7979-19	<8.48	U	ng/L	8.48	9.06	1	09/17/25 11:57	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ASTM D7979-19	<26.4	U	ng/L	26.4	46.1	1	09/17/25 11:57	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ASTM D7979-19	<35.7	U	ng/L	35.7	44.9	1	09/17/25 11:57	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ASTM D7979-19	<19.0	U	ng/L	19.0	44.9	1	09/17/25 11:57	09/12/25 17:22
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ASTM D7979-19	<7.20	U	ng/L	7.20	9.06	1	09/17/25 11:57	09/12/25 17:22
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ASTM D7979-19	<2.93	U	ng/L	2.93	8.97	1	09/17/25 11:57	09/12/25 17:22
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ASTM D7979-19	<37.7	U	ng/L	37.7	48.1	1	09/17/25 11:57	09/12/25 17:22
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ASTM D7979-19	<26.0	U	ng/L	26.0	48.1	1	09/17/25 11:57	09/12/25 17:22
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ASTM D7979-19	<20.3	U	ng/L	20.3	48.1	1	09/17/25 11:57	09/12/25 17:22
Perfluorobutane sulfonic acid (PFBS)	ASTM D7979-19	<7.89	U	ng/L	7.89	8.50	1	09/17/25 11:57	09/12/25 17:22
Perfluorobutanoic acid (PFBA)	ASTM D7979-19	25.3	J	ng/L	13.9	48.1	1	09/17/25 11:57	09/12/25 17:22
Perfluorodecane sulfonic acid (PFDS)	ASTM D7979-19	<7.13	U	ng/L	7.13	9.27	1	09/17/25 11:57	09/12/25 17:22
Perfluorodecanoic acid (PFDA)	ASTM D7979-19	<14.4	U	ng/L	14.4	48.1	1	09/17/25 11:57	09/12/25 17:22
Perfluorododecanoic acid (PFDOA)	ASTM D7979-19	<28.6	U	ng/L	28.6	48.1	1	09/17/25 11:57	09/12/25 17:22
Perfluoroheptane sulfonic acid (PFHpS)	ASTM D7979-19	<10.4	U	ng/L	10.4	45.8	1	09/17/25 11:57	09/12/25 17:22
Perfluoroheptanoic acid (PFHpA)	ASTM D7979-19	<14.9	U	ng/L	14.9	48.1	1	09/17/25 11:57	09/12/25 17:22
Perfluorohexane sulfonic acid (PFHxS)	ASTM D7979-19	<13.1	U	ng/L	13.1	43.8	1	09/17/25 11:57	09/12/25 17:22
Perfluorohexanoic acid (PFHxA)	ASTM D7979-19	<13.7	U	ng/L	13.7	48.1	1	09/17/25 11:57	09/12/25 17:22
Perfluorononane sulfonic acid (PFNS)	ASTM D7979-19	<12.9	U	ng/L	12.9	46.2	1	09/17/25 11:57	09/12/25 17:22

Analytical Report



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Matrix: WATER

Work Order: HN2513292
Date Collected: 09/09/25 13:15
Date Received: 09/11/25 09:30

CLIENT ID: RFI-81-33_090925

Lab ID: HN2513292-005

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononanoic acid (PFNA)	ASTM D7979-19	<8.95	U	ng/L	8.95	9.62	1	09/17/25 11:57	09/12/25 17:22
Perfluorooctane sulfonamide (PFOSAm)	ASTM D7979-19	<7.88	U	ng/L	7.88	9.62	1	09/17/25 11:57	09/12/25 17:22
Perfluorooctane sulfonic acid (PFOS)	ASTM D7979-19	<4.88	U	ng/L	4.88	8.93	1	09/17/25 11:57	09/12/25 17:22
Perfluorooctanoic acid (PFOA)	ASTM D7979-19	<8.95	U	ng/L	8.95	9.62	1	09/17/25 11:57	09/12/25 17:22
Perfluoropentane sulfonic acid (PFPeS)	ASTM D7979-19	<5.12	U	ng/L	5.12	9.02	1	09/17/25 11:57	09/12/25 17:22
Perfluoropentanoic acid (PFPeA)	ASTM D7979-19	9.78	J	ng/L	7.70	48.1	1	09/17/25 11:57	09/12/25 17:22
Perfluorotetradecanoic acid (PFTDA)	ASTM D7979-19	<36.3	U	ng/L	36.3	48.1	1	09/17/25 11:57	09/12/25 17:22
Perfluorotridecanoic acid (PFTrDA)	ASTM D7979-19	<17.1	U	ng/L	17.1	48.1	1	09/17/25 11:57	09/12/25 17:22
Perfluoroundecanoic acid (PFUnDA)	ASTM D7979-19	<11.6	U	ng/L	11.6	48.1	1	09/17/25 11:57	09/12/25 17:22
Surr: 13C2-FtS 4:2	ASTM D7979-19	115		%REC		50-130	1	09/17/25 11:57	09/12/25 17:22
Surr: 13C2-FtS 6:2	ASTM D7979-19	109		%REC		50-130	1	09/17/25 11:57	09/12/25 17:22
Surr: 13C2-FtS 8:2	ASTM D7979-19	88.6		%REC		50-130	1	09/17/25 11:57	09/12/25 17:22
Surr: 13C2-PFDA	ASTM D7979-19	98.4		%REC		70-130	1	09/17/25 11:57	09/12/25 17:22
Surr: 13C2-PFDoA	ASTM D7979-19	94.6		%REC		70-130	1	09/17/25 11:57	09/12/25 17:22
Surr: 13C2-PFHxA	ASTM D7979-19	103		%REC		50-130	1	09/17/25 11:57	09/12/25 17:22
Surr: 13C2-PFTeDA	ASTM D7979-19	75.5		%REC		50-130	1	09/17/25 11:57	09/12/25 17:22
Surr: 13C2-PFUnDA	ASTM D7979-19	98.0		%REC		70-130	1	09/17/25 11:57	09/12/25 17:22
Surr: 13C3-HFPO-DA	ASTM D7979-19	112		%REC		50-130	1	09/17/25 11:57	09/12/25 17:22
Surr: 13C3-PFBS	ASTM D7979-19	114		%REC		50-130	1	09/17/25 11:57	09/12/25 17:22
Surr: 13C4-PFBA	ASTM D7979-19	114		%REC		50-130	1	09/17/25 11:57	09/12/25 17:22
Surr: 13C4-PFHpA	ASTM D7979-19	110		%REC		50-130	1	09/17/25 11:57	09/12/25 17:22
Surr: 13C4-PFOA	ASTM D7979-19	107		%REC		70-130	1	09/17/25 11:57	09/12/25 17:22
Surr: 13C4-PFOS	ASTM D7979-19	112		%REC		70-130	1	09/17/25 11:57	09/12/25 17:22
Surr: 13C5-PFNA	ASTM D7979-19	106		%REC		70-130	1	09/17/25 11:57	09/12/25 17:22
Surr: 13C5-PFPeA	ASTM D7979-19	103		%REC		50-130	1	09/17/25 11:57	09/12/25 17:22
Surr: 13C8-FOSA	ASTM D7979-19	102		%REC		50-130	1	09/17/25 11:57	09/12/25 17:22
Surr: 18O2-PFHxS	ASTM D7979-19	101		%REC		70-130	1	09/17/25 11:57	09/12/25 17:22
Surr: d3-N-MeFOSAA	ASTM D7979-19	111		%REC		50-130	1	09/17/25 11:57	09/12/25 17:22
Surr: d5-N-EtFOSAA	ASTM D7979-19	105		%REC		50-130	1	09/17/25 11:57	09/12/25 17:22

Analytical Report



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Matrix: WATER

Work Order: HN2513292
Date Collected: 09/09/25 15:00
Date Received: 09/11/25 09:30

CLIENT ID: RFI-81-12R_090925

Lab ID: HN2513292-006

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ASTM D7979-19	<8.30	U	ng/L	8.30	8.87	1	09/17/25 13:39	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ASTM D7979-19	<25.8	U	ng/L	25.8	45.1	1	09/17/25 13:39	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ASTM D7979-19	<34.9	U	ng/L	34.9	44.0	1	09/17/25 13:39	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ASTM D7979-19	<18.6	U	ng/L	18.6	44.0	1	09/17/25 13:39	09/12/25 17:22
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ASTM D7979-19	<7.04	U	ng/L	7.04	8.87	1	09/17/25 13:39	09/12/25 17:22
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ASTM D7979-19	<2.87	U	ng/L	2.87	8.78	1	09/17/25 13:39	09/12/25 17:22
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ASTM D7979-19	<36.9	U	ng/L	36.9	47.1	1	09/17/25 13:39	09/12/25 17:22
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ASTM D7979-19	<25.4	U	ng/L	25.4	47.1	1	09/17/25 13:39	09/12/25 17:22
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ASTM D7979-19	<19.9	U	ng/L	19.9	47.1	1	09/17/25 13:39	09/12/25 17:22
Perfluorobutane sulfonic acid (PFBS)	ASTM D7979-19	<7.72	U	ng/L	7.72	8.32	1	09/17/25 13:39	09/12/25 17:22
Perfluorobutanoic acid (PFBA)	ASTM D7979-19	<13.6	U	ng/L	13.6	47.1	1	09/17/25 13:39	09/12/25 17:22
Perfluorodecane sulfonic acid (PFDS)	ASTM D7979-19	<6.98	U	ng/L	6.98	9.08	1	09/17/25 13:39	09/12/25 17:22
Perfluorodecanoic acid (PFDA)	ASTM D7979-19	<14.1	U	ng/L	14.1	47.1	1	09/17/25 13:39	09/12/25 17:22
Perfluorododecanoic acid (PFDOA)	ASTM D7979-19	<27.9	U	ng/L	27.9	47.1	1	09/17/25 13:39	09/12/25 17:22
Perfluoroheptane sulfonic acid (PFHpS)	ASTM D7979-19	<10.2	U	ng/L	10.2	44.8	1	09/17/25 13:39	09/12/25 17:22
Perfluoroheptanoic acid (PFHpA)	ASTM D7979-19	<14.6	U	ng/L	14.6	47.1	1	09/17/25 13:39	09/12/25 17:22
Perfluorohexane sulfonic acid (PFHxS)	ASTM D7979-19	<12.8	U	ng/L	12.8	42.8	1	09/17/25 13:39	09/12/25 17:22
Perfluorohexanoic acid (PFHxA)	ASTM D7979-19	<13.4	U	ng/L	13.4	47.1	1	09/17/25 13:39	09/12/25 17:22
Perfluorononane sulfonic acid (PFNS)	ASTM D7979-19	<12.6	U	ng/L	12.6	45.2	1	09/17/25 13:39	09/12/25 17:22

Analytical Report



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Matrix: WATER

Work Order: HN2513292
Date Collected: 09/09/25 15:00
Date Received: 09/11/25 09:30

CLIENT ID: RFI-81-12R_090925

Lab ID: HN2513292-006

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononanoic acid (PFNA)	ASTM D7979-19	<8.76	U	ng/L	8.76	9.42	1	09/17/25 13:39	09/12/25 17:22
Perfluorooctane sulfonamide (PFOSAm)	ASTM D7979-19	<7.71	U	ng/L	7.71	9.42	1	09/17/25 13:39	09/12/25 17:22
Perfluorooctane sulfonic acid (PFOS)	ASTM D7979-19	31.9		ng/L	4.77	8.74	1	09/17/25 13:39	09/12/25 17:22
Perfluorooctanoic acid (PFOA)	ASTM D7979-19	<8.76	U	ng/L	8.76	9.42	1	09/17/25 13:39	09/12/25 17:22
Perfluoropentane sulfonic acid (PFPeS)	ASTM D7979-19	<5.01	U	ng/L	5.01	8.83	1	09/17/25 13:39	09/12/25 17:22
Perfluoropentanoic acid (PFPeA)	ASTM D7979-19	<7.53	U	ng/L	7.53	47.1	1	09/17/25 13:39	09/12/25 17:22
Perfluorotetradecanoic acid (PFTDA)	ASTM D7979-19	<35.5	U	ng/L	35.5	47.1	1	09/17/25 13:39	09/12/25 17:22
Perfluorotridecanoic acid (PFTrDA)	ASTM D7979-19	<16.7	U	ng/L	16.7	47.1	1	09/17/25 13:39	09/12/25 17:22
Perfluoroundecanoic acid (PFUnDA)	ASTM D7979-19	<11.3	U	ng/L	11.3	47.1	1	09/17/25 13:39	09/12/25 17:22
<i>Surr: 13C2-FtS 4:2</i>	<i>ASTM D7979-19</i>	103		%REC		50-130	1	09/17/25 13:39	09/12/25 17:22
<i>Surr: 13C2-FtS 6:2</i>	<i>ASTM D7979-19</i>	101		%REC		50-130	1	09/17/25 13:39	09/12/25 17:22
<i>Surr: 13C2-FtS 8:2</i>	<i>ASTM D7979-19</i>	88.1		%REC		50-130	1	09/17/25 13:39	09/12/25 17:22
<i>Surr: 13C2-PFDA</i>	<i>ASTM D7979-19</i>	99.8		%REC		70-130	1	09/17/25 13:39	09/12/25 17:22
<i>Surr: 13C2-PFDoA</i>	<i>ASTM D7979-19</i>	99.9		%REC		70-130	1	09/17/25 13:39	09/12/25 17:22
<i>Surr: 13C2-PFHxA</i>	<i>ASTM D7979-19</i>	106		%REC		50-130	1	09/17/25 13:39	09/12/25 17:22
<i>Surr: 13C2-PFTeDA</i>	<i>ASTM D7979-19</i>	66.0		%REC		50-130	1	09/17/25 13:39	09/12/25 17:22
<i>Surr: 13C2-PFUnDA</i>	<i>ASTM D7979-19</i>	94.8		%REC		70-130	1	09/17/25 13:39	09/12/25 17:22
<i>Surr: 13C3-HFPO-DA</i>	<i>ASTM D7979-19</i>	94.1		%REC		50-130	1	09/17/25 13:39	09/12/25 17:22
<i>Surr: 13C3-PFBS</i>	<i>ASTM D7979-19</i>	103		%REC		50-130	1	09/17/25 13:39	09/12/25 17:22
<i>Surr: 13C4-PFBA</i>	<i>ASTM D7979-19</i>	115		%REC		50-130	1	09/17/25 13:39	09/12/25 17:22
<i>Surr: 13C4-PFHpA</i>	<i>ASTM D7979-19</i>	110		%REC		50-130	1	09/17/25 13:39	09/12/25 17:22
<i>Surr: 13C4-PFOA</i>	<i>ASTM D7979-19</i>	110		%REC		70-130	1	09/17/25 13:39	09/12/25 17:22
<i>Surr: 13C4-PFOS</i>	<i>ASTM D7979-19</i>	105		%REC		70-130	1	09/17/25 13:39	09/12/25 17:22
<i>Surr: 13C5-PFNA</i>	<i>ASTM D7979-19</i>	99.1		%REC		70-130	1	09/17/25 13:39	09/12/25 17:22
<i>Surr: 13C5-PFPeA</i>	<i>ASTM D7979-19</i>	101		%REC		50-130	1	09/17/25 13:39	09/12/25 17:22
<i>Surr: 13C8-FOSA</i>	<i>ASTM D7979-19</i>	98.7		%REC		50-130	1	09/17/25 13:39	09/12/25 17:22
<i>Surr: 18O2-PFHxS</i>	<i>ASTM D7979-19</i>	102		%REC		70-130	1	09/17/25 13:39	09/12/25 17:22
<i>Surr: d3-N-MeFOSAA</i>	<i>ASTM D7979-19</i>	105		%REC		50-130	1	09/17/25 13:39	09/12/25 17:22
<i>Surr: d5-N-EtFOSAA</i>	<i>ASTM D7979-19</i>	114		%REC		50-130	1	09/17/25 13:39	09/12/25 17:22

Analytical Report



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Matrix: WATER

Work Order: HN2513292
Date Collected: 09/10/25 10:50
Date Received: 09/11/25 09:30

CLIENT ID: RFI-12-40_091025

Lab ID: HN2513292-007

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ASTM D7979-19	<8.79	U	ng/L	8.79	9.39	1	09/17/25 13:54	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ASTM D7979-19	<27.3	U	ng/L	27.3	47.8	1	09/17/25 13:54	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ASTM D7979-19	<37.0	U	ng/L	37.0	46.6	1	09/17/25 13:54	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ASTM D7979-19	<19.7	U	ng/L	19.7	46.6	1	09/17/25 13:54	09/12/25 17:22
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ASTM D7979-19	<7.46	U	ng/L	7.46	9.39	1	09/17/25 13:54	09/12/25 17:22
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ASTM D7979-19	<3.04	U	ng/L	3.04	9.29	1	09/17/25 13:54	09/12/25 17:22
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ASTM D7979-19	<39.0	U	ng/L	39.0	49.8	1	09/17/25 13:54	09/12/25 17:22
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ASTM D7979-19	<26.9	U	ng/L	26.9	49.8	1	09/17/25 13:54	09/12/25 17:22
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ASTM D7979-19	<21.0	U	ng/L	21.0	49.8	1	09/17/25 13:54	09/12/25 17:22
Perfluorobutane sulfonic acid (PFBS)	ASTM D7979-19	<8.18	U	ng/L	8.18	8.81	1	09/17/25 13:54	09/12/25 17:22
Perfluorobutanoic acid (PFBA)	ASTM D7979-19	19.7	J	ng/L	14.4	49.8	1	09/17/25 13:54	09/12/25 17:22
Perfluorodecane sulfonic acid (PFDS)	ASTM D7979-19	<7.38	U	ng/L	7.38	9.61	1	09/17/25 13:54	09/12/25 17:22
Perfluorodecanoic acid (PFDA)	ASTM D7979-19	<15.0	U	ng/L	15.0	49.8	1	09/17/25 13:54	09/12/25 17:22
Perfluorododecanoic acid (PFDOA)	ASTM D7979-19	<29.6	U	ng/L	29.6	49.8	1	09/17/25 13:54	09/12/25 17:22
Perfluoroheptane sulfonic acid (PFHpS)	ASTM D7979-19	<10.8	U	ng/L	10.8	47.4	1	09/17/25 13:54	09/12/25 17:22
Perfluoroheptanoic acid (PFHpA)	ASTM D7979-19	<15.5	U	ng/L	15.5	49.8	1	09/17/25 13:54	09/12/25 17:22
Perfluorohexane sulfonic acid (PFHxS)	ASTM D7979-19	15.2	J	ng/L	13.5	45.4	1	09/17/25 13:54	09/12/25 17:22
Perfluorohexanoic acid (PFHxA)	ASTM D7979-19	<14.2	U	ng/L	14.2	49.8	1	09/17/25 13:54	09/12/25 17:22
Perfluorononane sulfonic acid (PFNS)	ASTM D7979-19	<13.4	U	ng/L	13.4	47.8	1	09/17/25 13:54	09/12/25 17:22

Analytical Report



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Matrix: WATER

Work Order: HN2513292
Date Collected: 09/10/25 10:50
Date Received: 09/11/25 09:30

CLIENT ID: RFI-12-40_091025

Lab ID: HN2513292-007

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononanoic acid (PFNA)	ASTM D7979-19	<9.27	U	ng/L	9.27	9.97	1	09/17/25 13:54	09/12/25 17:22
Perfluorooctane sulfonamide (PFOSAm)	ASTM D7979-19	<8.16	U	ng/L	8.16	9.97	1	09/17/25 13:54	09/12/25 17:22
Perfluorooctane sulfonic acid (PFOS)	ASTM D7979-19	25.0		ng/L	5.05	9.25	1	09/17/25 13:54	09/12/25 17:22
Perfluorooctanoic acid (PFOA)	ASTM D7979-19	<9.27	U	ng/L	9.27	9.97	1	09/17/25 13:54	09/12/25 17:22
Perfluoropentane sulfonic acid (PFPeS)	ASTM D7979-19	<5.30	U	ng/L	5.30	9.35	1	09/17/25 13:54	09/12/25 17:22
Perfluoropentanoic acid (PFPeA)	ASTM D7979-19	8.99	J	ng/L	7.98	49.8	1	09/17/25 13:54	09/12/25 17:22
Perfluorotetradecanoic acid (PFTDA)	ASTM D7979-19	<37.6	U	ng/L	37.6	49.8	1	09/17/25 13:54	09/12/25 17:22
Perfluorotridecanoic acid (PFTrDA)	ASTM D7979-19	<17.7	U	ng/L	17.7	49.8	1	09/17/25 13:54	09/12/25 17:22
Perfluoroundecanoic acid (PFUnDA)	ASTM D7979-19	<12.0	U	ng/L	12.0	49.8	1	09/17/25 13:54	09/12/25 17:22
<i>Surr: 13C2-FtS 4:2</i>	<i>ASTM D7979-19</i>	88.6		%REC		50-130	1	09/17/25 13:54	09/12/25 17:22
<i>Surr: 13C2-FtS 6:2</i>	<i>ASTM D7979-19</i>	94.7		%REC		50-130	1	09/17/25 13:54	09/12/25 17:22
<i>Surr: 13C2-FtS 8:2</i>	<i>ASTM D7979-19</i>	92.6		%REC		50-130	1	09/17/25 13:54	09/12/25 17:22
<i>Surr: 13C2-PFDA</i>	<i>ASTM D7979-19</i>	95.2		%REC		70-130	1	09/17/25 13:54	09/12/25 17:22
<i>Surr: 13C2-PFDoA</i>	<i>ASTM D7979-19</i>	95.0		%REC		70-130	1	09/17/25 13:54	09/12/25 17:22
<i>Surr: 13C2-PFHxA</i>	<i>ASTM D7979-19</i>	98.6		%REC		50-130	1	09/17/25 13:54	09/12/25 17:22
<i>Surr: 13C2-PFTeDA</i>	<i>ASTM D7979-19</i>	87.3		%REC		50-130	1	09/17/25 13:54	09/12/25 17:22
<i>Surr: 13C2-PFUnDA</i>	<i>ASTM D7979-19</i>	91.6		%REC		70-130	1	09/17/25 13:54	09/12/25 17:22
<i>Surr: 13C3-HFPO-DA</i>	<i>ASTM D7979-19</i>	114		%REC		50-130	1	09/17/25 13:54	09/12/25 17:22
<i>Surr: 13C3-PFBS</i>	<i>ASTM D7979-19</i>	106		%REC		50-130	1	09/17/25 13:54	09/12/25 17:22
<i>Surr: 13C4-PFBA</i>	<i>ASTM D7979-19</i>	112		%REC		50-130	1	09/17/25 13:54	09/12/25 17:22
<i>Surr: 13C4-PFHpA</i>	<i>ASTM D7979-19</i>	103		%REC		50-130	1	09/17/25 13:54	09/12/25 17:22
<i>Surr: 13C4-PFOA</i>	<i>ASTM D7979-19</i>	101		%REC		70-130	1	09/17/25 13:54	09/12/25 17:22
<i>Surr: 13C4-PFOS</i>	<i>ASTM D7979-19</i>	111		%REC		70-130	1	09/17/25 13:54	09/12/25 17:22
<i>Surr: 13C5-PFNA</i>	<i>ASTM D7979-19</i>	96.2		%REC		70-130	1	09/17/25 13:54	09/12/25 17:22
<i>Surr: 13C5-PFPeA</i>	<i>ASTM D7979-19</i>	99.1		%REC		50-130	1	09/17/25 13:54	09/12/25 17:22
<i>Surr: 13C8-FOSA</i>	<i>ASTM D7979-19</i>	96.3		%REC		50-130	1	09/17/25 13:54	09/12/25 17:22
<i>Surr: 18O2-PFHxS</i>	<i>ASTM D7979-19</i>	106		%REC		70-130	1	09/17/25 13:54	09/12/25 17:22
<i>Surr: d3-N-MeFOSAA</i>	<i>ASTM D7979-19</i>	107		%REC		50-130	1	09/17/25 13:54	09/12/25 17:22
<i>Surr: d5-N-EtFOSAA</i>	<i>ASTM D7979-19</i>	112		%REC		50-130	1	09/17/25 13:54	09/12/25 17:22

Analytical Report



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Matrix: WATER

Work Order: HN2513292
Date Collected: 09/10/25 12:50
Date Received: 09/11/25 09:30

CLIENT ID: RFI-23-01R_091025

Lab ID: HN2513292-008

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ASTM D7979-19	<8.67	U	ng/L	8.67	9.26	1	09/17/25 14:08	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ASTM D7979-19	<27.0	U	ng/L	27.0	47.1	1	09/17/25 14:08	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ASTM D7979-19	<36.5	U	ng/L	36.5	45.9	1	09/17/25 14:08	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ASTM D7979-19	<19.4	U	ng/L	19.4	45.9	1	09/17/25 14:08	09/12/25 17:22
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ASTM D7979-19	<7.36	U	ng/L	7.36	9.26	1	09/17/25 14:08	09/12/25 17:22
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ASTM D7979-19	<2.99	U	ng/L	2.99	9.17	1	09/17/25 14:08	09/12/25 17:22
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ASTM D7979-19	<38.5	U	ng/L	38.5	49.2	1	09/17/25 14:08	09/12/25 17:22
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ASTM D7979-19	<26.5	U	ng/L	26.5	49.2	1	09/17/25 14:08	09/12/25 17:22
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ASTM D7979-19	<20.8	U	ng/L	20.8	49.2	1	09/17/25 14:08	09/12/25 17:22
Perfluorobutane sulfonic acid (PFBS)	ASTM D7979-19	<8.06	U	ng/L	8.06	8.69	1	09/17/25 14:08	09/12/25 17:22
Perfluorobutanoic acid (PFBA)	ASTM D7979-19	<14.2	U	ng/L	14.2	49.2	1	09/17/25 14:08	09/12/25 17:22
Perfluorodecane sulfonic acid (PFDS)	ASTM D7979-19	<7.29	U	ng/L	7.29	9.48	1	09/17/25 14:08	09/12/25 17:22
Perfluorodecanoic acid (PFDA)	ASTM D7979-19	<14.8	U	ng/L	14.8	49.2	1	09/17/25 14:08	09/12/25 17:22
Perfluorododecanoic acid (PFDOA)	ASTM D7979-19	<29.2	U	ng/L	29.2	49.2	1	09/17/25 14:08	09/12/25 17:22
Perfluoroheptane sulfonic acid (PFHpS)	ASTM D7979-19	<10.6	U	ng/L	10.6	46.8	1	09/17/25 14:08	09/12/25 17:22
Perfluoroheptanoic acid (PFHpA)	ASTM D7979-19	<15.2	U	ng/L	15.2	49.2	1	09/17/25 14:08	09/12/25 17:22
Perfluorohexane sulfonic acid (PFHxS)	ASTM D7979-19	35.7	J	ng/L	13.4	44.8	1	09/17/25 14:08	09/12/25 17:22
Perfluorohexanoic acid (PFHxA)	ASTM D7979-19	<14.0	U	ng/L	14.0	49.2	1	09/17/25 14:08	09/12/25 17:22
Perfluorononane sulfonic acid (PFNS)	ASTM D7979-19	<13.2	U	ng/L	13.2	47.2	1	09/17/25 14:08	09/12/25 17:22

Analytical Report



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Matrix: WATER

Work Order: HN2513292
Date Collected: 09/10/25 12:50
Date Received: 09/11/25 09:30

CLIENT ID: RFI-23-01R_091025

Lab ID: HN2513292-008

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononanoic acid (PFNA)	ASTM D7979-19	<9.15	U	ng/L	9.15	9.84	1	09/17/25 14:08	09/12/25 17:22
Perfluorooctane sulfonamide (PFOSAm)	ASTM D7979-19	<8.06	U	ng/L	8.06	9.84	1	09/17/25 14:08	09/12/25 17:22
Perfluorooctane sulfonic acid (PFOS)	ASTM D7979-19	39.8		ng/L	4.98	9.13	1	09/17/25 14:08	09/12/25 17:22
Perfluorooctanoic acid (PFOA)	ASTM D7979-19	<9.15	U	ng/L	9.15	9.84	1	09/17/25 14:08	09/12/25 17:22
Perfluoropentane sulfonic acid (PFPeS)	ASTM D7979-19	<5.23	U	ng/L	5.23	9.22	1	09/17/25 14:08	09/12/25 17:22
Perfluoropentanoic acid (PFPeA)	ASTM D7979-19	<7.87	U	ng/L	7.87	49.2	1	09/17/25 14:08	09/12/25 17:22
Perfluorotetradecanoic acid (PFTDA)	ASTM D7979-19	<37.1	U	ng/L	37.1	49.2	1	09/17/25 14:08	09/12/25 17:22
Perfluorotridecanoic acid (PFTrDA)	ASTM D7979-19	<17.5	U	ng/L	17.5	49.2	1	09/17/25 14:08	09/12/25 17:22
Perfluoroundecanoic acid (PFUnDA)	ASTM D7979-19	<11.8	U	ng/L	11.8	49.2	1	09/17/25 14:08	09/12/25 17:22
Surr: 13C2-FtS 4:2	ASTM D7979-19	101		%REC		50-130	1	09/17/25 14:08	09/12/25 17:22
Surr: 13C2-FtS 6:2	ASTM D7979-19	104		%REC		50-130	1	09/17/25 14:08	09/12/25 17:22
Surr: 13C2-FtS 8:2	ASTM D7979-19	114		%REC		50-130	1	09/17/25 14:08	09/12/25 17:22
Surr: 13C2-PFDA	ASTM D7979-19	94.0		%REC		70-130	1	09/17/25 14:08	09/12/25 17:22
Surr: 13C2-PFDoA	ASTM D7979-19	96.1		%REC		70-130	1	09/17/25 14:08	09/12/25 17:22
Surr: 13C2-PFHxA	ASTM D7979-19	107		%REC		50-130	1	09/17/25 14:08	09/12/25 17:22
Surr: 13C2-PFTeDA	ASTM D7979-19	70.4		%REC		50-130	1	09/17/25 14:08	09/12/25 17:22
Surr: 13C2-PFUnDA	ASTM D7979-19	94.2		%REC		70-130	1	09/17/25 14:08	09/12/25 17:22
Surr: 13C3-HFPO-DA	ASTM D7979-19	118		%REC		50-130	1	09/17/25 14:08	09/12/25 17:22
Surr: 13C3-PFBS	ASTM D7979-19	101		%REC		50-130	1	09/17/25 14:08	09/12/25 17:22
Surr: 13C4-PFBA	ASTM D7979-19	108		%REC		50-130	1	09/17/25 14:08	09/12/25 17:22
Surr: 13C4-PFHpA	ASTM D7979-19	103		%REC		50-130	1	09/17/25 14:08	09/12/25 17:22
Surr: 13C4-PFOA	ASTM D7979-19	104		%REC		70-130	1	09/17/25 14:08	09/12/25 17:22
Surr: 13C4-PFOS	ASTM D7979-19	105		%REC		70-130	1	09/17/25 14:08	09/12/25 17:22
Surr: 13C5-PFNA	ASTM D7979-19	102		%REC		70-130	1	09/17/25 14:08	09/12/25 17:22
Surr: 13C5-PFPeA	ASTM D7979-19	96.8		%REC		50-130	1	09/17/25 14:08	09/12/25 17:22
Surr: 13C8-FOSA	ASTM D7979-19	94.9		%REC		50-130	1	09/17/25 14:08	09/12/25 17:22
Surr: 18O2-PFHxS	ASTM D7979-19	102		%REC		70-130	1	09/17/25 14:08	09/12/25 17:22
Surr: d3-N-MeFOSAA	ASTM D7979-19	101		%REC		50-130	1	09/17/25 14:08	09/12/25 17:22
Surr: d5-N-EtFOSAA	ASTM D7979-19	110		%REC		50-130	1	09/17/25 14:08	09/12/25 17:22

Analytical Report



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Matrix: WATER

Work Order: HN2513292
Date Collected: 09/10/25 14:10
Date Received: 09/11/25 09:30

CLIENT ID: RFI-23-02R_091025

Lab ID: HN2513292-009

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ASTM D7979-19	<8.25	U	ng/L	8.25	8.81	1	09/17/25 14:23	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ASTM D7979-19	<25.6	U	ng/L	25.6	44.8	1	09/17/25 14:23	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ASTM D7979-19	<34.7	U	ng/L	34.7	43.7	1	09/17/25 14:23	09/12/25 17:22
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ASTM D7979-19	<18.5	U	ng/L	18.5	43.7	1	09/17/25 14:23	09/12/25 17:22
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ASTM D7979-19	<7.00	U	ng/L	7.00	8.81	1	09/17/25 14:23	09/12/25 17:22
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ASTM D7979-19	<2.85	U	ng/L	2.85	8.72	1	09/17/25 14:23	09/12/25 17:22
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ASTM D7979-19	<36.6	U	ng/L	36.6	46.8	1	09/17/25 14:23	09/12/25 17:22
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ASTM D7979-19	<25.2	U	ng/L	25.2	46.8	1	09/17/25 14:23	09/12/25 17:22
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ASTM D7979-19	<19.7	U	ng/L	19.7	46.8	1	09/17/25 14:23	09/12/25 17:22
Perfluorobutane sulfonic acid (PFBS)	ASTM D7979-19	<7.67	U	ng/L	7.67	8.27	1	09/17/25 14:23	09/12/25 17:22
Perfluorobutanoic acid (PFBA)	ASTM D7979-19	<13.5	U	ng/L	13.5	46.8	1	09/17/25 14:23	09/12/25 17:22
Perfluorodecane sulfonic acid (PFDS)	ASTM D7979-19	<6.93	U	ng/L	6.93	9.02	1	09/17/25 14:23	09/12/25 17:22
Perfluorodecanoic acid (PFDA)	ASTM D7979-19	<14.0	U	ng/L	14.0	46.8	1	09/17/25 14:23	09/12/25 17:22
Perfluorododecanoic acid (PFDOA)	ASTM D7979-19	<27.8	U	ng/L	27.8	46.8	1	09/17/25 14:23	09/12/25 17:22
Perfluoroheptane sulfonic acid (PFHpS)	ASTM D7979-19	<10.1	U	ng/L	10.1	44.5	1	09/17/25 14:23	09/12/25 17:22
Perfluoroheptanoic acid (PFHpA)	ASTM D7979-19	<14.5	U	ng/L	14.5	46.8	1	09/17/25 14:23	09/12/25 17:22
Perfluorohexane sulfonic acid (PFHxS)	ASTM D7979-19	45.0		ng/L	12.7	42.6	1	09/17/25 14:23	09/12/25 17:22
Perfluorohexanoic acid (PFHxA)	ASTM D7979-19	<13.4	U	ng/L	13.4	46.8	1	09/17/25 14:23	09/12/25 17:22
Perfluorononane sulfonic acid (PFNS)	ASTM D7979-19	<12.5	U	ng/L	12.5	44.9	1	09/17/25 14:23	09/12/25 17:22

Analytical Report



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Matrix: WATER

Work Order: HN2513292
Date Collected: 09/10/25 14:10
Date Received: 09/11/25 09:30

CLIENT ID: RFI-23-02R_091025

Lab ID: HN2513292-009

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononanoic acid (PFNA)	ASTM D7979-19	<8.70	U	ng/L	8.70	9.36	1	09/17/25 14:23	09/12/25 17:22
Perfluorooctane sulfonamide (PFOSAm)	ASTM D7979-19	<7.66	U	ng/L	7.66	9.36	1	09/17/25 14:23	09/12/25 17:22
Perfluorooctane sulfonic acid (PFOS)	ASTM D7979-19	24.9		ng/L	4.74	8.68	1	09/17/25 14:23	09/12/25 17:22
Perfluorooctanoic acid (PFOA)	ASTM D7979-19	<8.70	U	ng/L	8.70	9.36	1	09/17/25 14:23	09/12/25 17:22
Perfluoropentane sulfonic acid (PFPeS)	ASTM D7979-19	<4.98	U	ng/L	4.98	8.78	1	09/17/25 14:23	09/12/25 17:22
Perfluoropentanoic acid (PFPeA)	ASTM D7979-19	<7.48	U	ng/L	7.48	46.8	1	09/17/25 14:23	09/12/25 17:22
Perfluorotetradecanoic acid (PFTDA)	ASTM D7979-19	<35.3	U	ng/L	35.3	46.8	1	09/17/25 14:23	09/12/25 17:22
Perfluorotridecanoic acid (PFTrDA)	ASTM D7979-19	<16.6	U	ng/L	16.6	46.8	1	09/17/25 14:23	09/12/25 17:22
Perfluoroundecanoic acid (PFUnDA)	ASTM D7979-19	<11.2	U	ng/L	11.2	46.8	1	09/17/25 14:23	09/12/25 17:22
Surr: 13C2-FtS 4:2	ASTM D7979-19	108		%REC		50-130	1	09/17/25 14:23	09/12/25 17:22
Surr: 13C2-FtS 6:2	ASTM D7979-19	97.7		%REC		50-130	1	09/17/25 14:23	09/12/25 17:22
Surr: 13C2-FtS 8:2	ASTM D7979-19	104		%REC		50-130	1	09/17/25 14:23	09/12/25 17:22
Surr: 13C2-PFDA	ASTM D7979-19	106		%REC		70-130	1	09/17/25 14:23	09/12/25 17:22
Surr: 13C2-PFDoA	ASTM D7979-19	94.8		%REC		70-130	1	09/17/25 14:23	09/12/25 17:22
Surr: 13C2-PFHxA	ASTM D7979-19	111		%REC		50-130	1	09/17/25 14:23	09/12/25 17:22
Surr: 13C2-PFTeDA	ASTM D7979-19	60.7		%REC		50-130	1	09/17/25 14:23	09/12/25 17:22
Surr: 13C2-PFUnDA	ASTM D7979-19	95.9		%REC		70-130	1	09/17/25 14:23	09/12/25 17:22
Surr: 13C3-HFPO-DA	ASTM D7979-19	105		%REC		50-130	1	09/17/25 14:23	09/12/25 17:22
Surr: 13C3-PFBS	ASTM D7979-19	104		%REC		50-130	1	09/17/25 14:23	09/12/25 17:22
Surr: 13C4-PFBA	ASTM D7979-19	113		%REC		50-130	1	09/17/25 14:23	09/12/25 17:22
Surr: 13C4-PFHpA	ASTM D7979-19	106		%REC		50-130	1	09/17/25 14:23	09/12/25 17:22
Surr: 13C4-PFOA	ASTM D7979-19	112		%REC		70-130	1	09/17/25 14:23	09/12/25 17:22
Surr: 13C4-PFOS	ASTM D7979-19	111		%REC		70-130	1	09/17/25 14:23	09/12/25 17:22
Surr: 13C5-PFNA	ASTM D7979-19	104		%REC		70-130	1	09/17/25 14:23	09/12/25 17:22
Surr: 13C5-PFPeA	ASTM D7979-19	108		%REC		50-130	1	09/17/25 14:23	09/12/25 17:22
Surr: 13C8-FOSA	ASTM D7979-19	103		%REC		50-130	1	09/17/25 14:23	09/12/25 17:22
Surr: 18O2-PFHxS	ASTM D7979-19	105		%REC		70-130	1	09/17/25 14:23	09/12/25 17:22
Surr: d3-N-MeFOSAA	ASTM D7979-19	113		%REC		50-130	1	09/17/25 14:23	09/12/25 17:22
Surr: d5-N-EtFOSAA	ASTM D7979-19	109		%REC		50-130	1	09/17/25 14:23	09/12/25 17:22



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Matrix: WATER
QC Lot: 2215509

Work Order: HN2513292
Date Collected: NA
Date Received: NA
Run ID: 3507036

Per- and Polyfluorinated Alkyl Substances by LC-MS

MB	CLIENT ID: Method Blank	Lab ID: QC-2215509-001

Method: ASTM D7979-19**Dilution:** 1**Analysis Date:** 09/15/25 20:33**Prep Date:** 09/12/25 17:23

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	<8.82	ng/L	8.82	9.42							U
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	<27.4	ng/L	27.4	47.9							U
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	<37.1	ng/L	37.1	46.7							U
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	<19.7	ng/L	19.7	47.4							U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	<7.48	ng/L	7.48	9.42							U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	<3.04	ng/L	3.04	9.32							U
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	<39.2	ng/L	39.2	50.0							U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	<27.0	ng/L	27.0	50.0							U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	<21.1	ng/L	21.1	50.0							U
Perfluorobutane sulfonic acid (PFBS)	<8.20	ng/L	8.20	8.84							U
Perfluorobutanoic acid (PFBA)	<14.4	ng/L	14.4	50.0							U
Perfluorodecane sulfonic acid (PFDS)	<7.41	ng/L	7.41	9.64							U
Perfluorodecanoic acid (PFDA)	<15.0	ng/L	15.0	50.0							U
Perfluorododecanoic acid (PFDOA)	<29.7	ng/L	29.7	50.0							U
Perfluoroheptane sulfonic acid (PFHpS)	<10.8	ng/L	10.8	47.6							U
Perfluoroheptanoic acid (PFHpA)	<15.5	ng/L	15.5	50.0							U
Perfluorohexane sulfonic acid (PFHxS)	<13.6	ng/L	13.6	45.5							U
Perfluorohexanoic acid (PFHxA)	<14.3	ng/L	14.3	50.0							U
Perfluorononane sulfonic acid (PFNS)	<13.4	ng/L	13.4	48.0							U
Perfluorononanoic acid (PFNA)	<9.30	ng/L	9.30	10.0							U
Perfluorooctane sulfonamide (PFOSAm)	<8.19	ng/L	8.19	10.0							U
Perfluorooctane sulfonic acid (PFOS)	<5.07	ng/L	5.07	9.28							U
Perfluorooctanoic acid (PFOA)	<9.30	ng/L	9.30	10.0							U
Perfluoropentane sulfonic acid (PFPeS)	<5.32	ng/L	5.32	9.38							U
Perfluoropentanoic acid (PFPeA)	<8.00	ng/L	8.00	50.0							U
Perfluorotetradecanoic acid (PFTDA)	<37.7	ng/L	37.7	50.0							U
Perfluorotridecanoic acid (PFTrDA)	<17.8	ng/L	17.8	50.0							U
Perfluoroundecanoic acid (PFUnDA)	<12.0	ng/L	12.0	50.0							U
Surr: 13C2-FtS 4:2	154	ng/L			149		104	50-130			
Surr: 13C2-FtS 6:2	134	ng/L			152		88.4	50-130			
Surr: 13C2-FtS 8:2	150	ng/L			153		97.8	50-130			

QA/QC Report



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Matrix: WATER
QC Lot: 2215509

Work Order: HN2513292
Date Collected: NA
Date Received: NA
Run ID: 3507036

MB		CLIENT ID: Method Blank				Lab ID: QC-2215509-001					
Method: ASTM D7979-19		Dilution: 1				Analysis Date: 09/15/25 20:33					
						Prep Date: 09/12/25 17:23					
Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Surr: 13C2-PFDA	150	ng/L			160		93.8	70-130			
Surr: 13C2-PFDoA	146	ng/L			160		91.0	70-130			
Surr: 13C2-PFHxA	154	ng/L			160		96.1	50-130			
Surr: 13C2-PFTeDA	132	ng/L			160		82.2	50-130			
Surr: 13C2-PFUnDA	150	ng/L			160		93.6	70-130			
Surr: 13C3-HFPO-DA	159	ng/L			160		99.2	50-130			
Surr: 13C3-PFBS	151	ng/L			149		102	50-130			
Surr: 13C4-PFBA	156	ng/L			160		97.7	50-130			
Surr: 13C4-PFHpA	158	ng/L			160		98.5	50-130			
Surr: 13C4-PFOA	157	ng/L			160		98.3	70-130			
Surr: 13C4-PFOS	143	ng/L			153		93.5	70-130			
Surr: 13C5-PFNA	147	ng/L			160		91.8	70-130			
Surr: 13C5-PFPeA	159	ng/L			160		99.3	50-130			
Surr: 13C8-FOSA	157	ng/L			160		98.1	50-130			
Surr: 18O2-PFHxS	156	ng/L			151		103	70-130			
Surr: d3-N-MeFOSAA	150	ng/L			160		93.8	50-130			
Surr: d5-N-EtFOSAA	163	ng/L			160		102	50-130			

MB		CLIENT ID: Method Blank				Lab ID: QC-2215509-002					
Method: ASTM D7979-19		Dilution: 1				Analysis Date: 09/15/25 20:48					
						Prep Date: 09/12/25 17:23					
Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	<8.82	ng/L	8.82	9.42							U
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	<27.4	ng/L	27.4	47.9							U
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	<37.1	ng/L	37.1	46.7							U
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	<19.7	ng/L	19.7	47.4							U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	<7.48	ng/L	7.48	9.42							U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	<3.04	ng/L	3.04	9.32							U
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	<39.2	ng/L	39.2	50.0							U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	<27.0	ng/L	27.0	50.0							U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	<21.1	ng/L	21.1	50.0							U
Perfluorobutane sulfonic acid (PFBS)	<8.20	ng/L	8.20	8.84							U
Perfluorobutanoic acid (PFBA)	<14.4	ng/L	14.4	50.0							U
Perfluorodecane sulfonic acid (PFDS)	<7.41	ng/L	7.41	9.64							U

QA/QC Report



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Matrix: WATER
QC Lot: 2215509

Work Order: HN2513292
Date Collected: NA
Date Received: NA
Run ID: 3507036

MB	CLIENT ID: Method Blank	Lab ID: QC-2215509-002

Method: ASTM D7979-19**Dilution:** 1**Analysis Date:** 09/15/25 20:48**Prep Date:** 09/12/25 17:23

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Perfluorodecanoic acid (PFDA)	<15.0	ng/L	15.0	50.0							U
Perfluorododecanoic acid (PFDOA)	<29.7	ng/L	29.7	50.0							U
Perfluoroheptane sulfonic acid (PFHpS)	<10.8	ng/L	10.8	47.6							U
Perfluoroheptanoic acid (PFHpA)	<15.5	ng/L	15.5	50.0							U
Perfluorohexane sulfonic acid (PFHxS)	<13.6	ng/L	13.6	45.5							U
Perfluorohexanoic acid (PFHxA)	<14.3	ng/L	14.3	50.0							U
Perfluorononane sulfonic acid (PFNS)	<13.4	ng/L	13.4	48.0							U
Perfluorononanoic acid (PFNA)	<9.30	ng/L	9.30	10.0							U
Perfluorooctane sulfonamide (PFOSAm)	<8.19	ng/L	8.19	10.0							U
Perfluorooctane sulfonic acid (PFOS)	<5.07	ng/L	5.07	9.28							U
Perfluorooctanoic acid (PFOA)	<9.30	ng/L	9.30	10.0							U
Perfluoropentane sulfonic acid (PFPeS)	<5.32	ng/L	5.32	9.38							U
Perfluoropentanoic acid (PFPeA)	<8.00	ng/L	8.00	50.0							U
Perfluorotetradecanoic acid (PFTDA)	<37.7	ng/L	37.7	50.0							U
Perfluorotridecanoic acid (PFTrDA)	<17.8	ng/L	17.8	50.0							U
Perfluoroundecanoic acid (PFUnDA)	<12.0	ng/L	12.0	50.0							U
Surr: 13C2-FtS 4:2	158	ng/L			149		106	50-130			
Surr: 13C2-FtS 6:2	159	ng/L			152		105	50-130			
Surr: 13C2-FtS 8:2	152	ng/L			153		99.1	50-130			
Surr: 13C2-PFDA	164	ng/L			160		102	70-130			
Surr: 13C2-PFDoA	155	ng/L			160		96.6	70-130			
Surr: 13C2-PFHxA	165	ng/L			160		103	50-130			
Surr: 13C2-PFTeDA	124	ng/L			160		77.4	50-130			
Surr: 13C2-PFUnDA	164	ng/L			160		102	70-130			
Surr: 13C3-HFPO-DA	147	ng/L			160		91.7	50-130			
Surr: 13C3-PFBS	160	ng/L			149		108	50-130			
Surr: 13C4-PFBA	166	ng/L			160		104	50-130			
Surr: 13C4-PFHpA	169	ng/L			160		106	50-130			
Surr: 13C4-PFOA	157	ng/L			160		98.1	70-130			
Surr: 13C4-PFOS	152	ng/L			153		99.5	70-130			
Surr: 13C5-PFNA	160	ng/L			160		100.0	70-130			
Surr: 13C5-PFPeA	167	ng/L			160		104	50-130			
Surr: 13C8-FOSA	158	ng/L			160		98.9	50-130			
Surr: 18O2-PFHxS	151	ng/L			151		99.8	70-130			
Surr: d3-N-MeFOSAA	160	ng/L			160		100	50-130			
Surr: d5-N-EtFOSAA	178	ng/L			160		111	50-130			

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2215509-003

Method: ASTM D7979-19**Dilution:** 1**Analysis Date:** 09/15/25 21:02**Prep Date:** 09/12/25 17:23

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual

QA/QC Report



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Matrix: WATER
QC Lot: 2215509

Work Order: HN2513292
Date Collected: NA
Date Received: NA
Run ID: 3507036

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2215509-003

Method: ASTM D7979-19

Dilution: 1

Analysis Date: 09/15/25 21:02

Prep Date: 09/12/25 17:23

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	521	ng/L	8.82	9.42	471		111	70-130			
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	535	ng/L	27.4	47.9	479		112	70-130			
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	515	ng/L	37.1	46.7	467		110	70-130			
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	510	ng/L	19.7	47.4	474		108	70-130			
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	500	ng/L	7.48	9.42	471		106	70-130			
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	498	ng/L	3.04	9.32	466		107	70-130			
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	489	ng/L	39.2	50.0	500		97.7	50-130			
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	543	ng/L	27.0	50.0	500		109	70-130			
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	551	ng/L	21.1	50.0	500		110	70-130			
Perfluorobutane sulfonic acid (PFBS)	481	ng/L	8.20	8.84	442		109	70-130			
Perfluorobutanoic acid (PFBA)	548	ng/L	14.4	50.0	500		110	50-130			
Perfluorodecane sulfonic acid (PFDS)	522	ng/L	7.41	9.64	482		108	70-130			
Perfluorodecanoic acid (PFDA)	542	ng/L	15.0	50.0	500		108	70-130			
Perfluorododecanoic acid (PFDOA)	557	ng/L	29.7	50.0	500		111	70-130			
Perfluoroheptane sulfonic acid (PFHpS)	508	ng/L	10.8	47.6	476		107	70-130			
Perfluoroheptanoic acid (PFHpA)	566	ng/L	15.5	50.0	500		113	50-130			
Perfluorohexane sulfonic acid (PFHxS)	488	ng/L	13.6	45.5	455		107	70-130			
Perfluorohexanoic acid (PFHxA)	533	ng/L	14.3	50.0	500		107	50-130			
Perfluorononane sulfonic acid (PFNS)	539	ng/L	13.4	48.0	480		112	70-130			
Perfluorononanoic acid (PFNA)	555	ng/L	9.30	10.0	500		111	70-130			
Perfluorooctane sulfonamide (PFOSAm)	533	ng/L	8.19	10.0	500		107	70-130			
Perfluorooctane sulfonic acid (PFOS)	482	ng/L	5.07	9.28	464		104	70-130			
Perfluorooctanoic acid (PFOA)	539	ng/L	9.30	10.0	500		108	70-130			
Perfluoropentane sulfonic acid (PFPeS)	495	ng/L	8.19	9.38	469		106	70-130			
Perfluoropentanoic acid (PFPeA)	568	ng/L	5.07	50.0	500		114	70-130			
Perfluorotetradecanoic acid (PFTDA)	612	ng/L	9.30	50.0	500		122	70-130			
Perfluorotridecanoic acid (PFTrDA)	567	ng/L	5.32	50.0	500		113	70-130			
Perfluoroundecanoic acid (PFUnDA)	565	ng/L	12.0	50.0	500		113	70-130			
Surr: 13C2-FtS 4:2	180	ng/L			149		121	50-130			
Surr: 13C2-FtS 6:2	160	ng/L			152		105	50-130			
Surr: 13C2-FtS 8:2	194	ng/L			153		127	50-130			
Surr: 13C2-PFDA	172	ng/L			160		107	70-130			
Surr: 13C2-PFDoA	172	ng/L			160		108	70-130			

QA/QC Report



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Matrix: WATER
QC Lot: 2215509

Work Order: HN2513292
Date Collected: NA
Date Received: NA
Run ID: 3507036

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2215509-003

Method: ASTM D7979-19

Dilution: 1

Analysis Date: 09/15/25 21:02

Prep Date: 09/12/25 17:23

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Surr: 13C2-PFHxA	166	ng/L			160		104	50-130			
Surr: 13C2-PFTeDA	182	ng/L			160		114	50-130			
Surr: 13C2-PFUnDA	169	ng/L			160		106	70-130			
Surr: 13C3-HFPO-DA	174	ng/L			160		109	50-130			
Surr: 13C3-PFBS	159	ng/L			149		107	50-130			
Surr: 13C4-PFBA	162	ng/L			160		101	50-130			
Surr: 13C4-PFHpA	160	ng/L			160		100	50-130			
Surr: 13C4-PFOA	168	ng/L			160		105	70-130			
Surr: 13C4-PFOS	165	ng/L			153		108	70-130			
Surr: 13C5-PFNA	171	ng/L			160		107	70-130			
Surr: 13C5-PFPeA	162	ng/L			160		101	50-130			
Surr: 13C8-FOSA	161	ng/L			160		101	50-130			
Surr: 18O2-PFHxS	154	ng/L			151		102	70-130			
Surr: d3-N-MeFOSAA	173	ng/L			160		108	50-130			
Surr: d5-N-EtFOSAA	164	ng/L			160		102	50-130			

The following samples were analyzed in this batch: HN2513292-001, HN2513292-002, HN2513292-003, HN2513292-004,
 HN2513292-005, HN2513292-006, HN2513292-007, HN2513292-008,
 HN2513292-009



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Matrix: WATER
QC Lot: 2215509

Work Order: HN2513292
Date Collected: 09/08/25 12:45
Date Received: 09/11/25 09:30
Run ID: 3507587

Per- and Polyfluorinated Alkyl Substances by LC-MS

MS CLIENT ID: West P-Trap_090825 Lab ID: QC-2215509-008

Method: ASTM D7979-19

Dilution: 1

Analysis Date: 09/17/25 10:30

Prep Date: 09/12/25 17:23

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	459	ng/L	8.42	8.99	428.18	<8.42	107	70-130			
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	422	ng/L	26.2	45.7	435.45	<26.2	96.9	70-130			
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	430	ng/L	35.4	44.6	424.55	<35.4	101	70-130			
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	460	ng/L	18.8	44.6	430.91	<18.8	107	70-130			
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	452	ng/L	7.14	8.99	428.18	<7.14	105	70-130			
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	402	ng/L	2.91	8.90	423.64	<2.91	95.0	70-130			
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	496	ng/L	37.4	47.7	454.55	<37.4	109	50-130			
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	494	ng/L	25.8	47.7	454.55	<25.8	108	70-130			
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	498	ng/L	20.1	47.7	454.55	<20.1	109	70-130			
Perfluorobutane sulfonic acid (PFBS)	408	ng/L	7.83	8.44	401.82	<7.83	101	70-130			
Perfluorobutanoic acid (PFBA)	502	ng/L	13.8	47.7	454.55	<13.8	110	50-130			
Perfluorodecane sulfonic acid (PFDS)	441	ng/L	7.07	9.20	438.18	<7.07	101	70-130			
Perfluorodecanoic acid (PFDA)	427	ng/L	14.3	47.7	454.55	<14.3	93.3	70-130			
Perfluorododecanoic acid (PFDOA)	469	ng/L	28.3	47.7	454.55	<28.3	103	70-130			
Perfluoroheptane sulfonic acid (PFHpS)	447	ng/L	10.3	45.4	432.73	<10.3	103	70-130			
Perfluoroheptanoic acid (PFHpA)	474	ng/L	14.8	47.7	454.55	<14.8	104	50-130			
Perfluorohexane sulfonic acid (PFHxS)	439	ng/L	13.0	43.4	413.64	15.8	102	70-130			
Perfluorohexanoic acid (PFHxA)	500	ng/L	13.6	47.7	454.55	<13.6	109	50-130			
Perfluorononane sulfonic acid (PFNS)	444	ng/L	12.8	45.8	436.36	<12.8	101	70-130			
Perfluorononanoic acid (PFNA)	479	ng/L	8.88	9.54	454.55	<8.88	105	70-130			
Perfluorooctane sulfonamide (PFOSAm)	460	ng/L	7.82	9.54	454.55	<7.82	101	70-130			
Perfluorooctane sulfonic acid (PFOS)	512	ng/L	4.84	8.86	421.82	69.2	105	70-130			
Perfluorooctanoic acid (PFOA)	514	ng/L	8.88	9.54	454.55	9.92	111	70-130			
Perfluoropentane sulfonic acid (PFPeS)	448	ng/L	5.08	8.95	426.36	<5.08	105	70-130			
Perfluoropentanoic acid (PFPeA)	524	ng/L	7.64	47.7	454.55	<7.64	114	70-130			
Perfluorotetradecanoic acid (PFTDA)	379	ng/L	36.0	47.7	454.55	<36.0	83.3	70-130			
Perfluorotridecanoic acid (PFTrDA)	412	ng/L	17.0	47.7	454.55	<17.0	90.3	70-130			
Perfluoroundecanoic acid (PFUnDA)	456	ng/L	11.5	47.7	454.55	<11.5	100	70-130			
Surr: 13C2-FtS 4:2	156	ng/L			135.45		116	50-130			
Surr: 13C2-FtS 6:2	176	ng/L			138.18		128	50-130			
Surr: 13C2-FtS 8:2	163	ng/L			139.09		117	50-130			

QA/QC Report



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Matrix: WATER
QC Lot: 2215509

Work Order: HN2513292
Date Collected: 09/08/25 12:45
Date Received: 09/11/25 09:30
Run ID: 3507587

MS	CLIENT ID: West P-Trap_090825	Lab ID: QC-2215509-008

Method: ASTM D7979-19

Dilution: 1

Analysis Date: 09/17/25 10:30

Prep Date: 09/12/25 17:23

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Surr: 13C2-PFDA	138	ng/L			145.45		94.8	70-130			
Surr: 13C2-PFDoA	146	ng/L			145.45		100	70-130			
Surr: 13C2-PFHxA	146	ng/L			145.45		100	50-130			
Surr: 13C2-PFTeDA	115	ng/L			145.45		79.4	50-130			
Surr: 13C2-PFUnDA	140	ng/L			145.45		96.3	70-130			
Surr: 13C3-HFPO-DA	170	ng/L			145.45		117	50-130			
Surr: 13C3-PFBS	138	ng/L			135.45		102	50-130			
Surr: 13C4-PFBA	163	ng/L			145.45		112	50-130			
Surr: 13C4-PFHpA	137	ng/L			145.45		94.0	50-130			
Surr: 13C4-PFOA	153	ng/L			145.45		105	70-130			
Surr: 13C4-PFOS	147	ng/L			139.09		106	70-130			
Surr: 13C5-PFNA	147	ng/L			145.45		101	70-130			
Surr: 13C5-PFPeA	155	ng/L			145.45		106	50-130			
Surr: 13C8-FOSA	136	ng/L			145.45		93.6	50-130			
Surr: 18O2-PFHxS	139	ng/L			137.27		101	70-130			
Surr: d3-N-MeFOSAA	164	ng/L			145.45		113	50-130			
Surr: d5-N-EtFOSAA	165	ng/L			145.45		113	50-130			

DUP	CLIENT ID: East P-Trap_090825	Lab ID: QC-2215509-010

Method: ASTM D7979-19

Dilution: 1

Analysis Date: 09/17/25 10:59

Prep Date: 09/12/25 17:23

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	<8.53	ng/L	8.53	9.11		<8.51			NC		U
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	<26.5	ng/L	26.5	46.3		<26.4			0.270	30	U
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	<35.9	ng/L	35.9	45.2		<35.8			NC		U
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	<19.1	ng/L	19.1	45.2		<19.0			NC		U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	<7.24	ng/L	7.24	9.11		<7.22			NC		U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	<2.94	ng/L	2.94	9.02		<2.94			NC		U
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	<37.9	ng/L	37.9	48.4		<37.8			NC		U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	<26.1	ng/L	26.1	48.4		<26.0			NC		U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	<20.4	ng/L	20.4	48.4		<20.4			NC		U
Perfluorobutane sulfonic acid (PFBS)	<7.93	ng/L	7.93	8.55		<7.91			NC		U
Perfluorobutanoic acid (PFBA)	<13.9	ng/L	13.9	48.4		<13.9			NC		U
Perfluorodecane sulfonic acid (PFDS)	<7.16	ng/L	7.16	9.32		<7.15			NC		U

QA/QC Report



Client: Arcadis US, Inc.
Project: RACER PFAS Analysis
Matrix: WATER
QC Lot: 2215509

Work Order: HN2513292
Date Collected: 09/08/25 12:45
Date Received: 09/11/25 09:30
Run ID: 3507587

DUP	CLIENT ID: East P-Trap_090825	Lab ID: QC-2215509-010

Method: ASTM D7979-19

Dilution: 1

Analysis Date: 09/17/25 10:59

Prep Date: 09/12/25 17:23

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Perfluorodecanoic acid (PFDA)	<14.5	ng/L	14.5	48.4		<14.5			NC		U
Perfluorododecanoic acid (PFDOA)	<38.4	ng/L	38.4	48.4		<28.6			NC		U
Perfluoroheptane sulfonic acid (PFHpS)	<10.4	ng/L	10.4	46.0		<10.4			0.270	30	U
Perfluoroheptanoic acid (PFHpA)	<15.0	ng/L	15.0	48.4		<15.0			NC		U
Perfluorohexane sulfonic acid (PFHxS)	18.4	ng/L	13.1	44.0		18.9			NC		J
Perfluorohexanoic acid (PFHxA)	<13.8	ng/L	13.8	48.4		<13.8			NC		U
Perfluorononane sulfonic acid (PFNS)	<13.0	ng/L	13.0	46.4		<12.9			0.270	30	U
Perfluorononanoic acid (PFNA)	<9.00	ng/L	9.00	9.67		<8.97			NC		U
Perfluorooctane sulfonamide (PFOSAm)	<7.92	ng/L	7.92	9.67		<7.90			NC		U
Perfluorooctane sulfonic acid (PFOS)	101	ng/L	4.90	8.98		115			12.6	30	
Perfluorooctanoic acid (PFOA)	<9.00	ng/L	9.00	9.67		<8.97			NC		U
Perfluoropentane sulfonic acid (PFPeS)	<5.14	ng/L	5.14	9.07		<5.13			NC		U
Perfluoropentanoic acid (PFPeA)	<7.74	ng/L	7.74	48.4		<7.72			NC		U
Perfluorotetradecanoic acid (PFTDA)	<36.4	ng/L	36.4	48.4		<36.4			NC		U
Perfluorotridecanoic acid (PFTrDA)	<17.2	ng/L	17.2	48.4		<17.1			NC		U
Perfluoroundecanoic acid (PFUnDA)	<11.6	ng/L	11.6	48.4		<11.6			NC		U
Surr: 13C2-FtS 4:2	151	ng/L			149		108	50-130	2.82	30	
Surr: 13C2-FtS 6:2	127	ng/L			152		89.3	50-130	6.40	30	
Surr: 13C2-FtS 8:2	149	ng/L			153		104	50-130	1.90	30	
Surr: 13C2-PFDA	150	ng/L			160		100	70-130	1.98	30	
Surr: 13C2-PFDoA	150	ng/L			160		100	70-130	1.51	30	
Surr: 13C2-PFHxA	152	ng/L			160		101	50-130	2.93	30	
Surr: 13C2-PFTeDA	129	ng/L			160		86.1	50-130	16.7	30	
Surr: 13C2-PFUnDA	146	ng/L			160		97.7	70-130	1.76	30	
Surr: 13C3-HFPO-DA	168	ng/L			160		112	50-130	2.71	30	
Surr: 13C3-PFBS	145	ng/L			149		104	50-130	1.90	30	
Surr: 13C4-PFBA	174	ng/L			160		116	50-130	5.31	30	
Surr: 13C4-PFHpA	161	ng/L			160		107	50-130	1.85	30	
Surr: 13C4-PFOA	154	ng/L			160		103	70-130	0.00	30	
Surr: 13C4-PFOS	156	ng/L			153		109	70-130	1.85	30	
Surr: 13C5-PFNA	153	ng/L			160		102	70-130	0.985	30	
Surr: 13C5-PFPeA	151	ng/L			160		101	50-130	0.985	30	
Surr: 13C8-FOSA	161	ng/L			160		108	50-130	8.39	30	
Surr: 18O2-PFHxS	143	ng/L			151		102	70-130	3.85	30	
Surr: d3-N-MeFOSAA	167	ng/L			160		112	50-130	8.37	30	
Surr: d5-N-EtFOSAA	167	ng/L			160		112	50-130	5.50	30	

The following samples were analyzed in this batch: HN2513292-001, HN2513292-002, HN2513292-003, HN2513292-004, HN2513292-005, HN2513292-006, HN2513292-007, HN2513292-008, HN2513292-009



Analytical Laboratory Report

Report ID: S81772.01(01)
Generated on 12/10/2025

Report to
Attention: Angela Paulson
Arcadis US, Inc.
28550 Cabot Drive, Suite 500
Novi, MI 48377

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Report Summary
Lab Sample ID(s): S81772.01-S81772.10
Project: 30282188.01
Collected Date(s): 11/24/2025 - 11/26/2025
Submitted Date/Time: 12/01/2025 08:15
Sampled by: Donald Richmond
P.O. #: 30282188.01

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Maya Murshak
Technical Director



Analytical Laboratory Report

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.

Methods may be modified for improved performance.

Results reported on a dry weight basis where applicable.

'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).

When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.

40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile, and 2-chloroethylvinyl ether need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.

QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.

Starred (*) analytes are not NY NELAP accredited.

Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)

PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."

Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.

Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

All accreditations/certifications held by this laboratory are listed on page 3. Not all accreditations/certifications are applicable to this report.

For a specific list of accredited analytes, please feel free to contact the laboratory or visit <https://www.meritlabs.com/certifications>.

Report Narrative

There is no additional narrative for this analytical report

Laboratory Accreditations (For Reference Only)

Authority	Accreditation ID
Michigan DEQ	#9956
DOD ELAP & ISO/IEC 17025:2017	#69699 PJLA Testing
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
o	Associated EIS outside of control limits
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
q	Qualifier ion ratio outside of control limits
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched



Analytical Laboratory Report

Method Summary

Method	Version
E1631E	EPA Method 1631 Revision E
E608.3	EPA Method 608.3 December 2016
N/A	Not Applicable
SW3015A	SW 846 Method 3015A Revision 1 February 2007
SW3510C	SW 846 Method 3510C Revision 3 December 1996
SW5030C/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5030C Revision 3 May 2003
SW6020A	SW 846 Method 6020A Revision 1 February 2007
SW7471B	SW 846 Method 7471B Revision 2 February 2007
SW8270D	SW 846 Method 8270D Revision 4 February 2007



Analytical Laboratory Report

Sample Summary (10 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S81772.01	MH3-9_112425	Groundwater	11/24/25 11:30
S81772.02	EastP-Trap_112425	Groundwater	11/24/25 13:00
S81772.03	WestP-Trap_112425	Groundwater	11/24/25 14:30
S81772.04	RFI-81-33_112525	Groundwater	11/25/25 12:00
S81772.05	RFI-81-12R_112525	Groundwater	11/25/25 13:40
S81772.06	RFI-86-14_112525	Groundwater	11/25/25 15:00
S81772.07	RFI-12-40_112525	Groundwater	11/25/25 16:10
S81772.08	RFI-23-01R_112625	Groundwater	11/26/25 12:00
S81772.09	FB-01_112425	Water	11/24/25 11:50
S81772.10	EB-01_112425	Water	11/24/25 11:40



Analytical Laboratory Report

Lab Sample ID: S81772.01

Sample Tag: MH3-9_112425

Collected Date/Time: 11/24/2025 11:30

Matrix: Groundwater

COC Reference: 182610

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40mL Glass	HCL	Yes	0.1	IR
4	1L Amber	None	Yes	0.1	IR
2	125mL Plastic	HNO3	Yes	0.1	IR
1	LLHg Kit	None	Yes	0.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	12/02/25 09:15	NDK	
Metal Digestion	Completed	SW3015A	12/10/25 11:00	JRH	
Metal Digestion	Completed	SW3015A	12/10/25 11:00	JRH	
BNA Extraction	Completed	SW3510C	12/01/25 17:00	JWR	
Extraction, PCB*	Completed	E608.3	12/01/25 12:00	JWR	
Mercury Digestion*	Completed	SW7471B	12/01/25 11:14	CTV	
Mercury Digestion*	Completed	SW7471B	12/01/25 11:14	CTV	

Metals

Method: SW6020A, Run Date: 12/10/25 14:58, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	0.003	0.002		mg/L	5	7440-38-2	
Barium	0.102	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Copper	Not detected	0.005		mg/L	5	7440-50-8	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.201	0.005		mg/L	5	7439-96-5	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW6020A, Run Date: 12/10/25 15:01, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony, Dissolved*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic, Dissolved	0.003	0.002		mg/L	5	7440-38-2	
Barium, Dissolved	0.099	0.005		mg/L	5	7440-39-3	
Beryllium, Dissolved	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium, Dissolved	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt, Dissolved	Not detected	0.005		mg/L	5	7440-48-4	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Lead, Dissolved	Not detected	0.003		mg/L	5	7439-92-1	



Analytical Laboratory Report

Lab Sample ID: S81772.01 (continued)

Sample Tag: MH3-9_112425

Method: SW6020A, Run Date: 12/10/25 15:01, Analyst: JRH (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Manganese, Dissolved	0.195	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	
Selenium, Dissolved	Not detected	0.005		mg/L	5	7782-49-2	
Silver, Dissolved	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium, Dissolved	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium, Dissolved	Not detected	0.005		mg/L	5	7440-62-2	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW7471B, Run Date: 12/01/25 14:49, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury*	Not detected	0.0002		mg/L	1	7439-97-6	

Method: SW7471B, Run Date: 12/01/25 14:59, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Dissolved*	Not detected	0.0002		mg/L	1	7439-97-6	

Method: E1631E, Run Date: 12/04/25 17:49, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Low Level*	Completed	0.50		ng/L	1	7439-97-6	O

Organics - PCBs/Pesticides

PCB, Method: E608.3, Run Date: 12/05/25 18:24, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	0.1		ug/L	1	12674-11-2	
PCB-1221	Not detected	0.1		ug/L	1	11104-28-2	
PCB-1232	Not detected	0.1		ug/L	1	11141-16-5	
PCB-1242	Not detected	0.1		ug/L	1	53469-21-9	
PCB-1248	Not detected	0.1		ug/L	1	12672-29-6	
PCB-1254	Not detected	0.1		ug/L	1	11097-69-1	
PCB-1260	Not detected	0.1		ug/L	1	11096-82-5	
PCB, Total*	Not detected	0.1		ug/L	1	1336-36-3	

Organics - Semi-Volatiles

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 12/08/25 19:56, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Benzaldehyde	Not detected	5		ug/L	2	100-52-7	
Acetophenone	Not detected	5		ug/L	2	98-86-2	
Caprolactam	Not detected	10		ug/L	2	105-60-2	
1,1'-Biphenyl	Not detected	5		ug/L	2	92-52-4	
Atrazine*	Not detected	3		ug/L	2	1912-24-9	

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 12/08/25 19:56, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
4-Bromophenyl phenyl ether	Not detected	5		ug/L	2	101-55-3	
di-n-Butyl phthalate	Not detected	5		ug/L	2	84-74-2	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S81772.01 (continued)

Sample Tag: MH3-9_112425

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 12/08/25 19:56, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Benzo(a)pyrene	Not detected	5		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(ghi)perylene	Not detected	5		ug/L	2	191-24-2	
Benzo(k)fluoranthene	Not detected	5		ug/L	2	207-08-9	
Butyl benzyl phthalate	Not detected	5		ug/L	2	85-68-7	
2-Chloronaphthalene	Not detected	5		ug/L	2	91-58-7	
2-Chlorophenol	Not detected	10		ug/L	2	95-57-8	
4-Chloro-3-methylphenol	Not detected	5		ug/L	2	59-50-7	
4-Chloroaniline	Not detected	10		ug/L	2	106-47-8	
4-Chlorophenyl phenyl ether	Not detected	5		ug/L	2	7005-72-3	
bis(2-Chloroethoxy)methane	Not detected	5		ug/L	2	111-91-1	
bis(2-Chloroethyl)ether	Not detected	1		ug/L	2	111-44-4	
Chrysene	Not detected	1		ug/L	2	218-01-9	
2,4-Dichlorophenol	Not detected	10		ug/L	2	120-83-2	
2,4-Dimethylphenol	Not detected	5		ug/L	2	105-67-9	
2,4-Dinitrophenol	Not detected	25		ug/L	2	51-28-5	
2,4-Dinitrotoluene	Not detected	5		ug/L	2	121-14-2	
2,6-Dinitrotoluene	Not detected	5		ug/L	2	606-20-2	
4,6-Dinitro-2-methylphenol	Not detected	25		ug/L	2	534-52-1	
Dibenzo(ah)anthracene	Not detected	5		ug/L	2	53-70-3	
Dibenzofuran	Not detected	4		ug/L	2	132-64-9	
Diethyl phthalate	Not detected	5		ug/L	2	84-66-2	
Dimethyl phthalate	Not detected	5		ug/L	2	131-11-3	
bis(2-Ethylhexyl)phthalate	Not detected	5		ug/L	2	117-81-7	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Hexachlorocyclopentadiene	Not detected	5		ug/L	2	77-47-4	
Hexachloroethane	Not detected	5		ug/L	2	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	5		ug/L	2	193-39-5	
Isophorone	Not detected	5		ug/L	2	78-59-1	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
2-Methylphenol (o-Cresol)	Not detected	10		ug/L	2	95-48-7	
2-Nitroaniline	Not detected	25		ug/L	2	88-74-4	
2-Nitrophenol	Not detected	5		ug/L	2	88-75-5	
3-Nitroaniline	Not detected	25		ug/L	2	99-09-2	
4-Nitroaniline	Not detected	25		ug/L	2	100-01-6	
4-Nitrophenol	Not detected	25		ug/L	2	100-02-7	
N-Nitrosodi-n-propylamine	Not detected	10		ug/L	2	621-64-7	
N-Nitrosodiphenylamine	Not detected	5		ug/L	2	86-30-6	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Nitrobenzene	Not detected	3		ug/L	2	98-95-3	
di-n-Octyl phthalate	Not detected	5		ug/L	2	117-84-0	
2,4,5-Trichlorophenol	Not detected	5		ug/L	2	95-95-4	
2,4,6-Trichlorophenol	Not detected	4		ug/L	2	88-06-2	
3,3'-Dichlorobenzidine	Not detected	10		ug/L	2	91-94-1	
3-, 4-Methylphenol (p,m-Cresol)	Not detected	10		ug/L	2	15831-10-4	
Pentachlorophenol	Not detected	5		ug/L	2	87-86-5	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Phenol	Not detected	5		ug/L	2	108-95-2	
Pyrene	Not detected	5		ug/L	2	129-00-0	

Lab Sample ID: S81772.01 (continued)

Sample Tag: MH3-9_112425

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 12/08/25 19:56, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Hexachlorobenzene	Not detected	5		ug/L	2	118-74-1	
Hexachlorobutadiene	Not detected	5		ug/L	2	87-68-3	
bis(2-Chloroisopropyl)ether*	Not detected	5		ug/L	2	108-60-1	
Carbazole	Not detected	5		ug/L	2	86-74-8	

Organics - Volatiles

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 12/01/25 16:10, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	30		ug/L	1	76-13-1	
Acetone	Not detected	20		ug/L	1	67-64-1	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Methyl Acetate	Not detected	10		ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	20		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1		ug/L	1	75-71-8	
Chloromethane	Not detected	1		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	2		ug/L	1	74-83-9	
Chloroethane	Not detected	1		ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	1	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
Cyclohexane	Not detected	1		ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	20		ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene	Not detected	2		ug/L	1	179601-23-1	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	



Analytical Laboratory Report

Lab Sample ID: S81772.01 (continued)

Sample Tag: MH3-9_112425

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 12/01/25 16:10, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Isopropylbenzene	Not detected	1		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dibromo-3-chloropropane	Not detected	1		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	2		ug/L	1	120-82-1	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Naphthalene	Not detected	1		ug/L	1	91-20-3	
Total Xylenes	Not detected	3		ug/L	1	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S81772.02
Sample Tag: EastP-Trap_112425
Collected Date/Time: 11/24/2025 13:00
Matrix: Groundwater
COC Reference: 182610

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40mL Glass	HCL	Yes	0.1	IR
2	1L Amber	None	Yes	0.1	IR
2	125mL Plastic	HNO3	Yes	0.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	12/02/25 09:15	NDK	
Metal Digestion	Completed	SW3015A	12/10/25 11:00	JRH	
Metal Digestion	Completed	SW3015A	12/10/25 11:00	JRH	
BNA Extraction	Completed	SW3510C	12/01/25 17:00	JWR	
Mercury Digestion*	Completed	SW7471B	12/01/25 11:14	CTV	
Mercury Digestion*	Completed	SW7471B	12/01/25 11:14	CTV	

Metals

Method: SW6020A, Run Date: 12/10/25 15:03, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.066	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Copper	Not detected	0.005		mg/L	5	7440-50-8	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.589	0.005		mg/L	5	7439-96-5	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	0.005	0.005		mg/L	5	7440-66-6	

Method: SW6020A, Run Date: 12/10/25 15:05, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony, Dissolved*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic, Dissolved	Not detected	0.002		mg/L	5	7440-38-2	
Barium, Dissolved	0.067	0.005		mg/L	5	7440-39-3	
Beryllium, Dissolved	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium, Dissolved	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt, Dissolved	Not detected	0.005		mg/L	5	7440-48-4	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Lead, Dissolved	Not detected	0.003		mg/L	5	7439-92-1	
Manganese, Dissolved	0.565	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	



Analytical Laboratory Report

Lab Sample ID: S81772.02 (continued)

Sample Tag: EastP-Trap_112425

Method: SW6020A, Run Date: 12/10/25 15:05, Analyst: JRH (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium, Dissolved	Not detected	0.005		mg/L	5	7782-49-2	
Silver, Dissolved	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium, Dissolved	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium, Dissolved	Not detected	0.005		mg/L	5	7440-62-2	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW7471B, Run Date: 12/01/25 15:02, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury*	Not detected	0.0002		mg/L	1	7439-97-6	

Method: SW7471B, Run Date: 12/01/25 15:05, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Dissolved*	Not detected	0.0002		mg/L	1	7439-97-6	

Organics - Semi-Volatiles

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 12/08/25 20:26, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Benzaldehyde	Not detected	5		ug/L	2	100-52-7	
Acetophenone	Not detected	5		ug/L	2	98-86-2	
Caprolactam	Not detected	10		ug/L	2	105-60-2	
1,1'-Biphenyl	Not detected	5		ug/L	2	92-52-4	
Atrazine*	Not detected	3		ug/L	2	1912-24-9	

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 12/08/25 20:26, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
4-Bromophenyl phenyl ether	Not detected	5		ug/L	2	101-55-3	
di-n-Butyl phthalate	Not detected	5		ug/L	2	84-74-2	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	5		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(ghi)perylene	Not detected	5		ug/L	2	191-24-2	
Benzo(k)fluoranthene	Not detected	5		ug/L	2	207-08-9	
Butyl benzyl phthalate	Not detected	5		ug/L	2	85-68-7	
2-Chloronaphthalene	Not detected	5		ug/L	2	91-58-7	
2-Chlorophenol	Not detected	10		ug/L	2	95-57-8	
4-Chloro-3-methylphenol	Not detected	5		ug/L	2	59-50-7	
4-Chloroaniline	Not detected	10		ug/L	2	106-47-8	
4-Chlorophenyl phenyl ether	Not detected	5		ug/L	2	7005-72-3	
bis(2-Chloroethoxy)methane	Not detected	5		ug/L	2	111-91-1	
bis(2-Chloroethyl)ether	Not detected	1		ug/L	2	111-44-4	
Chrysene	Not detected	1		ug/L	2	218-01-9	
2,4-Dichlorophenol	Not detected	10		ug/L	2	120-83-2	
2,4-Dimethylphenol	Not detected	5		ug/L	2	105-67-9	
2,4-Dinitrophenol	Not detected	25		ug/L	2	51-28-5	
2,4-Dinitrotoluene	Not detected	5		ug/L	2	121-14-2	
2,6-Dinitrotoluene	Not detected	5		ug/L	2	606-20-2	
4,6-Dinitro-2-methylphenol	Not detected	25		ug/L	2	534-52-1	



Analytical Laboratory Report

Lab Sample ID: S81772.02 (continued)

Sample Tag: EastP-Trap_112425

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 12/08/25 20:26, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibenzo(ah)anthracene	Not detected	5		ug/L	2	53-70-3	
Dibenzofuran	Not detected	4		ug/L	2	132-64-9	
Diethyl phthalate	Not detected	5		ug/L	2	84-66-2	
Dimethyl phthalate	Not detected	5		ug/L	2	131-11-3	
bis(2-Ethylhexyl)phthalate	Not detected	5		ug/L	2	117-81-7	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Hexachlorocyclopentadiene	Not detected	5		ug/L	2	77-47-4	
Hexachloroethane	Not detected	5		ug/L	2	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	5		ug/L	2	193-39-5	
Isophorone	Not detected	5		ug/L	2	78-59-1	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
2-Methylphenol (o-Cresol)	Not detected	10		ug/L	2	95-48-7	
2-Nitroaniline	Not detected	25		ug/L	2	88-74-4	
2-Nitrophenol	Not detected	5		ug/L	2	88-75-5	
3-Nitroaniline	Not detected	25		ug/L	2	99-09-2	
4-Nitroaniline	Not detected	25		ug/L	2	100-01-6	
4-Nitrophenol	Not detected	25		ug/L	2	100-02-7	
N-Nitrosodi-n-propylamine	Not detected	10		ug/L	2	621-64-7	
N-Nitrosodiphenylamine	Not detected	5		ug/L	2	86-30-6	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Nitrobenzene	Not detected	3		ug/L	2	98-95-3	
di-n-Octyl phthalate	Not detected	5		ug/L	2	117-84-0	
2,4,5-Trichlorophenol	Not detected	5		ug/L	2	95-95-4	
2,4,6-Trichlorophenol	Not detected	4		ug/L	2	88-06-2	
3,3'-Dichlorobenzidine	Not detected	10		ug/L	2	91-94-1	
3-, 4-Methylphenol (p,m-Cresol)	Not detected	10		ug/L	2	15831-10-4	
Pentachlorophenol	Not detected	5		ug/L	2	87-86-5	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Phenol	Not detected	5		ug/L	2	108-95-2	
Pyrene	Not detected	5		ug/L	2	129-00-0	
Hexachlorobenzene	Not detected	5		ug/L	2	118-74-1	
Hexachlorobutadiene	Not detected	5		ug/L	2	87-68-3	
bis(2-Chloroisopropyl)ether*	Not detected	5		ug/L	2	108-60-1	
Carbazole	Not detected	5		ug/L	2	86-74-8	

Organics - Volatiles

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 12/02/25 02:30, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	30		ug/L	1	76-13-1	
Acetone	Not detected	20		ug/L	1	67-64-1	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Methyl Acetate	Not detected	10		ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	20		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1		ug/L	1	75-71-8	
Chloromethane	Not detected	1		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	2		ug/L	1	74-83-9	
Chloroethane	Not detected	1		ug/L	1	75-00-3	



Analytical Laboratory Report

Lab Sample ID: S81772.02 (continued)

Sample Tag: EastP-Trap_112425

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 12/02/25 02:30, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	12	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
Cyclohexane	Not detected	1		ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	9	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	20		ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene	Not detected	2		ug/L	1	179601-23-1	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dibromo-3-chloropropane	Not detected	1		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	2		ug/L	1	120-82-1	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Naphthalene	Not detected	1		ug/L	1	91-20-3	
Total Xylenes	Not detected	3		ug/L	1	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S81772.03

Sample Tag: WestP-Trap_112425

Collected Date/Time: 11/24/2025 14:30

Matrix: Groundwater

COC Reference: 182610

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40mL Glass	HCL	Yes	0.1	IR
2	1L Amber	None	Yes	0.1	IR
2	125mL Plastic	HNO3	Yes	0.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	12/02/25 09:15	NDK	
Metal Digestion	Completed	SW3015A	12/10/25 11:00	JRH	
Metal Digestion	Completed	SW3015A	12/10/25 11:00	JRH	
BNA Extraction	Completed	SW3510C	12/01/25 17:00	JWR	
Mercury Digestion*	Completed	SW7471B	12/01/25 11:14	CTV	
Mercury Digestion*	Completed	SW7471B	12/01/25 11:14	CTV	

Metals

Method: SW6020A, Run Date: 12/10/25 15:08, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	0.004	0.002		mg/L	5	7440-38-2	
Barium	0.076	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Copper	Not detected	0.005		mg/L	5	7440-50-8	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.541	0.005		mg/L	5	7439-96-5	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW6020A, Run Date: 12/10/25 15:10, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony, Dissolved*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic, Dissolved	Not detected	0.002		mg/L	5	7440-38-2	
Barium, Dissolved	0.073	0.005		mg/L	5	7440-39-3	
Beryllium, Dissolved	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium, Dissolved	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt, Dissolved	Not detected	0.005		mg/L	5	7440-48-4	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Lead, Dissolved	Not detected	0.003		mg/L	5	7439-92-1	
Manganese, Dissolved	0.546	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	



Analytical Laboratory Report

Lab Sample ID: S81772.03 (continued)

Sample Tag: WestP-Trap_112425

Method: SW6020A, Run Date: 12/10/25 15:10, Analyst: JRH (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium, Dissolved	Not detected	0.005		mg/L	5	7782-49-2	
Silver, Dissolved	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium, Dissolved	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium, Dissolved	Not detected	0.005		mg/L	5	7440-62-2	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW7471B, Run Date: 12/01/25 15:09, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury*	Not detected	0.0002		mg/L	1	7439-97-6	

Method: SW7471B, Run Date: 12/01/25 15:12, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Dissolved*	Not detected	0.0002		mg/L	1	7439-97-6	

Organics - Semi-Volatiles

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 12/08/25 20:57, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Benzaldehyde	Not detected	5		ug/L	2	100-52-7	
Acetophenone	Not detected	5		ug/L	2	98-86-2	
Caprolactam	Not detected	10		ug/L	2	105-60-2	
1,1'-Biphenyl	Not detected	5		ug/L	2	92-52-4	
Atrazine*	Not detected	3		ug/L	2	1912-24-9	

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 12/08/25 20:57, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
4-Bromophenyl phenyl ether	Not detected	5		ug/L	2	101-55-3	
di-n-Butyl phthalate	Not detected	5		ug/L	2	84-74-2	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	5		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(ghi)perylene	Not detected	5		ug/L	2	191-24-2	
Benzo(k)fluoranthene	Not detected	5		ug/L	2	207-08-9	
Butyl benzyl phthalate	Not detected	5		ug/L	2	85-68-7	
2-Chloronaphthalene	Not detected	5		ug/L	2	91-58-7	
2-Chlorophenol	Not detected	10		ug/L	2	95-57-8	
4-Chloro-3-methylphenol	Not detected	5		ug/L	2	59-50-7	
4-Chloroaniline	Not detected	10		ug/L	2	106-47-8	
4-Chlorophenyl phenyl ether	Not detected	5		ug/L	2	7005-72-3	
bis(2-Chloroethoxy)methane	Not detected	5		ug/L	2	111-91-1	
bis(2-Chloroethyl)ether	Not detected	1		ug/L	2	111-44-4	
Chrysene	Not detected	1		ug/L	2	218-01-9	
2,4-Dichlorophenol	Not detected	10		ug/L	2	120-83-2	
2,4-Dimethylphenol	Not detected	5		ug/L	2	105-67-9	
2,4-Dinitrophenol	Not detected	25		ug/L	2	51-28-5	
2,4-Dinitrotoluene	Not detected	5		ug/L	2	121-14-2	
2,6-Dinitrotoluene	Not detected	5		ug/L	2	606-20-2	
4,6-Dinitro-2-methylphenol	Not detected	25		ug/L	2	534-52-1	



Analytical Laboratory Report

Lab Sample ID: S81772.03 (continued)

Sample Tag: WestP-Trap_112425

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 12/08/25 20:57, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibenzo(ah)anthracene	Not detected	5		ug/L	2	53-70-3	
Dibenzofuran	Not detected	4		ug/L	2	132-64-9	
Diethyl phthalate	Not detected	5		ug/L	2	84-66-2	
Dimethyl phthalate	Not detected	5		ug/L	2	131-11-3	
bis(2-Ethylhexyl)phthalate	Not detected	5		ug/L	2	117-81-7	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Hexachlorocyclopentadiene	Not detected	5		ug/L	2	77-47-4	
Hexachloroethane	Not detected	5		ug/L	2	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	5		ug/L	2	193-39-5	
Isophorone	Not detected	5		ug/L	2	78-59-1	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
2-Methylphenol (o-Cresol)	Not detected	10		ug/L	2	95-48-7	
2-Nitroaniline	Not detected	25		ug/L	2	88-74-4	
2-Nitrophenol	Not detected	5		ug/L	2	88-75-5	
3-Nitroaniline	Not detected	25		ug/L	2	99-09-2	
4-Nitroaniline	Not detected	25		ug/L	2	100-01-6	
4-Nitrophenol	Not detected	25		ug/L	2	100-02-7	
N-Nitrosodi-n-propylamine	Not detected	10		ug/L	2	621-64-7	
N-Nitrosodiphenylamine	Not detected	5		ug/L	2	86-30-6	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Nitrobenzene	Not detected	3		ug/L	2	98-95-3	
di-n-Octyl phthalate	Not detected	5		ug/L	2	117-84-0	
2,4,5-Trichlorophenol	Not detected	5		ug/L	2	95-95-4	
2,4,6-Trichlorophenol	Not detected	4		ug/L	2	88-06-2	
3,3'-Dichlorobenzidine	Not detected	10		ug/L	2	91-94-1	
3-, 4-Methylphenol (p,m-Cresol)	Not detected	10		ug/L	2	15831-10-4	
Pentachlorophenol	Not detected	5		ug/L	2	87-86-5	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Phenol	Not detected	5		ug/L	2	108-95-2	
Pyrene	Not detected	5		ug/L	2	129-00-0	
Hexachlorobenzene	Not detected	5		ug/L	2	118-74-1	
Hexachlorobutadiene	Not detected	5		ug/L	2	87-68-3	
bis(2-Chloroisopropyl)ether*	Not detected	5		ug/L	2	108-60-1	
Carbazole	Not detected	5		ug/L	2	86-74-8	

Organics - Volatiles

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 12/02/25 02:53, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	30		ug/L	1	76-13-1	
Acetone	Not detected	20		ug/L	1	67-64-1	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Methyl Acetate	Not detected	10		ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	20		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1		ug/L	1	75-71-8	
Chloromethane	Not detected	1		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	2		ug/L	1	74-83-9	
Chloroethane	Not detected	1		ug/L	1	75-00-3	



Analytical Laboratory Report

Lab Sample ID: S81772.03 (continued)

Sample Tag: WestP-Trap_112425

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 12/02/25 02:53, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	7	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
Cyclohexane	Not detected	1		ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	2	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	20		ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene	Not detected	2		ug/L	1	179601-23-1	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dibromo-3-chloropropane	Not detected	1		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	2		ug/L	1	120-82-1	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Naphthalene	Not detected	1		ug/L	1	91-20-3	
Total Xylenes	Not detected	3		ug/L	1	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S81772.04

Sample Tag: RFI-81-33_112525

Collected Date/Time: 11/25/2025 12:00

Matrix: Groundwater

COC Reference: 182610

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40mL Glass	HCL	Yes	0.1	IR
2	1L Amber	None	Yes	0.1	IR
2	125mL Plastic	HNO3	Yes	0.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	12/02/25 09:15	NDK	
Metal Digestion	Completed	SW3015A	12/10/25 11:00	JRH	
Metal Digestion	Completed	SW3015A	12/10/25 11:00	JRH	
BNA Extraction	Completed	SW3510C	12/01/25 17:00	JWR	
Mercury Digestion*	Completed	SW7471B	12/01/25 11:14	CTV	
Mercury Digestion*	Completed	SW7471B	12/01/25 11:14	CTV	

Metals

Method: SW6020A, Run Date: 12/10/25 15:12, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	0.002	0.002		mg/L	5	7440-38-2	
Barium	0.154	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Copper	Not detected	0.005		mg/L	5	7440-50-8	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	1.25	0.005		mg/L	5	7439-96-5	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW6020A, Run Date: 12/10/25 15:15, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony, Dissolved*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic, Dissolved	0.002	0.002		mg/L	5	7440-38-2	
Barium, Dissolved	0.157	0.005		mg/L	5	7440-39-3	
Beryllium, Dissolved	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium, Dissolved	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt, Dissolved	Not detected	0.005		mg/L	5	7440-48-4	
Copper, Dissolved	0.011	0.005		mg/L	5	7440-50-8	
Lead, Dissolved	Not detected	0.003		mg/L	5	7439-92-1	
Manganese, Dissolved	1.26	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	0.010	0.005		mg/L	5	7440-02-0	



Analytical Laboratory Report

Lab Sample ID: S81772.04 (continued)

Sample Tag: RFI-81-33_112525

Method: SW6020A, Run Date: 12/10/25 15:15, Analyst: JRH (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium, Dissolved	Not detected	0.005		mg/L	5	7782-49-2	
Silver, Dissolved	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium, Dissolved	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium, Dissolved	Not detected	0.005		mg/L	5	7440-62-2	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW7471B, Run Date: 12/01/25 15:15, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury*	Not detected	0.0002		mg/L	1	7439-97-6	

Method: SW7471B, Run Date: 12/01/25 15:18, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Dissolved*	Not detected	0.0002		mg/L	1	7439-97-6	

Organics - Semi-Volatiles

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 12/08/25 21:28, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Benzaldehyde	Not detected	5		ug/L	2	100-52-7	
Acetophenone	Not detected	5		ug/L	2	98-86-2	
Caprolactam	Not detected	10		ug/L	2	105-60-2	
1,1'-Biphenyl	Not detected	5		ug/L	2	92-52-4	
Atrazine*	Not detected	3		ug/L	2	1912-24-9	

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 12/08/25 21:28, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
4-Bromophenyl phenyl ether	Not detected	5		ug/L	2	101-55-3	
di-n-Butyl phthalate	Not detected	5		ug/L	2	84-74-2	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	5		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(ghi)perylene	Not detected	5		ug/L	2	191-24-2	
Benzo(k)fluoranthene	Not detected	5		ug/L	2	207-08-9	
Butyl benzyl phthalate	Not detected	5		ug/L	2	85-68-7	
2-Chloronaphthalene	Not detected	5		ug/L	2	91-58-7	
2-Chlorophenol	Not detected	10		ug/L	2	95-57-8	
4-Chloro-3-methylphenol	Not detected	5		ug/L	2	59-50-7	
4-Chloroaniline	Not detected	10		ug/L	2	106-47-8	
4-Chlorophenyl phenyl ether	Not detected	5		ug/L	2	7005-72-3	
bis(2-Chloroethoxy)methane	Not detected	5		ug/L	2	111-91-1	
bis(2-Chloroethyl)ether	Not detected	1		ug/L	2	111-44-4	
Chrysene	Not detected	1		ug/L	2	218-01-9	
2,4-Dichlorophenol	Not detected	10		ug/L	2	120-83-2	
2,4-Dimethylphenol	Not detected	5		ug/L	2	105-67-9	
2,4-Dinitrophenol	Not detected	25		ug/L	2	51-28-5	
2,4-Dinitrotoluene	Not detected	5		ug/L	2	121-14-2	
2,6-Dinitrotoluene	Not detected	5		ug/L	2	606-20-2	
4,6-Dinitro-2-methylphenol	Not detected	25		ug/L	2	534-52-1	



Analytical Laboratory Report

Lab Sample ID: S81772.04 (continued)

Sample Tag: RFI-81-33_112525

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 12/08/25 21:28, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibenzo(ah)anthracene	Not detected	5		ug/L	2	53-70-3	
Dibenzofuran	Not detected	4		ug/L	2	132-64-9	
Diethyl phthalate	Not detected	5		ug/L	2	84-66-2	
Dimethyl phthalate	Not detected	5		ug/L	2	131-11-3	
bis(2-Ethylhexyl)phthalate	Not detected	5		ug/L	2	117-81-7	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Hexachlorocyclopentadiene	Not detected	5		ug/L	2	77-47-4	
Hexachloroethane	Not detected	5		ug/L	2	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	5		ug/L	2	193-39-5	
Isophorone	Not detected	5		ug/L	2	78-59-1	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
2-Methylphenol (o-Cresol)	Not detected	10		ug/L	2	95-48-7	
2-Nitroaniline	Not detected	25		ug/L	2	88-74-4	
2-Nitrophenol	Not detected	5		ug/L	2	88-75-5	
3-Nitroaniline	Not detected	25		ug/L	2	99-09-2	
4-Nitroaniline	Not detected	25		ug/L	2	100-01-6	
4-Nitrophenol	Not detected	25		ug/L	2	100-02-7	
N-Nitrosodi-n-propylamine	Not detected	10		ug/L	2	621-64-7	
N-Nitrosodiphenylamine	Not detected	5		ug/L	2	86-30-6	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Nitrobenzene	Not detected	3		ug/L	2	98-95-3	
di-n-Octyl phthalate	Not detected	5		ug/L	2	117-84-0	
2,4,5-Trichlorophenol	Not detected	5		ug/L	2	95-95-4	
2,4,6-Trichlorophenol	Not detected	4		ug/L	2	88-06-2	
3,3'-Dichlorobenzidine	Not detected	10		ug/L	2	91-94-1	
3-, 4-Methylphenol (p,m-Cresol)	Not detected	10		ug/L	2	15831-10-4	
Pentachlorophenol	Not detected	5		ug/L	2	87-86-5	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Phenol	Not detected	5		ug/L	2	108-95-2	
Pyrene	Not detected	5		ug/L	2	129-00-0	
Hexachlorobenzene	Not detected	5		ug/L	2	118-74-1	
Hexachlorobutadiene	Not detected	5		ug/L	2	87-68-3	
bis(2-Chloroisopropyl)ether*	Not detected	5		ug/L	2	108-60-1	
Carbazole	Not detected	5		ug/L	2	86-74-8	

Organics - Volatiles

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 12/02/25 03:17, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	30		ug/L	1	76-13-1	
Acetone	Not detected	20		ug/L	1	67-64-1	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Methyl Acetate	Not detected	10		ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	20		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1		ug/L	1	75-71-8	
Chloromethane	Not detected	1		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	2		ug/L	1	74-83-9	
Chloroethane	Not detected	1		ug/L	1	75-00-3	



Analytical Laboratory Report

Lab Sample ID: S81772.04 (continued)

Sample Tag: RFI-81-33_112525

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 12/02/25 03:17, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
Cyclohexane	Not detected	1		ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	20		ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene	Not detected	2		ug/L	1	179601-23-1	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dibromo-3-chloropropane	Not detected	1		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	2		ug/L	1	120-82-1	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Naphthalene	Not detected	1		ug/L	1	91-20-3	
Total Xylenes	Not detected	3		ug/L	1	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S81772.05

Sample Tag: RFI-81-12R_112525

Collected Date/Time: 11/25/2025 13:40

Matrix: Groundwater

COC Reference: 182610

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40mL Glass	HCL	Yes	0.1	IR
2	1L Amber	None	Yes	0.1	IR
2	125mL Plastic	HNO3	Yes	0.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	12/02/25 09:15	NDK	
Metal Digestion	Completed	SW3015A	12/10/25 11:00	JRH	
Metal Digestion	Completed	SW3015A	12/10/25 11:00	JRH	
BNA Extraction	Completed	SW3510C	12/01/25 17:00	JWR	
Mercury Digestion*	Completed	SW7471B	12/01/25 11:14	CTV	
Mercury Digestion*	Completed	SW7471B	12/01/25 11:14	CTV	

Metals

Method: SW6020A, Run Date: 12/10/25 15:27, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.127	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Copper	Not detected	0.005		mg/L	5	7440-50-8	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.014	0.005		mg/L	5	7439-96-5	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	0.010	0.005		mg/L	5	7440-66-6	

Method: SW6020A, Run Date: 12/10/25 15:29, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony, Dissolved*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic, Dissolved	Not detected	0.002		mg/L	5	7440-38-2	
Barium, Dissolved	0.129	0.005		mg/L	5	7440-39-3	
Beryllium, Dissolved	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium, Dissolved	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt, Dissolved	Not detected	0.005		mg/L	5	7440-48-4	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Lead, Dissolved	Not detected	0.003		mg/L	5	7439-92-1	
Manganese, Dissolved	0.009	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	



Analytical Laboratory Report

Lab Sample ID: S81772.05 (continued)

Sample Tag: RFI-81-12R_112525

Method: SW6020A, Run Date: 12/10/25 15:29, Analyst: JRH (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium, Dissolved	0.006	0.005		mg/L	5	7782-49-2	
Silver, Dissolved	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium, Dissolved	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium, Dissolved	Not detected	0.005		mg/L	5	7440-62-2	
Zinc, Dissolved	0.007	0.005		mg/L	5	7440-66-6	

Method: SW7471B, Run Date: 12/01/25 15:22, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury*	Not detected	0.0002		mg/L	1	7439-97-6	

Method: SW7471B, Run Date: 12/01/25 15:25, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Dissolved*	Not detected	0.0002		mg/L	1	7439-97-6	

Organics - Semi-Volatiles

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 12/08/25 21:59, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Benzaldehyde	Not detected	5		ug/L	2	100-52-7	
Acetophenone	Not detected	5		ug/L	2	98-86-2	
Caprolactam	Not detected	10		ug/L	2	105-60-2	
1,1'-Biphenyl	Not detected	5		ug/L	2	92-52-4	
Atrazine*	Not detected	3		ug/L	2	1912-24-9	

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 12/08/25 21:59, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
4-Bromophenyl phenyl ether	Not detected	5		ug/L	2	101-55-3	
di-n-Butyl phthalate	Not detected	5		ug/L	2	84-74-2	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	5		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(ghi)perylene	Not detected	5		ug/L	2	191-24-2	
Benzo(k)fluoranthene	Not detected	5		ug/L	2	207-08-9	
Butyl benzyl phthalate	Not detected	5		ug/L	2	85-68-7	
2-Chloronaphthalene	Not detected	5		ug/L	2	91-58-7	
2-Chlorophenol	Not detected	10		ug/L	2	95-57-8	
4-Chloro-3-methylphenol	Not detected	5		ug/L	2	59-50-7	
4-Chloroaniline	Not detected	10		ug/L	2	106-47-8	
4-Chlorophenyl phenyl ether	Not detected	5		ug/L	2	7005-72-3	
bis(2-Chloroethoxy)methane	Not detected	5		ug/L	2	111-91-1	
bis(2-Chloroethyl)ether	Not detected	1		ug/L	2	111-44-4	
Chrysene	Not detected	1		ug/L	2	218-01-9	
2,4-Dichlorophenol	Not detected	10		ug/L	2	120-83-2	
2,4-Dimethylphenol	Not detected	5		ug/L	2	105-67-9	
2,4-Dinitrophenol	Not detected	25		ug/L	2	51-28-5	
2,4-Dinitrotoluene	Not detected	5		ug/L	2	121-14-2	
2,6-Dinitrotoluene	Not detected	5		ug/L	2	606-20-2	
4,6-Dinitro-2-methylphenol	Not detected	25		ug/L	2	534-52-1	



Analytical Laboratory Report

Lab Sample ID: S81772.05 (continued)

Sample Tag: RFI-81-12R_112525

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 12/08/25 21:59, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibenzo(ah)anthracene	Not detected	5		ug/L	2	53-70-3	
Dibenzofuran	Not detected	4		ug/L	2	132-64-9	
Diethyl phthalate	Not detected	5		ug/L	2	84-66-2	
Dimethyl phthalate	Not detected	5		ug/L	2	131-11-3	
bis(2-Ethylhexyl)phthalate	Not detected	5		ug/L	2	117-81-7	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Hexachlorocyclopentadiene	Not detected	5		ug/L	2	77-47-4	
Hexachloroethane	Not detected	5		ug/L	2	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	5		ug/L	2	193-39-5	
Isophorone	Not detected	5		ug/L	2	78-59-1	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
2-Methylphenol (o-Cresol)	Not detected	10		ug/L	2	95-48-7	
2-Nitroaniline	Not detected	25		ug/L	2	88-74-4	
2-Nitrophenol	Not detected	5		ug/L	2	88-75-5	
3-Nitroaniline	Not detected	25		ug/L	2	99-09-2	
4-Nitroaniline	Not detected	25		ug/L	2	100-01-6	
4-Nitrophenol	Not detected	25		ug/L	2	100-02-7	
N-Nitrosodi-n-propylamine	Not detected	10		ug/L	2	621-64-7	
N-Nitrosodiphenylamine	Not detected	5		ug/L	2	86-30-6	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Nitrobenzene	Not detected	3		ug/L	2	98-95-3	
di-n-Octyl phthalate	Not detected	5		ug/L	2	117-84-0	
2,4,5-Trichlorophenol	Not detected	5		ug/L	2	95-95-4	
2,4,6-Trichlorophenol	Not detected	4		ug/L	2	88-06-2	
3,3'-Dichlorobenzidine	Not detected	10		ug/L	2	91-94-1	
3-, 4-Methylphenol (p,m-Cresol)	Not detected	10		ug/L	2	15831-10-4	
Pentachlorophenol	Not detected	5		ug/L	2	87-86-5	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Phenol	Not detected	5		ug/L	2	108-95-2	
Pyrene	Not detected	5		ug/L	2	129-00-0	
Hexachlorobenzene	Not detected	5		ug/L	2	118-74-1	
Hexachlorobutadiene	Not detected	5		ug/L	2	87-68-3	
bis(2-Chloroisopropyl)ether*	Not detected	5		ug/L	2	108-60-1	
Carbazole	Not detected	5		ug/L	2	86-74-8	

Organics - Volatiles

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 12/02/25 03:41, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	30		ug/L	1	76-13-1	
Acetone	Not detected	20		ug/L	1	67-64-1	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Methyl Acetate	Not detected	10		ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	20		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1		ug/L	1	75-71-8	
Chloromethane	Not detected	1		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	2		ug/L	1	74-83-9	
Chloroethane	Not detected	1		ug/L	1	75-00-3	



Analytical Laboratory Report

Lab Sample ID: S81772.05 (continued)

Sample Tag: RFI-81-12R_112525

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 12/02/25 03:41, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
Cyclohexane	Not detected	1		ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	20		ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene	Not detected	2		ug/L	1	179601-23-1	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dibromo-3-chloropropane	Not detected	1		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	2		ug/L	1	120-82-1	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Naphthalene	Not detected	1		ug/L	1	91-20-3	
Total Xylenes	Not detected	3		ug/L	1	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S81772.06
Sample Tag: RFI-86-14_112525
Collected Date/Time: 11/25/2025 15:00
Matrix: Groundwater
COC Reference: 182610

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	125mL Plastic	HNO3	Yes	0.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Metal Digestion	Completed	SW3015A	12/10/25 11:00	JRH	
Metal Digestion	Completed	SW3015A	12/10/25 11:00	JRH	

Metals

Method: SW6020A, Run Date: 12/10/25 15:32, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Manganese	0.416	0.005		mg/L	5	7439-96-5	

Method: SW6020A, Run Date: 12/10/25 15:34, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Manganese, Dissolved	0.428	0.005		mg/L	5	7439-96-5	



Analytical Laboratory Report

Lab Sample ID: S81772.07
Sample Tag: RFI-12-40_112525
Collected Date/Time: 11/25/2025 16:10
Matrix: Groundwater
COC Reference: 182610

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40mL Glass	HCL	Yes	0.1	IR
2	1L Amber	None	Yes	0.1	IR
2	125mL Plastic	HNO3	Yes	0.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	12/02/25 09:15	NDK	
Metal Digestion	Completed	SW3015A	12/10/25 11:00	JRH	
Metal Digestion	Completed	SW3015A	12/10/25 11:00	JRH	
BNA Extraction	Completed	SW3510C	12/01/25 17:00	JWR	
Mercury Digestion*	Completed	SW7471B	12/03/25 12:47	CTV	
Mercury Digestion*	Completed	SW7471B	12/03/25 12:47	CTV	

Metals

Method: SW6020A, Run Date: 12/10/25 15:37, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.045	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Copper	Not detected	0.005		mg/L	5	7440-50-8	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.244	0.005		mg/L	5	7439-96-5	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW6020A, Run Date: 12/10/25 15:39, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony, Dissolved*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic, Dissolved	Not detected	0.002		mg/L	5	7440-38-2	
Barium, Dissolved	0.041	0.005		mg/L	5	7440-39-3	
Beryllium, Dissolved	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium, Dissolved	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt, Dissolved	Not detected	0.005		mg/L	5	7440-48-4	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Lead, Dissolved	Not detected	0.003		mg/L	5	7439-92-1	
Manganese, Dissolved	0.261	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	



Analytical Laboratory Report

Lab Sample ID: S81772.07 (continued)

Sample Tag: RFI-12-40_112525

Method: SW6020A, Run Date: 12/10/25 15:39, Analyst: JRH (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium, Dissolved	Not detected	0.005		mg/L	5	7782-49-2	
Silver, Dissolved	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium, Dissolved	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium, Dissolved	Not detected	0.005		mg/L	5	7440-62-2	
Zinc, Dissolved	0.006	0.005		mg/L	5	7440-66-6	

Method: SW7471B, Run Date: 12/03/25 17:22, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury*	Not detected	0.0002		mg/L	1	7439-97-6	

Method: SW7471B, Run Date: 12/03/25 17:32, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Dissolved*	Not detected	0.0002		mg/L	1	7439-97-6	

Organics - Semi-Volatiles

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 12/08/25 22:30, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Benzaldehyde	Not detected	5		ug/L	2	100-52-7	
Acetophenone	Not detected	5		ug/L	2	98-86-2	
Caprolactam	Not detected	10		ug/L	2	105-60-2	
1,1'-Biphenyl	Not detected	5		ug/L	2	92-52-4	
Atrazine*	Not detected	3		ug/L	2	1912-24-9	

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 12/08/25 22:30, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
4-Bromophenyl phenyl ether	Not detected	5		ug/L	2	101-55-3	
di-n-Butyl phthalate	Not detected	5		ug/L	2	84-74-2	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	5		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(ghi)perylene	Not detected	5		ug/L	2	191-24-2	
Benzo(k)fluoranthene	Not detected	5		ug/L	2	207-08-9	
Butyl benzyl phthalate	Not detected	5		ug/L	2	85-68-7	
2-Chloronaphthalene	Not detected	5		ug/L	2	91-58-7	
2-Chlorophenol	Not detected	10		ug/L	2	95-57-8	
4-Chloro-3-methylphenol	Not detected	5		ug/L	2	59-50-7	
4-Chloroaniline	Not detected	10		ug/L	2	106-47-8	
4-Chlorophenyl phenyl ether	Not detected	5		ug/L	2	7005-72-3	
bis(2-Chloroethoxy)methane	Not detected	5		ug/L	2	111-91-1	
bis(2-Chloroethyl)ether	Not detected	1		ug/L	2	111-44-4	
Chrysene	Not detected	1		ug/L	2	218-01-9	
2,4-Dichlorophenol	Not detected	10		ug/L	2	120-83-2	
2,4-Dimethylphenol	Not detected	5		ug/L	2	105-67-9	
2,4-Dinitrophenol	Not detected	25		ug/L	2	51-28-5	
2,4-Dinitrotoluene	Not detected	5		ug/L	2	121-14-2	
2,6-Dinitrotoluene	Not detected	5		ug/L	2	606-20-2	
4,6-Dinitro-2-methylphenol	Not detected	25		ug/L	2	534-52-1	



Analytical Laboratory Report

Lab Sample ID: S81772.07 (continued)

Sample Tag: RFI-12-40_112525

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 12/08/25 22:30, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibenzo(ah)anthracene	Not detected	5		ug/L	2	53-70-3	
Dibenzofuran	Not detected	4		ug/L	2	132-64-9	
Diethyl phthalate	Not detected	5		ug/L	2	84-66-2	
Dimethyl phthalate	Not detected	5		ug/L	2	131-11-3	
bis(2-Ethylhexyl)phthalate	Not detected	5		ug/L	2	117-81-7	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Hexachlorocyclopentadiene	Not detected	5		ug/L	2	77-47-4	
Hexachloroethane	Not detected	5		ug/L	2	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	5		ug/L	2	193-39-5	
Isophorone	Not detected	5		ug/L	2	78-59-1	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
2-Methylphenol (o-Cresol)	Not detected	10		ug/L	2	95-48-7	
2-Nitroaniline	Not detected	25		ug/L	2	88-74-4	
2-Nitrophenol	Not detected	5		ug/L	2	88-75-5	
3-Nitroaniline	Not detected	25		ug/L	2	99-09-2	
4-Nitroaniline	Not detected	25		ug/L	2	100-01-6	
4-Nitrophenol	Not detected	25		ug/L	2	100-02-7	
N-Nitrosodi-n-propylamine	Not detected	10		ug/L	2	621-64-7	
N-Nitrosodiphenylamine	Not detected	5		ug/L	2	86-30-6	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Nitrobenzene	Not detected	3		ug/L	2	98-95-3	
di-n-Octyl phthalate	Not detected	5		ug/L	2	117-84-0	
2,4,5-Trichlorophenol	Not detected	5		ug/L	2	95-95-4	
2,4,6-Trichlorophenol	Not detected	4		ug/L	2	88-06-2	
3,3'-Dichlorobenzidine	Not detected	10		ug/L	2	91-94-1	
3-, 4-Methylphenol (p,m-Cresol)	Not detected	10		ug/L	2	15831-10-4	
Pentachlorophenol	Not detected	5		ug/L	2	87-86-5	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Phenol	Not detected	5		ug/L	2	108-95-2	
Pyrene	Not detected	5		ug/L	2	129-00-0	
Hexachlorobenzene	Not detected	5		ug/L	2	118-74-1	
Hexachlorobutadiene	Not detected	5		ug/L	2	87-68-3	
bis(2-Chloroisopropyl)ether*	Not detected	5		ug/L	2	108-60-1	
Carbazole	Not detected	5		ug/L	2	86-74-8	

Organics - Volatiles

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 12/02/25 04:05, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	30		ug/L	1	76-13-1	
Acetone	Not detected	20		ug/L	1	67-64-1	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Methyl Acetate	Not detected	10		ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	20		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1		ug/L	1	75-71-8	
Chloromethane	Not detected	1		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	2		ug/L	1	74-83-9	
Chloroethane	Not detected	1		ug/L	1	75-00-3	



Analytical Laboratory Report

Lab Sample ID: S81772.07 (continued)

Sample Tag: RFI-12-40_112525

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 12/02/25 04:05, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	3	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	4	1		ug/L	1	71-55-6	
Cyclohexane	Not detected	1		ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	10	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	20		ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene	Not detected	2		ug/L	1	179601-23-1	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dibromo-3-chloropropane	Not detected	1		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	2		ug/L	1	120-82-1	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Naphthalene	Not detected	1		ug/L	1	91-20-3	
Total Xylenes	Not detected	3		ug/L	1	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S81772.08

Sample Tag: RFI-23-01R_112625

Collected Date/Time: 11/26/2025 12:00

Matrix: Groundwater

COC Reference: 182610

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40mL Glass	HCL	Yes	0.1	IR
2	1L Amber	None	Yes	0.1	IR
2	125mL Plastic	HNO3	Yes	0.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	12/02/25 09:15	NDK	
Metal Digestion	Completed	SW3015A	12/10/25 11:00	JRH	
Metal Digestion	Completed	SW3015A	12/10/25 11:00	JRH	
BNA Extraction	Completed	SW3510C	12/01/25 17:00	JWR	
Mercury Digestion*	Completed	SW7471B	12/03/25 12:47	CTV	
Mercury Digestion*	Completed	SW7471B	12/03/25 12:47	CTV	

Metals

Method: SW6020A, Run Date: 12/10/25 15:41, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic	Not detected	0.002		mg/L	5	7440-38-2	
Barium	0.069	0.005		mg/L	5	7440-39-3	
Beryllium	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt	Not detected	0.005		mg/L	5	7440-48-4	
Copper	Not detected	0.005		mg/L	5	7440-50-8	
Lead	Not detected	0.003		mg/L	5	7439-92-1	
Manganese	0.133	0.005		mg/L	5	7439-96-5	
Nickel	Not detected	0.005		mg/L	5	7440-02-0	
Selenium	Not detected	0.005		mg/L	5	7782-49-2	
Silver	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium	Not detected	0.005		mg/L	5	7440-62-2	
Zinc	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW6020A, Run Date: 12/10/25 15:44, Analyst: JRH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Antimony, Dissolved*	Not detected	0.005		mg/L	5	7440-36-0	
Arsenic, Dissolved	Not detected	0.002		mg/L	5	7440-38-2	
Barium, Dissolved	0.073	0.005		mg/L	5	7440-39-3	
Beryllium, Dissolved	Not detected	0.001		mg/L	5	7440-41-7	
Cadmium, Dissolved	Not detected	0.0005		mg/L	5	7440-43-9	
Chromium, Dissolved	Not detected	0.005		mg/L	5	7440-47-3	
Cobalt, Dissolved	Not detected	0.005		mg/L	5	7440-48-4	
Copper, Dissolved	Not detected	0.005		mg/L	5	7440-50-8	
Lead, Dissolved	Not detected	0.003		mg/L	5	7439-92-1	
Manganese, Dissolved	0.118	0.005		mg/L	5	7439-96-5	
Nickel, Dissolved	Not detected	0.005		mg/L	5	7440-02-0	



Analytical Laboratory Report

Lab Sample ID: S81772.08 (continued)

Sample Tag: RFI-23-01R_112625

Method: SW6020A, Run Date: 12/10/25 15:44, Analyst: JRH (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Selenium, Dissolved	Not detected	0.005		mg/L	5	7782-49-2	
Silver, Dissolved	Not detected	0.0005		mg/L	5	7440-22-4	
Thallium, Dissolved	Not detected	0.002		mg/L	5	7440-28-0	
Vanadium, Dissolved	Not detected	0.005		mg/L	5	7440-62-2	
Zinc, Dissolved	Not detected	0.005		mg/L	5	7440-66-6	

Method: SW7471B, Run Date: 12/03/25 17:35, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury*	Not detected	0.0002		mg/L	1	7439-97-6	

Method: SW7471B, Run Date: 12/03/25 17:39, Analyst: CTV

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Dissolved*	Not detected	0.0002		mg/L	1	7439-97-6	

Organics - Semi-Volatiles

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 12/08/25 23:01, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Benzaldehyde	Not detected	5		ug/L	2	100-52-7	
Acetophenone	Not detected	5		ug/L	2	98-86-2	
Caprolactam	Not detected	10		ug/L	2	105-60-2	
1,1'-Biphenyl	Not detected	5		ug/L	2	92-52-4	
Atrazine*	Not detected	3		ug/L	2	1912-24-9	

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 12/08/25 23:01, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	5		ug/L	2	83-32-9	
Acenaphthylene	Not detected	5		ug/L	2	208-96-8	
Anthracene	Not detected	5		ug/L	2	120-12-7	
4-Bromophenyl phenyl ether	Not detected	5		ug/L	2	101-55-3	
di-n-Butyl phthalate	Not detected	5		ug/L	2	84-74-2	
Benzo(a)anthracene	Not detected	1		ug/L	2	56-55-3	
Benzo(a)pyrene	Not detected	5		ug/L	2	50-32-8	
Benzo(b)fluoranthene	Not detected	1		ug/L	2	205-99-2	
Benzo(ghi)perylene	Not detected	5		ug/L	2	191-24-2	
Benzo(k)fluoranthene	Not detected	5		ug/L	2	207-08-9	
Butyl benzyl phthalate	Not detected	5		ug/L	2	85-68-7	
2-Chloronaphthalene	Not detected	5		ug/L	2	91-58-7	
2-Chlorophenol	Not detected	10		ug/L	2	95-57-8	
4-Chloro-3-methylphenol	Not detected	5		ug/L	2	59-50-7	
4-Chloroaniline	Not detected	10		ug/L	2	106-47-8	
4-Chlorophenyl phenyl ether	Not detected	5		ug/L	2	7005-72-3	
bis(2-Chloroethoxy)methane	Not detected	5		ug/L	2	111-91-1	
bis(2-Chloroethyl)ether	Not detected	1		ug/L	2	111-44-4	
Chrysene	Not detected	1		ug/L	2	218-01-9	
2,4-Dichlorophenol	Not detected	10		ug/L	2	120-83-2	
2,4-Dimethylphenol	Not detected	5		ug/L	2	105-67-9	
2,4-Dinitrophenol	Not detected	25		ug/L	2	51-28-5	
2,4-Dinitrotoluene	Not detected	5		ug/L	2	121-14-2	
2,6-Dinitrotoluene	Not detected	5		ug/L	2	606-20-2	
4,6-Dinitro-2-methylphenol	Not detected	25		ug/L	2	534-52-1	



Analytical Laboratory Report

Lab Sample ID: S81772.08 (continued)

Sample Tag: RFI-23-01R_112625

TCL Semi-Volatile Organics, Method: SW8270D, Run Date: 12/08/25 23:01, Analyst: PL (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Dibenzo(ah)anthracene	Not detected	5		ug/L	2	53-70-3	
Dibenzofuran	Not detected	4		ug/L	2	132-64-9	
Diethyl phthalate	Not detected	5		ug/L	2	84-66-2	
Dimethyl phthalate	Not detected	5		ug/L	2	131-11-3	
bis(2-Ethylhexyl)phthalate	Not detected	5		ug/L	2	117-81-7	
Fluoranthene	Not detected	1		ug/L	2	206-44-0	
Fluorene	Not detected	5		ug/L	2	86-73-7	
Hexachlorocyclopentadiene	Not detected	5		ug/L	2	77-47-4	
Hexachloroethane	Not detected	5		ug/L	2	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	5		ug/L	2	193-39-5	
Isophorone	Not detected	5		ug/L	2	78-59-1	
2-Methylnaphthalene	Not detected	5		ug/L	2	91-57-6	
2-Methylphenol (o-Cresol)	Not detected	10		ug/L	2	95-48-7	
2-Nitroaniline	Not detected	25		ug/L	2	88-74-4	
2-Nitrophenol	Not detected	5		ug/L	2	88-75-5	
3-Nitroaniline	Not detected	25		ug/L	2	99-09-2	
4-Nitroaniline	Not detected	25		ug/L	2	100-01-6	
4-Nitrophenol	Not detected	25		ug/L	2	100-02-7	
N-Nitrosodi-n-propylamine	Not detected	10		ug/L	2	621-64-7	
N-Nitrosodiphenylamine	Not detected	5		ug/L	2	86-30-6	
Naphthalene	Not detected	5		ug/L	2	91-20-3	
Nitrobenzene	Not detected	3		ug/L	2	98-95-3	
di-n-Octyl phthalate	Not detected	5		ug/L	2	117-84-0	
2,4,5-Trichlorophenol	Not detected	5		ug/L	2	95-95-4	
2,4,6-Trichlorophenol	Not detected	4		ug/L	2	88-06-2	
3,3'-Dichlorobenzidine	Not detected	10		ug/L	2	91-94-1	
3-, 4-Methylphenol (p,m-Cresol)	Not detected	10		ug/L	2	15831-10-4	
Pentachlorophenol	Not detected	5		ug/L	2	87-86-5	
Phenanthrene	Not detected	2		ug/L	2	85-01-8	
Phenol	Not detected	5		ug/L	2	108-95-2	
Pyrene	Not detected	5		ug/L	2	129-00-0	
Hexachlorobenzene	Not detected	5		ug/L	2	118-74-1	
Hexachlorobutadiene	Not detected	5		ug/L	2	87-68-3	
bis(2-Chloroisopropyl)ether*	Not detected	5		ug/L	2	108-60-1	
Carbazole	Not detected	5		ug/L	2	86-74-8	

Organics - Volatiles

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 12/02/25 04:28, Analyst: NDK

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	30		ug/L	1	76-13-1	
Acetone	Not detected	20		ug/L	1	67-64-1	
Carbon disulfide	Not detected	5		ug/L	1	75-15-0	
Methyl Acetate	Not detected	10		ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	5		ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	20		ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1		ug/L	1	75-71-8	
Chloromethane	Not detected	1		ug/L	1	74-87-3	
Vinyl chloride	Not detected	1		ug/L	1	75-01-4	
Bromomethane	Not detected	2		ug/L	1	74-83-9	
Chloroethane	Not detected	1		ug/L	1	75-00-3	



Analytical Laboratory Report

Lab Sample ID: S81772.08 (continued)

Sample Tag: RFI-23-01R_112625

TCL Volatile Organics 8260 PAL, Method: SW5030C/8260C, Run Date: 12/02/25 04:28, Analyst: NDK (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichlorofluoromethane	Not detected	1		ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1		ug/L	1	75-35-4	
Methylene chloride	Not detected	5		ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1		ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1		ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1		ug/L	1	156-59-2	
Chloroform	Not detected	1		ug/L	1	67-66-3	
1,1,1-Trichloroethane	Not detected	1		ug/L	1	71-55-6	
Cyclohexane	Not detected	1		ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10		ug/L	1	108-10-1	
2-Hexanone	Not detected	50		ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1		ug/L	1	56-23-5	
Benzene	Not detected	1		ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1		ug/L	1	107-06-2	
Trichloroethene	Not detected	1		ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1		ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1		ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	20		ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-01-5	
Toluene	Not detected	1		ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1		ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1		ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1		ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1		ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1		ug/L	1	106-93-4	
Chlorobenzene	Not detected	1		ug/L	1	108-90-7	
1,1,2,2-Tetrachloroethane	Not detected	1		ug/L	1	79-34-5	
Ethylbenzene	Not detected	1		ug/L	1	100-41-4	
p,m-Xylene	Not detected	2		ug/L	1	179601-23-1	
o-Xylene	Not detected	1		ug/L	1	95-47-6	
Styrene	Not detected	1		ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1		ug/L	1	98-82-8	
Bromoform	Not detected	1		ug/L	1	75-25-2	
1,3-Dichlorobenzene	Not detected	1		ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1		ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1		ug/L	1	95-50-1	
1,2-Dibromo-3-chloropropane	Not detected	1		ug/L	1	96-12-8	
1,2,4-Trichlorobenzene	Not detected	2		ug/L	1	120-82-1	
n-Propylbenzene	Not detected	1		ug/L	1	103-65-1	
Naphthalene	Not detected	1		ug/L	1	91-20-3	
Total Xylenes	Not detected	3		ug/L	1	1330-20-7	



Analytical Laboratory Report

Lab Sample ID: S81772.09
Sample Tag: FB-01_112425
Collected Date/Time: 11/24/2025 11:50
Matrix: Water
COC Reference: 182610

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	LLHg Kit	None	Yes	0.1	IR

Metals

Method: E1631E, Run Date: 12/04/25 17:06, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Low Level*	Completed	0.50		ng/L	1	7439-97-6	O

O-Analysis performed by outside laboratory. See attached report.



Analytical Laboratory Report

Lab Sample ID: S81772.10
Sample Tag: EB-01_112425
Collected Date/Time: 11/24/2025 11:40
Matrix: Water
COC Reference: 182610

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	LLHg Kit	None	Yes	0.1	IR

Metals

Method: E1631E, Run Date: 12/04/25 17:11, Analyst: EF

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Mercury, Low Level*	Completed	0.50		ng/L	1	7439-97-6	O

O-Analysis performed by outside laboratory. See attached report.

Merit Laboratories Login Checklist

Lab Set ID:S81772

Client:ARCADIS_NOVI (Arcadis US, Inc.)

Project: 30282188.01

Submitted: 12/01/2025 08:15 Login User: MMC

Attention: Angela Paulson

Address: Arcadis US, Inc.
28550 Cabot Drive, Suite 500
Novi, MI 48377

Phone: 517-249-2768 FAX:
Email: Angela.Paulson@arcadis.com

Selection	Description	Note
Sample Receiving		
01.	☐ Yes ☒ No ☐ N/A	Samples are received at 4C +/- 2C Thermometer # IR 0.1
02.	☒ Yes ☐ No ☐ N/A	Received on ice/ cooling process begun
03.	☐ Yes ☒ No ☐ N/A	Samples shipped
04.	☐ Yes ☒ No ☐ N/A	Samples left in 24 hr. drop box
05.	☐ Yes ☐ No ☒ N/A	Are there custody seals/tape or is the drop box locked
Chain of Custody		
06.	☒ Yes ☐ No ☐ N/A	COC adequately filled out
07.	☒ Yes ☐ No ☐ N/A	COC signed and relinquished to the lab
08.	☒ Yes ☐ No ☐ N/A	Sample tag on bottles match COC
09.	☒ Yes ☐ No ☐ N/A	Subcontracting needed? Subcontacted to: Eurofins
Preservation		
10.	☒ Yes ☐ No ☐ N/A	Do sample have correct chemical preservation
11.	☒ Yes ☐ No ☐ N/A	Completed pH checks on preserved samples? (no VOAs)
12.	☐ Yes ☒ No ☐ N/A	Did any samples need to be preserved in the lab?
Bottle Conditions		
13.	☒ Yes ☐ No ☐ N/A	All bottles intact
14.	☒ Yes ☐ No ☐ N/A	Appropriate analytical bottles are used
15.	☒ Yes ☐ No ☐ N/A	Merit bottles used
16.	☒ Yes ☐ No ☐ N/A	Sufficient sample volume received
17.	☐ Yes ☒ No ☐ N/A	Samples require laboratory filtration
18.	☒ Yes ☐ No ☐ N/A	Samples submitted within holding time
19.	☐ Yes ☒ No ☐ N/A	Do water VOC, TOX, DO or Alkalinity bottles contain

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____

Merit Laboratories Bottle Preservation Check

Lab Set ID: S81772 Submitted: 12/01/2025 08:15

Client: ARCADIS_NOVI (Arcadis US, Inc.)

Project: 30282188.01

Attention: Angela Paulson

Address: Arcadis US, Inc.
28550 Cabot Drive, Suite 500
Novi, MI 48377

Initial Preservation Check: 11/26/2025 16:16 MMC

Preservation Recheck (E200.8): N/A

Phone: 517-249-2768

FAX:

Email: Angela.Paulson@arcadis.com

Sample ID	Bottle / Preservation	pH (Orig)	Add ml	pH (New)	Notes
S81772.01	125mL Plastic HNO3	<2			
S81772.01	125mL Plastic HNO3	<2			
S81772.02	125mL Plastic HNO3	<2			
S81772.02	125mL Plastic HNO3	<2			
S81772.03	125mL Plastic HNO3	<2			
S81772.03	125mL Plastic HNO3	<2			
S81772.04	125mL Plastic HNO3	<2			
S81772.04	125mL Plastic HNO3	<2			
S81772.05	125mL Plastic HNO3	<2			
S81772.05	125mL Plastic HNO3	<2			
S81772.06	125mL Plastic HNO3	<2			
S81772.06	125mL Plastic HNO3	<2			
S81772.07	125mL Plastic HNO3	<2			
S81772.07	125mL Plastic HNO3	<2			
S81772.08	125mL Plastic HNO3	<2			
S81772.08	125mL Plastic HNO3	<2			



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C.O.C. PAGE # 1 OF 1

182610

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME ~~Angela Paulson~~ Angela Paulson			
COMPANY Arcadis			
ADDRESS 28550 cabot Dr. Suite 500			
CITY Novi		STATE MI	ZIP CODE 48377
PHONE NO. 517 249 2708	CELL NO.	P.O. NO.	
E-MAIL ADDRESS Angela.Paulson@arcadis.com		QUOTE NO.	

CONTACT NAME SAME	
COMPANY	
ADDRESS	
CITY	STATE ZIP CODE
PHONE NO.	E-MAIL ADDRESS

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME 30282188.01	SAMPLER(S) - PLEASE PRINT/SIGN NAME Donald Richmond / Donald Richmond
TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER	
DELIVERABLES REQUIRED ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER	

MATRIX W=WATER GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID
CODE: SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIFE A=AIR WS=WASTE

Containers & Preservatives

MERIT LAB NO. FOR LAB USE ONLY	COLLECTION		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives								Total	Dissolved	PCB's	PAL	PAL	LL Hg	Man	Dissolved	☐ Other _____ Special Instructions
	DATE	TIME				NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER										
81772.01	11/24/25	1130	MH3-9-112425	GW	11	X	X	X						X	X	X	X					
.02	11/24/25	1300	East P-Trap-112425	GW	9	X	X	X						X	X	X	X					
.03	11/24/25	1430	West P-Trap-112425	GW	9	X	X	X						X	X	X	X					
.04	11/25/25	1200	RFI-81-33-112525	GW	7	X	X	X						X	X	X	X					
.05	11/25/25	1340	RFI-81-12R-112525	GW	7	X	X	X						X	X	X	X					
.06	11/25/25	1500	RFI-86-14-112525	GW	2	X	X	X						X	X	X	X	X				
.07	11/25/25	1610	RFI-12-40-112525	GW	7	X	X	X					X	X	X	X	X					
.08	11/26/25	1200	RFI-23-01R-112625	GW	7	X	X	X						X	X	X	X					
.09	11/24/25	1150	FB-01-112425	GW	2	X	X	X						X	X	X	X					
.10	11/24/25	1140	~~FB-01~~ FB-01-112425	GW	2	X	X	X						X	X	X	X					

RELINQUISHED BY: SIGNATURE/ORGANIZATION RECEIVED BY: SIGNATURE/ORGANIZATION	DATE 11/26/25 TIME 1510
RELINQUISHED BY: SIGNATURE/ORGANIZATION RECEIVED BY: SIGNATURE/ORGANIZATION	DATE TIME

RELINQUISHED BY: SIGNATURE/ORGANIZATION RECEIVED BY: SIGNATURE/ORGANIZATION	DATE TIME		
SEAL NO	SEAL INTACT YES ☐ NO ☐	INITIALS	TEMP. ON ARRIVAL ☒ ICE (SOLID) ☐ BLUE ICE ☐ ICE (MELTED) ☐ NONE
SEAL NO	SEAL INTACT YES ☐ NO ☐	INITIALS	0.1

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE



ANALYTICAL REPORT

PREPARED FOR

Attn: Lab Results
Merit Laboratories
2680 E Lansing Drive
East Lansing, Michigan 48823

Generated 12/5/2025 2:12:59 PM

JOB DESCRIPTION

S81772 LL Hg

JOB NUMBER

190-38607-1

Eurofins Michigan

Job Notes

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

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

Authorization



Generated
12/5/2025 2:12:59 PM

Authorized for release by
Jessica Morosko, Project Manager I
Jessica.Morosko@et.eurofinsus.com
(330)966-1378



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Sample Summary

Client: Merit Laboratories
Project/Site: S81772 LL Hg

Job ID: 190-38607-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
190-38607-1	S81772.01	Water	11/24/25 11:30	12/02/25 13:02	Michigan
190-38607-2	S81772.09	Water	11/24/25 11:50	12/02/25 13:02	Michigan
190-38607-3	S81772.10	Water	11/24/25 11:40	12/02/25 13:02	Michigan

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

Case Narrative

Client: Merit Laboratories
Project: S81772 LL Hg

Job ID: 190-38607-1

Job ID: 190-38607-1

Eurofins Michigan

Job Narrative 190-38607-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 12/2/2025 1:02 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.9°C.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Michigan

Client Sample Results

Client: Merit Laboratories
Project/Site: S81772 LL Hg

Job ID: 190-38607-1

Client Sample ID: S81772.01

Lab Sample ID: 190-38607-1

Date Collected: 11/24/25 11:30

Matrix: Water

Date Received: 12/02/25 13:02

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.1		0.20	ng/L		12/03/25 16:00	12/04/25 17:49	1

Client Sample ID: S81772.09

Lab Sample ID: 190-38607-2

Date Collected: 11/24/25 11:50

Matrix: Water

Date Received: 12/02/25 13:02

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.20	ng/L		12/03/25 16:00	12/04/25 17:06	1

Client Sample ID: S81772.10

Lab Sample ID: 190-38607-3

Date Collected: 11/24/25 11:40

Matrix: Water

Date Received: 12/02/25 13:02

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.20	ng/L		12/03/25 16:00	12/04/25 17:11	1

QC Sample Results

Client: Merit Laboratories
Project/Site: S81772 LL Hg

Job ID: 190-38607-1

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 240-682870/1-A
Matrix: Water
Analysis Batch: 683117

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 682870

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.20	ng/L		12/03/25 16:00	12/04/25 15:44	1

Lab Sample ID: LCS 240-682870/2-A
Matrix: Water
Analysis Batch: 683117

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 682870

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.63		ng/L		93	77 - 123

Lab Sample ID: 190-38607-1 MS
Matrix: Water
Analysis Batch: 683117

Client Sample ID: S81772.01
Prep Type: Total/NA
Prep Batch: 682870

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	3.1		5.00	7.75		ng/L		92	71 - 125

Lab Sample ID: 190-38607-1 MSD
Matrix: Water
Analysis Batch: 683117

Client Sample ID: S81772.01
Prep Type: Total/NA
Prep Batch: 682870

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	3.1		5.00	8.07		ng/L		98	71 - 125	4	24

Definitions/Glossary

Client: Merit Laboratories
Project/Site: S81772 LL Hg

Job ID: 190-38607-1

Glossary

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

QC Association Summary

Client: Merit Laboratories
Project/Site: S81772 LL Hg

Job ID: 190-38607-1

Metals

Prep Batch: 682870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
190-38607-1	S81772.01	Total/NA	Water	1631E	
190-38607-2	S81772.09	Total/NA	Water	1631E	
190-38607-3	S81772.10	Total/NA	Water	1631E	
MB 240-682870/1-A	Method Blank	Total/NA	Water	1631E	
LCS 240-682870/2-A	Lab Control Sample	Total/NA	Water	1631E	
190-38607-1 MS	S81772.01	Total/NA	Water	1631E	
190-38607-1 MSD	S81772.01	Total/NA	Water	1631E	

Analysis Batch: 683117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
190-38607-1	S81772.01	Total/NA	Water	1631E	682870
190-38607-2	S81772.09	Total/NA	Water	1631E	682870
190-38607-3	S81772.10	Total/NA	Water	1631E	682870
MB 240-682870/1-A	Method Blank	Total/NA	Water	1631E	682870
LCS 240-682870/2-A	Lab Control Sample	Total/NA	Water	1631E	682870
190-38607-1 MS	S81772.01	Total/NA	Water	1631E	682870
190-38607-1 MSD	S81772.01	Total/NA	Water	1631E	682870

Lab Chronicle

Client: Merit Laboratories
Project/Site: S81772 LL Hg

Job ID: 190-38607-1

Client Sample ID: S81772.01

Lab Sample ID: 190-38607-1

Date Collected: 11/24/25 11:30

Matrix: Water

Date Received: 12/02/25 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631E			682870	GEV	EET CLE	12/03/25 16:00
Total/NA	Analysis	1631E		1	683117	GEV	EET CLE	12/04/25 17:49

Client Sample ID: S81772.09

Lab Sample ID: 190-38607-2

Date Collected: 11/24/25 11:50

Matrix: Water

Date Received: 12/02/25 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631E			682870	GEV	EET CLE	12/03/25 16:00
Total/NA	Analysis	1631E		1	683117	GEV	EET CLE	12/04/25 17:06

Client Sample ID: S81772.10

Lab Sample ID: 190-38607-3

Date Collected: 11/24/25 11:40

Matrix: Water

Date Received: 12/02/25 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631E			682870	GEV	EET CLE	12/03/25 16:00
Total/NA	Analysis	1631E		1	683117	GEV	EET CLE	12/04/25 17:11

Client Sample ID: Method Blank

Lab Sample ID: MB 240-682870/1-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631E			682870	GEV	EET CLE	12/03/25 16:00
Total/NA	Analysis	1631E		1	683117	GEV	EET CLE	12/04/25 15:44

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 240-682870/2-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631E			682870	GEV	EET CLE	12/03/25 16:00
Total/NA	Analysis	1631E		1	683117	GEV	EET CLE	12/04/25 15:49

Client Sample ID: S81772.01

Lab Sample ID: 190-38607-1 MS

Date Collected: 11/24/25 11:30

Matrix: Water

Date Received: 12/02/25 13:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631E			682870	GEV	EET CLE	12/03/25 16:00
Total/NA	Analysis	1631E		1	683117	GEV	EET CLE	12/04/25 17:54

Lab Chronicle

Client: Merit Laboratories
Project/Site: S81772 LL Hg

Job ID: 190-38607-1

Client Sample ID: S81772.01
Date Collected: 11/24/25 11:30
Date Received: 12/02/25 13:02

Lab Sample ID: 190-38607-1 MSD
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631E			682870	GEV	EET CLE	12/03/25 16:00
Total/NA	Analysis	1631E		1	683117	GEV	EET CLE	12/04/25 17:59

Laboratory References:
EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Analyst References:
Lab: EET CLE
Batch Type: Prep
GEV = Grace Vannest
Batch Type: Analysis
GEV = Grace Vannest

Accreditation/Certification Summary

Client: Merit Laboratories
Project/Site: S81772 LL Hg

Job ID: 190-38607-1

Laboratory: Eurofins Cleveland

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

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	09-30-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-26
Iowa	State	421	06-01-27
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	2250	09-30-26
New Jersey	NELAP	OH001	06-30-26
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	02-27-26
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-26
Texas	NELAP	T104704517	08-31-26
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-30-26
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-26

Method Summary

Client: Merit Laboratories
Project/Site: S81772 LL Hg

Job ID: 190-38607-1

Method	Method Description	Protocol	Laboratory
1631E	Mercury, Low Level (CVAFS)	EPA	EET CLE
1631E	Preparation, Mercury, Low Level	EPA	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396



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Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 1

REPORT TO

CONTACT NAME Project Management Team

COMPANY Merit Laboratories

ADDRESS 2680 East Lansing Drive

CITY East Lansing

PHONE NO. 517-332-0167

E-MAIL ADDRESS Results@meritlabs.com

CHAIN OF CUSTODY RECORD

CONTACT NAME

Accounting

COMPANY Merit Laboratories

ADDRESS 2680 East Lansing Drive

CITY East Lansing

PHONE NO. 517-332-0167

E-MAIL ADDRESS accounting@meritlabs.com

INVOICE TO

CONTACT NAME

Accounting

COMPANY Merit Laboratories

ADDRESS 2680 East Lansing Drive

CITY East Lansing

PHONE NO. 517-332-0167

E-MAIL ADDRESS accounting@meritlabs.com

PROJECT NO. NAME S81772

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☒ 3 DAYS ☐ STANDARD ☐ OTHER

DELIVERABLES REQUIRED ☒ STD ☐ LEVEL I ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER Premium EDD

MATRIX CODE GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID
SL=SLUDGE DW=DRINKING WATER O=OIL WP=WPIPE A=AIR W=WASTE

SAMPLE TAG IDENTIFICATION-DESCRIPTION

YEAR DATE TIME

11/24/25 1130 S81772.01

11/24/25 1150 S81772.09

11/24/25 1140 S81772.10

MATRIX CODE

WW 1 1

W 1 1

W 1 1

OTHER

MECH

NaOH

H₂SO₄

HNO₃

HCl

NONE

OF BOTTLES

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OTHER

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Low-Level Mercury

✓

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W=Water

** Subcontracted to

Eurofins

190-38607 Chain of Custody

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Environment Testing
TestAmerica

☐ SDS or Known Hazard Information Supplied by Client

☐ Discrepancies

☐ Short Hold

☐ Rush ☐ 24 Hr ☐ 2-Day ☐ 3-Day ☐ 5-Day ☐ Other:

Receipt Evaluation Performed by: Initials: JA Date: 12/2 Time: 13:02

Cooler / Sample Receipt

After hours receipt: complete gray areas. Place cooler in walk-in, place form in Receiving box. Date: _____ Time: _____

Method of Shipment:

Walk-In Client Eurofins TA Field/Courier

Other Client / 3rd Party Courier: _____

Fed Ex Tracking #: _____

UPS Tracking #: _____

Other: _____

Shipping Container Type:

☒ Cooler ☐ Box

☐ None ☐ Other: _____

Packing Materials:

☐ Plastic Bags ☐ Foam

☒ Bubble Wrap ☐ Paper

☐ Packing Peanuts ☐ None

☐ Other: _____

Custody Seals Intact:

☐ Yes ☒ No

☐ NA (not used or required)

Cooling Materials:

☒ Ice (Solid) ☐ Ice (Melted)

☐ Blue Ice ☐ None

☐ Other: _____

Bacteriological Samples	Temp Corrected (°C)	Frozen?		Rec'd Within 2 Hrs?		Sample Flagged?	
		Yes	No	Yes	No	Yes	No

Received on same day sampled? Yes ☐ No ☒

Additional Sheets Required? Yes ☐ No ☒

Receipt Temperatures

Thermometer ID	Observed (°C)	Corrected (°C)	Temp Blank	Sample Temp	Acceptable	Cooler ID	Affected Samples
CP313207	5.9°C	5.9°C			☒ Y ☐ N		
					☐ Y ☐ N		
					☐ Y ☐ N		

Receipt Questions**	Y	N	NA	"No" answers require additional comment
CoC present and ETA receipt signature, date, and time properly documented?	☒			
Containers and Labels in good condition? (unbroken, not leaking, appropriately filled, labels legible & attached)	☒			
Appropriate containers used and adequate volume provided?	☒			Preserved bottles checked for pH? Yes ☐ No ☒
Number of sample containers match CoC?	☒			pH strip lot # _____
Samples received within hold?	☒			
Samples submitted for GRO and Volatiles analysis (8260, 624, 524) received without headspace?		☒		<i>Id req only</i>
Was a Trip Blank received with VOA samples?		☒		
Were the samples free of any questionable physical conformities? (i.e.; field duplicates or multiple bottles of the same sample do not significantly vary in appearance - color, solid proportions, etc.)	☒			
Were the CoC bottle labels and all other items free of all other discrepancies or issues that would need to be addressed with the Project Manager and/or Client?	☒			
**May not be applicable if samples are not for compliance testing				*Excludes FOG, VOAs, TOC Vials, HEM

Client Contact Record

Contact Via: ☐ Phone ☐ Email ☐ Other: _____ Person Contacted: _____ Date/Time: _____

☐ Discrepancy allowance agreement is on record in the client project file

Discussion / Resolution

Any additional documentation and clarification from the client must be noted in the narrative and/or scanned into the CoC directory.

Reviewed by [Signature] Date: 12/2/25

WI-MI-010_020720

Chain of Custody Record

[illegible]

Eurofins - Cleveland Sample Receipt Form/Narrative		Login # _____	
Barberton Facility		Cooler unpacked by: <u>JLM</u>	
Client <u>Eurofins Michigan</u>	Site Name _____		
Cooler Received on <u>12/3/25</u>	Opened on <u>12/3/25</u>		
FedEx: 1 st Grd <u>Exp</u> UPS FAS Waypoint	Client Drop Off Eurofins Courier	Other _____	
Receipt After-hours Drop-off Date/Time _____		Storage Location _____	
Eurofins Cooler # <u>21</u>	Foam Box Client Cooler Box Other _____		
Packing material used. <u>Bubble Wrap</u> Foam Plastic Bag None Other _____			
COOLANT: <u>Wet Ice</u> Dry Ice Water None			
1 Cooler temperature upon receipt	☐ See Multiple Cooler Form		
IR GUN # <u>17</u> (CF <u>+07</u> °C)	Observed Cooler Temp <u>25</u> °C	Corrected Cooler Temp <u>32</u> °C	
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity <u>1</u> ☒ Yes ☐ No ☐ NA			
-Were the seals on the outside of the cooler(s) signed & dated? ☒ Yes ☐ No ☐ NA			
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? ☒ Yes ☐ No ☐ NA			
-Were tamper/custody seals intact and uncompromised? ☒ Yes ☐ No ☐ NA			
3 Shippers' packing slip attached to the cooler(s)?	☒ Yes ☐ No ☐ NA		
4 Did custody papers accompany the sample(s)?	☒ Yes ☐ No ☐ NA		
5 Were the custody papers relinquished & signed in the appropriate place?	☒ Yes ☐ No ☐ NA		
6 Was/were the person(s) who collected the samples clearly identified on the COC?	☒ Yes ☐ No ☐ NA		
7 Did all bottles arrive in good condition (Unbroken)?	☒ Yes ☐ No ☐ NA		
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	☒ Yes ☐ No ☐ NA		
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?	☒ Yes ☐ No ☐ NA		
10 Were correct bottle(s) used for the test(s) indicated?	☒ Yes ☐ No ☐ NA		
11 Sufficient quantity received to perform indicated analyses?	☒ Yes ☐ No ☐ NA		
12 Are these work share samples and all listed on the COC?	☒ Yes ☐ No ☐ NA		
If yes, Questions 13-17 have been checked at the originating laboratory			
13 Were all preserved sample(s) at the correct pH upon receipt?	☒ Yes ☐ No ☐ NA pH Strip Lot# HC567196		
14 Were VOAs on the COC?	☒ Yes ☐ No ☐ NA		
15 Were air bubbles >6 mm in any VOA vials?	☒ Larger than this ☐ Yes ☐ No ☐ NA		
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	☒ Yes ☐ No ☐ NA		
17 Was a LL Hg or Me Hg trip blank present? _____	☒ Yes ☐ No ☐ NA		
Contacted PM _____ Date _____ by _____	☒ Verbal Voice Mail Other _____		
Concerning _____			

Tests that are not checked for pH by Receiving
 VOAs
 Oil and Grease
 TOC

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page	Labeled by: _____ Labels Verified by: _____
19 SAMPLE CONDITION	
Sample(s) _____	were received after the recommended holding time had expired
Sample(s) _____	were received in a broken container
Sample(s) _____	were received with bubble >6 mm in diameter (Notify PM)
20 SAMPLE PRESERVATION	
Sample(s) _____	were further preserved in the laboratory
Time preserved. _____	Preservative(s) added/Lot number(s) _____
VOA Sample Preservation - Date/Time VOAs Frozen _____	

December 11, 2025

Angela Paulson
Arcadis US, Inc.
120 N. Washington Square
Suite 300
Lansing, MI 48933

Re: **RACER Lansing PFAS Analysis (30267725.0370B)**

Date Received: **12/03/2025**

Work Order: **HN2518206**

Dear Angela,

Enclosed are the results of the sample(s) submitted to our laboratory.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Kathy Jones-Gronda

/S/ KATHY JONES-GRONDA

Project Manager



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)

Work Order: HN2518206
Date Received: 03-Dec-2025

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt

9 water samples were received for analysis at ALS Environmental on 03-Dec-2025. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Organics

EPA 537 Mod-W

Run ID: 3758464

HN2518206-001: 13C2-FtS 8:2 - One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed.
HN2518206-001: 13C2-FtS 6:2 - One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed.
HN2518206-001: 13C2-FtS 4:2 - One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed.
HN2518206-002: 13C2-FtS 4:2 - One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed.
HN2518206-002: 13C2-FtS 6:2 - One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed.
HN2518206-003: 13C2-FtS 4:2 - One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed.
HN2518206-003: 13C2-FtS 6:2 - One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed.
HN2518206-003: 13C2-FtS 8:2 - One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed.
HN2518206-006: 13C2-FtS 4:2 - One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed.
HN2518206-006: 13C2-FtS 4:2 - One or more surrogate recoveries were above the upper control limits in the Sample DUP. The sample DUP was non-detect, therefore, no qualification is needed.
HN2518206-007: 13C2-FtS 4:2 - One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed.
HN2518206-007: 13C2-FtS 6:2 - One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed.
HN2518206-009: 13C2-FtS 6:2 - One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed.
HN2518206-009: 13C2-FtS 4:2 - One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed.

SAMPLE DETECTION SUMMARY

This form includes only detections above the limits as presented.

For a full listing of sample results, continue to the Sample Results section of this Report.



CLIENT ID: MH 3-9_112425	Lab ID: HN2518206-001

Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorobutane sulfonic acid (PFBS)	2.24	J	0.351	5.00	ng/L	EPA 537Mod
Perfluorobutanoic acid (PFBA)	15.9		2.60	5.00	ng/L	EPA 537Mod
Perfluoroheptane sulfonic acid (PFHpS)	0.910	J	0.566	5.00	ng/L	EPA 537Mod
Perfluoroheptanoic acid (PFHpA)	2.50	J	1.73	5.00	ng/L	EPA 537Mod
Perfluorohexane sulfonic acid (PFHxS)	13.1		0.903	5.00	ng/L	EPA 537Mod
Perfluorohexanoic acid (PFHxA)	5.22		1.20	5.00	ng/L	EPA 537Mod
Perfluorononanoic acid (PFNA)	1.98	J	0.870	5.00	ng/L	EPA 537Mod
Perfluorooctane sulfonic acid (PFOS)	20.8		0.892	2.00	ng/L	EPA 537Mod
Perfluorooctanoic acid (PFOA)	6.61		0.630	2.00	ng/L	EPA 537Mod
Perfluoropentane sulfonic acid (PFPeS)	1.88	J	0.556	5.00	ng/L	EPA 537Mod
Perfluoropentanoic acid (PFPeA)	4.08	J	1.28	5.00	ng/L	EPA 537Mod

CLIENT ID: East P-Trap_112425	Lab ID: HN2518206-002

Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorobutane sulfonic acid (PFBS)	3.54	J	0.351	5.00	ng/L	EPA 537Mod
Perfluorobutanoic acid (PFBA)	6.46		2.60	5.00	ng/L	EPA 537Mod
Perfluoroheptane sulfonic acid (PFHpS)	1.52	J	0.566	5.00	ng/L	EPA 537Mod
Perfluorohexane sulfonic acid (PFHxS)	16.8		0.903	5.00	ng/L	EPA 537Mod
Perfluorohexanoic acid (PFHxA)	2.44	J	1.20	5.00	ng/L	EPA 537Mod
Perfluorooctane sulfonic acid (PFOS)	93.8		0.892	2.00	ng/L	EPA 537Mod
Perfluorooctanoic acid (PFOA)	7.29		0.630	2.00	ng/L	EPA 537Mod
Perfluoropentane sulfonic acid (PFPeS)	2.31	J	0.556	5.00	ng/L	EPA 537Mod
Perfluoropentanoic acid (PFPeA)	1.57	J	1.28	5.00	ng/L	EPA 537Mod

CLIENT ID: West P-Trap_112425	Lab ID: HN2518206-003

Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorobutane sulfonic acid (PFBS)	3.18	J	0.351	5.00	ng/L	EPA 537Mod
Perfluorobutanoic acid (PFBA)	7.24		2.60	5.00	ng/L	EPA 537Mod
Perfluoroheptane sulfonic acid (PFHpS)	1.40	J	0.566	5.00	ng/L	EPA 537Mod
Perfluoroheptanoic acid (PFHpA)	2.56	J	1.73	5.00	ng/L	EPA 537Mod
Perfluorohexane sulfonic acid (PFHxS)	19.6		0.903	5.00	ng/L	EPA 537Mod
Perfluorohexanoic acid (PFHxA)	3.44	J	1.20	5.00	ng/L	EPA 537Mod
Perfluorononanoic acid (PFNA)	1.70	J	0.870	5.00	ng/L	EPA 537Mod
Perfluorooctane sulfonic acid (PFOS)	70.4		0.892	2.00	ng/L	EPA 537Mod
Perfluorooctanoic acid (PFOA)	11.8		0.630	2.00	ng/L	EPA 537Mod
Perfluoropentane sulfonic acid (PFPeS)	2.02	J	0.556	5.00	ng/L	EPA 537Mod
Perfluoropentanoic acid (PFPeA)	2.55	J	1.28	5.00	ng/L	EPA 537Mod

CLIENT ID: RFI-81-33_112525	Lab ID: HN2518206-004

Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorobutane sulfonic acid (PFBS)	2.10	J	0.351	5.00	ng/L	EPA 537Mod
Perfluorobutanoic acid (PFBA)	25.5		2.60	5.00	ng/L	EPA 537Mod

SAMPLE DETECTION SUMMARY

This form includes only detections above the limits as presented.

For a full listing of sample results, continue to the Sample Results section of this Report.



CLIENT ID: RFI-81-33_112525	Lab ID: HN2518206-004

Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorohexane sulfonic acid (PFHxS)	3.40	J	0.903	5.00	ng/L	EPA 537Mod
Perfluorohexanoic acid (PFHxA)	4.37	J	1.20	5.00	ng/L	EPA 537Mod
Perfluorooctane sulfonic acid (PFOS)	1.02	J	0.892	2.00	ng/L	EPA 537Mod
Perfluorooctanoic acid (PFOA)	2.63		0.630	2.00	ng/L	EPA 537Mod
Perfluoropentane sulfonic acid (PFPeS)	0.691	J	0.556	5.00	ng/L	EPA 537Mod
Perfluoropentanoic acid (PFPeA)	9.16		1.28	5.00	ng/L	EPA 537Mod

CLIENT ID: RFI-81-12R_112525	Lab ID: HN2518206-005

Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorobutane sulfonic acid (PFBS)	2.15	J	0.351	5.00	ng/L	EPA 537Mod
Perfluorobutanoic acid (PFBA)	14.1		2.60	5.00	ng/L	EPA 537Mod
Perfluoroheptanoic acid (PFHpA)	2.29	J	1.73	5.00	ng/L	EPA 537Mod
Perfluorohexane sulfonic acid (PFHxS)	2.96	J	0.903	5.00	ng/L	EPA 537Mod
Perfluorohexanoic acid (PFHxA)	2.39	J	1.20	5.00	ng/L	EPA 537Mod
Perfluorononanoic acid (PFNA)	1.25	J	0.870	5.00	ng/L	EPA 537Mod
Perfluorooctane sulfonic acid (PFOS)	18.4		0.892	2.00	ng/L	EPA 537Mod
Perfluorooctanoic acid (PFOA)	7.80		0.630	2.00	ng/L	EPA 537Mod
Perfluoropentanoic acid (PFPeA)	2.16	J	1.28	5.00	ng/L	EPA 537Mod

CLIENT ID: RFI-86-14_112525	Lab ID: HN2518206-006

Analyte	Results	Flag	MDL	MRL	Units	Method
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0.763	J	0.467	5.00	ng/L	EPA 537Mod
Perfluorobutane sulfonic acid (PFBS)	1.99	J	0.351	5.00	ng/L	EPA 537Mod
Perfluorobutanoic acid (PFBA)	8.73		2.60	5.00	ng/L	EPA 537Mod
Perfluorododecanoic acid (PFDOA)	0.706	J	0.691	5.00	ng/L	EPA 537Mod
Perfluoroheptanoic acid (PFHpA)	3.53	J	1.73	5.00	ng/L	EPA 537Mod
Perfluorohexane sulfonic acid (PFHxS)	2.08	J	0.903	5.00	ng/L	EPA 537Mod
Perfluorohexanoic acid (PFHxA)	4.00	J	1.20	5.00	ng/L	EPA 537Mod
Perfluorooctane sulfonic acid (PFOS)	1.14	J	0.892	2.00	ng/L	EPA 537Mod
Perfluorooctanoic acid (PFOA)	9.25		0.630	2.00	ng/L	EPA 537Mod
Perfluoropentane sulfonic acid (PFPeS)	0.727	J	0.556	5.00	ng/L	EPA 537Mod
Perfluoropentanoic acid (PFPeA)	3.89	J	1.28	5.00	ng/L	EPA 537Mod

CLIENT ID: RFI-12-40_112525	Lab ID: HN2518206-007

Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorobutane sulfonic acid (PFBS)	1.76	J	0.351	5.00	ng/L	EPA 537Mod
Perfluorobutanoic acid (PFBA)	12.6		2.60	5.00	ng/L	EPA 537Mod
Perfluoroheptanoic acid (PFHpA)	3.81	J	1.73	5.00	ng/L	EPA 537Mod
Perfluorohexane sulfonic acid (PFHxS)	14.8		0.903	5.00	ng/L	EPA 537Mod
Perfluorohexanoic acid (PFHxA)	9.50		1.20	5.00	ng/L	EPA 537Mod
Perfluorononanoic acid (PFNA)	2.99	J	0.870	5.00	ng/L	EPA 537Mod

SAMPLE DETECTION SUMMARY

This form includes only detections above the limits as presented.

For a full listing of sample results, continue to the Sample Results section of this Report.



CLIENT ID: RFI-12-40_112525	Lab ID: HN2518206-007

Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorooctane sulfonic acid (PFOS)	20.0		0.892	2.00	ng/L	EPA 537Mod
Perfluorooctanoic acid (PFOA)	10.2		0.630	2.00	ng/L	EPA 537Mod
Perfluoropentane sulfonic acid (PFPeS)	0.611	J	0.556	5.00	ng/L	EPA 537Mod
Perfluoropentanoic acid (PFPeA)	7.87		1.28	5.00	ng/L	EPA 537Mod

CLIENT ID: RFI-23-01R_112625	Lab ID: HN2518206-008

Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorobutane sulfonic acid (PFBS)	2.84	J	0.351	5.00	ng/L	EPA 537Mod
Perfluorobutanoic acid (PFBA)	4.66	J	2.60	5.00	ng/L	EPA 537Mod
Perfluoroheptanoic acid (PFHpA)	1.88	J	1.73	5.00	ng/L	EPA 537Mod
Perfluorohexane sulfonic acid (PFHxS)	37.0		0.903	5.00	ng/L	EPA 537Mod
Perfluorohexanoic acid (PFHxA)	3.84	J	1.20	5.00	ng/L	EPA 537Mod
Perfluorononanoic acid (PFNA)	1.74	J	0.870	5.00	ng/L	EPA 537Mod
Perfluorooctane sulfonic acid (PFOS)	15.8		0.892	2.00	ng/L	EPA 537Mod
Perfluorooctanoic acid (PFOA)	5.25		0.630	2.00	ng/L	EPA 537Mod
Perfluoropentane sulfonic acid (PFPeS)	3.02	J	0.556	5.00	ng/L	EPA 537Mod
Perfluoropentanoic acid (PFPeA)	1.52	J	1.28	5.00	ng/L	EPA 537Mod

CLIENT ID: RFI-23-02R_112625	Lab ID: HN2518206-009

Analyte	Results	Flag	MDL	MRL	Units	Method
Perfluorobutane sulfonic acid (PFBS)	3.54	J	0.351	5.00	ng/L	EPA 537Mod
Perfluorobutanoic acid (PFBA)	7.37		2.60	5.00	ng/L	EPA 537Mod
Perfluorodecanoic acid (PFDA)	3.29	J	1.24	5.00	ng/L	EPA 537Mod
Perfluoroheptane sulfonic acid (PFHpS)	0.773	J	0.566	5.00	ng/L	EPA 537Mod
Perfluoroheptanoic acid (PFHpA)	4.02	J	1.73	5.00	ng/L	EPA 537Mod
Perfluorohexane sulfonic acid (PFHxS)	31.6		0.903	5.00	ng/L	EPA 537Mod
Perfluorohexanoic acid (PFHxA)	4.11	J	1.20	5.00	ng/L	EPA 537Mod
Perfluorononanoic acid (PFNA)	2.55	J	0.870	5.00	ng/L	EPA 537Mod
Perfluorooctane sulfonic acid (PFOS)	22.7		0.892	2.00	ng/L	EPA 537Mod
Perfluorooctanoic acid (PFOA)	7.28		0.630	2.00	ng/L	EPA 537Mod
Perfluoropentane sulfonic acid (PFPeS)	3.88	J	0.556	5.00	ng/L	EPA 537Mod
Perfluoropentanoic acid (PFPeA)	3.16	J	1.28	5.00	ng/L	EPA 537Mod

SAMPLE SUMMARY



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Workorder: HN2518206

Laboratory Sample ID	Client Sample ID	Sample Matrix	Collection Date	Date Received
HN2518206-001	MH 3-9_112425	WATER	11/24/25 11:30	12/03/25 13:00
HN2518206-002	East P-Trap_112425	WATER	11/24/25 13:00	12/03/25 13:00
HN2518206-003	West P-Trap_112425	WATER	11/24/25 14:30	12/03/25 13:00
HN2518206-004	RFI-81-33_112525	WATER	11/25/25 12:00	12/03/25 13:00
HN2518206-005	RFI-81-12R_112525	WATER	11/25/25 13:40	12/03/25 13:00
HN2518206-006	RFI-86-14_112525	WATER	11/25/25 15:00	12/03/25 13:00
HN2518206-007	RFI-12-40_112525	WATER	11/25/25 16:10	12/03/25 13:00
HN2518206-008	RFI-23-01R_112625	WATER	11/26/25 12:00	12/03/25 13:00
HN2518206-009	RFI-23-02R_112625	WATER	11/26/25	12/03/25 13:00



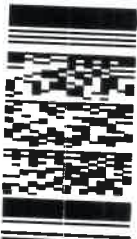
ALS Group USA, Corp

Work Order

Work Order

#	Sample Description	Date	Time	Matrix	Preservative	# Bottles	A	B	C	D	E	F	G	H	I	J	Sample Notes
1	MH 3-9-112425	11/24/25	1130		None	3	X										
2	East P-Trap-112425	11/24/25	1300		None	3	X										
3	West P-Trap-112425	11/24/25	1430		None	3	X										
4	RFT-81-33-112525	11/25/25	1200		None	3	X										
5	RFT-81-12R-112525	11/25/25	1340		None	3	X										
6	RFT-8C-14-112525	11/25/25	1500		None	3	X										
7	RFT-12-40-112525	11/25/25	1610		None	3	X										
8	RFT-23-01R-112625	11/26/25	1200		None	3	X										
9	RFT-23-02R-112625	11/26/25			None	3	X										
10					None	3	X										

Environmental Division
Holland
Work Order Reference
HN2518206



Telephone : +1 616 399 6070

Preservative Key:	1-HCl	2-HNO3	3-H2SO4	4-NaOH	5-Na2S2O3	6-NaHSO4	7-Other
Relinquished by							
Date							
Time							
Recovery %							
Recovery C							

Required Turnaround Time: _____
 Std 10 Wk days _____ 5 Wk days _____ 2 Wk days _____ 24 hr _____

Results Due:

QC Reporting Level: (check box below)

Other:

Page 1 of 1

ALS Group USA, Corp | 3352 128th Ave | Holland Michigan 49424 | TEL. (616) 399-6070

Telephone : +1 616 399 6070



Environmental Division
Holland
Work Order Reference
HN2518206



ALS Holland
3352 128th Ave., Holland MI 49424

ALS Holland Sample Receiving Checklist

Received by:

Date/Time:

Carrier Name:

Shipping container/cooler in good condition?

Custody seals intact on shipping container/cooler?

Custody seals intact on sample bottles?

Chain of Custody present?

COC signed when relinquished and received?

COC agrees with sample labels?

Samples in proper container/bottle?

Sample containers intact?

Sufficient sample volume for indicated test?

All samples received within holding time?

Container/Temp Blank temperature in compliance?

Temperature(s) (°C):

Thermometer(s):

Sample(s) received on ice?

Matrix/Matrices:

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage:

Water – VOA vials have zero headspace?

Water – pH acceptable upon receipt?

pH strip lot #: _____ < 2 _____ > 12 _____ Other _____

pH adjusted (note adjustments below)?

pH adjusted by:

Login Notes:

HN-SHT-160-R01, Sample Receipt Checklist

REPORT QUALIFIERS AND DEFINITIONS

*	Value exceeds Regulatory Limit (if MCL displayed)
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
NC	Not Calculated
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
V	The Continuing Calibration Verification was outside of control criteria
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

Holland Laboratory Certifications¹

Agency	Type	ID	Issued	Expires
Alabama	Drinking Water (Secondary)	42500	12/17/2024	12/31/2025
Colorado	UST		07/01/2025	06/30/2026
Connecticut	Drinking Water (Secondary)	PH-0155	12/10/2024	12/31/2026
Florida	NELAP (Primary)	E871106	07/01/2025	06/30/2026
Illinois	NELAP (Secondary)	200076	11/14/2024	12/31/2025
Indiana	Drinking Water (Secondary)	C-MI-08	12/31/2024	09/04/2026
Iowa	State Specific	403	09/01/2025	09/01/2027
Kansas	NELAP (Secondary)	E-10411	08/01/2025	07/31/2026
Kentucky	Waste Water	KY98004	12/20/2024	12/31/2025
Kentucky	UST	120474	07/07/2025	06/30/2026
Michigan	Drinking Water (Primary)	0022	12/19/2023	09/04/2026
Minnesota	NELAP (Secondary)	026-999-449	12/17/2024	12/31/2025
Missouri	Drinking Water (Secondary)	01262	11/14/2024	12/30/2027
New Jersey	NELAP (Secondary)	MI015	07/01/2025	6/30/2026
New York	NELAP (Secondary)	12128	04/01/2025	04/01/2026
North Dakota	State Specific	R-192	11/18/2024	06/30/2025
Ohio	Drinking Water (Secondary)	87783	06/26/2025	6/30/2026
Pennsylvania	NELAP (Secondary)	68-03827	11/25/2025	07/31/2026
Texas	NELAP (Secondary)	T104704494	02/12/2025	01/31/2026
USDA	Domestic CA	Soil-MI-007	02/06/2025	08/07/2026
USDA	Soil Import	525-23-62-77572	03/03/2023	03/03/2026
West Virginia	State Specific	355	06/07/2025	08/31/2026
Wisconsin	State Specific	399084510	08/08/2025	08/31/2026

¹ - Scope available upon request

ANALYST SUMMARY



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)

Work Order: HN2518206

Sample Name: MH 3-9_112425 **Date Collected:** 11/24/25
Laboratory Code: HN2518206-001 **Date Received:** 12/03/25
Sample Matrix: WATER

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 537Mod	EPA 537Mod	001-AA	2368627	Steven Nguyen	3758464	Michelle McClendon

Sample Name: East P-Trap_112425 **Date Collected:** 11/24/25
Laboratory Code: HN2518206-002 **Date Received:** 12/03/25
Sample Matrix: WATER

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 537Mod	EPA 537Mod	002-AA	2368627	Steven Nguyen	3758464	Michelle McClendon

Sample Name: West P-Trap_112425 **Date Collected:** 11/24/25
Laboratory Code: HN2518206-003 **Date Received:** 12/03/25
Sample Matrix: WATER

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 537Mod	EPA 537Mod	003-AA	2368627	Steven Nguyen	3758464	Michelle McClendon

Sample Name: RFI-81-33_112525 **Date Collected:** 11/25/25
Laboratory Code: HN2518206-004 **Date Received:** 12/03/25
Sample Matrix: WATER

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 537Mod	EPA 537Mod	004-AA	2368627	Steven Nguyen	3758464	Michelle McClendon

ANALYST SUMMARY



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)

Work Order: HN2518206

Sample Name: RFI-81-12R_112525
Laboratory Code: HN2518206-005
Sample Matrix: WATER

Date Collected: 11/25/25
Date Received: 12/03/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 537Mod	EPA 537Mod	005-AA	2368627	Steven Nguyen	3758464	Michelle McClendon

Sample Name: RFI-86-14_112525
Laboratory Code: HN2518206-006
Sample Matrix: WATER

Date Collected: 11/25/25
Date Received: 12/03/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 537Mod	EPA 537Mod	006-AA	2368627	Steven Nguyen	3758464	Michelle McClendon

Sample Name: RFI-12-40_112525
Laboratory Code: HN2518206-007
Sample Matrix: WATER

Date Collected: 11/25/25
Date Received: 12/03/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 537Mod	EPA 537Mod	007-AA	2368627	Steven Nguyen	3758464	Michelle McClendon

Sample Name: RFI-23-01R_112625
Laboratory Code: HN2518206-008
Sample Matrix: WATER

Date Collected: 11/26/25
Date Received: 12/03/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 537Mod	EPA 537Mod	008-AA	2368627	Steven Nguyen	3758464	Michelle McClendon

ANALYST SUMMARY



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)

Work Order: HN2518206

Sample Name: RFI-23-02R_112625
Laboratory Code: HN2518206-009
Sample Matrix: WATER

Date Collected: 11/26/25
Date Received: 12/03/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 537Mod	EPA 537Mod	009-AA	2368627	Steven Nguyen	3758464	Michelle McClendon

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/24/25 11:30
Date Received: 12/03/25 13:00

CLIENT ID: MH 3-9_112425

Lab ID: HN2518206-001

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	EPA 537Mod	<0.467	U	ng/L	0.467	5.00	1	12/10/25 03:44	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	EPA 537Mod	<1.13	U	ng/L	1.13	5.00	1	12/10/25 03:44	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	EPA 537Mod	<0.936	U	ng/L	0.936	5.00	1	12/10/25 03:44	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	EPA 537Mod	<1.92	U	ng/L	1.92	5.00	1	12/10/25 03:44	12/05/25 11:34
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	EPA 537Mod	<0.562	U	ng/L	0.562	5.00	1	12/10/25 03:44	12/05/25 11:34
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	EPA 537Mod	<0.448	U	ng/L	0.448	5.00	1	12/10/25 03:44	12/05/25 11:34
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	EPA 537Mod	<1.17	U	ng/L	1.17	5.00	1	12/10/25 03:44	12/05/25 11:34
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	EPA 537Mod	<1.54	U	ng/L	1.54	5.00	1	12/10/25 03:44	12/05/25 11:34
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	EPA 537Mod	<0.644	U	ng/L	0.644	5.00	1	12/10/25 03:44	12/05/25 11:34
Perfluorobutane sulfonic acid (PFBS)	EPA 537Mod	2.24	J	ng/L	0.351	5.00	1	12/10/25 03:44	12/05/25 11:34
Perfluorobutanoic acid (PFBA)	EPA 537Mod	15.9		ng/L	2.60	5.00	1	12/10/25 03:44	12/05/25 11:34
Perfluorodecane sulfonic acid (PFDS)	EPA 537Mod	<1.37	U	ng/L	1.37	5.00	1	12/10/25 03:44	12/05/25 11:34
Perfluorodecanoic acid (PFDA)	EPA 537Mod	<1.24	U	ng/L	1.24	5.00	1	12/10/25 03:44	12/05/25 11:34
Perfluorododecanoic acid (PFDOA)	EPA 537Mod	<0.691	U	ng/L	0.691	5.00	1	12/10/25 03:44	12/05/25 11:34
Perfluoroheptane sulfonic acid (PFHpS)	EPA 537Mod	0.910	J	ng/L	0.566	5.00	1	12/10/25 03:44	12/05/25 11:34
Perfluoroheptanoic acid (PFHpA)	EPA 537Mod	2.50	J	ng/L	1.73	5.00	1	12/10/25 03:44	12/05/25 11:34
Perfluorohexane sulfonic acid (PFHxS)	EPA 537Mod	13.1		ng/L	0.903	5.00	1	12/10/25 03:44	12/05/25 11:34
Perfluorohexanoic acid (PFHxA)	EPA 537Mod	5.22		ng/L	1.20	5.00	1	12/10/25 03:44	12/05/25 11:34
Perfluorononane sulfonic acid (PFNS)	EPA 537Mod	<0.496	U	ng/L	0.496	5.00	1	12/10/25 03:44	12/05/25 11:34

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/24/25 11:30
Date Received: 12/03/25 13:00

CLIENT ID: MH 3-9_112425

Lab ID: HN2518206-001

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononanoic acid (PFNA)	EPA 537Mod	1.98	J	ng/L	0.870	5.00	1	12/10/25 03:44	12/05/25 11:34
Perfluorooctane sulfonamide (PFOSAm)	EPA 537Mod	<0.711	U	ng/L	0.711	5.00	1	12/10/25 03:44	12/05/25 11:34
Perfluorooctane sulfonic acid (PFOS)	EPA 537Mod	20.8		ng/L	0.892	2.00	1	12/10/25 03:44	12/05/25 11:34
Perfluorooctanoic acid (PFOA)	EPA 537Mod	6.61		ng/L	0.630	2.00	1	12/10/25 03:44	12/05/25 11:34
Perfluoropentane sulfonic acid (PFPeS)	EPA 537Mod	1.88	J	ng/L	0.556	5.00	1	12/10/25 03:44	12/05/25 11:34
Perfluoropentanoic acid (PFPeA)	EPA 537Mod	4.08	J	ng/L	1.28	5.00	1	12/10/25 03:44	12/05/25 11:34
Perfluorotetradecanoic acid (PFTDA)	EPA 537Mod	<2.64	U	ng/L	2.64	5.00	1	12/10/25 03:44	12/05/25 11:34
Perfluorotridecanoic acid (PFTrDA)	EPA 537Mod	<1.93	U	ng/L	1.93	5.00	1	12/10/25 03:44	12/05/25 11:34
Perfluoroundecanoic acid (PFUnDA)	EPA 537Mod	<0.974	U	ng/L	0.974	5.00	1	12/10/25 03:44	12/05/25 11:34
Surr: 13C2-FtS 4:2	EPA 537Mod	327	S	%REC		50-150	1	12/10/25 03:44	12/05/25 11:34
Surr: 13C2-FtS 6:2	EPA 537Mod	247	S	%REC		50-150	1	12/10/25 03:44	12/05/25 11:34
Surr: 13C2-FtS 8:2	EPA 537Mod	187	S	%REC		50-150	1	12/10/25 03:44	12/05/25 11:34
Surr: 13C2-PFDA	EPA 537Mod	93.5		%REC		50-150	1	12/10/25 03:44	12/05/25 11:34
Surr: 13C2-PFDoA	EPA 537Mod	95.6		%REC		50-150	1	12/10/25 03:44	12/05/25 11:34
Surr: 13C2-PFHxA	EPA 537Mod	76.2		%REC		50-150	1	12/10/25 03:44	12/05/25 11:34
Surr: 13C2-PFTeA	EPA 537Mod	92.6		%REC		27-134	1	12/10/25 03:44	12/05/25 11:34
Surr: 13C2-PFUnA	EPA 537Mod	92.8		%REC		50-150	1	12/10/25 03:44	12/05/25 11:34
Surr: 13C3-HFPO-DA	EPA 537Mod	87.9		%REC		41-142	1	12/10/25 03:44	12/05/25 11:34
Surr: 13C3-PFBS	EPA 537Mod	76.0		%REC		50-150	1	12/10/25 03:44	12/05/25 11:34
Surr: 13C4-PFBA	EPA 537Mod	94.6		%REC		50-150	1	12/10/25 03:44	12/05/25 11:34
Surr: 13C4-PFHpA	EPA 537Mod	82.7		%REC		42-141	1	12/10/25 03:44	12/05/25 11:34
Surr: 13C4-PFOA	EPA 537Mod	80.5		%REC		50-150	1	12/10/25 03:44	12/05/25 11:34
Surr: 13C4-PFOS	EPA 537Mod	81.1		%REC		50-150	1	12/10/25 03:44	12/05/25 11:34
Surr: 13C5-PFNA	EPA 537Mod	92.0		%REC		50-150	1	12/10/25 03:44	12/05/25 11:34
Surr: 13C5-PFPeA	EPA 537Mod	72.2		%REC		43-138	1	12/10/25 03:44	12/05/25 11:34
Surr: 13C8-FOSA	EPA 537Mod	72.7		%REC		30-122	1	12/10/25 03:44	12/05/25 11:34
Surr: 18O2-PFHxS	EPA 537Mod	70.5		%REC		50-150	1	12/10/25 03:44	12/05/25 11:34
Surr: d3-N-MeFOSAA	EPA 537Mod	81.7		%REC		35-136	1	12/10/25 03:44	12/05/25 11:34

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/24/25 11:30
Date Received: 12/03/25 13:00

CLIENT ID: MH 3-9_112425

Lab ID: HN2518206-001

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Surr: d5-N-EtFOSAA	EPA 537Mod	97.2		%REC		34-142	1	12/10/25 03:44	12/05/25 11:34

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/24/25 13:00
Date Received: 12/03/25 13:00

CLIENT ID: East P-Trap_112425

Lab ID: HN2518206-002

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	EPA 537Mod	<0.467	U	ng/L	0.467	5.00	1	12/10/25 03:58	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	EPA 537Mod	<1.13	U	ng/L	1.13	5.00	1	12/10/25 03:58	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	EPA 537Mod	<0.936	U	ng/L	0.936	5.00	1	12/10/25 03:58	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	EPA 537Mod	<1.92	U	ng/L	1.92	5.00	1	12/10/25 03:58	12/05/25 11:34
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	EPA 537Mod	<0.562	U	ng/L	0.562	5.00	1	12/10/25 03:58	12/05/25 11:34
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	EPA 537Mod	<0.448	U	ng/L	0.448	5.00	1	12/10/25 03:58	12/05/25 11:34
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	EPA 537Mod	<1.17	U	ng/L	1.17	5.00	1	12/10/25 03:58	12/05/25 11:34
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	EPA 537Mod	<1.54	U	ng/L	1.54	5.00	1	12/10/25 03:58	12/05/25 11:34
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	EPA 537Mod	<0.644	U	ng/L	0.644	5.00	1	12/10/25 03:58	12/05/25 11:34
Perfluorobutane sulfonic acid (PFBS)	EPA 537Mod	3.54	J	ng/L	0.351	5.00	1	12/10/25 03:58	12/05/25 11:34
Perfluorobutanoic acid (PFBA)	EPA 537Mod	6.46		ng/L	2.60	5.00	1	12/10/25 03:58	12/05/25 11:34
Perfluorodecane sulfonic acid (PFDS)	EPA 537Mod	<1.37	U	ng/L	1.37	5.00	1	12/10/25 03:58	12/05/25 11:34
Perfluorodecanoic acid (PFDA)	EPA 537Mod	<1.24	U	ng/L	1.24	5.00	1	12/10/25 03:58	12/05/25 11:34
Perfluorododecanoic acid (PFDOA)	EPA 537Mod	<0.691	U	ng/L	0.691	5.00	1	12/10/25 03:58	12/05/25 11:34
Perfluoroheptane sulfonic acid (PFHpS)	EPA 537Mod	1.52	J	ng/L	0.566	5.00	1	12/10/25 03:58	12/05/25 11:34
Perfluoroheptanoic acid (PFHpA)	EPA 537Mod	<1.73	U	ng/L	1.73	5.00	1	12/10/25 03:58	12/05/25 11:34
Perfluorohexane sulfonic acid (PFHxS)	EPA 537Mod	16.8		ng/L	0.903	5.00	1	12/10/25 03:58	12/05/25 11:34
Perfluorohexanoic acid (PFHxA)	EPA 537Mod	2.44	J	ng/L	1.20	5.00	1	12/10/25 03:58	12/05/25 11:34
Perfluorononane sulfonic acid (PFNS)	EPA 537Mod	<0.496	U	ng/L	0.496	5.00	1	12/10/25 03:58	12/05/25 11:34

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/24/25 13:00
Date Received: 12/03/25 13:00

CLIENT ID: East P-Trap_112425

Lab ID: HN2518206-002

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononanoic acid (PFNA)	EPA 537Mod	<0.870	U	ng/L	0.870	5.00	1	12/10/25 03:58	12/05/25 11:34
Perfluorooctane sulfonamide (PFOSAm)	EPA 537Mod	<0.711	U	ng/L	0.711	5.00	1	12/10/25 03:58	12/05/25 11:34
Perfluorooctane sulfonic acid (PFOS)	EPA 537Mod	93.8		ng/L	0.892	2.00	1	12/10/25 03:58	12/05/25 11:34
Perfluorooctanoic acid (PFOA)	EPA 537Mod	7.29		ng/L	0.630	2.00	1	12/10/25 03:58	12/05/25 11:34
Perfluoropentane sulfonic acid (PFPeS)	EPA 537Mod	2.31	J	ng/L	0.556	5.00	1	12/10/25 03:58	12/05/25 11:34
Perfluoropentanoic acid (PFPeA)	EPA 537Mod	1.57	J	ng/L	1.28	5.00	1	12/10/25 03:58	12/05/25 11:34
Perfluorotetradecanoic acid (PFTDA)	EPA 537Mod	<2.64	U	ng/L	2.64	5.00	1	12/10/25 03:58	12/05/25 11:34
Perfluorotridecanoic acid (PFTrDA)	EPA 537Mod	<1.93	U	ng/L	1.93	5.00	1	12/10/25 03:58	12/05/25 11:34
Perfluoroundecanoic acid (PFUnDA)	EPA 537Mod	<0.974	U	ng/L	0.974	5.00	1	12/10/25 03:58	12/05/25 11:34
Surr: 13C2-FtS 4:2	EPA 537Mod	301	S	%REC		50-150	1	12/10/25 03:58	12/05/25 11:34
Surr: 13C2-FtS 6:2	EPA 537Mod	183	S	%REC		50-150	1	12/10/25 03:58	12/05/25 11:34
Surr: 13C2-FtS 8:2	EPA 537Mod	124		%REC		50-150	1	12/10/25 03:58	12/05/25 11:34
Surr: 13C2-PFDA	EPA 537Mod	91.6		%REC		50-150	1	12/10/25 03:58	12/05/25 11:34
Surr: 13C2-PFDoA	EPA 537Mod	89.1		%REC		50-150	1	12/10/25 03:58	12/05/25 11:34
Surr: 13C2-PFHxA	EPA 537Mod	95.5		%REC		50-150	1	12/10/25 03:58	12/05/25 11:34
Surr: 13C2-PFTeA	EPA 537Mod	88.9		%REC		27-134	1	12/10/25 03:58	12/05/25 11:34
Surr: 13C2-PFUnA	EPA 537Mod	88.4		%REC		50-150	1	12/10/25 03:58	12/05/25 11:34
Surr: 13C3-HFPO-DA	EPA 537Mod	104		%REC		41-142	1	12/10/25 03:58	12/05/25 11:34
Surr: 13C3-PFBS	EPA 537Mod	81.3		%REC		50-150	1	12/10/25 03:58	12/05/25 11:34
Surr: 13C4-PFBA	EPA 537Mod	106		%REC		50-150	1	12/10/25 03:58	12/05/25 11:34
Surr: 13C4-PFHpA	EPA 537Mod	98.3		%REC		42-141	1	12/10/25 03:58	12/05/25 11:34
Surr: 13C4-PFOA	EPA 537Mod	88.5		%REC		50-150	1	12/10/25 03:58	12/05/25 11:34
Surr: 13C4-PFOS	EPA 537Mod	82.1		%REC		50-150	1	12/10/25 03:58	12/05/25 11:34
Surr: 13C5-PFNA	EPA 537Mod	95.7		%REC		50-150	1	12/10/25 03:58	12/05/25 11:34
Surr: 13C5-PFPeA	EPA 537Mod	91.1		%REC		43-138	1	12/10/25 03:58	12/05/25 11:34
Surr: 13C8-FOSA	EPA 537Mod	75.9		%REC		30-122	1	12/10/25 03:58	12/05/25 11:34
Surr: 18O2-PFHxS	EPA 537Mod	79.3		%REC		50-150	1	12/10/25 03:58	12/05/25 11:34
Surr: d3-N-MeFOSAA	EPA 537Mod	80.0		%REC		35-136	1	12/10/25 03:58	12/05/25 11:34

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/24/25 13:00
Date Received: 12/03/25 13:00

CLIENT ID: East P-Trap_112425	Lab ID: HN2518206-002

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Surr: d5-N-EtFOSAA	EPA 537Mod	86.4		%REC		34-142	1	12/10/25 03:58	12/05/25 11:34

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/24/25 14:30
Date Received: 12/03/25 13:00

CLIENT ID: West P-Trap_112425

Lab ID: HN2518206-003

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	EPA 537Mod	<0.467	U	ng/L	0.467	5.00	1	12/10/25 04:13	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	EPA 537Mod	<1.13	U	ng/L	1.13	5.00	1	12/10/25 04:13	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	EPA 537Mod	<0.936	U	ng/L	0.936	5.00	1	12/10/25 04:13	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	EPA 537Mod	<1.92	U	ng/L	1.92	5.00	1	12/10/25 04:13	12/05/25 11:34
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	EPA 537Mod	<0.562	U	ng/L	0.562	5.00	1	12/10/25 04:13	12/05/25 11:34
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	EPA 537Mod	<0.448	U	ng/L	0.448	5.00	1	12/10/25 04:13	12/05/25 11:34
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	EPA 537Mod	<1.17	U	ng/L	1.17	5.00	1	12/10/25 04:13	12/05/25 11:34
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	EPA 537Mod	<1.54	U	ng/L	1.54	5.00	1	12/10/25 04:13	12/05/25 11:34
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	EPA 537Mod	<0.644	U	ng/L	0.644	5.00	1	12/10/25 04:13	12/05/25 11:34
Perfluorobutane sulfonic acid (PFBS)	EPA 537Mod	3.18	J	ng/L	0.351	5.00	1	12/10/25 04:13	12/05/25 11:34
Perfluorobutanoic acid (PFBA)	EPA 537Mod	7.24		ng/L	2.60	5.00	1	12/10/25 04:13	12/05/25 11:34
Perfluorodecane sulfonic acid (PFDS)	EPA 537Mod	<1.37	U	ng/L	1.37	5.00	1	12/10/25 04:13	12/05/25 11:34
Perfluorodecanoic acid (PFDA)	EPA 537Mod	<1.24	U	ng/L	1.24	5.00	1	12/10/25 04:13	12/05/25 11:34
Perfluorododecanoic acid (PFDOA)	EPA 537Mod	<0.691	U	ng/L	0.691	5.00	1	12/10/25 04:13	12/05/25 11:34
Perfluoroheptane sulfonic acid (PFHpS)	EPA 537Mod	1.40	J	ng/L	0.566	5.00	1	12/10/25 04:13	12/05/25 11:34
Perfluoroheptanoic acid (PFHpA)	EPA 537Mod	2.56	J	ng/L	1.73	5.00	1	12/10/25 04:13	12/05/25 11:34
Perfluorohexane sulfonic acid (PFHxS)	EPA 537Mod	19.6		ng/L	0.903	5.00	1	12/10/25 04:13	12/05/25 11:34
Perfluorohexanoic acid (PFHxA)	EPA 537Mod	3.44	J	ng/L	1.20	5.00	1	12/10/25 04:13	12/05/25 11:34
Perfluorononane sulfonic acid (PFNS)	EPA 537Mod	<0.496	U	ng/L	0.496	5.00	1	12/10/25 04:13	12/05/25 11:34

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/24/25 14:30
Date Received: 12/03/25 13:00

CLIENT ID: West P-Trap_112425

Lab ID: HN2518206-003

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononanoic acid (PFNA)	EPA 537Mod	1.70	J	ng/L	0.870	5.00	1	12/10/25 04:13	12/05/25 11:34
Perfluorooctane sulfonamide (PFOSAm)	EPA 537Mod	<0.711	U	ng/L	0.711	5.00	1	12/10/25 04:13	12/05/25 11:34
Perfluorooctane sulfonic acid (PFOS)	EPA 537Mod	70.4		ng/L	0.892	2.00	1	12/10/25 04:13	12/05/25 11:34
Perfluorooctanoic acid (PFOA)	EPA 537Mod	11.8		ng/L	0.630	2.00	1	12/10/25 04:13	12/05/25 11:34
Perfluoropentane sulfonic acid (PFPeS)	EPA 537Mod	2.02	J	ng/L	0.556	5.00	1	12/10/25 04:13	12/05/25 11:34
Perfluoropentanoic acid (PFPeA)	EPA 537Mod	2.55	J	ng/L	1.28	5.00	1	12/10/25 04:13	12/05/25 11:34
Perfluorotetradecanoic acid (PFTDA)	EPA 537Mod	<2.64	U	ng/L	2.64	5.00	1	12/10/25 04:13	12/05/25 11:34
Perfluorotridecanoic acid (PFTrDA)	EPA 537Mod	<1.93	U	ng/L	1.93	5.00	1	12/10/25 04:13	12/05/25 11:34
Perfluoroundecanoic acid (PFUnDA)	EPA 537Mod	<0.974	U	ng/L	0.974	5.00	1	12/10/25 04:13	12/05/25 11:34
Surr: 13C2-FtS 4:2	EPA 537Mod	345	S	%REC		50-150	1	12/10/25 04:13	12/05/25 11:34
Surr: 13C2-FtS 6:2	EPA 537Mod	234	S	%REC		50-150	1	12/10/25 04:13	12/05/25 11:34
Surr: 13C2-FtS 8:2	EPA 537Mod	157	S	%REC		50-150	1	12/10/25 04:13	12/05/25 11:34
Surr: 13C2-PFDA	EPA 537Mod	90.3		%REC		50-150	1	12/10/25 04:13	12/05/25 11:34
Surr: 13C2-PFDoA	EPA 537Mod	85.7		%REC		50-150	1	12/10/25 04:13	12/05/25 11:34
Surr: 13C2-PFHxA	EPA 537Mod	87.5		%REC		50-150	1	12/10/25 04:13	12/05/25 11:34
Surr: 13C2-PFTeA	EPA 537Mod	86.4		%REC		27-134	1	12/10/25 04:13	12/05/25 11:34
Surr: 13C2-PFUnA	EPA 537Mod	82.1		%REC		50-150	1	12/10/25 04:13	12/05/25 11:34
Surr: 13C3-HFPO-DA	EPA 537Mod	98.4		%REC		41-142	1	12/10/25 04:13	12/05/25 11:34
Surr: 13C3-PFBS	EPA 537Mod	77.1		%REC		50-150	1	12/10/25 04:13	12/05/25 11:34
Surr: 13C4-PFBA	EPA 537Mod	94.8		%REC		50-150	1	12/10/25 04:13	12/05/25 11:34
Surr: 13C4-PFHpA	EPA 537Mod	95.4		%REC		42-141	1	12/10/25 04:13	12/05/25 11:34
Surr: 13C4-PFOA	EPA 537Mod	82.8		%REC		50-150	1	12/10/25 04:13	12/05/25 11:34
Surr: 13C4-PFOS	EPA 537Mod	76.7		%REC		50-150	1	12/10/25 04:13	12/05/25 11:34
Surr: 13C5-PFNA	EPA 537Mod	88.1		%REC		50-150	1	12/10/25 04:13	12/05/25 11:34
Surr: 13C5-PFPeA	EPA 537Mod	86.7		%REC		43-138	1	12/10/25 04:13	12/05/25 11:34
Surr: 13C8-FOSA	EPA 537Mod	71.4		%REC		30-122	1	12/10/25 04:13	12/05/25 11:34
Surr: 18O2-PFHxS	EPA 537Mod	70.3		%REC		50-150	1	12/10/25 04:13	12/05/25 11:34
Surr: d3-N-MeFOSAA	EPA 537Mod	77.6		%REC		35-136	1	12/10/25 04:13	12/05/25 11:34

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/24/25 14:30
Date Received: 12/03/25 13:00

CLIENT ID: West P-Trap_112425

Lab ID: HN2518206-003

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Surr: d5-N-EtFOSAA	EPA 537Mod	79.6		%REC		34-142	1	12/10/25 04:13	12/05/25 11:34

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/25/25 12:00
Date Received: 12/03/25 13:00

CLIENT ID: RFI-81-33_112525

Lab ID: HN2518206-004

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	EPA 537Mod	<0.467	U	ng/L	0.467	5.00	1	12/10/25 04:27	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	EPA 537Mod	<1.13	U	ng/L	1.13	5.00	1	12/10/25 04:27	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	EPA 537Mod	<0.936	U	ng/L	0.936	5.00	1	12/10/25 04:27	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	EPA 537Mod	<1.92	U	ng/L	1.92	5.00	1	12/10/25 04:27	12/05/25 11:34
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	EPA 537Mod	<0.562	U	ng/L	0.562	5.00	1	12/10/25 04:27	12/05/25 11:34
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	EPA 537Mod	<0.448	U	ng/L	0.448	5.00	1	12/10/25 04:27	12/05/25 11:34
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	EPA 537Mod	<1.17	U	ng/L	1.17	5.00	1	12/10/25 04:27	12/05/25 11:34
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	EPA 537Mod	<1.54	U	ng/L	1.54	5.00	1	12/10/25 04:27	12/05/25 11:34
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	EPA 537Mod	<0.644	U	ng/L	0.644	5.00	1	12/10/25 04:27	12/05/25 11:34
Perfluorobutane sulfonic acid (PFBS)	EPA 537Mod	2.10	J	ng/L	0.351	5.00	1	12/10/25 04:27	12/05/25 11:34
Perfluorobutanoic acid (PFBA)	EPA 537Mod	25.5		ng/L	2.60	5.00	1	12/10/25 04:27	12/05/25 11:34
Perfluorodecane sulfonic acid (PFDS)	EPA 537Mod	<1.37	U	ng/L	1.37	5.00	1	12/10/25 04:27	12/05/25 11:34
Perfluorodecanoic acid (PFDA)	EPA 537Mod	<1.24	U	ng/L	1.24	5.00	1	12/10/25 04:27	12/05/25 11:34
Perfluorododecanoic acid (PFDOA)	EPA 537Mod	<0.691	U	ng/L	0.691	5.00	1	12/10/25 04:27	12/05/25 11:34
Perfluoroheptane sulfonic acid (PFHpS)	EPA 537Mod	<0.566	U	ng/L	0.566	5.00	1	12/10/25 04:27	12/05/25 11:34
Perfluoroheptanoic acid (PFHpA)	EPA 537Mod	<1.73	U	ng/L	1.73	5.00	1	12/10/25 04:27	12/05/25 11:34
Perfluorohexane sulfonic acid (PFHxS)	EPA 537Mod	3.40	J	ng/L	0.903	5.00	1	12/10/25 04:27	12/05/25 11:34
Perfluorohexanoic acid (PFHxA)	EPA 537Mod	4.37	J	ng/L	1.20	5.00	1	12/10/25 04:27	12/05/25 11:34
Perfluorononane sulfonic acid (PFNS)	EPA 537Mod	<0.496	U	ng/L	0.496	5.00	1	12/10/25 04:27	12/05/25 11:34

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/25/25 12:00
Date Received: 12/03/25 13:00

CLIENT ID: RFI-81-33_112525

Lab ID: HN2518206-004

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononanoic acid (PFNA)	EPA 537Mod	<0.870	U	ng/L	0.870	5.00	1	12/10/25 04:27	12/05/25 11:34
Perfluorooctane sulfonamide (PFOSAm)	EPA 537Mod	<0.711	U	ng/L	0.711	5.00	1	12/10/25 04:27	12/05/25 11:34
Perfluorooctane sulfonic acid (PFOS)	EPA 537Mod	1.02	J	ng/L	0.892	2.00	1	12/10/25 04:27	12/05/25 11:34
Perfluorooctanoic acid (PFOA)	EPA 537Mod	2.63		ng/L	0.630	2.00	1	12/10/25 04:27	12/05/25 11:34
Perfluoropentane sulfonic acid (PFPeS)	EPA 537Mod	0.691	J	ng/L	0.556	5.00	1	12/10/25 04:27	12/05/25 11:34
Perfluoropentanoic acid (PFPeA)	EPA 537Mod	9.16		ng/L	1.28	5.00	1	12/10/25 04:27	12/05/25 11:34
Perfluorotetradecanoic acid (PFTDA)	EPA 537Mod	<2.64	U	ng/L	2.64	5.00	1	12/10/25 04:27	12/05/25 11:34
Perfluorotridecanoic acid (PFTrDA)	EPA 537Mod	<1.93	U	ng/L	1.93	5.00	1	12/10/25 04:27	12/05/25 11:34
Perfluoroundecanoic acid (PFUnDA)	EPA 537Mod	<0.974	U	ng/L	0.974	5.00	1	12/10/25 04:27	12/05/25 11:34
<i>Surr: 13C2-FtS 4:2</i>	<i>EPA 537Mod</i>	131		%REC		50-150	1	12/10/25 04:27	12/05/25 11:34
<i>Surr: 13C2-FtS 6:2</i>	<i>EPA 537Mod</i>	122		%REC		50-150	1	12/10/25 04:27	12/05/25 11:34
<i>Surr: 13C2-FtS 8:2</i>	<i>EPA 537Mod</i>	114		%REC		50-150	1	12/10/25 04:27	12/05/25 11:34
<i>Surr: 13C2-PFDA</i>	<i>EPA 537Mod</i>	92.2		%REC		50-150	1	12/10/25 04:27	12/05/25 11:34
<i>Surr: 13C2-PFDoA</i>	<i>EPA 537Mod</i>	90.0		%REC		50-150	1	12/10/25 04:27	12/05/25 11:34
<i>Surr: 13C2-PFHxA</i>	<i>EPA 537Mod</i>	94.1		%REC		50-150	1	12/10/25 04:27	12/05/25 11:34
<i>Surr: 13C2-PFTeA</i>	<i>EPA 537Mod</i>	95.4		%REC		27-134	1	12/10/25 04:27	12/05/25 11:34
<i>Surr: 13C2-PFUnA</i>	<i>EPA 537Mod</i>	91.5		%REC		50-150	1	12/10/25 04:27	12/05/25 11:34
<i>Surr: 13C3-HFPO-DA</i>	<i>EPA 537Mod</i>	116		%REC		41-142	1	12/10/25 04:27	12/05/25 11:34
<i>Surr: 13C3-PFBS</i>	<i>EPA 537Mod</i>	89.5		%REC		50-150	1	12/10/25 04:27	12/05/25 11:34
<i>Surr: 13C4-PFBA</i>	<i>EPA 537Mod</i>	111		%REC		50-150	1	12/10/25 04:27	12/05/25 11:34
<i>Surr: 13C4-PFHpA</i>	<i>EPA 537Mod</i>	95.6		%REC		42-141	1	12/10/25 04:27	12/05/25 11:34
<i>Surr: 13C4-PFOA</i>	<i>EPA 537Mod</i>	89.9		%REC		50-150	1	12/10/25 04:27	12/05/25 11:34
<i>Surr: 13C4-PFOS</i>	<i>EPA 537Mod</i>	83.7		%REC		50-150	1	12/10/25 04:27	12/05/25 11:34
<i>Surr: 13C5-PFNA</i>	<i>EPA 537Mod</i>	91.9		%REC		50-150	1	12/10/25 04:27	12/05/25 11:34
<i>Surr: 13C5-PFPeA</i>	<i>EPA 537Mod</i>	97.3		%REC		43-138	1	12/10/25 04:27	12/05/25 11:34
<i>Surr: 13C8-FOSA</i>	<i>EPA 537Mod</i>	80.9		%REC		30-122	1	12/10/25 04:27	12/05/25 11:34
<i>Surr: 18O2-PFHxS</i>	<i>EPA 537Mod</i>	80.5		%REC		50-150	1	12/10/25 04:27	12/05/25 11:34
<i>Surr: d3-N-MeFOSAA</i>	<i>EPA 537Mod</i>	85.1		%REC		35-136	1	12/10/25 04:27	12/05/25 11:34

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/25/25 12:00
Date Received: 12/03/25 13:00

CLIENT ID: RFI-81-33_112525	Lab ID: HN2518206-004

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Surr: d5-N-EtFOSAA	EPA 537Mod	90.5		%REC		34-142	1	12/10/25 04:27	12/05/25 11:34

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/25/25 13:40
Date Received: 12/03/25 13:00

CLIENT ID: RFI-81-12R_112525

Lab ID: HN2518206-005

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	EPA 537Mod	<0.467	U	ng/L	0.467	5.00	1	12/10/25 04:42	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	EPA 537Mod	<1.13	U	ng/L	1.13	5.00	1	12/10/25 04:42	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	EPA 537Mod	<0.936	U	ng/L	0.936	5.00	1	12/10/25 04:42	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	EPA 537Mod	<1.92	U	ng/L	1.92	5.00	1	12/10/25 04:42	12/05/25 11:34
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	EPA 537Mod	<0.562	U	ng/L	0.562	5.00	1	12/10/25 04:42	12/05/25 11:34
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	EPA 537Mod	<0.448	U	ng/L	0.448	5.00	1	12/10/25 04:42	12/05/25 11:34
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	EPA 537Mod	<1.17	U	ng/L	1.17	5.00	1	12/10/25 04:42	12/05/25 11:34
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	EPA 537Mod	<1.54	U	ng/L	1.54	5.00	1	12/10/25 04:42	12/05/25 11:34
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	EPA 537Mod	<0.644	U	ng/L	0.644	5.00	1	12/10/25 04:42	12/05/25 11:34
Perfluorobutane sulfonic acid (PFBS)	EPA 537Mod	2.15	J	ng/L	0.351	5.00	1	12/10/25 04:42	12/05/25 11:34
Perfluorobutanoic acid (PFBA)	EPA 537Mod	14.1		ng/L	2.60	5.00	1	12/10/25 04:42	12/05/25 11:34
Perfluorodecane sulfonic acid (PFDS)	EPA 537Mod	<1.37	U	ng/L	1.37	5.00	1	12/10/25 04:42	12/05/25 11:34
Perfluorodecanoic acid (PFDA)	EPA 537Mod	<1.24	U	ng/L	1.24	5.00	1	12/10/25 04:42	12/05/25 11:34
Perfluorododecanoic acid (PFDOA)	EPA 537Mod	<0.691	U	ng/L	0.691	5.00	1	12/10/25 04:42	12/05/25 11:34
Perfluoroheptane sulfonic acid (PFHpS)	EPA 537Mod	<0.566	U	ng/L	0.566	5.00	1	12/10/25 04:42	12/05/25 11:34
Perfluoroheptanoic acid (PFHpA)	EPA 537Mod	2.29	J	ng/L	1.73	5.00	1	12/10/25 04:42	12/05/25 11:34
Perfluorohexane sulfonic acid (PFHxS)	EPA 537Mod	2.96	J	ng/L	0.903	5.00	1	12/10/25 04:42	12/05/25 11:34
Perfluorohexanoic acid (PFHxA)	EPA 537Mod	2.39	J	ng/L	1.20	5.00	1	12/10/25 04:42	12/05/25 11:34
Perfluorononane sulfonic acid (PFNS)	EPA 537Mod	<0.496	U	ng/L	0.496	5.00	1	12/10/25 04:42	12/05/25 11:34

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/25/25 13:40
Date Received: 12/03/25 13:00

CLIENT ID: RFI-81-12R_112525

Lab ID: HN2518206-005

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononanoic acid (PFNA)	EPA 537Mod	1.25	J	ng/L	0.870	5.00	1	12/10/25 04:42	12/05/25 11:34
Perfluorooctane sulfonamide (PFOSAm)	EPA 537Mod	<0.711	U	ng/L	0.711	5.00	1	12/10/25 04:42	12/05/25 11:34
Perfluorooctane sulfonic acid (PFOS)	EPA 537Mod	18.4		ng/L	0.892	2.00	1	12/10/25 04:42	12/05/25 11:34
Perfluorooctanoic acid (PFOA)	EPA 537Mod	7.80		ng/L	0.630	2.00	1	12/10/25 04:42	12/05/25 11:34
Perfluoropentane sulfonic acid (PFPeS)	EPA 537Mod	<0.556	U	ng/L	0.556	5.00	1	12/10/25 04:42	12/05/25 11:34
Perfluoropentanoic acid (PFPeA)	EPA 537Mod	2.16	J	ng/L	1.28	5.00	1	12/10/25 04:42	12/05/25 11:34
Perfluorotetradecanoic acid (PFTDA)	EPA 537Mod	<2.64	U	ng/L	2.64	5.00	1	12/10/25 04:42	12/05/25 11:34
Perfluorotridecanoic acid (PFTrDA)	EPA 537Mod	<1.93	U	ng/L	1.93	5.00	1	12/10/25 04:42	12/05/25 11:34
Perfluoroundecanoic acid (PFUnDA)	EPA 537Mod	<0.974	U	ng/L	0.974	5.00	1	12/10/25 04:42	12/05/25 11:34
Surr: 13C2-FtS 4:2	EPA 537Mod	150		%REC		50-150	1	12/10/25 04:42	12/05/25 11:34
Surr: 13C2-FtS 6:2	EPA 537Mod	118		%REC		50-150	1	12/10/25 04:42	12/05/25 11:34
Surr: 13C2-FtS 8:2	EPA 537Mod	108		%REC		50-150	1	12/10/25 04:42	12/05/25 11:34
Surr: 13C2-PFDA	EPA 537Mod	81.7		%REC		50-150	1	12/10/25 04:42	12/05/25 11:34
Surr: 13C2-PFDoA	EPA 537Mod	90.0		%REC		50-150	1	12/10/25 04:42	12/05/25 11:34
Surr: 13C2-PFHxA	EPA 537Mod	90.4		%REC		50-150	1	12/10/25 04:42	12/05/25 11:34
Surr: 13C2-PFTeA	EPA 537Mod	94.4		%REC		27-134	1	12/10/25 04:42	12/05/25 11:34
Surr: 13C2-PFUnA	EPA 537Mod	89.7		%REC		50-150	1	12/10/25 04:42	12/05/25 11:34
Surr: 13C3-HFPO-DA	EPA 537Mod	104		%REC		41-142	1	12/10/25 04:42	12/05/25 11:34
Surr: 13C3-PFBS	EPA 537Mod	83.7		%REC		50-150	1	12/10/25 04:42	12/05/25 11:34
Surr: 13C4-PFBA	EPA 537Mod	104		%REC		50-150	1	12/10/25 04:42	12/05/25 11:34
Surr: 13C4-PFHpA	EPA 537Mod	101		%REC		42-141	1	12/10/25 04:42	12/05/25 11:34
Surr: 13C4-PFOA	EPA 537Mod	90.8		%REC		50-150	1	12/10/25 04:42	12/05/25 11:34
Surr: 13C4-PFOS	EPA 537Mod	81.2		%REC		50-150	1	12/10/25 04:42	12/05/25 11:34
Surr: 13C5-PFNA	EPA 537Mod	88.9		%REC		50-150	1	12/10/25 04:42	12/05/25 11:34
Surr: 13C5-PFPeA	EPA 537Mod	94.1		%REC		43-138	1	12/10/25 04:42	12/05/25 11:34
Surr: 13C8-FOSA	EPA 537Mod	79.8		%REC		30-122	1	12/10/25 04:42	12/05/25 11:34
Surr: 18O2-PFHxS	EPA 537Mod	78.0		%REC		50-150	1	12/10/25 04:42	12/05/25 11:34
Surr: d3-N-MeFOSAA	EPA 537Mod	81.8		%REC		35-136	1	12/10/25 04:42	12/05/25 11:34

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/25/25 13:40
Date Received: 12/03/25 13:00

CLIENT ID: RFI-81-12R_112525	Lab ID: HN2518206-005

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Surr: d5-N-EtFOSAA	EPA 537Mod	83.5		%REC		34-142	1	12/10/25 04:42	12/05/25 11:34

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/25/25 15:00
Date Received: 12/03/25 13:00

CLIENT ID: RFI-86-14_112525

Lab ID: HN2518206-006

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	EPA 537Mod	0.763	J	ng/L	0.467	5.00	1	12/10/25 00:51	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	EPA 537Mod	<1.13	U	ng/L	1.13	5.00	1	12/10/25 00:51	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	EPA 537Mod	<0.936	U	ng/L	0.936	5.00	1	12/10/25 00:51	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	EPA 537Mod	<1.92	U	ng/L	1.92	5.00	1	12/10/25 00:51	12/05/25 11:34
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	EPA 537Mod	<0.562	U	ng/L	0.562	5.00	1	12/10/25 00:51	12/05/25 11:34
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	EPA 537Mod	<0.448	U	ng/L	0.448	5.00	1	12/10/25 00:51	12/05/25 11:34
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	EPA 537Mod	<1.17	U	ng/L	1.17	5.00	1	12/10/25 00:51	12/05/25 11:34
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	EPA 537Mod	<1.54	U	ng/L	1.54	5.00	1	12/10/25 00:51	12/05/25 11:34
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	EPA 537Mod	<0.644	U	ng/L	0.644	5.00	1	12/10/25 00:51	12/05/25 11:34
Perfluorobutane sulfonic acid (PFBS)	EPA 537Mod	1.99	J	ng/L	0.351	5.00	1	12/10/25 00:51	12/05/25 11:34
Perfluorobutanoic acid (PFBA)	EPA 537Mod	8.73		ng/L	2.60	5.00	1	12/10/25 00:51	12/05/25 11:34
Perfluorodecane sulfonic acid (PFDS)	EPA 537Mod	<1.37	U	ng/L	1.37	5.00	1	12/10/25 00:51	12/05/25 11:34
Perfluorodecanoic acid (PFDA)	EPA 537Mod	<1.24	U	ng/L	1.24	5.00	1	12/10/25 00:51	12/05/25 11:34
Perfluorododecanoic acid (PFDOA)	EPA 537Mod	0.706	J	ng/L	0.691	5.00	1	12/10/25 00:51	12/05/25 11:34
Perfluoroheptane sulfonic acid (PFHpS)	EPA 537Mod	<0.566	U	ng/L	0.566	5.00	1	12/10/25 00:51	12/05/25 11:34
Perfluoroheptanoic acid (PFHpA)	EPA 537Mod	3.53	J	ng/L	1.73	5.00	1	12/10/25 00:51	12/05/25 11:34
Perfluorohexane sulfonic acid (PFHxS)	EPA 537Mod	2.08	J	ng/L	0.903	5.00	1	12/10/25 00:51	12/05/25 11:34
Perfluorohexanoic acid (PFHxA)	EPA 537Mod	4.00	J	ng/L	1.20	5.00	1	12/10/25 00:51	12/05/25 11:34
Perfluorononane sulfonic acid (PFNS)	EPA 537Mod	<0.496	U	ng/L	0.496	5.00	1	12/10/25 00:51	12/05/25 11:34

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/25/25 15:00
Date Received: 12/03/25 13:00

CLIENT ID: RFI-86-14_112525

Lab ID: HN2518206-006

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononanoic acid (PFNA)	EPA 537Mod	<0.870	U	ng/L	0.870	5.00	1	12/10/25 00:51	12/05/25 11:34
Perfluorooctane sulfonamide (PFOSAm)	EPA 537Mod	<0.711	U	ng/L	0.711	5.00	1	12/10/25 00:51	12/05/25 11:34
Perfluorooctane sulfonic acid (PFOS)	EPA 537Mod	1.14	J	ng/L	0.892	2.00	1	12/10/25 00:51	12/05/25 11:34
Perfluorooctanoic acid (PFOA)	EPA 537Mod	9.25		ng/L	0.630	2.00	1	12/10/25 00:51	12/05/25 11:34
Perfluoropentane sulfonic acid (PFPeS)	EPA 537Mod	0.727	J	ng/L	0.556	5.00	1	12/10/25 00:51	12/05/25 11:34
Perfluoropentanoic acid (PFPeA)	EPA 537Mod	3.89	J	ng/L	1.28	5.00	1	12/10/25 00:51	12/05/25 11:34
Perfluorotetradecanoic acid (PFTDA)	EPA 537Mod	<2.64	U	ng/L	2.64	5.00	1	12/10/25 00:51	12/05/25 11:34
Perfluorotridecanoic acid (PFTrDA)	EPA 537Mod	<1.93	U	ng/L	1.93	5.00	1	12/10/25 00:51	12/05/25 11:34
Perfluoroundecanoic acid (PFUnDA)	EPA 537Mod	<0.974	U	ng/L	0.974	5.00	1	12/10/25 00:51	12/05/25 11:34
<i>Surr: 13C2-FtS 4:2</i>	<i>EPA 537Mod</i>	212	S	%REC		50-150	1	12/10/25 00:51	12/05/25 11:34
<i>Surr: 13C2-FtS 6:2</i>	<i>EPA 537Mod</i>	115		%REC		50-150	1	12/10/25 00:51	12/05/25 11:34
<i>Surr: 13C2-FtS 8:2</i>	<i>EPA 537Mod</i>	101		%REC		50-150	1	12/10/25 00:51	12/05/25 11:34
<i>Surr: 13C2-PFDA</i>	<i>EPA 537Mod</i>	87.2		%REC		50-150	1	12/10/25 00:51	12/05/25 11:34
<i>Surr: 13C2-PFDoA</i>	<i>EPA 537Mod</i>	95.3		%REC		50-150	1	12/10/25 00:51	12/05/25 11:34
<i>Surr: 13C2-PFHxA</i>	<i>EPA 537Mod</i>	100		%REC		50-150	1	12/10/25 00:51	12/05/25 11:34
<i>Surr: 13C2-PFTeA</i>	<i>EPA 537Mod</i>	87.5		%REC		27-134	1	12/10/25 00:51	12/05/25 11:34
<i>Surr: 13C2-PFUnA</i>	<i>EPA 537Mod</i>	94.2		%REC		50-150	1	12/10/25 00:51	12/05/25 11:34
<i>Surr: 13C3-HFPO-DA</i>	<i>EPA 537Mod</i>	95.7		%REC		41-142	1	12/10/25 00:51	12/05/25 11:34
<i>Surr: 13C3-PFBS</i>	<i>EPA 537Mod</i>	83.5		%REC		50-150	1	12/10/25 00:51	12/05/25 11:34
<i>Surr: 13C4-PFBA</i>	<i>EPA 537Mod</i>	110		%REC		50-150	1	12/10/25 00:51	12/05/25 11:34
<i>Surr: 13C4-PFHpA</i>	<i>EPA 537Mod</i>	95.2		%REC		42-141	1	12/10/25 00:51	12/05/25 11:34
<i>Surr: 13C4-PFOA</i>	<i>EPA 537Mod</i>	97.9		%REC		50-150	1	12/10/25 00:51	12/05/25 11:34
<i>Surr: 13C4-PFOS</i>	<i>EPA 537Mod</i>	89.5		%REC		50-150	1	12/10/25 00:51	12/05/25 11:34
<i>Surr: 13C5-PFNA</i>	<i>EPA 537Mod</i>	95.5		%REC		50-150	1	12/10/25 00:51	12/05/25 11:34
<i>Surr: 13C5-PFPeA</i>	<i>EPA 537Mod</i>	90.9		%REC		43-138	1	12/10/25 00:51	12/05/25 11:34
<i>Surr: 13C8-FOSA</i>	<i>EPA 537Mod</i>	75.6		%REC		30-122	1	12/10/25 00:51	12/05/25 11:34
<i>Surr: 18O2-PFHxS</i>	<i>EPA 537Mod</i>	83.1		%REC		50-150	1	12/10/25 00:51	12/05/25 11:34
<i>Surr: d3-N-MeFOSAA</i>	<i>EPA 537Mod</i>	79.3		%REC		35-136	1	12/10/25 00:51	12/05/25 11:34

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/25/25 15:00
Date Received: 12/03/25 13:00

CLIENT ID: RFI-86-14_112525	Lab ID: HN2518206-006

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Surr: d5-N-EtFOSAA	EPA 537Mod	82.6		%REC		34-142	1	12/10/25 00:51	12/05/25 11:34

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/25/25 16:10
Date Received: 12/03/25 13:00

CLIENT ID: RFI-12-40_112525

Lab ID: HN2518206-007

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	EPA 537Mod	<0.467	U	ng/L	0.467	5.00	1	12/10/25 04:56	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	EPA 537Mod	<1.13	U	ng/L	1.13	5.00	1	12/10/25 04:56	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	EPA 537Mod	<0.936	U	ng/L	0.936	5.00	1	12/10/25 04:56	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	EPA 537Mod	<1.92	U	ng/L	1.92	5.00	1	12/10/25 04:56	12/05/25 11:34
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	EPA 537Mod	<0.562	U	ng/L	0.562	5.00	1	12/10/25 04:56	12/05/25 11:34
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	EPA 537Mod	<0.448	U	ng/L	0.448	5.00	1	12/10/25 04:56	12/05/25 11:34
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	EPA 537Mod	<1.17	U	ng/L	1.17	5.00	1	12/10/25 04:56	12/05/25 11:34
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	EPA 537Mod	<1.54	U	ng/L	1.54	5.00	1	12/10/25 04:56	12/05/25 11:34
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	EPA 537Mod	<0.644	U	ng/L	0.644	5.00	1	12/10/25 04:56	12/05/25 11:34
Perfluorobutane sulfonic acid (PFBS)	EPA 537Mod	1.76	J	ng/L	0.351	5.00	1	12/10/25 04:56	12/05/25 11:34
Perfluorobutanoic acid (PFBA)	EPA 537Mod	12.6		ng/L	2.60	5.00	1	12/10/25 04:56	12/05/25 11:34
Perfluorodecane sulfonic acid (PFDS)	EPA 537Mod	<1.37	U	ng/L	1.37	5.00	1	12/10/25 04:56	12/05/25 11:34
Perfluorodecanoic acid (PFDA)	EPA 537Mod	<1.24	U	ng/L	1.24	5.00	1	12/10/25 04:56	12/05/25 11:34
Perfluorododecanoic acid (PFDOA)	EPA 537Mod	<0.691	U	ng/L	0.691	5.00	1	12/10/25 04:56	12/05/25 11:34
Perfluoroheptane sulfonic acid (PFHpS)	EPA 537Mod	<0.566	U	ng/L	0.566	5.00	1	12/10/25 04:56	12/05/25 11:34
Perfluoroheptanoic acid (PFHpA)	EPA 537Mod	3.81	J	ng/L	1.73	5.00	1	12/10/25 04:56	12/05/25 11:34
Perfluorohexane sulfonic acid (PFHxS)	EPA 537Mod	14.8		ng/L	0.903	5.00	1	12/10/25 04:56	12/05/25 11:34
Perfluorohexanoic acid (PFHxA)	EPA 537Mod	9.50		ng/L	1.20	5.00	1	12/10/25 04:56	12/05/25 11:34
Perfluorononane sulfonic acid (PFNS)	EPA 537Mod	<0.496	U	ng/L	0.496	5.00	1	12/10/25 04:56	12/05/25 11:34

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/25/25 16:10
Date Received: 12/03/25 13:00

CLIENT ID: RFI-12-40_112525

Lab ID: HN2518206-007

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononanoic acid (PFNA)	EPA 537Mod	2.99	J	ng/L	0.870	5.00	1	12/10/25 04:56	12/05/25 11:34
Perfluorooctane sulfonamide (PFOSAm)	EPA 537Mod	<0.711	U	ng/L	0.711	5.00	1	12/10/25 04:56	12/05/25 11:34
Perfluorooctane sulfonic acid (PFOS)	EPA 537Mod	20.0		ng/L	0.892	2.00	1	12/10/25 04:56	12/05/25 11:34
Perfluorooctanoic acid (PFOA)	EPA 537Mod	10.2		ng/L	0.630	2.00	1	12/10/25 04:56	12/05/25 11:34
Perfluoropentane sulfonic acid (PFPeS)	EPA 537Mod	0.611	J	ng/L	0.556	5.00	1	12/10/25 04:56	12/05/25 11:34
Perfluoropentanoic acid (PFPeA)	EPA 537Mod	7.87		ng/L	1.28	5.00	1	12/10/25 04:56	12/05/25 11:34
Perfluorotetradecanoic acid (PFTDA)	EPA 537Mod	<2.64	U	ng/L	2.64	5.00	1	12/10/25 04:56	12/05/25 11:34
Perfluorotridecanoic acid (PFTrDA)	EPA 537Mod	<1.93	U	ng/L	1.93	5.00	1	12/10/25 04:56	12/05/25 11:34
Perfluoroundecanoic acid (PFUnDA)	EPA 537Mod	<0.974	U	ng/L	0.974	5.00	1	12/10/25 04:56	12/05/25 11:34
Surr: 13C2-FtS 4:2	EPA 537Mod	200	S	%REC		50-150	1	12/10/25 04:56	12/05/25 11:34
Surr: 13C2-FtS 6:2	EPA 537Mod	166	S	%REC		50-150	1	12/10/25 04:56	12/05/25 11:34
Surr: 13C2-FtS 8:2	EPA 537Mod	112		%REC		50-150	1	12/10/25 04:56	12/05/25 11:34
Surr: 13C2-PFDA	EPA 537Mod	90.5		%REC		50-150	1	12/10/25 04:56	12/05/25 11:34
Surr: 13C2-PFDoA	EPA 537Mod	88.6		%REC		50-150	1	12/10/25 04:56	12/05/25 11:34
Surr: 13C2-PFHxA	EPA 537Mod	85.1		%REC		50-150	1	12/10/25 04:56	12/05/25 11:34
Surr: 13C2-PFTeA	EPA 537Mod	95.0		%REC		27-134	1	12/10/25 04:56	12/05/25 11:34
Surr: 13C2-PFUnA	EPA 537Mod	88.7		%REC		50-150	1	12/10/25 04:56	12/05/25 11:34
Surr: 13C3-HFPO-DA	EPA 537Mod	110		%REC		41-142	1	12/10/25 04:56	12/05/25 11:34
Surr: 13C3-PFBS	EPA 537Mod	87.8		%REC		50-150	1	12/10/25 04:56	12/05/25 11:34
Surr: 13C4-PFBA	EPA 537Mod	102		%REC		50-150	1	12/10/25 04:56	12/05/25 11:34
Surr: 13C4-PFHpA	EPA 537Mod	111		%REC		42-141	1	12/10/25 04:56	12/05/25 11:34
Surr: 13C4-PFOA	EPA 537Mod	91.1		%REC		50-150	1	12/10/25 04:56	12/05/25 11:34
Surr: 13C4-PFOS	EPA 537Mod	84.6		%REC		50-150	1	12/10/25 04:56	12/05/25 11:34
Surr: 13C5-PFNA	EPA 537Mod	86.6		%REC		50-150	1	12/10/25 04:56	12/05/25 11:34
Surr: 13C5-PFPeA	EPA 537Mod	94.4		%REC		43-138	1	12/10/25 04:56	12/05/25 11:34
Surr: 13C8-FOSA	EPA 537Mod	79.3		%REC		30-122	1	12/10/25 04:56	12/05/25 11:34
Surr: 18O2-PFHxS	EPA 537Mod	79.9		%REC		50-150	1	12/10/25 04:56	12/05/25 11:34
Surr: d3-N-MeFOSAA	EPA 537Mod	77.8		%REC		35-136	1	12/10/25 04:56	12/05/25 11:34

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/25/25 16:10
Date Received: 12/03/25 13:00

CLIENT ID: RFI-12-40_112525	Lab ID: HN2518206-007

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Surr: d5-N-EtFOSAA	EPA 537Mod	86.6		%REC		34-142	1	12/10/25 04:56	12/05/25 11:34

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/26/25 12:00
Date Received: 12/03/25 13:00

CLIENT ID: RFI-23-01R_112625

Lab ID: HN2518206-008

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	EPA 537Mod	<0.467	U	ng/L	0.467	5.00	1	12/10/25 05:11	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	EPA 537Mod	<1.13	U	ng/L	1.13	5.00	1	12/10/25 05:11	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	EPA 537Mod	<0.936	U	ng/L	0.936	5.00	1	12/10/25 05:11	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	EPA 537Mod	<1.92	U	ng/L	1.92	5.00	1	12/10/25 05:11	12/05/25 11:34
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	EPA 537Mod	<0.562	U	ng/L	0.562	5.00	1	12/10/25 05:11	12/05/25 11:34
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	EPA 537Mod	<0.448	U	ng/L	0.448	5.00	1	12/10/25 05:11	12/05/25 11:34
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	EPA 537Mod	<1.17	U	ng/L	1.17	5.00	1	12/10/25 05:11	12/05/25 11:34
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	EPA 537Mod	<1.54	U	ng/L	1.54	5.00	1	12/10/25 05:11	12/05/25 11:34
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	EPA 537Mod	<0.644	U	ng/L	0.644	5.00	1	12/10/25 05:11	12/05/25 11:34
Perfluorobutane sulfonic acid (PFBS)	EPA 537Mod	2.84	J	ng/L	0.351	5.00	1	12/10/25 05:11	12/05/25 11:34
Perfluorobutanoic acid (PFBA)	EPA 537Mod	4.66	J	ng/L	2.60	5.00	1	12/10/25 05:11	12/05/25 11:34
Perfluorodecane sulfonic acid (PFDS)	EPA 537Mod	<1.37	U	ng/L	1.37	5.00	1	12/10/25 05:11	12/05/25 11:34
Perfluorodecanoic acid (PFDA)	EPA 537Mod	<1.24	U	ng/L	1.24	5.00	1	12/10/25 05:11	12/05/25 11:34
Perfluorododecanoic acid (PFDOA)	EPA 537Mod	<0.691	U	ng/L	0.691	5.00	1	12/10/25 05:11	12/05/25 11:34
Perfluoroheptane sulfonic acid (PFHpS)	EPA 537Mod	<0.566	U	ng/L	0.566	5.00	1	12/10/25 05:11	12/05/25 11:34
Perfluoroheptanoic acid (PFHpA)	EPA 537Mod	1.88	J	ng/L	1.73	5.00	1	12/10/25 05:11	12/05/25 11:34
Perfluorohexane sulfonic acid (PFHxS)	EPA 537Mod	37.0		ng/L	0.903	5.00	1	12/10/25 05:11	12/05/25 11:34
Perfluorohexanoic acid (PFHxA)	EPA 537Mod	3.84	J	ng/L	1.20	5.00	1	12/10/25 05:11	12/05/25 11:34
Perfluorononane sulfonic acid (PFNS)	EPA 537Mod	<0.496	U	ng/L	0.496	5.00	1	12/10/25 05:11	12/05/25 11:34

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/26/25 12:00
Date Received: 12/03/25 13:00

CLIENT ID: RFI-23-01R_112625

Lab ID: HN2518206-008

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononanoic acid (PFNA)	EPA 537Mod	1.74	J	ng/L	0.870	5.00	1	12/10/25 05:11	12/05/25 11:34
Perfluorooctane sulfonamide (PFOSAm)	EPA 537Mod	<0.711	U	ng/L	0.711	5.00	1	12/10/25 05:11	12/05/25 11:34
Perfluorooctane sulfonic acid (PFOS)	EPA 537Mod	15.8		ng/L	0.892	2.00	1	12/10/25 05:11	12/05/25 11:34
Perfluorooctanoic acid (PFOA)	EPA 537Mod	5.25		ng/L	0.630	2.00	1	12/10/25 05:11	12/05/25 11:34
Perfluoropentane sulfonic acid (PFPeS)	EPA 537Mod	3.02	J	ng/L	0.556	5.00	1	12/10/25 05:11	12/05/25 11:34
Perfluoropentanoic acid (PFPeA)	EPA 537Mod	1.52	J	ng/L	1.28	5.00	1	12/10/25 05:11	12/05/25 11:34
Perfluorotetradecanoic acid (PFTDA)	EPA 537Mod	<2.64	U	ng/L	2.64	5.00	1	12/10/25 05:11	12/05/25 11:34
Perfluorotridecanoic acid (PFTrDA)	EPA 537Mod	<1.93	U	ng/L	1.93	5.00	1	12/10/25 05:11	12/05/25 11:34
Perfluoroundecanoic acid (PFUnDA)	EPA 537Mod	<0.974	U	ng/L	0.974	5.00	1	12/10/25 05:11	12/05/25 11:34
Surr: 13C2-FtS 4:2	EPA 537Mod	120		%REC		50-150	1	12/10/25 05:11	12/05/25 11:34
Surr: 13C2-FtS 6:2	EPA 537Mod	122		%REC		50-150	1	12/10/25 05:11	12/05/25 11:34
Surr: 13C2-FtS 8:2	EPA 537Mod	116		%REC		50-150	1	12/10/25 05:11	12/05/25 11:34
Surr: 13C2-PFDA	EPA 537Mod	87.8		%REC		50-150	1	12/10/25 05:11	12/05/25 11:34
Surr: 13C2-PFDoA	EPA 537Mod	92.5		%REC		50-150	1	12/10/25 05:11	12/05/25 11:34
Surr: 13C2-PFHxA	EPA 537Mod	97.4		%REC		50-150	1	12/10/25 05:11	12/05/25 11:34
Surr: 13C2-PFTeA	EPA 537Mod	98.8		%REC		27-134	1	12/10/25 05:11	12/05/25 11:34
Surr: 13C2-PFUnA	EPA 537Mod	93.0		%REC		50-150	1	12/10/25 05:11	12/05/25 11:34
Surr: 13C3-HFPO-DA	EPA 537Mod	119		%REC		41-142	1	12/10/25 05:11	12/05/25 11:34
Surr: 13C3-PFBS	EPA 537Mod	92.6		%REC		50-150	1	12/10/25 05:11	12/05/25 11:34
Surr: 13C4-PFBA	EPA 537Mod	109		%REC		50-150	1	12/10/25 05:11	12/05/25 11:34
Surr: 13C4-PFHpA	EPA 537Mod	100		%REC		42-141	1	12/10/25 05:11	12/05/25 11:34
Surr: 13C4-PFOA	EPA 537Mod	91.0		%REC		50-150	1	12/10/25 05:11	12/05/25 11:34
Surr: 13C4-PFOS	EPA 537Mod	83.8		%REC		50-150	1	12/10/25 05:11	12/05/25 11:34
Surr: 13C5-PFNA	EPA 537Mod	96.1		%REC		50-150	1	12/10/25 05:11	12/05/25 11:34
Surr: 13C5-PFPeA	EPA 537Mod	104		%REC		43-138	1	12/10/25 05:11	12/05/25 11:34
Surr: 13C8-FOSA	EPA 537Mod	82.6		%REC		30-122	1	12/10/25 05:11	12/05/25 11:34
Surr: 18O2-PFHxS	EPA 537Mod	83.1		%REC		50-150	1	12/10/25 05:11	12/05/25 11:34
Surr: d3-N-MeFOSAA	EPA 537Mod	85.7		%REC		35-136	1	12/10/25 05:11	12/05/25 11:34

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/26/25 12:00
Date Received: 12/03/25 13:00

CLIENT ID: RFI-23-01R_112625	Lab ID: HN2518206-008

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Surr: d5-N-EtFOSAA	EPA 537Mod	91.0		%REC		34-142	1	12/10/25 05:11	12/05/25 11:34

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/26/25
Date Received: 12/03/25 13:00

CLIENT ID: RFI-23-02R_112625

Lab ID: HN2518206-009

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	EPA 537Mod	<0.467	U	ng/L	0.467	5.00	1	12/10/25 05:54	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	EPA 537Mod	<1.13	U	ng/L	1.13	5.00	1	12/10/25 05:54	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	EPA 537Mod	<0.936	U	ng/L	0.936	5.00	1	12/10/25 05:54	12/05/25 11:34
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	EPA 537Mod	<1.92	U	ng/L	1.92	5.00	1	12/10/25 05:54	12/05/25 11:34
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	EPA 537Mod	<0.562	U	ng/L	0.562	5.00	1	12/10/25 05:54	12/05/25 11:34
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	EPA 537Mod	<0.448	U	ng/L	0.448	5.00	1	12/10/25 05:54	12/05/25 11:34
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	EPA 537Mod	<1.17	U	ng/L	1.17	5.00	1	12/10/25 05:54	12/05/25 11:34
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	EPA 537Mod	<1.54	U	ng/L	1.54	5.00	1	12/10/25 05:54	12/05/25 11:34
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	EPA 537Mod	<0.644	U	ng/L	0.644	5.00	1	12/10/25 05:54	12/05/25 11:34
Perfluorobutane sulfonic acid (PFBS)	EPA 537Mod	3.54	J	ng/L	0.351	5.00	1	12/10/25 05:54	12/05/25 11:34
Perfluorobutanoic acid (PFBA)	EPA 537Mod	7.37		ng/L	2.60	5.00	1	12/10/25 05:54	12/05/25 11:34
Perfluorodecane sulfonic acid (PFDS)	EPA 537Mod	<1.37	U	ng/L	1.37	5.00	1	12/10/25 05:54	12/05/25 11:34
Perfluorodecanoic acid (PFDA)	EPA 537Mod	3.29	J	ng/L	1.24	5.00	1	12/10/25 05:54	12/05/25 11:34
Perfluorododecanoic acid (PFDOA)	EPA 537Mod	<0.691	U	ng/L	0.691	5.00	1	12/10/25 05:54	12/05/25 11:34
Perfluoroheptane sulfonic acid (PFHpS)	EPA 537Mod	0.773	J	ng/L	0.566	5.00	1	12/10/25 05:54	12/05/25 11:34
Perfluoroheptanoic acid (PFHpA)	EPA 537Mod	4.02	J	ng/L	1.73	5.00	1	12/10/25 05:54	12/05/25 11:34
Perfluorohexane sulfonic acid (PFHxS)	EPA 537Mod	31.6		ng/L	0.903	5.00	1	12/10/25 05:54	12/05/25 11:34
Perfluorohexanoic acid (PFHxA)	EPA 537Mod	4.11	J	ng/L	1.20	5.00	1	12/10/25 05:54	12/05/25 11:34
Perfluorononane sulfonic acid (PFNS)	EPA 537Mod	<0.496	U	ng/L	0.496	5.00	1	12/10/25 05:54	12/05/25 11:34

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/26/25
Date Received: 12/03/25 13:00

CLIENT ID: RFI-23-02R_112625

Lab ID: HN2518206-009

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononanoic acid (PFNA)	EPA 537Mod	2.55	J	ng/L	0.870	5.00	1	12/10/25 05:54	12/05/25 11:34
Perfluorooctane sulfonamide (PFOSAm)	EPA 537Mod	<0.711	U	ng/L	0.711	5.00	1	12/10/25 05:54	12/05/25 11:34
Perfluorooctane sulfonic acid (PFOS)	EPA 537Mod	22.7		ng/L	0.892	2.00	1	12/10/25 05:54	12/05/25 11:34
Perfluorooctanoic acid (PFOA)	EPA 537Mod	7.28		ng/L	0.630	2.00	1	12/10/25 05:54	12/05/25 11:34
Perfluoropentane sulfonic acid (PFPeS)	EPA 537Mod	3.88	J	ng/L	0.556	5.00	1	12/10/25 05:54	12/05/25 11:34
Perfluoropentanoic acid (PFPeA)	EPA 537Mod	3.16	J	ng/L	1.28	5.00	1	12/10/25 05:54	12/05/25 11:34
Perfluorotetradecanoic acid (PFTDA)	EPA 537Mod	<2.64	U	ng/L	2.64	5.00	1	12/10/25 05:54	12/05/25 11:34
Perfluorotridecanoic acid (PFTrDA)	EPA 537Mod	<1.93	U	ng/L	1.93	5.00	1	12/10/25 05:54	12/05/25 11:34
Perfluoroundecanoic acid (PFUnDA)	EPA 537Mod	<0.974	U	ng/L	0.974	5.00	1	12/10/25 05:54	12/05/25 11:34
Surr: 13C2-FtS 4:2	EPA 537Mod	259	S	%REC		50-150	1	12/10/25 05:54	12/05/25 11:34
Surr: 13C2-FtS 6:2	EPA 537Mod	170	S	%REC		50-150	1	12/10/25 05:54	12/05/25 11:34
Surr: 13C2-FtS 8:2	EPA 537Mod	123		%REC		50-150	1	12/10/25 05:54	12/05/25 11:34
Surr: 13C2-PFDA	EPA 537Mod	98.3		%REC		50-150	1	12/10/25 05:54	12/05/25 11:34
Surr: 13C2-PFDoA	EPA 537Mod	97.4		%REC		50-150	1	12/10/25 05:54	12/05/25 11:34
Surr: 13C2-PFHxA	EPA 537Mod	107		%REC		50-150	1	12/10/25 05:54	12/05/25 11:34
Surr: 13C2-PFTeA	EPA 537Mod	97.2		%REC		27-134	1	12/10/25 05:54	12/05/25 11:34
Surr: 13C2-PFUnA	EPA 537Mod	95.1		%REC		50-150	1	12/10/25 05:54	12/05/25 11:34
Surr: 13C3-HFPO-DA	EPA 537Mod	120		%REC		41-142	1	12/10/25 05:54	12/05/25 11:34
Surr: 13C3-PFBS	EPA 537Mod	99.1		%REC		50-150	1	12/10/25 05:54	12/05/25 11:34
Surr: 13C4-PFBA	EPA 537Mod	119		%REC		50-150	1	12/10/25 05:54	12/05/25 11:34
Surr: 13C4-PFHpA	EPA 537Mod	122		%REC		42-141	1	12/10/25 05:54	12/05/25 11:34
Surr: 13C4-PFOA	EPA 537Mod	103		%REC		50-150	1	12/10/25 05:54	12/05/25 11:34
Surr: 13C4-PFOS	EPA 537Mod	95.9		%REC		50-150	1	12/10/25 05:54	12/05/25 11:34
Surr: 13C5-PFNA	EPA 537Mod	101		%REC		50-150	1	12/10/25 05:54	12/05/25 11:34
Surr: 13C5-PFPeA	EPA 537Mod	112		%REC		43-138	1	12/10/25 05:54	12/05/25 11:34
Surr: 13C8-FOSA	EPA 537Mod	94.1		%REC		30-122	1	12/10/25 05:54	12/05/25 11:34
Surr: 18O2-PFHxS	EPA 537Mod	84.2		%REC		50-150	1	12/10/25 05:54	12/05/25 11:34
Surr: d3-N-MeFOSAA	EPA 537Mod	94.2		%REC		35-136	1	12/10/25 05:54	12/05/25 11:34

Analytical Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER

Work Order: HN2518206
Date Collected: 11/26/25
Date Received: 12/03/25 13:00

CLIENT ID: RFI-23-02R_112625	Lab ID: HN2518206-009

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Surr: d5-N-EtFOSAA	EPA 537Mod	92.8		%REC		34-142	1	12/10/25 05:54	12/05/25 11:34



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER
QC Lot: 2368627

Work Order: HN2518206
Date Collected: NA
Date Received: NA
Run ID: 3758464

Per- and Polyfluorinated Alkyl Substances by LC-MS

MB	CLIENT ID: Method Blank	Lab ID: QC-2368627-001

Method: EPA 537Mod**Dilution:** 1**Analysis Date:** 12/09/25 21:12**Prep Date:** 12/05/25 11:35

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	<0.467	ng/L	0.467	5.00							U
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	<1.13	ng/L	1.13	5.00							U
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	<0.936	ng/L	0.936	5.00							U
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	<1.92	ng/L	1.92	5.00							U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	<0.562	ng/L	0.562	5.00							U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	<0.448	ng/L	0.448	5.00							U
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	<1.17	ng/L	1.17	5.00							U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	<1.54	ng/L	1.54	5.00							U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	<0.644	ng/L	0.644	5.00							U
Perfluorobutane sulfonic acid (PFBS)	<0.351	ng/L	0.351	5.00							U
Perfluorobutanoic acid (PFBA)	<2.60	ng/L	2.60	5.00							U
Perfluorodecane sulfonic acid (PFDS)	<1.37	ng/L	1.37	5.00							U
Perfluorodecanoic acid (PFDA)	<1.24	ng/L	1.24	5.00							U
Perfluorododecanoic acid (PFDOA)	<0.691	ng/L	0.691	5.00							U
Perfluoroheptane sulfonic acid (PFHpS)	<0.566	ng/L	0.566	5.00							U
Perfluoroheptanoic acid (PFHpA)	<1.73	ng/L	1.73	5.00							U
Perfluorohexane sulfonic acid (PFHxS)	<0.903	ng/L	0.903	5.00							U
Perfluorohexanoic acid (PFHxA)	<1.20	ng/L	1.20	5.00							U
Perfluorononane sulfonic acid (PFNS)	<0.496	ng/L	0.496	5.00							U
Perfluorononanoic acid (PFNA)	<0.870	ng/L	0.870	5.00							U
Perfluorooctane sulfonamide (PFOSAm)	<0.711	ng/L	0.711	5.00							U
Perfluorooctane sulfonic acid (PFOS)	<0.892	ng/L	0.892	2.00							U
Perfluorooctanoic acid (PFOA)	<0.630	ng/L	0.630	2.00							U
Perfluoropentane sulfonic acid (PFPeS)	<0.556	ng/L	0.556	5.00							U
Perfluoropentanoic acid (PFPeA)	<1.28	ng/L	1.28	5.00							U
Perfluorotetradecanoic acid (PFTDA)	<2.64	ng/L	2.64	5.00							U
Perfluorotridecanoic acid (PFTrDA)	<1.93	ng/L	1.93	5.00							U
Perfluoroundecanoic acid (PFUnDA)	<0.974	ng/L	0.974	5.00							U
Surr: 13C2-FtS 4:2	155	ng/L			149.44		104	50-150			
Surr: 13C2-FtS 6:2	178	ng/L			152		117	50-150			
Surr: 13C2-FtS 8:2	173	ng/L			153.28		113	50-150			

QA/QC Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER
QC Lot: 2368627

Work Order: HN2518206
Date Collected: NA
Date Received: NA
Run ID: 3758464

MB	CLIENT ID: Method Blank	Lab ID: QC-2368627-001

Method: EPA 537Mod

Dilution: 1

Analysis Date: 12/09/25 21:12

Prep Date: 12/05/25 11:35

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Surr: 13C2-PFDA	139	ng/L			160		87.0	50-150			
Surr: 13C2-PFDoA	137	ng/L			160		85.3	50-150			
Surr: 13C2-PFHxA	146	ng/L			160		91.5	50-150			
Surr: 13C2-PFTeA	94.7	ng/L			160		59.2	27-134			
Surr: 13C2-PFUnA	138	ng/L			160		86.3	50-150			
Surr: 13C3-HFPO-DA	175	ng/L			160		109	41-142			
Surr: 13C3-PFBS	147	ng/L			148.8		98.6	50-150			
Surr: 13C4-PFBA	172	ng/L			160		108	50-150			
Surr: 13C4-PFHpA	175	ng/L			160		109	42-141			
Surr: 13C4-PFOA	150	ng/L			160		93.8	50-150			
Surr: 13C4-PFOS	124	ng/L			152.8		81.0	50-150			
Surr: 13C5-PFNA	153	ng/L			160		95.4	50-150			
Surr: 13C5-PFPeA	173	ng/L			160		108	43-138			
Surr: 13C8-FOSA	152	ng/L			160		95.2	30-122			
Surr: 18O2-PFHxS	122	ng/L			151.2		81.0	50-150			
Surr: d3-N-MeFOSAA	146	ng/L			160		91.6	35-136			
Surr: d5-N-EtFOSAA	163	ng/L			160		102	34-142			

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2368627-002

Method: EPA 537Mod

Dilution: 1

Analysis Date: 12/09/25 21:26

Prep Date: 12/05/25 11:35

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	29.7	ng/L	0.467	5.00	30.1		98.5	61-128			
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	30.2	ng/L	1.13	5.00	30.7		98.3	61-148			
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	29.4	ng/L	0.936	5.00	29.9		98.2	67-143			
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	31.3	ng/L	1.92	5.00	30.3		103	66-151			
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	29.2	ng/L	0.562	5.00	30.1		97.1	74-135			
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	30.2	ng/L	0.448	5.00	29.8		101	69-133			
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	30.6	ng/L	1.17	5.00	32		95.7	65-139			
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	32.1	ng/L	1.54	5.00	32		100	67-140			
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	31.6	ng/L	0.644	5.00	32		98.7	67-133			
Perfluorobutane sulfonic acid (PFBS)	30.0	ng/L	0.351	5.00	28.3		106	69-131			
Perfluorobutanoic acid (PFBA)	32.1	ng/L	2.60	5.00	32		100	73-139			
Perfluorodecane sulfonic acid (PFDS)	29.2	ng/L	1.37	5.00	30.8		94.7	64-128			

QA/QC Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER
QC Lot: 2368627

Work Order: HN2518206
Date Collected: NA
Date Received: NA
Run ID: 3758464

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2368627-002

Method: EPA 537Mod

Dilution: 1

Analysis Date: 12/09/25 21:26

Prep Date: 12/05/25 11:35

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Perfluorodecanoic acid (PFDA)	32.2	ng/L	1.24	5.00	32		101	77-135			
Perfluorododecanoic acid (PFDOA)	31.4	ng/L	0.691	5.00	32		98.1	77-137			
Perfluoroheptane sulfonic acid (PFHpS)	31.3	ng/L	0.566	5.00	30.5		102	70-137			
Perfluoroheptanoic acid (PFHpA)	32.6	ng/L	1.73	5.00	32		102	67-130			
Perfluorohexane sulfonic acid (PFHxS)	29.0	ng/L	0.903	5.00	29.1		99.7	68-131			
Perfluorohexanoic acid (PFHxA)	32.0	ng/L	1.20	5.00	32		100	72-129			
Perfluorononane sulfonic acid (PFNS)	29.8	ng/L	0.496	5.00	30.7		97.0	70-132			
Perfluorononanoic acid (PFNA)	32.7	ng/L	0.870	5.00	32		102	75-131			
Perfluorooctane sulfonamide (PFOSAm)	32.7	ng/L	0.711	5.00	32		102	66-140			
Perfluorooctane sulfonic acid (PFOS)	30.1	ng/L	0.892	2.00	29.7		101	72-133			
Perfluorooctanoic acid (PFOA)	32.7	ng/L	0.630	2.00	32		102	71-133			
Perfluoropentane sulfonic acid (PFPeS)	31.0	ng/L	0.556	5.00	30		103	73-137			
Perfluoropentanoic acid (PFPeA)	33.1	ng/L	1.28	5.00	32		104	72-129			
Perfluorotetradecanoic acid (PFTDA)	32.3	ng/L	2.64	5.00	32		101	62-139			
Perfluorotridecanoic acid (PFTrDA)	42.4	ng/L	1.93	5.00	32		133	47-147			
Perfluoroundecanoic acid (PFUnDA)	32.1	ng/L	0.974	5.00	32		100	80-135			
Surr: 13C2-FtS 4:2	128	ng/L			149.44		85.7	50-150			
Surr: 13C2-FtS 6:2	142	ng/L			152		93.7	50-150			
Surr: 13C2-FtS 8:2	151	ng/L			153.28		98.3	50-150			
Surr: 13C2-PFDA	133	ng/L			160		83.2	50-150			
Surr: 13C2-PFDoA	154	ng/L			160		96.5	50-150			
Surr: 13C2-PFHxA	129	ng/L			160		80.8	50-150			
Surr: 13C2-PFTeA	99.7	ng/L			160		62.3	27-134			
Surr: 13C2-PFUnA	145	ng/L			160		90.9	50-150			
Surr: 13C3-HFPO-DA	147	ng/L			160		91.8	41-142			
Surr: 13C3-PFBS	117	ng/L			148.8		78.7	50-150			
Surr: 13C4-PFBA	152	ng/L			160		95.2	50-150			
Surr: 13C4-PFHpA	143	ng/L			160		89.2	42-141			
Surr: 13C4-PFOA	138	ng/L			160		86.5	50-150			
Surr: 13C4-PFOS	122	ng/L			152.8		79.7	50-150			
Surr: 13C5-PFNA	132	ng/L			160		82.7	50-150			
Surr: 13C5-PFPeA	135	ng/L			160		84.5	43-138			
Surr: 13C8-FOSA	122	ng/L			160		76.3	30-122			
Surr: 18O2-PFHxS	121	ng/L			151.2		79.8	50-150			
Surr: d3-N-MeFOSAA	126	ng/L			160		79.0	35-136			
Surr: d5-N-EtFOSAA	135	ng/L			160		84.1	34-142			

MS	CLIENT ID: Batch QC	Lab ID: QC-2368627-005

Method: EPA 537Mod

Dilution: 1

Analysis Date: 12/10/25 00:07

Prep Date: 12/05/25 11:35

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual

QA/QC Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER
QC Lot: 2368627

Work Order: HN2518206
Date Collected: NA
Date Received: NA
Run ID: 3758464

MS		CLIENT ID: Batch QC				Lab ID: QC-2368627-005					
Method: EPA 537Mod		Dilution: 1				Analysis Date: 12/10/25 00:07					
						Prep Date: 12/05/25 11:35					
Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	33.1	ng/L	0.433	4.63	27.894	<0.433	119	61-128			
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	31.1	ng/L	1.05	4.63	28.45	<1.05	107	61-148			
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	27.9	ng/L	0.867	4.63	27.709	<0.867	100.0	67-143			
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	215	ng/L	1.78	4.63	30.3	169	NC	66-151			O
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	25.0	ng/L	0.521	4.63	27.894	2.73	79.7	74-135			
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	31.8	ng/L	0.415	4.63	27.616	<0.415	115	69-133			
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	28.3	ng/L	1.08	4.63	29.655	<1.08	93.1	65-139			
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	30.6	ng/L	1.43	4.63	29.655	<1.43	103	67-140			
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	32.3	ng/L	0.597	4.63	29.655	<0.597	109	67-133			
Perfluorobutane sulfonic acid (PFBS)	35.1	ng/L	0.325	4.63	26.226	6.63	109	69-141			
Perfluorobutanoic acid (PFBA)	153	ng/L	2.41	4.63	29.655	107	157	73-139			S
Perfluorodecane sulfonic acid (PFDS)	30.7	ng/L	1.27	4.63	28.543	<1.27	107	64-128			
Perfluorodecanoic acid (PFDA)	42.3	ng/L	1.15	4.63	29.655	7.09	119	77-135			
Perfluorododecanoic acid (PFDOA)	35.5	ng/L	0.640	4.63	29.655	<0.640	118	77-137			
Perfluoroheptane sulfonic acid (PFHpS)	39.0	ng/L	0.525	4.63	28.265	<0.525	137	70-137			
Perfluoroheptanoic acid (PFHpA)	35.9	ng/L	1.60	4.63	29.655	6.09	101	67-130			
Perfluorohexane sulfonic acid (PFHxS)	36.5	ng/L	0.837	4.63	26.967	1.97	128	68-131			
Perfluorohexanoic acid (PFHxA)	67.7	ng/L	1.11	4.63	29.655	29.6	128	72-129			
Perfluorononane sulfonic acid (PFNS)	32.8	ng/L	0.460	4.63	28.45	<0.460	115	70-132			
Perfluorononanoic acid (PFNA)	36.6	ng/L	0.806	4.63	29.655	1.67	118	75-131			
Perfluorooctane sulfonamide (PFOSAm)	35.3	ng/L	0.659	4.63	29.655	<0.659	118	66-140			
Perfluorooctane sulfonic acid (PFOS)	43.9	ng/L	0.827	1.85	27.523	8.43	129	72-133			
Perfluorooctanoic acid (PFOA)	50.9	ng/L	0.584	1.85	29.655	11.6	132	71-133			
Perfluoropentane sulfonic acid (PFPeS)	37.8	ng/L	0.515	4.63	27.801	<0.515	136	73-137			
Perfluoropentanoic acid (PFPeA)	73.5	ng/L	1.19	4.63	29.655	41.0	110	72-129			
Perfluorotetradecanoic acid (PFTDA)	28.6	ng/L	2.45	4.63	29.655	<2.45	95.4	62-139			
Perfluorotridecanoic acid (PFTrDA)	30.4	ng/L	1.79	4.63	29.655	<1.79	102	47-147			
Perfluoroundecanoic acid (PFUnDA)	38.0	ng/L	0.903	4.63	29.655	<0.903	126	80-135			
Surr: 13C2-FtS 4:2	615	ng/L			138.49		444	50-150			S
Surr: 13C2-FtS 6:2	713	ng/L			140.86		506	50-150			S
Surr: 13C2-FtS 8:2	497	ng/L			142.05		350	50-150			S
Surr: 13C2-PFDA	130	ng/L			148.27		87.5	50-150			
Surr: 13C2-PFDoA	118	ng/L			148.27		79.4	50-150			

QA/QC Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER
QC Lot: 2368627

Work Order: HN2518206
Date Collected: NA
Date Received: NA
Run ID: 3758464

MS	CLIENT ID: Batch QC	Lab ID: QC-2368627-005

Method: EPA 537Mod **Dilution:** 1 **Analysis Date:** 12/10/25 00:07
Prep Date: 12/05/25 11:35

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Surr: 13C2-PFHxA	101	ng/L			148.27		68.1	50-150			
Surr: 13C2-PFTeA	121	ng/L			148.27		81.9	27-134			
Surr: 13C2-PFUnA	122	ng/L			148.27		82.1	50-150			
Surr: 13C3-HFPO-DA	176	ng/L			148.27		119	41-142			
Surr: 13C3-PFBS	110	ng/L			137.9		79.4	50-150			
Surr: 13C4-PFBA	90.1	ng/L			148.27		60.7	50-150			
Surr: 13C4-PFHpA	136	ng/L			148.27		92.0	42-141			
Surr: 13C4-PFOA	120	ng/L			148.27		81.1	50-150			
Surr: 13C4-PFOS	99.9	ng/L			141.6		70.6	50-150			
Surr: 13C5-PFNA	130	ng/L			148.27		87.9	50-150			
Surr: 13C5-PFPeA	127	ng/L			148.27		85.7	43-138			
Surr: 13C8-FOSA	101	ng/L			148.27		67.9	30-122			
Surr: 18O2-PFHxS	86.9	ng/L			140.12		62.0	50-150			
Surr: d3-N-MeFOSAA	134	ng/L			148.27		90.4	35-136			
Surr: d5-N-EtFOSAA	227	ng/L			148.27		153	34-142			S

DUP	CLIENT ID: RFI-86-14_112525	Lab ID: QC-2368627-007

Method: EPA 537Mod **Dilution:** 1 **Analysis Date:** 12/10/25 00:36
Prep Date: 12/05/25 11:35

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	<0.467	ng/L	0.467	5.00		0.763			NC		U
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	<1.13	ng/L	1.13	5.00		<1.13			NC		U
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	<0.936	ng/L	0.936	5.00		<0.936			NC		U
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	<1.92	ng/L	1.92	5.00		<1.92			NC		U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	<0.562	ng/L	0.562	5.00		<0.562			NC		U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	<0.448	ng/L	0.448	5.00		<0.448			NC		U
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	<1.17	ng/L	1.17	5.00		<1.17			NC		U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	<1.54	ng/L	1.54	5.00		<1.54			NC		U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	<0.644	ng/L	0.644	5.00		<0.644			NC		U
Perfluorobutane sulfonic acid (PFBS)	1.81	ng/L	0.351	5.00		1.99			NC		J
Perfluorobutanoic acid (PFBA)	8.97	ng/L	2.60	5.00		8.73			2.76	30	
Perfluorodecane sulfonic acid (PFDS)	<1.37	ng/L	1.37	5.00		<1.37			NC		U
Perfluorodecanoic acid (PFDA)	<1.24	ng/L	1.24	5.00		<1.24			NC		U
Perfluorododecanoic acid (PFDOA)	<0.691	ng/L	0.691	5.00		0.706			NC		U

QA/QC Report



Client: Arcadis US, Inc.
Project: RACER Lansing PFAS Analysis (30267725.0370B)
Matrix: WATER
QC Lot: 2368627

Work Order: HN2518206
Date Collected: NA
Date Received: NA
Run ID: 3758464

DUP	CLIENT ID: RFI-86-14_112525	Lab ID: QC-2368627-007

Method: EPA 537Mod

Dilution: 1

Analysis Date: 12/10/25 00:36

Prep Date: 12/05/25 11:35

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Perfluoroheptane sulfonic acid (PFHpS)	<0.566	ng/L	0.566	5.00		<0.566			NC		U
Perfluoroheptanoic acid (PFHpA)	3.70	ng/L	1.73	5.00		3.53			NC		J
Perfluorohexane sulfonic acid (PFHxS)	2.14	ng/L	0.903	5.00		2.08			NC		J
Perfluorohexanoic acid (PFHxA)	4.08	ng/L	1.20	5.00		4.00			NC		J
Perfluorononane sulfonic acid (PFNS)	<0.496	ng/L	0.496	5.00		<0.496			NC		U
Perfluorononanoic acid (PFNA)	<0.870	ng/L	0.870	5.00		<0.870			NC		U
Perfluorooctane sulfonamide (PFOSAm)	<0.711	ng/L	0.711	5.00		<0.711			NC		U
Perfluorooctane sulfonic acid (PFOS)	<0.892	ng/L	0.892	2.00		1.14			NC		U
Perfluorooctanoic acid (PFOA)	9.27	ng/L	0.630	2.00		9.25			0.232	30	
Perfluoropentane sulfonic acid (PFPeS)	0.639	ng/L	0.556	5.00		0.727			NC		J
Perfluoropentanoic acid (PFPeA)	3.87	ng/L	1.28	5.00		3.89			NC		J
Perfluorotetradecanoic acid (PFTDA)	<2.64	ng/L	2.64	5.00		<2.64			NC		U
Perfluorotridecanoic acid (PFTrDA)	<1.93	ng/L	1.93	5.00		<1.93			NC		U
Perfluoroundecanoic acid (PFUnDA)	<0.974	ng/L	0.974	5.00		<0.974			NC		U
Surr: 13C2-FtS 4:2	321	ng/L			149.44		227	50-150	6.83	30	S
Surr: 13C2-FtS 6:2	169	ng/L			152		118	50-150	2.58	30	
Surr: 13C2-FtS 8:2	160	ng/L			153.28		110	50-150	8.53	30	
Surr: 13C2-PFDA	130	ng/L			160		85.6	50-150	1.85	30	
Surr: 13C2-PFDoA	138	ng/L			160		91.0	50-150	4.62	30	
Surr: 13C2-PFHxA	147	ng/L			160		97.0	50-150	3.05	30	
Surr: 13C2-PFTeA	138	ng/L			160		91.2	27-134	4.14	30	
Surr: 13C2-PFUnA	130	ng/L			160		85.7	50-150	9.45	30	
Surr: 13C3-HFPO-DA	161	ng/L			160		107	41-142	11.1	30	
Surr: 13C3-PFBS	127	ng/L			148.8		90.0	50-150	7.49	30	
Surr: 13C4-PFBA	167	ng/L			160		110	50-150	0.00	30	
Surr: 13C4-PFHpA	156	ng/L			160		103	42-141	7.87	30	
Surr: 13C4-PFOA	145	ng/L			160		96.0	50-150	1.96	30	
Surr: 13C4-PFOS	126	ng/L			152.8		86.9	50-150	2.95	30	
Surr: 13C5-PFNA	141	ng/L			160		93.0	50-150	2.65	30	
Surr: 13C5-PFPeA	145	ng/L			160		96.1	43-138	5.56	30	
Surr: 13C8-FOSA	119	ng/L			160		78.7	30-122	4.02	30	
Surr: 18O2-PFHxS	120	ng/L			151.2		84.1	50-150	1.20	30	
Surr: d3-N-MeFOSAA	123	ng/L			160		81.0	35-136	2.12	30	
Surr: d5-N-EtFOSAA	131	ng/L			160		86.2	34-142	4.27	30	

The following samples were analyzed in this batch: HN2518206-001, HN2518206-002, HN2518206-003, HN2518206-004, HN2518206-005, HN2518206-006, HN2518206-007, HN2518206-008, HN2518206-009

Attachment 2

Groundwater Sampling Logs

Location ID:	RFI-12-40	Date(s):	2025-06-18	Work Order(s):	2Q STCM Sampling
Client:	RACER	Facility:	Buick City	Facility Location:	1107 E Stewart Ave Flint, MI 48505, Flint, MI, 48505, US
Weather(°F):	CLOUDS, T:69.75 °F, rH:88%, Clouds: 75%, Wind:8.05mph N-NE			Field Technician:	Donald Richmond
Measuring Pt. Description:	Top of Inner Casing	Screen Setting (ft-bgs):	3.00-8.00	Casing Diameter (in):	2.00
Static Water Level (ft-bmp):	5.32	Total Depth (ft-bmp):	7.59	Water Column(ft):	2.27
Depth to Product (ft-bmp):	NA	Pump Intake Depth(ft-bmp):	NA	Purge Method:	Low Flow
Purge Start Time:	12:45	Total Volume Purged (gallons):	1.32	Sample ID:	NA
Purge End Time:	13:15	Well Volumes Purged (total):	3.57	Replicate Type / Replicate ID:	NA / NA
Scope of work completed?	Yes				

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm ^c)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
12:50	0	200	mL/min	5.32	7.16	1.711	3.68	0.56	17.9	-54	Clear	No Odor
12:55	5	200	mL/min	5.32	7.08	1.192	1.36	0.4	17.6	-34.8	Clear	No Odor
13:00	10	200	mL/min	5.32	7.08	1.093	1.62	0.31	17.4	-27.8	Clear	No Odor
13:05	15	200	mL/min	5.32	7.08	1.085	0.85	0.27	17.2	-24.1	Clear	No Odor
13:10	20	200	mL/min	5.32	7.08	1.079	0.74	0.25	17.2	-21.3	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative

Comments: None

Well Information:

Well Labeled Properly:	yes
Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RFI-23-01R	Date(s):	2025-06-18	Work Order(s):	2Q STCM Sampling			
Client:	RACER	Facility:	Buick City	Facility Location:	1107 E Stewart Ave Flint, MI 48505, Flint, MI, 48505, US		Area:	Buick City
Weather(°F):	CLOUDS, T:70.02 °F, rH:88%, Clouds: 100%, Wind:11.5mph N-NE			Field Technician:	Donald Richmond			
Measuring Pt. Description:	Top of Inner Casing	Screen Setting (ft-bgs):	4.00-14.00	Casing Diameter (in):	2.00	Well Casing Material:		
Static Water Level (ft-bmp):	4.59	Total Depth (ft-bmp):	13.61	Water Column(ft):	9.02	Gallons in Well:	1.47	
Depth to Product (ft-bmp):	NA	Pump Intake Depth(ft-bmp):	NA	Purge Method:	Low Flow	Purging Equipment:	Peristaltic Pump	
Purge Start Time:	11:05	Total Volume Purged (gallons):	2.377	Sample ID:	NA	Sample Time:	NA	
Purge End Time:	11:55	Well Volumes Purged (total):	1.62	Replicate Type / Replicate ID:	NA / NA	Water Quality Meter/ ID:	YSI Pro DSS / NA	
Scope of work completed?	Yes							

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm ^c)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
11:20	0	200	mL/min	4.59	6.97	0.713	5.06	0.78	16.1	119.2	Clear	No Odor
11:25	5	200	mL/min	4.59	7.01	0.709	4.76	0.74	16.6	99.6	Clear	No Odor
11:30	10	200	mL/min	4.59	7.01	0.708	3.62	0.74	16.9	40.4	Clear	No Odor
11:35	15	200	mL/min	4.59	7	0.708	2.4	0.69	17.2	-2.6	Clear	No Odor
11:40	20	200	mL/min	4.59	7	0.705	2.29	0.6	16.9	-17.7	Clear	No Odor
11:45	25	200	mL/min	4.59	7.01	0.703	2.35	0.54	17.2	-24.1	Clear	No Odor
11:50	30	200	mL/min	4.59	7.01	0.699	2.45	0.5	17	-29.7	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative

Comments:	None
Well Information:	
Well Labeled Properly:	yes
Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RFI-23-02R	Date(s):	2025-06-17	Work Order(s):	2Q STCM Sampling			
Client:	RACER	Facility:	Buick City	Facility Location:	1107 E Stewart Ave Flint, MI 48505, Flint, MI, 48505, US		Area:	Buick City
Weather(°F):	CLOUDS, T:87.53 °F, rH:56%, Clouds: 40%, Wind:6.91mph S-SW			Field Technician:	Donald Richmond			
Measuring Pt. Description:	Top of Inner Casing	Screen Setting (ft-bgs):	4.00-14.00	Casing Diameter (in):	2.00	Well Casing Material:		
Static Water Level (ft-bmp):	4.15	Total Depth (ft-bmp):	13.86	Water Column(ft):	9.71	Gallons in Well:	1.58	
Depth to Product (ft-bmp):	NA	Pump Intake Depth(ft-bmp):	NA	Purge Method:	Low Flow	Purging Equipment:	Peristaltic Pump	
Purge Start Time:	15:55	Total Volume Purged (gallons):	1.32	Sample ID:	NA	Sample Time:	NA	
Purge End Time:	16:25	Well Volumes Purged (total):	0.84	Replicate Type / Replicate ID:	NA / NA	Water Quality Meter/ ID:	YSI Pro DSS / NA	
Scope of work completed?	Yes							

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm ^c)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
16:00	0	200	mL/min	4.15	7.39	1.03	42	2.56	18.8	83.1	Clear	No Odor
16:05	5	200	mL/min	4.15	7.27	1.006	15.62	0.41	19	93.2	Clear	No Odor
16:10	10	200	mL/min	4.15	7.25	1.005	11.85	0.35	18.6	93.7	Clear	No Odor
16:15	15	200	mL/min	4.15	7.23	0.997	8.84	0.31	18.2	93.2	Clear	No Odor
16:20	20	200	mL/min	4.15	7.17	0.972	11.14	0.27	18.4	92.9	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative

Comments:	None
Well Information:	
Well Labeled Properly:	yes
Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RFI-81-12R	Date(s):	2025-06-17	Work Order(s):	2Q STCM Sampling			
Client:	RACER	Facility:	Buick City	Facility Location:	1107 E Stewart Ave Flint, MI 48505, Flint, MI, 48505, US		Area:	Buick City
Weather(°F):	CLOUDS, T:86.04 °F, rH:58%, Clouds: 20%, Wind:10.36mph SW			Field Technician:	Donald Richmond			
Measuring Pt. Description:	Top of Inner Casing	Screen Setting (ft-bgs):	8.00-18.00	Casing Diameter (in):	2.00	Well Casing Material:		
Static Water Level (ft-bmp):	5.34	Total Depth (ft-bmp):	13.59	Water Column(ft):	8.25	Gallons in Well:	1.35	
Depth to Product (ft-bmp):	NA	Pump Intake Depth(ft-bmp):	NA	Purge Method:	Low Flow	Purging Equipment:	Peristaltic Pump	
Purge Start Time:	14:20	Total Volume Purged (gallons):	1.849	Sample ID:	NA	Sample Time:	NA	
Purge End Time:	15:00	Well Volumes Purged (total):	1.37	Replicate Type / Replicate ID:	NA / NA	Water Quality Meter/ ID:	YSI Pro DSS / NA	
Scope of work completed?	Yes							

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm ^c)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
14:35	0	200	mL/min	5.34	6.95	0.521	61	4.32	16.6	108.7	Clear	No Odor
14:40	5	200	mL/min	5.34	6.92	0.518	21	4.16	17.2	115.7	Clear	No Odor
14:45	10	200	mL/min	5.34	6.92	0.518	15.71	4.15	17.1	118	Clear	No Odor
14:50	15	200	mL/min	5.34	6.9	0.519	11.72	3.62	16.6	119.9	Clear	No Odor
14:55	20	200	mL/min	5.34	6.86	0.526	14	2.81	16.7	120.8	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative

Comments:	None
Well Information:	
Well Labeled Properly:	yes
Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RFI-81-33	Date(s):	2025-06-17	Work Order(s):	2Q STCM Sampling		
Client:	RACER	Facility:	Buick City	Facility Location:	1107 E Stewart Ave Flint, MI 48505, Flint, MI, 48505, US	Area:	Buick City
Weather(°F):	CLOUDS, T:83.55 °F, rH:61%, Clouds: 40%, Wind:9.22mph S-SW			Field Technician:	Donald Richmond		
Measuring Pt. Description:	Top of Inner Casing	Screen Setting (ft-bgs):	9.00-14.00	Casing Diameter (in):	2.00	Well Casing Material:	
Static Water Level (ft-bmp):	5.2	Total Depth (ft-bmp):	13.71	Water Column(ft):	8.51	Gallons in Well:	1.39
Depth to Product (ft-bmp):	NA	Pump Intake Depth(ft-bmp):	NA	Purge Method:	Low Flow	Purging Equipment:	Peristaltic Pump
Purge Start Time:	12:55	Total Volume Purged (gallons):	1.32	Sample ID:	NA	Sample Time:	NA
Purge End Time:	13:25	Well Volumes Purged (total):	0.95	Replicate Type / Replicate ID:	NA / NA	Water Quality Meter/ ID:	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm ^c)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
13:00	0	200	mL/min	5.20	6.96	0.836	87	0.88	18.1	-35.7	Clear	No Odor
13:05	5	200	mL/min	5.20	6.96	0.832	15.97	0.5	18	-38.8	Clear	No Odor
13:10	10	200	mL/min	5.20	6.94	0.829	7.96	0.32	18.9	-42.5	Clear	No Odor
13:15	15	200	mL/min	5.20	6.92	0.832	7.32	0.25	19	-47.3	Clear	No Odor
13:20	20	200	mL/min	5.20	6.92	0.83	7.73	0.23	19.4	-48.1	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative

Comments:	None
Well Information:	
Well Labeled Properly:	NA
Is Well in Good Condition?	NA
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RFI-86-14	Date(s):	2025-06-17	Work Order(s):	2Q STCM Sampling		
Client:	RACER	Facility:	Buick City	Facility Location:	1107 E Stewart Ave Flint, MI 48505, Flint, MI, 48505, US	Area:	Buick City
Weather(°F):	CLOUDS, T:81.57 °F, rH:65%, Clouds: 20%, Wind:10.36mph SW			Field Technician:	Donald Richmond		
Measuring Pt. Description:	Top of Inner Casing	Screen Setting (ft-bgs):	9.00-17.00	Casing Diameter (in):	2.00	Well Casing Material:	
Static Water Level (ft-bmp):	14.57	Total Depth (ft-bmp):	16.79	Water Column(ft):	2.22	Gallons in Well:	0.36
Depth to Product (ft-bmp):	NA	Pump Intake Depth(ft-bmp):	NA	Purge Method:	Low Flow	Purging Equipment:	Peristaltic Pump
Purge Start Time:	11:55	Total Volume Purged (gallons):	1.584	Sample ID:	NA	Sample Time:	NA
Purge End Time:	12:30	Well Volumes Purged (total):	4.40	Replicate Type / Replicate ID:	NA / NA	Water Quality Meter/ ID:	YSI Pro DSS / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm ^c)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
12:00	0	200	mL/min	14.57	7.09	0.762	2.04	2.32	17	167.6	Clear	No Odor
12:10	10	200	mL/min	14.57	7.24	0.763	1.23	1.35	17	133.1	Clear	No Odor
12:15	15	200	mL/min	14.57	7.27	0.757	3.73	1.18	18	119.3	Clear	No Odor
12:20	20	200	mL/min	14.57	7.25	0.762	2.31	1.16	17.8	114.8	Clear	No Odor
12:25	25	200	mL/min	14.57	7.24	0.758	1.68	1.08	18	110	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative

Comments:	None
Well Information:	
Well Labeled Properly:	yes
Is Well in Good Condition?	good
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RFI-12-40	Date(s):	2025-09-10	Work Order(s):	3Q STCM Sampling
Client:	RACER	Facility:	Buick City	Facility Location:	1107 E Stewart Ave Flint, MI 48505, Flint, MI, 48505, US
Weather(°F):	CLOUDS, T:66.97 °F, rH:80%, Clouds: 99%, Wind:5.17mph S-SW			Field Technician:	Donald Richmond
Measuring Pt. Description:	Top of Inner Casing	Screen Setting (ft-bgs):	3.00-8.00	Casing Diameter (in):	2.00
Static Water Level (ft-bmp):	5.51	Total Depth (ft-bmp):	7.59	Water Column(ft):	2.08
Depth to Product (ft-bmp):	NA	Pump Intake Depth(ft-bmp):	NA	Purge Method:	Low Flow
Purge Start Time:	10:20	Total Volume Purged (liters):	5	Sample ID:	NA
Purge End Time:	10:50	Well Volumes Purged (total):	3.91	Replicate Type / Replicate ID:	NA / NA
Scope of work completed?	Yes				
Well Casing Material:	Peristaltic Pump				
Liters in Well:	1.28				
Purging Equipment:	Peristaltic Pump				
Water Quality Meter/ ID:	YSI 600 XLM Sonde 1.65 inch / NA				

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm ^c)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
10:25	0	200	mL/min	5.51	6.98	1.498	3.64	0.64	20.7	203.8	Clear	No Odor
10:30	5	200	mL/min	5.51	6.98	1.282	1.44	0.34	20.9	200.9	Clear	No Odor
10:35	10	200	mL/min	5.51	6.97	1.275	1.03	0.24	21	199.4	Clear	No Odor
10:40	15	200	mL/min	5.51	6.96	1.268	0.76	0.21	21.1	197.8	Clear	No Odor
10:45	20	200	mL/min	5.51	6.98	1.26	0.82	0.18	21.1	195.8	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative

Comments: None

Well Information:

Well Labeled Properly: NA

Is Well in Good Condition? NA

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RFI-23-01R	Date(s):	2025-09-10	Work Order(s):	3Q STCM Sampling
Client:	RACER	Facility:	Buick City	Facility Location:	1107 E Stewart Ave Flint, MI 48505, Flint, MI, 48505, US
Weather(°F):	CLEAR, T:74.37 °F, rH:48%, Clouds: 0%, Wind:5.75mph W-SW			Field Technician:	Donald Richmond
Measuring Pt. Description:	Top of Inner Casing	Screen Setting (ft-bgs):	4.00-14.00	Casing Diameter (in):	2.00
Static Water Level (ft-bmp):	5.56	Total Depth (ft-bmp):	13.61	Water Column(ft):	8.05
Depth to Product (ft-bmp):	NA	Pump Intake Depth(ft-bmp):	NA	Purge Method:	Low Flow
Purge Start Time:	12:05	Total Volume Purged (liters):	8	Sample ID:	NA
Purge End Time:	12:50	Well Volumes Purged (total):	1.61	Replicate Type / Replicate ID:	NA / NA
Water Quality Meter/ ID:	YSI 600 XLM Sonde 1.65 inch / NA				
Scope of work completed?	Yes				

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm ^c)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
12:10	0	200	mL/min	5.56	7.02	0.776	57	0.96	19.2	155.7	Clear	No Odor
12:15	5	200	mL/min	5.56	6.93	0.772	101	0.37	19.4	51	Clear	No Odor
12:20	10	200	mL/min	5.56	6.92	0.771	14.74	0.28	19.6	-25.9	Clear	No Odor
12:25	15	200	mL/min	5.56	6.92	0.77	12.19	0.23	19.6	-56.5	Clear	No Odor
12:30	20	200	mL/min	5.56	6.91	0.767	12.2	0.16	19.7	-78.8	Clear	No Odor
12:35	25	200	mL/min	5.56	6.9	0.764	7.64	0.14	20.2	-105.6	Clear	No Odor
12:40	30	200	mL/min	5.56	6.9	0.764	4.66	0.1	20.2	-113.1	Clear	No Odor
12:45	35	200	mL/min	5.56	6.9	0.766	3.82	0.09	20.3	-117.2	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative

Comments: None

Well Information:

Well Labeled Properly: NA

Is Well in Good Condition? NA

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RFI-23-02R	Date(s):	2025-09-10	Work Order(s):	3Q STCM Sampling			
Client:	RACER	Facility:	Buick City	Facility Location:	1107 E Stewart Ave Flint, MI 48505, Flint, MI, 48505, US		Area:	Buick City
Weather(°F):	CLEAR, T:74.93 °F, rH:48%, Clouds: 0%, Wind:5.75mph SW			Field Technician:	Donald Richmond			
Measuring Pt. Description:	Top of Inner Casing	Screen Setting (ft-bgs):	4.00-14.00	Casing Diameter (in):	2.00	Well Casing Material:	,PVC	
Static Water Level (ft-bmp):	4.76	Total Depth (ft-bmp):	13.86	Water Column(ft):	9.1	Liters in Well:	5.62	
Depth to Product (ft-bmp):	NA	Pump Intake Depth(ft-bmp):	NA	Purge Method:	Low Flow	Purging Equipment:	Peristaltic Pump	
Purge Start Time:	13:25	Total Volume Purged (liters):	8	Sample ID:	NA	Sample Time:	NA	
Purge End Time:	14:10	Well Volumes Purged (total):	1.42	Replicate Type / Replicate ID:	NA / NA	Water Quality Meter/ ID:	YSI 600 XLM Sonde 1.65 inch / NA	
Scope of work completed?	Yes							

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm ^c)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
13:35	0	200	mL/min	4.76	7.27	1.09	27	0.48	18.5	135	Clear	No Odor
13:40	5	200	mL/min	4.76	7.24	1.086	12.75	0.38	18.6	132.9	Clear	No Odor
13:45	10	200	mL/min	4.76	7.19	1.075	8.68	0.36	18.8	132.6	Clear	No Odor
13:50	15	200	mL/min	4.62	7.01	1.006	5.83	0.8	19	137.3	Clear	No Odor
13:55	20	200	mL/min	4.76	6.94	0.97	5.58	0.99	19	140	Clear	No Odor
14:00	25	200	mL/min	4.76	6.89	0.934	3.7	1.08	19.1	143.9	Clear	No Odor
14:05	30	200	mL/min	4.76	6.88	0.926	3.48	1.02	19.3	144.3	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative

Comments: None

Well Information:

Well Labeled Properly:	NA
Is Well in Good Condition?	NA
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RFI-81-12R	Date(s):	2025-09-09	Work Order(s):	3Q STCM Sampling			
Client:	RACER	Facility:	Buick City	Facility Location:	1107 E Stewart Ave Flint, MI 48505, Flint, MI, 48505, US		Area:	Buick City
Weather(°F):	CLEAR, T:73.6 °F, rH:43%, Clouds: 0%, Wind:10.36mph S-SW			Field Technician:	Donald Richmond			
Measuring Pt. Description:	Top of Inner Casing	Screen Setting (ft-bgs):	8.00-18.00	Casing Diameter (in):	2.00	Well Casing Material:	,PVC	
Static Water Level (ft-bmp):	5.62	Total Depth (ft-bmp):	13.7	Water Column(ft):	8.08	Liters in Well:	4.99	
Depth to Product (ft-bmp):	NA	Pump Intake Depth(ft-bmp):	NA	Purge Method:	Low Flow	Purging Equipment:	Peristaltic Pump	
Purge Start Time:	14:00	Total Volume Purged (liters):	11	Sample ID:	NA	Sample Time:	NA	
Purge End Time:	15:00	Well Volumes Purged (total):	2.20	Replicate Type / Replicate ID:	NA / NA	Water Quality Meter/ ID:	YSI 600 XLM Sonde 1.65 inch / NA	
Scope of work completed?	Yes							

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm ^c)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
14:05	0	200	mL/min	5.62	6.95	0.612	197	1.22	19.6	188.2	Clear	No Odor
14:10	5	200	mL/min	5.62	6.88	0.608	50	0.78	19.8	187.9	Clear	No Odor
14:15	10	200	mL/min	5.62	6.84	0.602	44	1.03	20	186.9	Clear	No Odor
14:20	15	200	mL/min	5.62	6.85	0.596	32.93	2.69	20.1	185.5	Clear	No Odor
14:25	20	200	mL/min	5.62	6.85	0.595	22.84	3	20.2	185.8	Clear	No Odor
14:30	25	200	mL/min	5.62	6.85	0.594	23.43	3.38	19.9	186.7	Clear	No Odor
14:35	30	200	mL/min	5.62	6.84	0.583	15.57	3.08	20.2	187.3	Clear	No Odor
14:40	35	200	mL/min	5.62	6.83	0.587	10.63	2.42	20	188.2	Clear	No Odor
14:45	40	200	mL/min	5.62	6.81	0.592	10.7	1.9	20.2	187.9	Clear	No Odor
14:50	45	200	mL/min	5.62	6.84	0.596	10.68	1.74	19.8	186.1	Clear	No Odor
14:55	50	200	mL/min	5.62	6.75	0.605	3.62	1.26	19.9	183.1	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative

Comments: None

Well Information:

Well Labeled Properly: NA

Is Well in Good Condition? NA

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RFI-81-33	Date(s):	2025-09-09	Work Order(s):	3Q STCM Sampling		
Client:	RACER	Facility:	Buick City	Facility Location:	1107 E Stewart Ave Flint, MI 48505, Flint, MI, 48505, US	Area:	Buick City
Weather(°F):	CLEAR, T:70.68 °F, rH:49%, Clouds: 0%, Wind:10.36mph S-SW			Field Technician:	Donald Richmond		
Measuring Pt. Description:	Top of Inner Casing	Screen Setting (ft-bgs):	9.00-14.00	Casing Diameter (in):	2.00	Well Casing Material:	
Static Water Level (ft-bmp):	6	Total Depth (ft-bmp):	13.74	Water Column(ft):	7.74	Liters in Well:	4.78
Depth to Product (ft-bmp):	NA	Pump Intake Depth(ft-bmp):	NA	Purge Method:	Low Flow	Purging Equipment:	Peristaltic Pump
Purge Start Time:	12:20	Total Volume Purged (liters):	10	Sample ID:	NA	Sample Time:	NA
Purge End Time:	13:15	Well Volumes Purged (total):	2.09	Replicate Type / Replicate ID:	NA / NA	Water Quality Meter/ ID:	YSI 600 XLM Sonde 1.65 inch / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm ^c)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
12:25	0	200	mL/min	6.00	6.68	0.875	26	0.59	18.3	210.5	Clear	No Odor
12:30	5	200	mL/min	6.00	6.7	0.877	5.86	0.35	18.6	197	Clear	No Odor
12:35	10	200	mL/min	6.00	6.71	0.878	4.77	0.27	18.6	184	Clear	No Odor
12:40	15	200	mL/min	6.00	6.71	0.877	3.76	0.21	18.6	172.8	Clear	No Odor
12:45	20	200	mL/min	6.00	6.72	0.876	3.71	0.17	18.5	159.7	Clear	No Odor
12:50	25	200	mL/min	6.00	6.72	0.877	3.66	0.14	18.6	150.7	Clear	No Odor
12:55	30	200	mL/min	6.00	6.72	0.876	4.24	0.13	18.6	144	Clear	No Odor
13:00	35	200	mL/min	6.00	6.72	0.876	6.57	0.11	18.7	132.5	Clear	No Odor
13:05	40	200	mL/min	6.00	6.72	0.876	9.72	0.09	18.7	125.3	Clear	No Odor
13:10	45	200	mL/min	6.00	6.72	0.875	11.75	0.08	18.7	120.1	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative

Comments: None

Well Information:

Well Labeled Properly: NA

Is Well in Good Condition? NA

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RFI-86-14	Date(s):	2025-09-08	Work Order(s):	3Q STCM Sampling
Client:	RACER	Facility:	Buick City	Facility Location:	1107 E Stewart Ave Flint, MI 48505, Flint, MI, 48505, US
Weather(°F):	CLEAR, T:66.24 °F, rH:49%, Clouds: 0%, Wind:6.91mph S			Field Technician:	Donald Richmond
Measuring Pt. Description:	Top of Inner Casing	Screen Setting (ft-bgs):	9.00-17.00	Casing Diameter (in):	2.00
Static Water Level (ft-bmp):	14.94	Total Depth (ft-bmp):	16.8	Water Column(ft):	1.86
Depth to Product (ft-bmp):	NA	Pump Intake Depth(ft-bmp):	NA	Purge Method:	Low Flow
Purge Start Time:	15:10	Total Volume Purged (liters):	7	Sample ID:	NA
Purge End Time:	15:50	Well Volumes Purged (total):	6.09	Replicate Type / Replicate ID:	NA / NA
Water Quality Meter/ ID:	YSI 600 XLM Sonde 1.65 inch / NA				
Scope of work completed?	Yes				

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm ^c)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
15:20	0	200	mL/min	14.94	6.96	0.8	31	1.55	18.9	227.1	Clear	No Odor
15:25	5	200	mL/min	14.94	7.02	0.796	3.29	0.94	18.8	224.2	Clear	No Odor
15:35	15	200	mL/min	14.94	7.03	0.797	1.54	0.6	18.4	222.1	Clear	No Odor
15:40	20	200	mL/min	14.94	7.03	0.797	1.2	0.53	18.4	221.2	Clear	No Odor
15:45	25	200	mL/min	14.94	7.03	0.799	1.09	0.43	18.2	220.5	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative

Comments: None

Well Information:

Well Labeled Properly: NA

Is Well in Good Condition? NA

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RFI-23-01R	Date(s):	2025-11-26	Work Order(s):	4Q STCM Sampling		
Client:	RACER	Facility:	Buick City	Facility Location:	1107 E Stewart Ave Flint, MI 48505, Flint, MI, 48505, US	Area:	Buick City
Weather(°F):	CLOUDS, T:36.54 °F, rH:79%, Clouds: 100%, Wind:19.57mph SW			Field Technician:	Donald Richmond		
Measuring Pt. Description:	Top of Inner Casing	Screen Setting (ft-bgs):	4.00-14.00	Casing Diameter (in):	2.00	Well Casing Material:	,PVC
Static Water Level (ft-bmp):	5.56	Total Depth (ft-bmp):	13.54	Water Column(ft):	7.98	Gallons in Well:	1.3
Depth to Product (ft-bmp):	NA	Pump Intake Depth(ft-bmp):	NA	Purge Method:	Low Flow	Purging Equipment:	Peristaltic Pump
Purge Start Time:	11:05	Total Volume Purged (gallons):	2.641	Sample ID:	NA	Sample Time:	NA
Purge End Time:	12:00	Well Volumes Purged (total):	2.03	Replicate Type / Replicate ID:	NA / NA	Water Quality Meter/ ID:	YSI 600 XLM Sonde 1.65 inch / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm ^c)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
11:25	0	200	mL/min	5.56	6.69	0.761	72	1.92	13	72.2	Clear	No Odor
11:30	5	200	mL/min	5.56	6.61	0.77	5.06	0.4	13.4	65.4	Clear	No Odor
11:35	10	200	mL/min	5.56	6.64	0.779	4.1	0.31	13.4	55.5	Clear	No Odor
11:40	15	200	mL/min	5.56	6.65	0.785	4.23	0.37	13.3	49.6	Clear	No Odor
11:45	20	200	mL/min	5.56	6.67	0.791	4.61	0.48	13.4	45	Clear	No Odor
11:50	25	200	mL/min	5.56	6.68	0.794	4.5	0.5	13.2	44.9	Clear	No Odor
11:55	30	200	mL/min	5.56	6.68	0.795	4.52	0.54	13.6	44.4	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative

Comments: None

Well Information:

Well Labeled Properly:	NA
Is Well in Good Condition?	NA
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RFI-23-02R	Date(s):	2025-11-26	Work Order(s):	4Q STCM Sampling		
Client:	RACER	Facility:	Buick City	Facility Location:	1107 E Stewart Ave Flint, MI 48505, Flint, MI, 48505, US	Area:	Buick City
Weather(°F):	CLOUDS, T:37.4 °F, rH:77%, Clouds: 100%, Wind:19.57mph SW			Field Technician:	Donald Richmond		
Measuring Pt. Description:	Top of Inner Casing	Screen Setting (ft-bgs):	4.00-14.00	Casing Diameter (in):	2.00	Well Casing Material:	,PVC
Static Water Level (ft-bmp):	4.95	Total Depth (ft-bmp):	13.87	Water Column(ft):	8.92	Gallons in Well:	1.46
Depth to Product (ft-bmp):	NA	Pump Intake Depth(ft-bmp):	NA	Purge Method:	Low Flow	Purging Equipment:	Peristaltic Pump
Purge Start Time:	12:30	Total Volume Purged (gallons):	2.112	Sample ID:	NA	Sample Time:	NA
Purge End Time:	13:15	Well Volumes Purged (total):	1.45	Replicate Type / Replicate ID:	NA / NA	Water Quality Meter/ ID:	YSI 600 XLM Sonde 1.65 inch / NA
Scope of work completed?	Yes						

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm ^c)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
12:40	0	200	mL/min	4.95	7	1.051	106	1.26	12.2	80	Clear	No Odor
12:45	5	200	mL/min	4.95	6.92	0.975	16	1.55	12.2	80.8	Clear	No Odor
12:50	10	200	mL/min	4.95	6.9	0.963	8.24	1.6	12.3	85.7	Clear	No Odor
12:55	15	200	mL/min	4.95	6.9	0.958	5.97	1.69	12.3	93.3	Clear	No Odor
13:00	20	200	mL/min	4.95	6.91	0.956	5.14	1.82	11.9	101.8	Clear	No Odor
13:05	25	200	mL/min	4.95	6.91	0.953	4.25	1.89	12	109	Clear	No Odor
13:10	30	200	mL/min	4.95	6.91	0.952	3.98	1.89	11.9	111	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative
_____	_____	_____	_____	_____

Comments: None

Well Information:

Well Labeled Properly:	NA
Is Well in Good Condition?	NA
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RFI-12-40	Date(s):	2025-11-25	Work Order(s):	4Q STCM Sampling
Client:	RACER	Facility:	Buick City	Facility Location:	1107 E Stewart Ave Flint, MI 48505, Flint, MI, 48505, US
Weather(°F):	MIST, T:46.98 °F, rH:98%, Clouds: 100%, Wind:3.44mph S-SW			Field Technician:	Donald Richmond
Measuring Pt. Description:	Top of Inner Casing	Screen Setting (ft-bgs):	3.00-8.00	Casing Diameter (in):	2.00
Static Water Level (ft-bmp):	5.49	Total Depth (ft-bmp):	7.58	Water Column(ft):	2.09
Depth to Product (ft-bmp):	NA	Pump Intake Depth(ft-bmp):	NA	Purge Method:	Low Flow
Purge Start Time:	15:40	Total Volume Purged (gallons):	1.32	Sample ID:	NA
Purge End Time:	16:10	Well Volumes Purged (total):	3.88	Replicate Type / Replicate ID:	NA / NA
Scope of work completed?	Yes				

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm ^c)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
15:50	0	200	mL/min	7.58	6.9	1.423	3.15	2.59	12.2	20.7	Clear	No Odor
15:55	5	200	mL/min	5.49	7.06	1.224	1.39	1.11	12.1	19.3	Clear	No Odor
16:00	10	200	mL/min	5.49	7.07	1.178	1.53	0.82	12.1	19.3	Clear	No Odor
16:05	15	200	mL/min	5.49	7.06	1.163	1.56	0.77	12.1	19.3	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative

Comments: None

Well Information:

Well Labeled Properly:	NA
Is Well in Good Condition?	NA
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RFI-81-12R	Date(s):	2025-11-25	Work Order(s):	4Q STCM Sampling			
Client:	RACER	Facility:	Buick City	Facility Location:	1107 E Stewart Ave Flint, MI 48505, Flint, MI, 48505, US		Area:	Buick City
Weather(°F):	CLOUDS, T:46.13 °F, rH:96%, Clouds: 100%, Wind:5.75mph S-SE			Field Technician:	Donald Richmond			
Measuring Pt. Description:	Top of Inner Casing	Screen Setting (ft-bgs):	8.00-18.00	Casing Diameter (in):	2.00	Well Casing Material:	PVC	
Static Water Level (ft-bmp):	6.2	Total Depth (ft-bmp):	13.59	Water Column(ft):	7.39	Gallons in Well:	1.21	
Depth to Product (ft-bmp):	NA	Pump Intake Depth(ft-bmp):	NA	Purge Method:	Low Flow	Purging Equipment:	Peristaltic Pump	
Purge Start Time:	12:55	Total Volume Purged (gallons):	2.112	Sample ID:	NA	Sample Time:	NA	
Purge End Time:	13:40	Well Volumes Purged (total):	1.75	Replicate Type / Replicate ID:	NA / NA	Water Quality Meter/ ID:	YSI 600 XLM Sonde 1.65 inch / NA	
Scope of work completed?	Yes							

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm ^c)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
13:05	0	200	mL/min	6.20	6.89	0.495	140	3.11	13.6	105.4	Clear	No Odor
13:10	5	200	mL/min	6.20	6.84	0.481	36	3.62	13.9	102.3	Clear	No Odor
13:15	10	200	mL/min	6.20	6.81	0.482	21	2.93	14	87.6	Clear	No Odor
13:20	15	200	mL/min	6.20	6.79	0.487	14	2.4	14	58.8	Clear	No Odor
13:25	20	200	mL/min	6.20	6.79	0.494	9.16	2.02	14	37.9	Clear	No Odor
13:30	25	200	mL/min	6.20	6.79	0.497	8.29	1.91	14	38.7	Clear	No Odor
13:35	30	200	mL/min	6.20	6.79	0.501	10.26	1.82	13.6	43.9	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative

Comments: None

Well Information:

Well Labeled Properly:	NA
Is Well in Good Condition?	NA
Well Inspection Comments:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RFI-81-33	Date(s):	2025-11-25	Work Order(s):	4Q STCM Sampling
Client:	RACER	Facility:	Buick City	Facility Location:	1107 E Stewart Ave Flint, MI 48505, Flint, MI, 48505, US
Weather(°F):	RAIN, T:44.17 °F, rH:97%, Clouds: 100%, Wind:1.01mph E			Field Technician:	Donald Richmond
Measuring Pt. Description:	Top of Inner Casing	Screen Setting (ft-bgs):	9.00-14.00	Casing Diameter (in):	2.00
Static Water Level (ft-bmp):	6.14	Total Depth (ft-bmp):	13.73	Water Column(ft):	7.59
Depth to Product (ft-bmp):	NA	Pump Intake Depth(ft-bmp):	NA	Purge Method:	Low Flow
Purge Start Time:	11:15	Total Volume Purged (gallons):	2.112	Sample ID:	NA
Purge End Time:	12:00	Well Volumes Purged (total):	1.70	Replicate Type / Replicate ID:	NA / NA
Water Quality Meter/ ID:	YSI 600 XLM Sonde 1.65 inch / NA				
Scope of work completed?	Yes				

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm ^c)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
11:25	0	200	mL/min	6.14	6.74	0.607	13.04	0.9	13.8	70.8	Clear	No Odor
11:30	5	200	mL/min	6.14	6.73	0.629	7.17	0.62	13.6	7.5	Clear	No Odor
11:35	10	200	mL/min	6.14	6.73	0.634	7.12	0.6	13.6	0.6	Clear	No Odor
11:40	15	200	mL/min	6.14	6.73	0.643	5.79	0.54	13.7	-13.8	Clear	No Odor
11:45	20	200	mL/min	6.14	6.74	0.65	4.36	0.5	13.6	-22.9	Clear	No Odor
11:50	25	200	mL/min	6.14	6.74	0.658	4.63	0.48	13.5	-29.6	Clear	No Odor
11:55	30	200	mL/min	6.14	6.74	0.663	3.54	0.46	13.6	-33.6	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative

Comments: None

Well Information:

Well Labeled Properly: NA

Is Well in Good Condition? NA

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
mS/cm = milliSiemens per centimeter

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
gpm = gallons per minute

Location ID:	RFI-86-14	Date(s):	2025-11-25	Work Order(s):	4Q STCM Sampling
Client:	RACER	Facility:	Buick City	Facility Location:	1107 E Stewart Ave Flint, MI 48505, Flint, MI, 48505, US
Weather(°F):	MIST, T:46.72 °F, rH:96%, Clouds: 100%, Wind:4.61mph S			Field Technician:	Donald Richmond
Measuring Pt. Description:	Top of Inner Casing	Screen Setting (ft-bgs):	9.00-17.00	Casing Diameter (in):	2.00
Static Water Level (ft-bmp):	15.22	Total Depth (ft-bmp):	16.78	Water Column(ft):	1.56
Depth to Product (ft-bmp):	NA	Pump Intake Depth(ft-bmp):	NA	Purge Method:	Low Flow
Purge Start Time:	14:20	Total Volume Purged (gallons):	1.848	Sample ID:	NA
Purge End Time:	15:00	Well Volumes Purged (total):	7.39	Replicate Type / Replicate ID:	NA / NA
Water Quality Meter/ ID:	YSI 600 XLM Sonde 1.65 inch / NA				
Scope of work completed?	Yes				

Time	Total Elapsed (min)	Flow Rate	Flow Rate Unit	Depth to Water (ft)	pH (S.U.)	Specific Conductivity (mS/cm ^c)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
14:25	0	200	mL/min	15.22	7.06	0.642	9.29	1.11	14.9	126.4	Clear	No Odor
14:35	10	200	mL/min	15.22	7.07	0.656	2.28	0.68	14.9	89.9	Clear	No Odor
14:40	15	200	mL/min	15.22	7.07	0.658	2.02	0.67	14.9	79	Clear	No Odor
14:45	20	200	mL/min	15.22	7.07	0.663	1.91	0.65	14.7	61.8	Clear	No Odor
14:50	25	200	mL/min	15.22	7.07	0.665	1.83	0.66	14.8	54.4	Clear	No Odor
14:55	30	200	mL/min	15.22	7.07	0.668	1.77	0.66	14.8	50.2	Clear	No Odor

Constituent Sampled	Container	Number	Volume	Preservative

Comments: None

Well Information:

Well Labeled Properly: NA

Is Well in Good Condition? NA

Well Inspection Comments: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

uS/cm = microSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
S.U = standard units
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°F = degrees Fahrenheit
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