HALEY ALDRICH

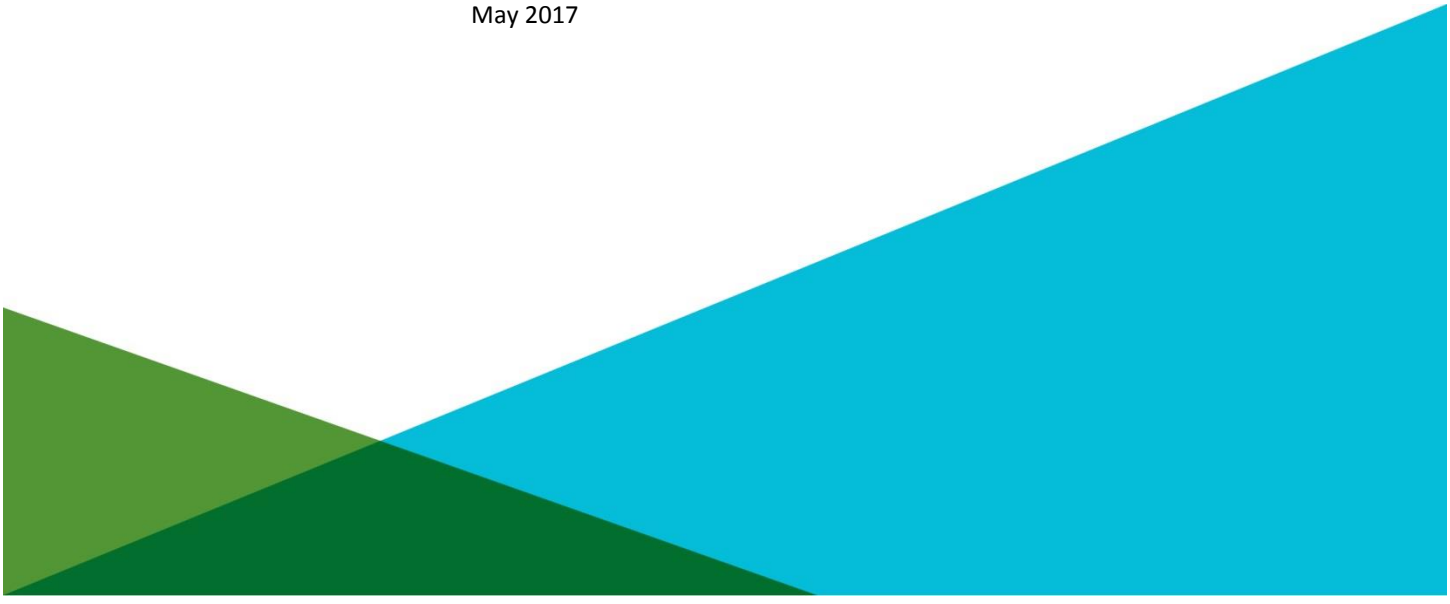
www.haleyaldrich.com

SOIL REMEDIAL ACTION REPORT ADDENDUM
EWING TOWNSHIP INDUSTRIAL LAND
1445 PARKWAY AVENUE
EWING, NEW JERSEY

by Haley & Aldrich, Inc.
Cleveland, Ohio

for New Jersey Department of Environmental Protection
Trenton, New Jersey

File No. 70613
May 2017



HALEY ALDRICH

www.haleyaldrich.com

SOIL REMEDIAL ACTION REPORT ADDENDUM
EWING TOWNSHIP INDUSTRIAL LAND
1445 PARKWAY AVENUE
EWING, NEW JERSEY

by Haley & Aldrich, Inc.
Cleveland, Ohio

for New Jersey Department of Environmental Protection
Trenton, New Jersey

File No. 70613
May 2017

HALEY & ALDRICH, INC.
299 Cherry Hill Road
Suite 303
Parsippany, NJ 07054
973.263.3900

10 May 2017
File No. 70613

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

Subject: Soil Remedial Action Report Addendum
Ewing Township Industrial Land
Former Delphi Interior and Lighting Systems Division
1445 Parkway Avenue
Ewing, New Jersey
NJDEP SRP PI No. 011336
ISRA Case No. E97070

Ladies and Gentlemen:

On behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust, Haley & Aldrich, Inc. (Haley & Aldrich) is providing this Soil Remedial Action Report (RAR) Addendum for the Ewing Township Industrial Land site (Site) located at 1445 Parkway Avenue in Ewing, New Jersey. This Soil RAR Addendum summarizes the Impact to Groundwater analysis completed for soils at the Site. Presented herein are the findings and conclusions consistent with the requirements of N.J.A.C. 7:26E.

If you have questions, please do not hesitate to contact the undersigned.

Sincerely yours,
HALEY & ALDRICH, INC.

Amy K. Murphy, LSRP
Senior Project Manager

Daniel Putz
Program Manager

David Hagen
Senior Vice President

Enclosures

C: RACER Trust; Attn: Robert Hare, Cleanup Manager
NJDEP; Attn: Gerald Hahn, Bureau of Inspection and Review (BIR)
NJDEP; Attn: Kevin Schick, Chief, Bureau of Environmental Evaluation and Risk Assessment (BEERA)

G:\70613\821 - IGW Analysis Reporting\Text\2017_0502_RACEREwing_SoilRARAddendum-F.docx

Table of Contents

Page

List of Tables v
List of Figures v

1. Introduction and Previous Work 1

1.1 SITE BACKGROUND 1
1.2 PHYSICAL SETTING 2
1.2.1 Geology 2
1.2.2 Hydrogeology 2
1.3 SUMMARY OF PREVIOUS REPORTS 3
1.4 SUMMARY OF REMEDIAL ACTIONS TO DATE 3
1.4.1 AOC-01C Plater Pits #5 and #6 Excavations 4
1.4.2 AOC-11 Gold Run Pond Excavations 4
1.4.3 Southern Swale Excavations 5
1.5 SUMMARY OF PRELIMINARY IMPACT TO GROUNDWATER EVALUATION 6
1.6 SUMMARY OF ADDITIONAL WORK COMPLETED FOR IMPACT TO GROUNDWATER EVALUATION 8
1.6.1 Monitoring Well Redevelopment and Sampling 8
1.6.2 SPLP Sampling 8
1.6.3 Supplemental Soil Borings 9

2. Regulatory Status 10

2.1 NJDEP CASE INVENTORY DOCUMENT 10
2.2 NJDEP COVER/CERTIFICATION FORM AND REMEDIAL ACTION FORM 10
2.3 REGULATORY TIMEFRAME AND EXTENSION REQUEST 10
2.4 RECEPTOR EVALUATION SUMMARY 10
2.4.1 Land Use 10
2.4.2 Groundwater 11
2.4.3 Vapor Intrusion 11
2.4.4 Ecological 12

3. Supplemental Data Collection 16

3.1 MONITORING WELL REDEVELOPMENT 16
3.2 SPLP SAMPLING 17
3.2.1 Previous SPLP Sampling 17
3.2.2 SPLP Sample Collection and Analysis 18
3.3 SUPPLEMENTAL SOIL BORINGS 18
3.4 ANALYTICAL DATA MANAGEMENT 19
3.5 DATA USABILITY ASSESSMENT 19
3.5.1 QUALITY ASSURANCE PROJECT PLAN 19
3.5.1 USABILITY REVIEW 19
3.6 DATA QUALITY ASSESSMENT 23
3.7 ELECTRONIC DATA DELIVERABLES 23

Table of Contents

Page

4. Applicable Soil Impact to Groundwater Screening Criteria 24

4.1 SOIL CLEANUP CRITERIA 24
4.2 2013 DEFAULT SOIL REMEDIATION SCREENING LEVELS 24
4.3 EVALUATION OF SPLP ANALYSIS 25
4.3.1 Arsenic 25
4.3.2 Chromium and Hexavalent Chromium 26
4.3.3 Nickel 26
4.3.4 Zinc 26
4.3.5 Benzene 27
4.3.6 Chlorobenzene 27
4.3.7 Trichloroethene 27
4.3.8 Vinyl Chloride 27
4.4 SITE-SPECIFIC SCREENING CRITERIA 27

5. Impact to Groundwater Evaluation 28

5.1 ADDITIONAL IGW PATHWAY EVALUATION METHODS 28
5.2 STEP ONE – IMMOBILE CHEMICAL DETERMINATION 28
5.3 STEP TWO – SINGLE POINT COMPARISON 29
5.4 STEP THREE – SPATIALLY-WEIGHTED AVERAGING 29
5.4.1 Spatially-Weighted Averaging Inputs 30
5.4.2 Spatially-Weighted Averaging Results 32

6. Conclusions and Recommendations 36

References 39

Tables
Figures
Appendix A - NJDEP Training Materials
Appendix B - Groundwater Contours
Appendix C - Case Inventory Document
Appendix D - NJDEP Forms
Appendix E - Receptor Evaluation Form
Appendix F - Borings Logs
Appendix G - Laboratory Reports
Appendix H - Synthetic Precipitation Leachate Procedure Calculations
Appendix I - Chromium Evaluation
Appendix J - NJDEP Comments on Impact to Groundwater
Appendix K - SESOIL Outputs
Appendix L - Spatially-Weighted Averaging

List of Tables

Table No.	Title
I	Post Redevelopment Groundwater Comparison
II	Summary of 2012 SPLP Analytical Results
III	Summary of 2016 SPLP Analytical Results
IV	Summary of Analytical Results for 2016 Supplemental Borings
V	Usability Bias Assessment
VI	Applicable Screening Criteria
VII	IGW Sampling Raw Data Statistical Evaluation
VIII	IGW Sampling Reporting Limit Evaluation Results
IX	Impact to Groundwater Analysis Summary Table

List of Figures

Figure No.	Title
1	Project Locus
2	Site Plan with Well Locations
3	2012 and 2016 SPLP Soil Boring Locations
4	2016 Supplemental Soil Boring Locations
5	Impact to Groundwater Compliance Evaluation Functional Areas

1. Introduction and Previous Work

The following Addendum to the Soil Remedial Action Report (RAR) (Haley & Aldrich, October 2016) presents findings and conclusions based on supplemental impact to groundwater (IGW) pathway evaluations conducted in accordance with the requirements of N.J.A.C. 7:26E for the Ewing Township Industrial Land site (Site). The Soil RAR summarized remedial actions conducted at the Site prior to 1990 through November 2013. The potential for soil IGW was initially assessed in the Groundwater Remedial Investigation Report (GwRIR) dated May 2016, which identified nine constituents that could potentially pose an IGW above Class II-A Groundwater Quality Standards[1]. These constituents are further evaluated herein. Through communications and correspondence, New Jersey Department of Environmental Protection (NJDEP) indicated that soil IGW evaluations should be documented as part of soil remediation activities for the Site, as provided herein.

1.1 SITE BACKGROUND

The Site is approximately 80 acres in size and is located at 1445 Parkway Avenue Lot 1.01, Block 343, of the tax map of Ewing Township, Mercer County, New Jersey (Figure 1). The Site was previously used as farmland and orchards prior to development, and is the former location of a manufacturing facility that was owned and operated by the now-liquidated General Motors Corporation. The Site was operated for motor vehicle parts manufacturing from 1938 to 1998, and was also the location of a Defense Plant Corporation aircraft assembly plant during World War II.

The Site has been referred to in the past by several names including the Turnstead Division of GM, Eastern Aircraft Division, Fisher Body Division, Fisher Guide Division, Inland Fisher Guide Division, Delphi Interior and Lighting Systems and the Old GM Plant. One or more of these names may have been used in previous reports or summaries of previous investigations and all refer to the facility. A Site plan is provided as Figure 2.

The manufacturing plant at the Site closed in 1998 and demolition of Site structures occurred between the fall of 2000 and the spring of 2002. Following building demolition, former process pits were uncovered and material that had been placed in the pits at the time of their closure (varied by pit as manufacturing needs resulted in pit closure and new pit construction) was excavated in the spring of 2002 for process pit inspections by NJDEP. All floor pits were pumped to remove precipitation that had accumulated prior to the NJDEP inspection of the pits in November 2003.

For purposes of this IGW evaluation and consistent with NJDEP training materials (attached as Appendix A for reference), the Site is considered a single Area of Concern (AOC) because soil remediation has already been conducted and soil contaminants are widespread with no discernable sources. This is consistent with the groundwater evaluation whereby the Site was evaluated as a single AOC.

[1] We note that the groundwater beneath the Site is not currently used for potable purposes nor is it reasonably anticipated to be used for such purposes in the future. In addition, most of the groundwater beneath the Site flows towards, and discharges into, Gold Run (2016 Groundwater RIR).

1.2 PHYSICAL SETTING

Ground surface topography in the region is generally flat with low rolling hills incised by stream valleys, such as Gold Run. The Site is bounded on the west and south by railroad tracks that are topographically higher than the Site. A ditch has been created between the Site and the railroad tracks on the western and southern (aka Southern Swale) sides of the Site because the railroad tracks are slightly elevated. The Site is bounded to the north by commercial areas located along Parkway Avenue, which are topographically higher than the Site; and Silvia Street to the east, which is an undeveloped dirt roadway to a nearby Ewing Township utility facility.

Rivers and streams within the vicinity of the Site, such as Gold Run and Jacobs Creek, flow generally to the south towards the Delaware River. The predominant surface water feature in the vicinity of the Site is Gold Run, which roughly transects the eastern portion of the Site from north to south and is the topographic low of the Site. The storm sewers beneath Parkway Avenue discharge in the northeastern corner of the Site, which forms the present-day stream, Gold Run. Prior to 2011, the storm sewers beneath Parkway Avenue discharged into Gold Run Pond, which was located in the northeast corner and excavated in 2011, as detailed in the October 2016 Soil RAR. Gold Run flows from the Parkway Avenue discharge in a southerly direction towards the Delaware River.

1.2.1 Geology

The Site geology is presented in the May 2016 GwRIR. In general, the following summarizes the current understanding of Site geology. The overburden soils range in thickness from 0 to 20 feet, overlying weathered bedrock. The soils are generally: fill, 0 to 10 feet thick; and residual bedrock, clays, silts, sands, and rock fragments, 0 to 10 feet thick. The soils are thinnest at the northwest corner of the Site, and thicken in the center of the Site, where extensive fill has been placed, then thin again towards Gold Run. The overburden soils typically are dry, with groundwater present in the underlying weathered bedrock. The weathered bedrock is highly fractured bedrock, defined up to a depth of 30 feet below ground surface (bgs), where it transitions to competent bedrock.

The underlying bedrock unit consists of alternating bands of light gray to reddish-brown, medium- to coarse-grained arkosic sandstone and red-brown to purple-brown siltstone and shale, with several thicker, more massive sandstone beds of the Raven Rock Member of the Stockton Formation. The bedrock was formed during the late Triassic period. Bedding planes typically strike N80˚E to N90˚E, with a gentle dip angle to the north/northwest ranging from nine to 14 degrees. Due to numerous episodes of faulting and fracturing, the bedrock is highly fractured, creating numerous hydraulically interconnected vertical and horizontal fractures. Bedding plane joints, typical in New Jersey geology, are present but their significance in relation to overall bedrock groundwater flow is overshadowed by significant structural geologic deformation, fracturing, and faulting.

1.2.2 Hydrogeology

The Site hydrogeology is presented in the May 2016 GwRIR. In general, the following summarizes the current understanding of Site hydrogeology. The overburden/weathered bedrock unit is considered to constitute a single hydrogeologic unit and has an average hydraulic conductivity of $3x10^{-2}$ cm/s. Groundwater within the overburden/weathered bedrock aquifer flows from the west to east across the

Site and discharges into Gold Run. Accordingly, Gold Run is a hydrogeologic boundary along the eastern portion of the Site for groundwater flowing through the overburdened/weathered bedrock.

Groundwater in the bedrock aquifer flows from the northwest corner of the Site to the south, southeast, and east. The bedrock groundwater flows east along the northern boundary of the Site, such that the northern boundary acts as up/side gradient in the bedrock aquifer. The groundwater on the western side of the Site follows a fault that has been identified through drilling and hydrogeologic testing to be a low/no flow boundary on the west side of the Site. Based on the groundwater contours provided in Appendix B, the western half of the southern side of the Site appears to be up/side gradient, while the eastern half of the southern side appears to be downgradient. Similar to the overburden/weathered bedrock, Gold Run has been interpreted as a receiving (gaining) stream for bedrock groundwater flow.

Fracturing in the upper portion of the weathered bedrock and competent bedrock is significant. A review of fracture frequency versus depth indicates that the lithostatic pressure typically reduces the frequency of open fractures past the 90 feet bgs depth. The decrease in fracture frequency corresponds to a general decrease in bedrock hydraulic conductivity with depth.

Vertical gradients across the Site vary spatially both in direction and magnitude. In areas proximal to groundwater flow boundaries, such as Gold Run and the fault along the western border of the Site, vertical groundwater flow is upward. In the areas located some distance from the boundaries vertical flow is downward, indicative of groundwater recharge. The overburden/weathered bedrock unit exhibits a hydraulic conductivity approximately an order of magnitude greater than the bedrock unit, indicating more significant groundwater flow occurs in the overburden/weathered bedrock.

1.3 SUMMARY OF PREVIOUS REPORTS

Provided below is a list of documents and reports that summarize key activities related to soil and groundwater investigation/delineation and document the remedial measures that have been conducted at the Site.

- Remedial Investigation Report, December 2003
- Supplemental Remedial Investigation Report, April 2005
- Remedial Action Workplan, June 2006
- Remedial Investigation Report/Groundwater Investigation Workplan, December 2006
- Revised Remedial Action Workplan, December 2008
- Remedial Investigation Progress Report, January 2009
- Groundwater Investigation Summary Report, May 2009
- Soil Remedial Investigation Report, May 2014
- Groundwater Remedial Investigation Report, May 2016
- Soil Remedial Action Report, August 2016

1.4 SUMMARY OF REMEDIAL ACTIONS TO DATE

Presented below are summaries of soil remedial actions completed at the Site. A more detailed description of these activities and others is provided in the October 2016 Soil RAR previously submitted to the NJDEP.

1.4.1 AOC-01C Plater Pits #5 and #6 Excavations

The August 14, 2009 NJDEP comment letter for the December 2008 Revised Remedial Action Workplan (RAW) considered Plater Pit #5 and Plater Pit #6 to be "hot spot[s]…that required a permanent remedial strategy". Contamination in Plater Pit #5 indicated individual volatile organic compounds (VOCs) were detected up to 5,500 milligrams per kilogram (mg/kg), polycyclic aromatic hydrocarbons (PAHs) up to 460 mg/kg, metals up to 46,700 mg/kg (copper), and cyanide up to 9,960 mg/kg. Remediation was to focus on soil boring PL05-03. Contamination in Plater Pit #6 indicated individual total petroleum hydrocarbons (TPH) concentrations were detected up to 33,500 mg/kg, copper up to 14,800 mg/kg, nickel up to 30,700 mg/kg, and hexavalent chromium up to 12,200 mg/kg. Remediation in Plater Pit #6 was to focus on soil borings PL06-02 and PL06-03.

Soil excavation activities were conducted between September 24, 2013 and October 7, 2013. The Plater Pit #5 excavation measured approximately 18.3 feet wide by 38.3 feet long and approximately 5 feet deep. Approximately 130 cubic yards of material were removed from Plater Pit #5. The Plater Pit #6 excavation measured approximately 38.3 feet wide by 78.3 feet long by 5.8 feet deep. Approximately 644 cubic yards of material were removed from Plater Pit #6. A total of 766.67 tons of soil were disposed to the Environmental Quality Company (EQ) facility in Pennsylvania.

The plater pit excavations were successful in removing high concentrations of VOCs, BN, cyanide and hexavalent chromium. Remaining soil contamination above Non-Residential Direct Contact Soil Remediation Standards (NRDCSRS) in these areas is covered by either the existing former manufacturing slab or a layer of clean stone fill. Post-excavation samples were not required, because soil samples from previously installed soil borings were used for excavation verification.

1.4.2 AOC-11 Gold Run Pond Excavations

Sediment in the former Gold Run Pond contained trichloroethylene (TCE) at concentrations exceeding the NJDEP Freshwater Sediment Screening Guidelines in effect at the time. TCE was historically detected in sediments (at depths from 2-3 feet) at concentrations up to 130 mg/kg. The elevated concentrations of TCE in pond sediment were near the outfall of the Parkway Avenue storm water sewer which conveys surface water run-off from the nearby Naval Air Warfare Center (NAWC), residential areas, and Gold Run headwaters. Likewise, elevated concentrations of TCE have been detected in surface water draining from NAWC, a facility impacted by TCE related to aircraft testing, at concentrations exceeding the New Jersey Surface Water Quality Standard (SWQS). Based on the Conceptual Site Model detailed in the December 2008 Revised RAW, the contaminated sediment found in the former Gold Run Pond was thought to be acting as a potential source for groundwater contamination in the area.

As part of the remediation, the man-made pond structure was removed and Gold Run was re-contoured to restore the hydrological profile to the original channel alignment observed in historic aerial photographs. The remedial excavation was conducted during the period of 30 August 2011 to 5 January 2012. The excavation included removal of the pond sediments to bedrock, roughly 1 to 8 feet below the original sediment depth (GRP_EX-1) and the banks surrounding the pond area (GRP_EX-2) to a depth of 1 foot bgs. The total combined excavation volume from both excavations was 9,643 cubic yards. The original estimate was 5,500 cubic yards. The increase in volume was primarily due to the top of bedrock being non-uniform and deeper than expected in the south-eastern portion of GRP_EX-1. In the north

end of the pond towards Parkway Avenue, the sediment depth was generally less than the design sediment depth of 4 feet; however, in the south end of the pond, near the former flow control structure, the sediment was consistently 3 to 4 feet deeper than the design depth. The volume increase in GRP_EX-1 was the result of variations in the depth of sediments and, to a lesser extent, the need to use kiln dust to dry saturated sediments. The 4,143 cubic yards of additional soil excavated included 713 cubic yards of soil that was excavated out of the eastern bank of the pond (GRP_EX-2) to create the wetlands compensation area; therefore, the disposal volume attributable to the additional pond sediment is 3,430 cubic yards. The off-Site disposal of soils/sediments excavated during the Gold Run Pond excavations at GRP_EX-1 and GRP_EX-2 was approximately 11,250 tons to the Clean Earth facility in Pennsylvania.

A wetlands compensation area was constructed in accordance with the request from the NJDEP Division of Land Regulation Wetlands Mitigation Group to compensate for the installation of impermeable surfaces, specifically the outlet structure installed at the outfall of the two reinforced concrete pipes that drain storm water from Parkway Avenue into the Gold Run channel. The compensation area was excavated northeast of the GRP_EX-1 to approximately 4 feet bgs (GRP_EX-2). The soils excavated in this area were sampled and determined to be acceptable for on-Site reuse. A total of 713 cubic yards of soil were excavated and reused as a base material for the new channel construction.

The Gold Run Pond excavations were successful in removing the contaminated pond sediment, removing the pond outlet structure, and re-contouring Gold Run to restore the hydrological profile to the original channel alignment observed in historic aerial photographs. Post-excavation samples were not required since previously installed soil borings were used for excavation verification. Additional ecological evaluation of remaining soils and sediment is presented in Section 2.4.4.

1.4.3 Southern Swale Excavations

The southern swale had contamination from various metals and semi-volatile organic compounds (SVOCs) noted during sampling events conducted in July 1998, August 1998, September 2002, June 2013, and July 2013. Excavation of portions of the southern swale was initially proposed in the June 2006 RAW. The proposed remedy for the Southern Swale area included the removal of the contaminated soil/sediment from the bottom and sidewalls of this swale to a maximum depth of 2 feet below grade.

The remedial excavation was conducted during the period of August 30, 2011 to January 5, 2012. The focus of excavation was limited to areas SSwale_EX-1 and SSwale_EX-2. Excavation area SSwale_EX-4 was subsequently added to remove a limited amount of additional impacted soils located between the southern limit of SSwale_EX-1 and the northern limit of SSwale_EX-2. Approximately 4,388 tons of soil were excavated and disposed at the Clean Earth facility in Pennsylvania.

The excavations were successful in removing elevated levels of various metals and SVOCs in surficial soils of the northern portion of the Southern Swale. Post-excavation samples were not required, in part due to the previously installed soil borings used for excavation verification, but also because post-excavation samples collected at the excavation extents (i.e., the top of the steep side-slopes ranging from 15 to 30 degrees) would not be related to the material excavated from the bottom of the swale. In addition, the Compliance Evaluation included in the June 2014 Soil Remedial Investigation Report (RIR) indicated surface and subsurface soils in AOC-12 are compliant with NRDCSRS for a Limited Restricted

Use Soil Remedial Action. Additional ecological evaluation of remaining soils and sediment is presented in Section 2.4.4.

1.5 SUMMARY OF PRELIMINARY IMPACT TO GROUNDWATER EVALUATION

As part of the GwRIR, an initial assessment of the potential for soil IGW was conducted. The methodology used in the GwRIR was based on the guidance provided in *Technical Guidance for the Attainment of Remediation Standards and Site-Specific Criteria* (NJDEP, 2012) ("Compliance Tech Guide"). The GwRIR initial assessment identified constituents of concern (COCs) that required further evaluation based on a multi-step process which included:

- Review and exclusion of COCs where the IGW screening criteria was not based on health considerations, but rather on aesthetic considerations such as taste, odor, and appearance. These COCs were excluded from the IGW pathway evaluation because, by law, soil standards must be based on health considerations;
- Consideration of COC background levels;
- Single point comparison to default screening criteria;
- Compliance averaging by calculating the arithmetic mean for the data set where there were two or fewer distinct sample values or nine or fewer total sample points;
- Compliance averaging at the 95 percent upper confidence limit (UCL) of the mean; and
- Considering the two most recent years of groundwater sampling results to represent current groundwater quality.

Analytes were detected in both soil and groundwater media at concentrations greater than their respective screening criteria. The list of samples was then refined by considering only the two most recent years of groundwater sampling results to represent current groundwater quality. The constituents that were not detected in both soil and groundwater at concentrations greater than their respective screening criteria represent constituents for which there is no complete soil to groundwater leaching pathway. The GwRIR identified that the following COCs had potentially complete IGW pathways:

- Benzo(a)anthracene
- Benzo(a)pyrene
- Arsenic
- Lead
- Nickel

The GwRIR identified that the presence of these constituents in groundwater may be related to elevated turbidity in groundwater samples, and, as such, further evaluation was warranted.

The GwRIR also identified the following constituents that had a potentially complete IGW pathway:

- Benzene
- Chlorobenzene
- Trichloroethene
- Vinyl Chloride

The potentially complete IGW pathway required further evaluation utilizing additional sampling, further Synthetic Precipitation Leaching Procedure (SPLP) sampling to evaluate Site-specific screening criteria for IGW, and evaluation techniques, such as spatially-weighted averaging.

It should be noted that the list of constituents retained for the final IGW analysis described herein is derived from the initial analysis provided above (including chromium/hexavalent chromium and zinc). These constituents were identified as being potentially significant based on an AOC-by-AOC approach. This approach was conservative (that is, more constituents were identified and retained) because groundwater at adjacent and downgradient AOCs was used as the downgradient compliance point instead of the property boundary. The final IGW analysis of retained constituents (provided in the remainder of this document) is more appropriately based on a Site-wide basis because:

1. Remediation at individual AOCs has been completed,
2. Remaining contamination is sporadic and distributed across the Site, and
3. All sample results are above the water table.

This Site-wide approach is consistent with *10 July 2014 NJDEP "Hot Topic" Training Impact to Ground Water Pathway* training provided by the NJDEP.

In an email dated 16 August 2016 from Matt Turner (NJDEP) to Amy Murphy (Haley & Aldrich LSRP), the NJDEP issued comments (included in Appendix J) on the initial IGW analysis presented in the GwRIR. The NJDEP indicated that it completed an inspection and review of the GwRIR submitted to NJDEP on 6 May 2016. The comments on the IGW evaluation were summarized in a NJDEP memorandum dated July 15, 2016 and indicated:

> "The LSRP has utilized a process whereby soil IGW is sequentially evaluated and AOCs screen out by compliance with the default soil IGWSRS values using; single point compliance, arithmetic mean (<10 samples), 95 percent UCL of the mean and spatially weighted averages. In addition, soil IGW for individual contaminants was screen out by the LSRP using professional judgement that included an evaluation of the existing soil data and whether migration to groundwater has occurred based a comparison historic and most recent groundwater data to GWQS. Regarding the soil IGW pathway the LSRP has recommended further evaluation of nine metals, three PAHs and ten VOC compounds.
>
> BEERA accepts the compliance and attainment strategy utilized for the evaluation of the soil IGW pathway using the methods prescribed in the Technical Guidance for the Attainment of Remediation Standards and a Site-specific evaluation utilizing the extensive groundwater data. It is far more difficult to comment on the professional judgement utilized to screen out contaminants for further consideration without having direct involvement with the numerous AOCs, past remedial activities and data that includes 1,000+ samples. It is also unclear how the October 2010 Settlement Agreement that includes a goal of achieving clean up to non-residential standards will handle remediation to IGWSRS when the Site-specific values to be generated are below the non-residential SRS."

However, the NJDEP expressed concern regarding screening out chromium and zinc:

> "Justification has not been provided for not listing and more importantly for not carrying through for further evaluation, chromium/hexavalent chromium and zinc. These contaminants are present in soil and groundwater at concentrations well above any IGWSRS or GWQS. It is assumed that aluminum and manganese, which also exceed applicable IGWSRS and GWQS have been screened out since the IGWSRS were based upon secondary drinking water standards and application of professional judgement, but the elimination of chromium/hex. chromium and zinc from further IGWSRS evaluation must be justified."

Consequently, chromium and zinc were added back to the COCs where further analysis was warranted. The complete set of NJDEP comments are included in Appendix J. A more detailed formal response to comments will be forthcoming.

Based on the GwRIR analysis and the NJDEP comments, the following COCs required further analysis:

- Benzo(a)anthracene
- Benzo(a)pyrene
- Arsenic
- Chromium
- Lead
- Nickel
- Zinc
- Benzene
- Chlorobenzene
- Trichloroethene
- Vinyl Chloride

1.6 SUMMARY OF ADDITIONAL WORK COMPLETED FOR IMPACT TO GROUNDWATER EVALUATION

1.6.1 Monitoring Well Redevelopment and Sampling

As outlined in the GwRIR, due to the age of many Site monitoring wells, sediment accumulation was suspected to be influencing the concentrations of some metals within the wells. In the first quarter of 2016, nine monitoring wells (MW-1A, MW-4, MW-4A, MW-5, MW-5A, MW-6, MW-6A, MW-7, and MW-77) were redeveloped to assess the impact of sediment on constituent concentrations. In September 2016, 10 additional monitoring wells (MW-2, MW-2A, MW-3, MW-3A, MW-15, MW-15A, MW-21A, MW-25, MW-35, and MW-35A) were redeveloped. MW-4, MW-4A, MW-5, MW-5A, MW-6, MW-6A were also redeveloped again. The monitoring wells varied in age from 30 years old (MW-4, MW-5, MW-6, and MW-7) to six years old (MW-77). Further details on the redevelopment activities are provided in Section 3.1.3.

1.6.2 SPLP Sampling

As identified above, several constituents exceeded the default screening criteria following the initial evaluation process. SPLP (USEPA SW-846 Method 1312) sampling and analysis was used to determine Site-specific IGW soil screening criteria in accordance with the NJDEP guidance document, *Development of Site-Specific Impact to Ground Water Soil Remediation Standards Using the Synthetic Precipitation*

Leaching Procedure ("SPLP Guidance", version 3.0, 2013). This process was utilized to create Site-specific screening criteria values for IGW for the constituents requiring additional evaluation. In 2016, 74 soil samples were collected at 53 locations and analyzed in accordance with the SPLP method. The results from these samples were evaluated in conjunction with 22 SPLP samples from 11 locations collected in 2012. The details of the sampling activity are evaluated in Section 4.3.

1.6.3 Supplemental Soil Borings

Following the submission of the GwRIR and in conjunction with discussions with the NJDEP, additional compliance averaging methods were employed to evaluate compliance of constituents in the IGW pathway, including the spatially-weighted averages of constituent concentrations. Initial calculations demonstrated that some polygons were large due to wide spacing between adjacent borings. As such, supplemental borings were installed and soil samples were collected to increase the sample density in those areas. In October 2016, 29 soil borings were installed and 53 soil samples were collected to supplement existing data to create a higher-resolution representation of zones of contamination across the Site and further constrain data gaps. The additional investigation is detailed in Section 3.3.

2. Regulatory Status

2.1 NJDEP CASE INVENTORY DOCUMENT

The completed NJDEP Case Inventory Document (CID) is included as Appendix C.

2.2 NJDEP COVER/CERTIFICATION FORM AND REMEDIAL ACTION FORM

The completed NJDEP Cover/Certification Form and RAR form are included as Appendix D.

2.3 REGULATORY TIMEFRAME AND EXTENSION REQUEST

Evidence of a discharge at this Site was discovered prior to 7 May 1999. Therefore, in accordance with the Site Remediation Reform Act, N.J.S.A. 58:10C-1 et seq. (SRRA), specifically N.J.A.C. 58:10C-27a(3), the 7 May 2014 remedial investigation deadline applied to this Site. However, an extension request based on meeting criteria from section one of P.L.2013, c.283 was submitted to NJDEP on 20 March 2014, extending the deadline to complete the remedial investigation to 7 May 2016. This regulatory requirement was satisfied by submittal of a Soil RIR submitted to NJDEP on 19 June 2014 and a GwRIR submitted to NJDEP in May 2016. In addition, in accordance with N.J.A.C. 7:26E-5.8(b)2, implementation of remedial actions and submittal of a final remediation documents are required by 7 May 2021.

2.4 RECEPTOR EVALUATION SUMMARY

The initial Receptor Evaluation (RE) form was previously completed in April 2011. An updated RE form was provided in the 2014 Soil RIR, and again in the 2016 GwRIR and 2016 Soil RAR. The following subsections summarize the investigations and their conclusions.

2.4.1 Land Use

On 28 April 2016, Haley & Aldrich utilized NJDEP GeoWeb and NJDEP geographic information software (GIS) files to obtain information concerning sensitive populations and resources located within 200 feet of the Site boundary and determined that there are two types of land use receptors within 200 feet of the Site. The following information was provided by NJDEP GeoWeb:

- Local Land Use: The local land use is a mixture of commercial, industrial, residential, and vacant land.
- Residences: Residences are located within 200 feet of the Site boundary. The list of residences and parks has been included in Attachment 1 in Appendix E.
- Public and Private Schools that teach students in grades kindergarten through 12: No public or private schools that teach students in grades kindergarten through 12 are located within 200 feet of the Site boundary.
- Child Care Facilities: No child care facilities are located within 200 feet of the Site boundary.
- Public Parks and Playgrounds: One recreation park is located within 200 feet of the Site boundary. The list of residences and parks has been included in Attachment 1 in Appendix E.

- Proposed Change of Land Use: Property is currently vacant pending property transfer. The prospective redevelopment of the Site is likely mixed commercial and residential use.

2.4.2 Groundwater

A door-to-door survey was undertaken per N.J.A.C. 7:26E to evaluate potential groundwater use. The RE form and associated tables are presented in Appendix E. During the initial ½ mile survey, 16 wells were identified to potentially exist in the vicinity of the Site. During the initial survey, a home well was identified at the furthest extent of the search radius (½ mile side gradient) along Carlton Avenue. This positive identification initiated the more detailed survey defined by upgradient 250 feet., side gradient 500 feet., and downgradient 500 feet. This search identified 98 nearby parcels to be further evaluated as part of the detailed survey. Several locations were removed from the list as part of the search:

- Block 375 lots 1 & 2 – removed due to being initially investigated and reported on during ½ mile search.
- Block 341 Lot 6 – removed because it is the condos to the south of property and is included in the groundwater Classification Exception Area (CEA) for Roller Bearing Inc. As such, an active well should not be present.
- Block 344 & 345 Lot 1.01 – belongs to Pearson Trust and is a vacant lot on which RACER Trust has installed monitoring wells MW-55, MW-55A, MW-56, and MW-56A.
- Block 374 Lot 4.02 – property owned by the NAWC which has an active CEA.
- Block 341.01 Lot 5 – property owned by Roller Bearing, Inc. which has an active CEA.
- Block 343 Lot 1.02 – owned by the credit union near the Site, this location responded during the ½ mile search.

The detailed survey included a door-to-door visit of 19 locations where no response was received based on mailings. Of these locations, 17 locations did not respond to the repeated attempts to contact them regarding potable wells. Review of previously obtained water records indicated that 13 of the 17 locations were connected to the publicly available water supply.

During the detailed survey, only one pumping well was identified within the designated search radius, located at the Benevolent & Protective Order of Elks Park at 1501 Parkway Avenue (Block 375 Lot 20). This well was found to no longer be in use and was not used previously for potable purposes. As such, no additional actions were required nor taken in accordance with N.J.A.C. 7:26E 1.14.

Based on the door-to-door survey, there do not appear to be any potable groundwater users within 250 feet upgradient, 500 feet side gradient, and 500 feet downgradient. This result is consistent with the RE findings at the Roller Bearing Company (RBC) site, along with their CEA.

2.4.3 Vapor Intrusion

Although there are exceedances of the NJDEP Groundwater Vapor Intrusion Screening Levels (GWVISLs), there are no buildings or structures located within 100 feet of these exceedances. Therefore, a vapor intrusion investigation has not been triggered.

2.4.4 Ecological

In 2003, a Baseline Ecological Evaluation (a BEE, which is the precursor to the current Ecological Evaluation Technical Guidance) was performed by Exponent, Inc. (Exponent) of Bellevue, Washington. Based on comments received from NJDEP at the time, the data were not sufficient and a second investigation was performed to collect surface water and sediment data that addressed data gaps. In 2007, a Revised BEE was submitted that evaluated the risks that metals and PAHs could potentially pose to aquatic receptors/wildlife in Upper Gold Run, Gold Run Pond, Lower Gold Run, the Southern Swale, and areas downstream of the Site. The contaminants of potential ecological concern (COPECs) chosen for sediments at one or more locations of the Site included metals (arsenic, chromium, copper, lead, mercury, nickel, zinc) and polychlorinated biphenyl (PCBs) (Aroclor 1260); PAHs were sampled but it was concluded that their presence was most likely a result of local conditions (suburban sources).

Although Exponent never estimated relative risk using hazard quotients, they concluded that "population-level ecological effects from exposure to COPECs are unlikely and additional ecological investigations are not warranted" based on "the limited size of the habitat resources on-Site, and the availability of larger tracts of more suitable habitat nearby". Exponent stated that most of the contamination was derived from the upstream NAWC and they also cite a food chain analysis performed by EA Engineering (for NAWC in 2000) as evidence to support their conclusion that the risk to ecological receptors in negligible.

A memorandum from NJDEP dated 13 May 2009 (J. Bobko to C. Lacy) expressed some concern about the contamination in sediment but concluded that "it is unlikely that the contaminants of concern at the Site would adversely affect populations of ecological receptors, and further investigation based on ecological considerations are not warranted"; they noted, however, that "Since the original BEE and this revision were submitted it has been determined that significant concentrations of TCE are present within Gold Run Pond. TCE at location PS-18 extends to bedrock. GM has proposed (December 2008 RRAW) to remove the contaminated sediment in Gold Run Pond."

2.4.4.1 Surface Water

The storm sewers beneath Parkway Ave originate near the NAWC facility and discharge in the northeastern corner of the Site in the vicinity of the former Gold Run Pond, which forms the present-day stream, Gold Run. Gold Run roughly transects the eastern portion of the Site from north to south, as well as the former RBC site located south of the Site, then flows in a southerly direction towards the Delaware River. Both the NAWC and former Roller Bearing have established groundwater CEAs for various constituents including chlorinated VOCs; a portion of the NAWC's CEA runs along the length of the north and south storm sewers that lie beneath Parkway Avenue up to the discharge point to Gold Run, and the Roller Bearing CEA encompasses a portion of Gold Run. In addition, the CEA proposed in the May 2016 GwRIR encompasses the entire RACER Site, including the length of Gold Run.

In 2015, the average upstream-to-downstream concentrations for TCE in surface water at locations SW-1, SW-2, SW-3, SW-5 and SW-4 were, respectively, 2.8, 24.5, 6.9, 5.0, and 3.8 micrograms per liter (ug/L). These concentrations were all lower than the NJDEP Freshwater Chronic Aquatic Ecological Screening Criteria (ESC) of 47 ug/l that is protective of aquatic receptors. Both upstream and downstream concentrations of TCE exceeded the NJDEP Freshwater Human Health ESC for TCE of 1 ug/L that was promulgated for waters classified as FW2. Although it does appear that the central reach of

Gold Run may contribute to the total load of TCE to the waterbody, it is also clear that the upstream location violates the benchmark for this water classification (FW2). This human health benchmark for TCE was developed with the understanding that a child or adult would consume 2 liters of water per day over the course of a lifetime. It is our understanding that an FW2 water classification would contain "wastewater discharges" or runoff from "anthropogenic activities" and it is more likely than not that water from Gold Run would not be utilized as a potable drinking water source, specifically considering the extents of the established CEAs for the NAWC and Roller Bearing sites and the proposed CEA for the RACER Site. It is also known that eight tributaries from this subwatershed (Mercer County, Watershed Management Area 11) are currently listed for investigation of contamination by pathogens under the Total Maximum Daily Load (TMDL) program, which would be a further deterrent for a human receptor to utilize Gold Run as a drinking water source. Knowing this, we conclude that the potential for a chronic drinking water exposure scenario at Gold Run is very low and therefore conclude that, despite TCE concentrations in surface water that slightly exceed the human health benchmark, the incremental risk would be negligible.

2.4.4.2 Soils

Soil samples remaining after AOC-11 and AOC-12 excavations were also compared to NJDEP Ecological Screening Criteria (ESC). As discussed in the NJDEP *Ecological Evaluation Technical Guidance* (Version 1.3, 2015), the ESC are conservative values, below which no adverse effect is anticipated to occur to benthic flora and fauna. An exceedance does not indicate an adverse effect will occur, but rather prompts the ecological risk assessor to look more closely at parameters that may affect risk. These parameters may include relative concentrations, location of the samples of concern, frequency of detection (in relation to the total number of samples), analytical variability and persistence in the environment.

Remaining soil samples from the 0 – 0.5 feet depth interval obtained from AOC-11 and AOC-12 are presented in Table I included in Appendix E. The suite of metals in soils were compared to the ESC, which included the USEPA Ecological Soil Screening Levels (EcoSSLs) as well as the more conservative Wildlife Preliminary Remediation Goal (PRG) values. Of the metals tested, arsenic, chromium, cobalt, copper, lead, mercury, nickel, selenium, vanadium and zinc had at least one value which exceeded the respective ESC. For arsenic, more than half the values were below the Wildlife PRG ESCs, with the remaining values falling within the range of the USEPA EcoSSLs (18 – 46 mg/kg). For chromium, while most of the values were above the more conservative Wildlife PRG, all but two values (ISO16, 55.9 mg/kg and ISO20, 90.7 mg/kg) fell within the safe concentration range of the EcoSSLs (26 – 34 mg/kg). Most of the values for copper also fell within the EcoSSL range of 28 – 70 mg/kg; ISO16 and ISO37 were outliers at 381 mg/kg and 320 mg/kg, respectively. All of the values for lead fell within the range of the respective EcoSSLs (11 – 1700 mg/kg). Most of the mercury values were within the range bounded by the Wildlife PRG and the EcoSSL of 0.1 – 0.3 mg/kg. The range of values for nickel also fell within the range of EcoSSLs (38 – 280 mg/kg). All three of the concentrations for vanadium fell on the low end of the EcoSSL range of 7.8 – 280 mg/kg. Finally, for zinc, 16 of 20 values fell within the EcoSSL range of 46 – 160 mg/kg; four values (ASO5, 513 mg/kg; B6-12, 640 mg/kg; ISO16, 1600 mg/kg; ISO37, 2650 mg/kg) fell above the highest EcoSSL value. Based on the above analysis, it can be concluded that, with the exception of copper and zinc in very isolated areas (e.g. ISO16 and ISO37), metals would not pose a significant risk to soil flora and fauna as they were detected at concentrations that are within a range of EcoSSL benchmarks which are deemed acceptable by the USEPA.

2.4.4.3 Sediment

Since the 13 May 2009 NJDEP memorandum, remedial actions were conducted in Gold Run and the Southern Swale as summarized above in Sections 1.4.2 and 1.4.2. Sediment was excavated and replaced with clean fill to bedrock in Gold Run Pond and to 2 feet in the Southern Swale. Based on the Conceptual Site Model at the time, contaminated sediment in Gold Run Pond was thought to be acting as a groundwater contamination source. In 2011, the pond structure was removed and Gold Run was recontoured to restore the waterbody to the original channel alignment observed in historic aerial photographs. Briefly, after obtaining all the required permits, preconstruction and initial Site preparation activities were performed prior to the excavation of soils and sediments that contained constituents above human health NRDCSRS. Aquatic organisms were trapped and relocated or humanely destroyed per the permit conditions. All sediments that exceeded human health benchmarks within Gold Run Pond and the Southern Swale that were excavated were properly disposed of off-Site.

Sediment samples remaining after AOC-11 and AOC-12 excavations were also compared to NJDEP ESC. As discussed in the NJDEP *Ecological Evaluation Technical Guidance*, the ESC are conservative values, below which no adverse effect is anticipated to occur to benthic flora and fauna. An exceedance does not indicate an adverse effect will occur, but rather prompts the ecological risk assessor to look more closely at parameters that may affect risk. These parameters may include relative concentrations, location of the samples of concern, frequency of detection (in relation to the total number of samples), analytical variability and persistence in the environment.

Remaining sediment samples which had at least one COPEC that exceeded an ESC are presented in Table II included in Appendix E. Remaining sediment samples in AOC-12 (below 2 feet) which exceeded selected ESC values are below the "biologically active zone" which, per NJDEP *Ecological Evaluation Technical Guidance*, is defined as the top 0 to 6 inches. For AOC-11, only two remaining locations (GR-05 and WSE4) exceeded ESCs within the biotic zone. This very low frequency of exceedances of ESCs makes it clear that samples which are above the NJDEP benchmarks pose a negligible spatial hazard to aquatic receptors. Additionally, although chromium, lead, nickel and zinc exceeded the ESCs, the concentration of each metal falls between the range of the "threshold effect concentration" (TEC) and the "probable effect concentration" (PEC) published as "consensus values" (MacDonald *et al*., 2000) that are considered to be reasonable measures of sediment quality by the scientific community. Aroclor 1260, a PCB, was also detected infrequently (only 1 remaining sample) and at a low concentration which falls within the TEC/PEC range of 0.06 – 0.68 mg/kg. Finally, PAHs were detected very infrequently (only 1 remaining sample). Only five of the 16 PAHs were greater than the respective ESC value and, like the other compounds, the concentrations fall between the respective TEC/PEC sediment quality values. Based on the above analysis, it can be concluded that metals, PCBs and PAHs would pose a negligible risk to benthic flora and fauna as they were detected infrequently and at concentrations that are within a range of benchmarks which are acceptable, in terms of incremental risk, to the scientific community.

Areas that were excavated were backfilled and the soil was compacted to a depth of approximately 1 foot using clean loam. The channel areas were lined with clean turf material and the banks and riparian zones were covered with erosion control matting. A professional consultant specializing in wetland mitigation developed a Restoration Landscaping Plan. Constructed areas were mitigated by planting the permanently wet areas with wetland-dependent emergent vegetation. Riparian zones and transitional areas were seeded with a commercial wildflower mix and hundreds of native trees were planted. These restored wetlands were inspected on a quarterly basis and any plants or trees that died or were

damaged by foraging animals were replaced and protected by browse fencing. In addition to this, a compensatory wetland was created from an uncontaminated area to provide lowland habitat that was lost due to the installation of hard structures engineered to control stormwater and erosion during high water events.

2.4.4.4 Conclusion

Under the current NJDEP Ecological Evaluation Technical Guidance, the existing wetlands on the Site are considered Environmentally Sensitive Natural Resources (ESNRs); an ecological risk assessment, however, is only necessary if there is a source of contamination via which a potential ecological receptor can be exposed. In other words, since Gold Run sediments have been remediated and restored with clean fill, any exposure pathway from a potential "source" to a potential "receptor" is considered "incomplete": without an exposure, there can be no ecological risk to aquatic organisms. Given this information, and the fact that the current wetlands have been successfully restored and revegetated to reflect the historical topography and hydrology, it can be confidently stated that a condition of "no significant risk" can be declared for the Site.

3. Supplemental Data Collection

The GwRIR concluded that further evaluation was required for the potential IGW issues that were identified. The additional evaluation included development of Site-specific screening criteria for IGW and redevelopment of older monitoring wells that were suspected to have turbidity issues. In addition, initial calculations of spatially-weighted averaging indicated that some polygons were large due to wide spacing between adjacent borings. Supplemental borings were therefore installed and soil samples were collected to increase the sample density in those areas. The following presents a summary of the supplemental data collection.

3.1 MONITORING WELL REDEVELOPMENT

As detailed in the GwRIR, due to the age of many Site monitoring wells, sediment accumulation was suspected to be influencing the concentrations of some metals and SVOCs within the wells. The monitoring wells varied in age from 30 years old (MW-4, MW-5, MW-6, and MW-7) to six years old (MW-77). To test this hypothesis, the wells were redeveloped to remove any sediment that may be causing false positive results and/or elevated concentrations of these constituents in groundwater and the wells were re-sampled.

During the first quarter of 2016, nine monitoring wells (MW-1A, MW-4, MW-4A, MW-5, MW-5A, MW-6, MW-6A, MW-7, and MW-77) were redeveloped to assess the impact of sediment on constituent concentrations. These wells were redeveloped utilizing submersible pumps through a combination of surging to loosen sediment and purging to remove it from the well. During this event, it was found that the wells had too much sediment and were too large in diameter to effectively remove sediment using this method.

In September 2016, 10 additional monitoring wells (MW-2, MW-2A, MW-3, MW-3A, MW-15, MW-15A, MW-21A, MW-25, MW-35, and MW-35A), along with the nine previously developed wells (MW-4, MW-4A, MW-5, MW-5A, MW-6, MW-6A), were redeveloped using surging and over-pumping for a longer period of time (minimum of two hours with a maximum of four hours and at a higher pumping rate of approximately 0.7 to 1.5 gpm) to remove accumulated fine-grained material from the well screen and sand pack. Turbidity in the water removed from the well was continuously monitored with a turbidity meter. Redevelopment was terminated when the turbidity was reduced below 50 NTU and no new fine-grained material was being recovered or the maximum time limit was reached.

Following development, groundwater samples were collected via low flow techniques in October 2016, as part of Site-wide groundwater monitoring, to assess the effectiveness of redevelopment on groundwater concentrations. A comparison of pre- and post-redevelopment concentrations is presented in Table I. The results indicate that the metals concentrations remain relatively consistent, with the exception of MW-77 which indicated a decrease in total chromium and lead as a result of well redevelopment activities in early 2016. Although the redevelopment activities reduced turbidity in the monitoring wells, it did not appear to address the elevated detections of the key constituents benzo(a)anthracene, benzo(a)pyrene, arsenic, lead, and nickel; accordingly, these constituents are further evaluated below.

3.2 SPLP SAMPLING

Two sets of SPLP sampling results were evaluated per the *Development of Site-Specific Impact to Ground Water Soil Remediation Standards Using the Synthetic Precipitation Leaching Procedure* guidance document, version 3.0, dated November 2013, as detailed below.

3.2.1 Previous SPLP Sampling

As part of supplemental Site investigation activities in April 2012, 22 soil samples from 11 soil boring locations were collected and analyzed for SPLP analysis across the Site (Figure 3).

The soil borings were advanced utilizing direct-push drilling techniques and soil samples were continuously collected from ground surface to target depth at each location. The soil borings were drilled to a range of depths from 5 to 15 feet below ground surface and up to three samples were collected from the unsaturated zone at each location. Soil boring logs were created for each boring location and are presented in Appendix F. Soil samples were characterized and screened for VOCs utilizing a portable Photoionization Detector (PID). Soil samples for SPLP analysis were collected targeting the areas and depths of "hot spots" with the potential to impact groundwater, as determined by previous soil sampling results. Samples were analyzed for the following constituents:

- Antimony
- Arsenic
- Barium
- Beryllium
- Cadmium
- Chromium, Hexavalent
- Chromium, Total
- Cobalt
- Copper
- Cyanide
- Lead
- Manganese
- Mercury
- Nickel
- Selenium
- Silver
- Zinc

After collection, samples were preserved, placed on ice, and submitted to the laboratory for analysis. The laboratory analysis followed method USEPA SW-846 Method 1312 for SPLP analysis and targeted the constituent suite (e.g. inorganics, etc) that required further evaluation in the AOC.

The analytical results are summarized in Table II and were evaluated further, as presented in Section 4.3.

3.2.2 SPLP Sample Collection and Analysis

In September 2016, soil borings were advanced and 74 soil samples were collected at 53 locations (Figure 3) for additional SPLP analysis. The sample locations were chosen based upon two primary criteria:

- **Previously analyzed and reported concentrations** – Previously sampled locations with high concentrations were targeted for SPLP analysis. Sample distribution within those zones was chosen to reflect a range of concentrations for each of the eight COCs: arsenic, benzene, chlorobenzene, chromium, nickel, trichloroethene, vinyl chloride, and zinc.
- **Representation of Site conditions** – Locations were also chosen based upon how the location represented Site conditions (e.g., borings were not collected in soils/areas that displayed uncommon or anomalous characteristics). This was intended to provide samples with a range in concentrations that could be analyzed for the development of Site-specific screening criteria values for IGW.

Approximately 53 soil boring locations were proposed. Fifty-one soil borings were advanced and continuously sampled utilizing direct-push drilling techniques. Two soil borings in the southeast corner of AOC-09 were completed using a hand auger due to dense vegetation causing impediment to the Geoprobe drilling rig. Soil borings were advanced to target depths ranging from 3 to 15 feet bgs and up to four samples were collected from the unsaturated zone at each location. From the 53 soil borings completed, 74 soil samples were collected for SPLP analysis. Soils were characterized and screened for VOCs utilizing a PID. Results of these field analyses are provided on the soil boring logs included in Appendix F. After collection, samples were preserved, placed on ice, and submitted to the laboratory for analysis. The analytical results are summarized in Table III and were analyzed in accordance with NJDEP SPLP Guidance, as presented in Section 4.3.

To determine if the samples would be conducive to producing SPLP results, samples were analyzed first for total contaminants. If the total sample results indicated detections of the key constituents, the samples were then analyzed utilizing USEPA SW-846 Method 1312 for SPLP. The resulting extractant was analyzed for COCs in accordance with N.J.A.C. 7:26E and NJDEP's *Development of Site-Specific Impact to Ground Water Soil Remediation Standards Using the Synthetic Precipitation Leaching Procedure* guidance document (version 3.0,2013. If there were no detections of the key COCs, other samples were selected for analysis. The results are included in Appendix G and summarized in Table III.

3.3 SUPPLEMENTAL SOIL BORINGS

Supplemental soil borings and associated soil sampling was conducted to fill data gaps associated with the initial spatially-weighted averaging statistical evaluation. The two primary constituents that required additional data were arsenic and trichloroethene. During October 2016, 29 supplemental soil borings (Figure 4) were advanced and 53 soil samples were collected to gather additional data. The soil samples were collected at a range of depths to capture the extents of targeted constituents and to supplement existing data. The soil borings were advanced and continuously sampled utilizing direct-push drilling techniques. Borings were typically drilled to 2 to 4 feet bgs and up to two samples were collected from the unsaturated zone at each location. The soil borings were logged for lithology and screened for the presence of VOCs utilizing a PID. Soil boring logs are presented in Appendix F. Soil samples were collected, preserved, placed on ice, and submitted to the laboratory for analysis under

chain-of-custody procedures. The soil sample results are presented in Table IV and included in Appendix G.

3.4 ANALYTICAL DATA MANAGEMENT

The analytical data used in the IGW evaluation presented in Section 5 is a compilation of previously reported Site Investigation activities, previously reported soil Remedial Action activities, and the recent supplemental investigation activities presented above.

For IGW screening, the analytical data for the Site were segregated into surface soil and subsurface soil data sets as follows:

- Samples with a bottom sampling depth of 2 feet above water table were included as surface soil.
- Samples that were collected from 2 feet above water table to the water table were included as sub-surface soil.

The following procedures were applied when using the analytical data:

- For locations with multiple sample depths, the maximum sample concentration was used to represent the location for a conservative compliance evaluation, except where noted below.
- For locations with re-samples at a previously sampled depth:
  - If both sample results are detected, then the latest sample concentration is used;
  - If both samples are non-detect (ND), then the minimum reporting limit (RL) is used;
  - For samples with the original sample detect and resample ND, the lowest of both values is used.
- For ND values with missing RLs, an appropriate RL value was considered depending on the dataset distribution, as detailed in Section 5.4.1.4.
- Results qualified as estimated ("J" qualifier) were included.
- For samples in which analyte concentrations are detected outside the calibration range, and the samples are diluted and reanalyzed, the re-analyses results for that compound were used in the evaluation.

3.5 DATA USABILITY ASSESSMENT

3.5.1 QUALITY ASSURANCE PROJECT PLAN

In accordance with N.J.A.C 7:26E-1.6 (the Technical Requirements for Site Remediation) a Quality Assurance Project Plan (QAPP) that complies with N.J.A.C. 7:26E-2.2 and with the Quality Assurance Project Plan Technical Guidance (version 1.0, 2014) was previously prepared.

3.5.1 USABILITY REVIEW

A usability review as described in the procedures and guidelines presented in the Quality Assurance Project Plan Technical Guidance (version 1.0,2014) was performed on data generated after October 2014, as required by the NJDEP. The review has determined the data to be usable for its intended purposes. A summary of the review is presented in the following sections. The summary includes an examination of any issues identified during the review.

3.5.1.1 Data of Known Quality Conformance/Non-Conformance Review

To comply with the Data Quality Assessment and Data Usability Evaluation (DQA/DUE) Technical Guidance (dated April 2014) and with the Quality Assurance Project Plan Technical Guidance (version1.0,2014), the laboratory included Data of Known Quality (DKQ) Conformance/Non-Conformance Summaries in each lab deliverable. Since September 2016, nine sample delivery groups of soil data have been generated.

The DKQ Conformance/Non-Conformance Summary included in each analytical report indicates that the nine data packages (L1628990, L1628635, L1634792, L1634840, L1628787, L1629399, L1634839, L1629226, and L1634605) meet the data of known quality requirements.

3.5.1.2 Case Narrative Review

To comply with the DQA/DUE Technical Guidance (dated April 2014) and with the Quality Assurance Project Plan Technical Guidance (version 1,2014), the laboratory included Case Narratives in each lab deliverable.

The Case Narratives included in each analytical report indicate the delivery groups had no additional deviations of the preparation and analysis of samples, aside from what has already been summarized in other sections of this review.

3.5.1.3 Data Usability

The overall usability of the data was assessed by evaluating the precision, accuracy, representativeness, completeness, comparability, and sensitivity (PARCCS) of each data set with the measurement performance criteria in the QAPP.

3.5.1.3.1. Precision

The DQA/DUE Technical Guidance states that non-aqueous samples with greater than or equal to a 50 percent relative percent difference (RPD) must consider if the precision of the results is an issue of representativeness.

The RPD between two measurements is calculated using the following simplified formula:

$$RPD = \left(\frac{|R_1 - R_2|}{((R_1 + R_2)/2)} \right) X\ 100$$

Where:

R_1=value of first result
R_2=value of second result

To assess precision for this dataset, LCS/LCSD, MS/MSD, and laboratory duplicate samples were considered. Most duplicate results where under the RPD calculations; however, a few RPDs exceeded the RPD limit of 20%. The RPDs that exceed the 50% criterion make up a negligible percentage of the overall RPDs of the data set, so the overall precision of the analyses does not affect the usability of the data set.

Below is a summary of those laboratory duplicated with RPDs greater than 20%:

- Lab duplicate for SDG L1634839 RPD is 93 for Arsenic.
- Lab duplicate for SDG L1628787 RPD is 34 for Nickel.

3.5.1.3.2. Accuracy/Bias

The data from method/preparation blank samples indicate the sample data must be qualified in accordance with the procedures prescribed in the National Functional Guidelines.

The data from Laboratory Control Samples (LCS) were used to determine accuracy and potential bias of the sample data.

Analytical accuracy/bias was determined by evaluating the percent recovery data of LCS tests. LCS is an artificial sample prepared in the laboratory using a blank matrix that is fortified with analytes from a standard reference material that is independent of the calibration standards. The LCS is prepared and analyzed in the same manner as the field samples. The data from LCS analyses is intended to provide an indication of the accuracy and bias of the analytical method for each target analyte.

Percent recovery is calculated for LCS using the following formulas:

$$R_{\%} = (SSR/SA)\ X\ 100$$

Where:

SSR = Spiked Sample Result
SA = Spike Added
$R_{\%}$ = Percent Recovery

The percent recovery is determined by dividing the measured value by the true value and multiplying by 100.

Potential biases were noted in the case narratives included in the lab reports. The potential bias was identified by a review of the LCS, matrix spike (MS) results, method blank results, and surrogate recoveries (where appropriate). LCS and MS sample recoveries that fell outside the acceptable ranges are summarized on Table V and additional sources of potential bias are summarized below. These biases do not impact the data interpretation and overall conclusions.

- SDG L1634605 reported method blank detections for batches WG946393-1 and WG947133-1 for Arsenic results, yielding a potential for high bias for results reported in this SDG.
- SDG L1629226 reported a method blank detection for batch WG933853-17 for TCE yielding a potential for high bias for results for associated samples L1629226-03-06, 08-10, and 16.
- SDG L1634839 reported a method blank detection for batch WG947133-1 for Arsenic yielding a potential for high bias for results for associated samples L1634829-03.
- Sample L1629399-07, the surrogate recovery for toluene-d8 was higher than the acceptance criteria yielding a potential for high bias for results.

- MS recovery for samples L1629399-04 and -07 for nickel was 0, yielding a potential for low bias for results; however, the spike amount was less than 10% of the original concentration, which is too low for a meaningful analysis and does not cause need for additional consideration of the usability of these results.
- MS recovery for samples L1628787-04, -05, -08, and -09 for arsenic was 0, yielding a potential for low bias for results; however, the spike amount was less than 10% of the original concentration, which is too low for a meaningful analysis and does not cause need for additional consideration of the usability of these results.

3.5.1.3.3. Sample Representativeness

The review of the representativeness concludes that over 90 percent of the samples are acceptable for their intended use. Therefore, the representativeness meets the criteria specified in the QAPP. This conclusion was reached by reviewing three elements. First, all samples were collected in accordance with the NJDEP Field Sampling Procedures Manual dated 2005 (FSPM). No deviations from the practices described in the FSPM were identified in the review of field documentation. Second, previous sections summarize the accuracy and precision of the results and concluded that no issues of accuracy or precision affect the interpretations on the results. Third, the quantity of samples and their locations represent the vertical and horizontal distributions of contaminants after the various remedial actions have been completed.

3.5.1.3.4. Completeness

Completeness was assessed by comparing the number of valid (usable) sample results to the total possible number of results within a specific sample matrix and/or analysis. Percent completeness was calculated using the following formula:

$$\text{Percent Completeness} = \frac{\text{Number of Valid (usable) measurements}}{\text{Number of Measurements Planned}} \text{ X } 100$$

Overall completeness is considered acceptable if at least 90 percent of the data planned for collection are determined to be valid. Over 90 percent of the planned data was determined to be valid.

3.5.1.3.5. Comparability

The comparability of data sets was evaluated by reviewing the sampling and analysis methods used to generate the data for each data set. The review confirmed that standard operating procedures (SOPs) were used to collect and analyze a representative sample that is commensurable to other samples. Project comparability was determined to be acceptable because the sampling and analysis methods were completed in accordance with the specifications of standard SOPs and the QAPP. In addition, the overall sample comparability is considered acceptable because the results of field audits indicate that the approved sampling methods were utilized during the collection of samples.

3.5.1.3.6. Sensitivity and Quantitation Limits

The quantitation limits for the sample data was reviewed to ensure that the sensitivity of the analyses was sufficient to achieve the project objectives. Each analytical method used has an RL that is sufficient for comparison to their respective screening criteria.

Several of the RLs exceed the applicable screening criteria, but there is no cause for additional review. Many of these RLs are elevated due to dilutions.

3.5.1.3.7. Data Limitations and Actions

No data use limitations have been identified in data usability review.

3.6 DATA QUALITY ASSESSMENT

The Data Usability Review, conducted per NJDEP's DQA/DUE Technical Guidance dated April 2014, has determined the data to be usable for its intended purposes. A Usability Review was completed for the data, as described in the procedures and guidelines presented in the QAPP Technical Guidance (version 1.0,2014). The laboratory reports are provided as Appendix G.

3.7 ELECTRONIC DATA DELIVERABLES

The groundwater samples were shipped under chain-of-custody to Alpha Analytical, Inc., located in Westborough, Massachusetts (NJDEP Certification MA935). Complete copies of the laboratory reports, including the quality assurance/quality control data, are provided as Appendix G. Electronic Data Deliverables were provided to NJDEP via email for data collected since September 2016.

4. Applicable Soil Impact to Groundwater Screening Criteria

There are several applicable soil screening criteria for IGW for the Site, including:

- Soil Cleanup Criteria (SCC), updated 12 May 1999, based on the proposed rule entitled *Cleanup Standards for Contaminated Sites*, N.J.A.C. 7:26D, in effect at the time (February 3, 1992).
- Soil Screening Levels for IGW (IGWSSL) based on the NJDEP guidance document, *Development of Impact to Ground Water Soil Remediation Standards Using the Soil-Water Partition Equation* ("Development of IGWSRS", version 3.0, 2013);
- Site-specific soil screening Criteria for IGW based on SPLP data generated from samples collected from the Site, based on the NJDEP guidance document, *Development of Site-Specific Impact to Ground Water Soil Remediation Standards Using the Synthetic Precipitation Leaching Procedure (version 3.0, 2013)*; and

The following sections provide a brief background on the criteria and how they were applied for the Site to evaluate soil IGW pathways at the Site in accordance with N.J.A.C. 7:26E.

4.1 SOIL CLEANUP CRITERIA

The soil screening criteria for the Site used in recent years for investigation and remediation has typically been based on the 2013 default IGWSSLs, as a conservative measure. However, the NJDEP's May 1999 SCC could also be applied, in accordance with the NJDEP guidance and provisions[2]. The Revised Remedial Action Workplan (RRAW) was submitted to NJDEP on December 1, 2008, within the six-month phase-in period, prior to the adoption of the current SRS. The soil remedial action activities conducted for the Site have been conducted under the December 2008 RRAW which was conditionally approved by the NJDEP in their August 14, 2009 comment letter, and subsequently confirmed by the LSRP. Therefore, in accordance with the December 2008 RRAW, a mixture of the May 1999 SCC for organics (PCBs, VOCs and base/neutral extractable organic compounds (B/Ns)), and the default June 2008 IGWSSLs (N.J.A.C. 7:26D) for metals, since there were no metals established as part of the SCC for IGW, are applicable to the Site. However, as demonstrated below, since the IGW pathway evaluation goals were achieved using Site-specific screening criteria or other means, evaluation relative to SCC was not necessary for this Addendum.

4.2 2013 DEFAULT SOIL REMEDIATION SCREENING LEVELS

The screening criteria used for initial assessment of soil IGW at the Site, as detailed in the GwRIR, are the NJDEP's November 2013 default IGWSSLs as outlined in Table 1 of the Development of Impact to Groundwater Soil Remediation Standard (IGWSRS) guidance document. The 2013 IGWSSL provide the

[2] In accordance with "Order of Magnitude Guidance" (Updated August 10, 2009), any newly adopted remediation standard that increases in concentration (compared to a previous standard) may be used at any time during an active remediation. Simultaneously, if the new standard decreases, the Department may not compel the use of the new remediation standard for previously-approved Remedial Action Workplans with the following exception - if the decrease in the remediation standard is an order of magnitude or more, the person responsible for conducting the remediation must use the new standard.

most conservative approach to evaluating IGW and therefore were utilized to screen constituents to identify the key COCs. The applicable screening criteria are summarized in Table VI.

4.3 EVALUATION OF SPLP ANALYSIS

Site-specific criteria were developed utilizing the SPLP sampling data detailed in Section 3.2. The Site-specific criteria were developed in accordance with N.J.A.C. 7:26E and NJDEP's *Development of Site-Specific Impact to Ground Water Soil Remediation Standards Using the Synthetic Precipitation Leaching Procedure* guidance document (version 3.0, 2013). Analytical data were evaluated using the NJDEP SPLP Spreadsheet (version 3.1, 2013) with default parameters to develop the Site-specific IGWSRS. The spreadsheet iteratively calculated solutions utilizing four different methods dependent upon the numerical characteristics of the SPLP sampling results:

Option 1a: All adjusted extractant concentrations are below the leachate criterion. In this instance, the Site-specific IGWSRS is the same as the highest total soil concentration.

Option 1b: Simple inspection of tabulated results to find highest acceptable Site-specific IGWSRS. This dictates that if one or more of the extractant concentrations is less than the leachate criterion, then the acceptable Site-specific IGWSRS is equivalent to the total concentration of the sample with the highest extractant concentration that is less than the leachate criterion.

Option 2: Site-specific IGWSRS using Site-specific K_d value. If all K_d values for a given set of samples are within an order of magnitude of each other, these values can be averaged and the resulting coefficient substituted into Equation one in the NJDEP SPLP Guidance. This equation can be used to calculate a Site-specific IGWSRS.

Option 3: Site-specific IGWSRS using linear regression. This method was not utilized.

Spreadsheets containing the parameters and calculations for each individual constituent are included as Appendix H. A summary of the Site-specific IGWSRS compared to the 2013 default IGWSSL values for constituents, along with which criteria is utilized for the IGW evaluation below, is provided in Table VI.

As outlined above, Site-specific IGWSRS were computed for seven constituents based on analytical results of SPLP sampling. Details regarding the development of Site-specific IGWSRS for each constituent are presented below.

4.3.1 Arsenic

During the 2016 SPLP sampling event, 17 samples were collected and analyzed for total arsenic. SPLP analysis was conducted on 10 of the 17 samples based on the criteria outlined above. The results of the SPLP analysis were input into the NJDEP SPLP Spreadsheet and field leachate concentrations were calculated. All samples exceeded the Default Leachate Criterion of 3 ug/L. Therefore, options 1a and 1b were not valid and option two was utilized to calculate a Site-specific IGWSRS of approximately 11 mg/kg. Because this was below the 2013 default IGWSSL of 19 mg/kg, the default value was adopted as

the Site-specific IGWSRS for evaluation purposes. The spreadsheet used for calculations is included in Appendix H.

4.3.2 Chromium and Hexavalent Chromium

A separate Site-specific IGWSRS for hexavalent chromium was not developed due to the lack of hexavalent chromium detections and the remediation for concentrations identified as potential sources at the Site. The chromium and hexavalent chromium found at the Site are limited in soils and well-delineated horizontally and vertically. Chromium and hexavalent chromium were detected above the New Jersey Groundwater Quality Standard (NJGWQS) of 70 ug/L in several monitoring wells and shown to demonstrate decreasing temporal trends after the Plater Pit # 6 excavation in 2013. Furthermore, SPLP sampling performed for total chromium and hexavalent chromium in 2012 indicated no potential future releases to groundwater at the Site. The limited soil exceedances of total chromium and hexavalent chromium were evaluated for correlation using the analytical data results (presented in Appendix I). Out of 1,120 samples analyzed for total chromium across the Site, 584 samples were also analyzed for hexavalent chromium. To understand the relation between both constituents, a simple linear regression model was fitted considering total chromium data on the Y-axis and hexavalent chromium data on the X-axis. The coefficient of determination for the model is 4.7%, which means that 4.7% total variation in hexavalent chromium can be explained by the linear relationship between both constituents; the other 95.3% of the total variation is unexplained by the model. Compared to the Site-wide total chromium exceedances, hexavalent chromium exceedances were limited. Most of the hexavalent chromium exceedances were collected prior to 2012 and the 2016 SPLP sampling could not duplicate similar hexavalent chromium concentrations indicating the potential for degradation due to naturally occurring processes. In calculating Site-specific IGWSRS, option 1a was applied and a Site-specific IGWSRS of 1,540 mg/kg was determined based on the total chromium concentration measured in the 2.5 – 3.0 feet. bgs interval in boring TP9-3-203. The spreadsheet used for calculations is included in Appendix H.

4.3.3 Nickel

During the 2016 SPLP sampling event, 29 samples were collected to be analyzed for total nickel. SPLP analysis was conducted on 18 of the 29 samples collected. Of these, the sample collected from 7.0 – 7.5 feet bgs at boring 268-2R yielded a high extractant concentration of 2,570 ug/L, which was higher than the next highest concentration of 1,850 ug/L. This high extractant concentration was measured despite the fact that the total soil concentration of the 268-2R sample was below the mean for the sample group. Therefore, the sample was determined to be anomalous and discounted from further evaluation. The field leachate concentrations for the remaining 17 samples did not exceed the field leachate criterion. Option 1a was applied and a Site-specific IGWSRS of 9,200 mg/kg was determined based on the total nickel concentration measured in the 3.3 – 3.8 feet. bgs interval in boring 268-2R. The spreadsheet used for calculations is included in Appendix H.

4.3.4 Zinc

During the 2012 SPLP sampling event, 22 samples were collected to be analyzed for total zinc. SPLP analysis was conducted on all of the samples collected. The field leachate concentrations of the 22 samples did not exceed the extractant criterion for zinc of 40,000 ug/L. Option 1a was applied and a Site-specific IGWSRS of 14,200 mg/kg was determined based on the total zinc concentration measured

in the 2.5 – 3 feet bgs interval in boring TP-9-202. The spreadsheet used for calculations is included in Appendix H.

4.3.5 Benzene

During the 2016 SPLP sampling event, 15 samples were collected and analyzed for total benzene. SPLP analysis was conducted on eight of the 15 samples due to low concentrations and non-detects. The field leachate concentrations of six samples exceeded the Default Leachate Criterion for benzene of 4 ug/L. Option 1b was applied and a Site-specific IGWSRS of 0.2 mg/kg was determined for the Site. The spreadsheet used for calculations is included in Appendix H.

4.3.6 Chlorobenzene

During the 2016 SPLP sampling event, 18 samples were collected and analyzed for total chlorobenzene. SPLP analysis was conducted on 13 of the 18 collected samples based upon the IGWSRS presented in Section 4.2. The field leachate concentrations of all samples did not exceed the Default Leachate Criterion for chlorobenzene of 1,000 ug/L. O ption 1a was applied and a Site-specific IGWSRS of 83 mg/kg was determined based on the total chlorobenzene concentration measured in the 8 – 8.5 feet bgs interval in boring B8-4-102. The spreadsheet used for calculations is included in Appendix H.

4.3.7 Trichloroethene

During the 2016 SPLP sampling event, 18 samples were collected and analyzed for TCE. SPLP analysis was completed on four of the 18 samples collected. The field leachate concentrations of one sample (SB-AOC8B-2013-105) exceeded the Default Leachate Criterion for TCE of 20 ug/L. Option 1b was applied and a Site-specific IGWSRS of 0.13 mg/kg was determined for the Site. The spreadsheet used for calculations is included in Appendix H.

4.3.8 Vinyl Chloride

During the 2016 SPLP sampling event, seven samples were collected and analyzed for vinyl chloride (VC). SPLP analysis was completed for three of the seven samples collected. The field leachate concentrations of two samples exceeded the Default Leachate Criterion for VC of 2 ug/L. Option 1b was applied and a Site-specific IGWSRS of 0.06 mg/kg was determined for the Site. The spreadsheet used for calculations is included in Appendix H.

4.4 SITE-SPECIFIC SCREENING CRITERIA

Table 1 presents the applicable screening criteria for IGW for the Site. As identified above, SCC were not utilized for the Site, as IGW pathway evaluation goals were achieved using Site-specific screening criteria and spatially weighted averaging, as discussed below. The Site-specific IGWSRS pathway is based on the higher of either 2013 default IGWSSL or Site-specific IGWSRS as determined from the SPLP evaluation, detailed above, as allowed by *The Development of Site-Specific Impact to Ground Water Soil Remediation Standards Using the Synthetic Precipitation Leaching Procedure* (version 3.0,2013). As detailed above, chromium, nickel, zinc, benzene, chlorobenzene, trichloroethene, and vinyl chloride utilized the Site-specific IGWSRS as determined from the SPLP evaluation, while arsenic utilized the 2013 default IGWSSL. Henceforth, the Site-specific criteria will be referred to as Site-specific IGWSRS.

5. Impact to Groundwater Evaluation

As identified in Section 1.5, the GwRIR identified nine constituents which had a potentially compete IGW pathway that required further evaluation. In addition, the NJDEP provided comments on the GwRIR and identified concerns with the preliminary IGW evaluation dropping chromium and zinc (Appendix J); as such, these constituents were added back to the evaluation. Thus, the following constituents were carried forward for the additional IGW evaluation in the sections below:

- Metals
  - Arsenic
  - Chromium
  - Lead
  - Nickel
  - Zinc
- PAHs
  - Benzo(a)anthracene
  - Benzo(a)pyrene
- VOCs
  - Benzene
  - Chlorobenzene
  - Trichloroethene
  - Vinyl Chloride

5.1 ADDITIONAL IGW PATHWAY EVALUATION METHODS

The additional IGW evaluation was performed in a step-wise process as detailed below:

Step 1: COCs were evaluated in accordance with N.J.A.C. 7:26E and *Guidance for the Evaluation of Immobile Chemicals for the Impact to Ground Water Pathway* (NJDEP, 2008; "Immobile Chemical Guidance").

Step 2: COCs which remained an issue after Step 1 were evaluated by single point comparison to the Site-specific IGWSRS.

Step 3: COCs which remained after Step 2 were evaluated by calculating spatially-weighted averages using Thiessen polygons and comparing results with applicable Site-specific IGWSRS.

5.2 STEP ONE – IMMOBILE CHEMICAL DETERMINATION

As identified in the N.J.A.C. 7:26E and *Guidance for the Evaluation of Immobile Chemicals for the Impact to Ground Water Pathway* (NJDEP, 2008; "Immobile Chemical Guidance"), three of the 11 constituents

identified for further analysis are considered for the immobile chemical determination: benzo(a)anthracene, benzo(a)pyrene, and lead. These constituents were evaluated based on the following conditions:

- Benzo(a)anthracene, benzo(a)pyrene, and lead are identified as potentially immobile chemicals for the IGW pathway by the NJDEP in their Immobile Chemical Guidance.
- Benzo(a)anthracene, benzo(a)pyrene, and lead were vertically delineated to IGWSRS. In most cases, a "clean" zone of at least 2 feet was found to exist between the soil contamination and the groundwater table.
- The few detections of these three constituents were spatially distributed across the Site and they were not due to a point discharge of mixtures that could affect the mobility of the contaminant.
- No co-solvent of these three constituents were present in these areas.
- Soil texture at the Site is more coarse than sandy loam. A worst-case Seasonal Soil (SESOIL) model analysis was performed using sandy loam as default soil and maximum constituent concentration representing the entire column as worst-case scenario. The results of the analyses indicate that the final extractant concentration at the water table are below the Default Leachate Criteria for all three compounds. Results are included as Appendix K.
- There were no known recent acid or bases discharged at the Site that could alter soil pH.
- The maximum concentration detected at the Site for benzo(a)anthracene, benzo(a)pyrene, and lead are well below the free or residual product level.

Based on the above conditions, benzo(a)anthracene, benzo(a)pyrene, and lead are considered to be immobile and the pathway for IGW is not complete. The remaining eight constituents, arsenic, chromium, nickel, zinc, benzene, chlorobenzene, trichloroethene, and vinyl chloride, were carried forward for further IGW analysis.

5.3 STEP TWO – SINGLE POINT COMPARISON

The single point comparison to the Site-specific IGWSRS indicates that one or more samples exceed the Site-specific IGWSRS for all eight of the constituents screened against these values (see detailed exceedance data in Appendix L). Therefore, further IGW evaluation is required for all of these constituents.

5.4 STEP THREE – SPATIALLY-WEIGHTED AVERAGING

The potential for IGW impact was further evaluated for the eight remaining constituents, arsenic, chromium, nickel, zinc, benzene, chlorobenzene, trichloroethene, and vinyl chloride, using a spatially-weighted averaging method. As identified in the *Technical Guidance for the Attainment of Remediation Standards and Site-Specific Criteria* (version 1.0, 2012):

> "Unlike the direct contact pathways, determining compliance for the impact to ground water pathway is based on the full extent of the contamination. Onsite and offsite areas are not evaluated separately. The reason for this is because the receptor, the ground water, is not confined to a site, but extends across the adjacent site and beyond. The same compliance procedures are used whether an AOC extends offsite or not."

Spatially-weighted averaging is a method to evaluate concentrations based on representative sample areas and sample concentrations to provide an area-weighted mean over larger areas. The calculation process evaluates the average across individual Functional Areas (FAs) in comparison to the Site-specific IGWSRS. The FAs are developed to represent the potential IGW, and as such, are Site-wide. This is consistent with the fact that the sources of significant releases, such as Plater Pits #5 and #6 where elevated chromium and nickel soil impacts were observed, have been excavated, leaving sporadic level contamination distributed across the Site. The FAs are broken down into individual Thiessen polygons using GIS and representative concentration values to calculate the area-weighted average across the FA for comparison to the Site-specific IGWSRS. The following sections provide a detail of the inputs to the analysis and the results of these analyses.

5.4.1 Spatially-Weighted Averaging Inputs

5.4.1.1 Functional Areas

In accordance with N.J.A.C. 7:26E and the Compliance Tech Guide, 25 FAs, as shown in Figure 5, were delineated to represent Site-wide conditions. Functional areas were constructed to meet the following conditions:

- 100 feet in width, parallel to the dominant shallow groundwater flow (see Section 1.2.2); and
- Varying length, appropriate to capture Site boundaries, perpendicular to the dominant groundwater shallow flow direction. According to the *Technical Guidance for the Attainment of Remediation Standards and Site-Specific Criteria* Appendix B, functional area length is based on the AOC length and there is no constraint on the length of the AOC in the direction perpendicular to groundwater flow. As such, our functional areas were based upon the whole Site AOC equivalent to the groundwater AOC which is also Site-wide.

Each FA was evaluated separately for surface and sub-surface zones and similar FA dimensions, detailed above, were applied to both zones irrespective of spatial sample variation.

5.4.1.2 Thiessen polygons

GIS mapping was used to create a Thiessen Polygon around each sample within a FA. Thiessen polygons are polygons whose boundaries define the area that is closest to each point relative to all other points; they are mathematically defined by the perpendicular bisectors of the lines between all points. The area of each Thiessen Polygon was calculated using GIS and was used to represent the area of each sample as a fraction of the total FA area. For each constituent, the spatially-weighted average was calculated as follows:

- The contaminant concentration in each polygon was multiplied by the fraction of its area relative to the total area of the FA.
- The resultant products were summed for all samples within each FA to derive a weighted average concentration for each constituent.

The spatially-weighted average values were compared to the Site-specific IGWSRS. A compound was determined to not exceed criteria for IGW if the spatially-weighted average did not exceed the Site-

specific IGWSRS. Documentation of spatially-weighted average calculations is provided in Appendix L and the evaluation results are summarized in the following sub-sections.

5.4.1.3 Concentration Data

For detected values, the following procedures were used to determine the concentration term of an FA:

- If multiple sample depths existed at a location, the highest concentration within that depth interval (surface/sub-surface) was used to represent the concentration of that location for a conservative compliance evaluation.
- If a resample was collected at a single depth, then only that depth interval was replaced with the new sample concentration and the maximum concentration in that location was used.
- For historic samples with depth intervals that were longer than 6 inches (e.g. 2-foot sample interval), the sample results were replaced as follows:
  - If the recent sample was collected utilizing a 6-inch sample interval and was collected in the same zone as the original longer interval sample, then the recent sample concentration was used.
  - If multiple recent samples with 6-inch intervals were collected in that zone, then the maximum concentration was used.
- For results reported as non-detect, the RL was used to represent the non-detect value.
- For results reported as non-detected with RL values exceeding Site-specific IGWSRS or with missing RLs, an appropriate RL value was considered depending on the dataset distribution as described below.

5.4.1.4 Censored Data Imputations

For results reported as non-detect, the RL was used to impute the non-detect value in most cases. However, in very few cases, outlined below, the imputation was done by calculating an appropriate RL based on the Site-wide RL data distribution:

1. A significant portion of Site samples represented historic data and very high RL values were reported due to multiple older lab analysis methods;
2. A high percentage of RLs were reported exceeding the Site-specific IGWSRS.

Table VII presents the raw data statistics of Site-wide RL data. As shown in the table, a significant percentage of the RL values exceeded the Site-specific IGWSRS. Due to the multiple, older laboratory analysis methods, the detection limits were typically not representative. Recent sampling in the vicinity of previously collected samples utilizing current analytical methods confirm that these older analytical methods with high RLs do not represent true sample concentrations in those areas. Therefore, a more appropriate RL value was calculated by statistically analyzing the Site-wide RL data. The results of the statistical analysis are presented in Table VIII. Depending on the evaluation, the high RL values were imputed with 75 percentile values for more conservative evaluation in most cases, and median values in very few cases.

5.4.2 Spatially-Weighted Averaging Results

5.4.2.1 Arsenic

The NJDEP 2013 default IGWSSL for arsenic is 19 mg/kg, which was used for this evaluation. In the surface zone, arsenic was found to be in exceedance of IGWSRS at individual sample locations in 16 FAs: IGW03, IGW05, IGW06, IGW07, IGW08, IGW09, IGW10, IGW11, IGW12, IGW15, IGW17, IGW18, IGW22, IGW23, IGW24, and IGW25. The spatially-weighted averaging method was used to evaluate arsenic in the remaining FAs. As detailed above, Thiessen polygons were generated for each point and bounded by the outline of either the Thiessen polygon of the neighboring point or the edge of the functional area. The maximum spatially-weighted mean concentration of arsenic in the surface zone was 18.6 mg/kg (IGW09), which is below 2013 default IGWSSL.

Spatially-weighted averaging was also used to evaluate arsenic in the subsurface zone due to single-point exceedances in four FAs: IGW05, IGW06, IGW09, and IGW10. The maximum spatially-weighted mean concentration of arsenic in the subsurface zone was 19.0 mg/kg (IGW09), which meets 2013 default IGWSSL.

Summary tables and Thiessen polygon maps are presented in Appendix L. Based on the IGW pathway evaluation results for arsenic in the surface and subsurface zones, arsenic meets the 2013 default IGWSSL.

5.4.2.2 Chromium

The Site-specific IGWSRS for total chromium is 1,540 mg/kg; as discussed in Section 4.3.2, a separate Site-specific IGWSRS for hexavalent chromium was not developed due to the lack of hexavalent chromium detections and the remediation for concentrations identified as potential sources at the Site. In the surface zone, total chromium was found to be in exceedance of Site-specific IGWSRS at individual sample locations in nine FAs: IGW04, IGW05, IGW06, IGW09, IGW10, IGW14, IGW16, IGW17 and IGW20. The spatially-weighted averaging method was used to evaluate chromium in these FAs. The maximum spatially-weighted mean concentration of chromium in the surface zone was 1,244 mg/kg (IGW04), which is below Site-specific IGWSRS.

In the subsurface zone, single-point exceedances of Site-specific IGWSRS were observed in two FAs: IGW03 and IGW06. The maximum spatially-weighted mean concentration of chromium in the subsurface zone was 422 mg/kg (IGW03), which is below Site-specific IGWSRS.

Summary tables and Thiessen polygon maps are enclosed in Appendix L. Based on the IGW pathway evaluation results for total chromium in the surface and subsurface zones, the concentration of total chromium is below Site-specific IGWSRS.

5.4.2.3 Nickel

The Site-specific IGWSRS for nickel is 9,200 mg/kg. In the surface zone, nickel was found to be in exceedance of Site-specific IGWSRS at individual sample locations in seven FAs: IGW04, IGW05, IGW06, IGW09, IGW14, IGW16, and IGW19. The spatially-weighted averaging method was used to evaluate nickel in these FAs. As detailed above, Thiessen polygons were generated for each point and bounded

by the outline of either the Thiessen polygon of the neighboring point or the edge of the functional area. The maximum spatially-weighted mean concentration of nickel in the surface zone was 3,233 mg/kg (IGW19), which is below Site-specific IGWSRS.

In the subsurface zone, nickel was found to be in exceedance of Site-specific IGWSRS at individual sample locations in IGW05. The area weighted mean concentration was calculated to be 562 mg/kg, which is below the Site-specific IGWSRS.

Summary tables and Thiessen polygon maps are enclosed in Appendix L. Based on the IGW pathway evaluation results for nickel in the surface and subsurface zones, the concentration of nickel is below Site-specific IGWSRS.

5.4.2.4 Zinc

The Site-specific IGWSRS for zinc is 14,200 mg/kg. In the surface zone, zinc was found to be in exceedance of Site-specific IGWSRS at individual sample locations in seven FAs: IGW03, IGW04, IGW05, IGW06, IGW09, IGW12, and IGW14. The spatially-weighted averaging method was used to evaluate zinc in these FAs. As detailed above, Thiessen polygons were generated for each point and bounded by the outline of either the Thiessen polygon of the neighboring point or the edge of the functional area. The maximum spatially-weighted mean concentration of zinc in the surface zone was 5,501 mg/kg (IGW04), which is below Site-specific IGWSRS.

In the subsurface zone, spatially-weighted averaging was utilized for zinc following observation of single-point exceedances in three FAs: IGW03, IGW04, and IGW05. The maximum spatially-weighted mean concentration was 40,300 mg/kg (IGW03), which exceeds Site-specific IGWSRS; however, by reducing the area of the polygon to represent the extent of the Sludge Drying Bed No. 1 (approximately 7,500 sq. feet) from which the sample was taken, the area weighted average becomes 7,148.89 mg/kg, which is below Site-specific IGWSRS.

Summary tables and Thiessen polygon maps are enclosed in Appendix L. Based on the IGW pathway evaluation results for zinc in the surface and subsurface zones, and the above justification, zinc meets Site-specific IGWSRS.

5.4.2.5 Benzene

The Site-specific IGWSRS calculated for benzene is 0.2 mg/kg. In the surface zone, benzene was found to be in exceedance of Site-specific IGWSRS at individual sample locations in eight FAs: IGW03, IGW04, IGW05, IGW06, IGW08, IGW09, IGW14, and IGW18. The spatially-weighted averaging method was used to evaluate benzene in the remaining FAs. As detailed above, Thiessen polygons were generated for each point and bounded by the outline of either the Thiessen polygon of the neighboring point or the edge of the functional area. The maximum spatially-weighted mean concentration was 0.15 mg/kg (IGW09), which is below Site-specific IGWSRS.

In the subsurface zone, benzene was found to be in exceedance of Site-specific IGWSRS at individual sample locations in six FAs: IGW03, IGW04, IGW05, IGW06, IGW12, and IGW14. These FAs were evaluated using the spatially-weighted averaging method. The maximum spatially-weighted mean concentration was 0.13 mg/kg (IGW03), which is below Site-specific IGWSRS.

Summary tables and Thiessen polygon maps are enclosed in Appendix L. Detailed RL analysis is presented in Tables 7 and 8. Based on the IGW pathway evaluation results for benzene in the surface and subsurface zones, benzene is below the Site-specific IGWSRS.

5.4.2.6 Chlorobenzene

The Site-specific IGWSRS calculated for chlorobenzene is 83 mg/kg. In the surface zone, chlorobenzene was found to be in exceedance of Site-specific IGWSRS at one sample location in IGW09. Compliance averaging methods were used to evaluate chlorobenzene in this FA. The spatially-weighted averaging method was used to evaluate chlorobenzene in the remaining FAs. As detailed above, Thiessen polygons were generated for each point and bounded by the outline of either the Thiessen polygon of the neighboring point or the edge of the functional area. The area weighted mean concentration was calculated to be 1.73 mg/kg, which is below the Site-specific IGWSRS.

In the subsurface zone, chlorobenzene was found to be in exceedance of Site-specific IGWSRS at one sample location in IGW05. The area weighted mean concentration was calculated to be 1.25 mg/kg, which is below the Site-specific IGWSRS.

Summary tables and Thiessen polygon maps are enclosed in Appendix L. Detailed RL analysis is presented in Tables 7 and 8. Based on the IGW pathway evaluation results for chlorobenzene in the surface and subsurface zones, chlorobenzene is below the Site-specific IGWSRS.

5.4.2.7 Trichloroethene

The Site-specific IGWSRS calculated for TCE is 0.13 mg/kg. In the surface zone, TCE was found to be in exceedance of Site-specific IGWSRS at individual sample locations in 22 FAs: IGW03, IGW04, IGW05, IGW06, IGW07, IGW08, IGW09, IGW10, IGW11, IGW12, IGW13, IGW14, IGW15, IGW16, IGW17, IGW18, IGW19, IGW20, IGW21, IGW22, IGW23, and IGW24. Revised RLs enabled compliance achievement in IGW20 (see Section 5.4.1.4). The spatially-weighted averaging method was used to evaluate TCE in the remaining FAs. As detailed above, Thiessen polygons were generated for each point and bounded by the outline of either the Thiessen polygon of the neighboring point or the edge of the functional area. The maximum spatially-weighted mean concentration of TCE was 0.13 mg/kg (IGW07), which meets Site-specific IGWSRS.

In the subsurface zone, trichloroethene was found to be in exceedance of Site-specific IGWSRS at individual sample locations in 11 FAs: IGW03, IGW04, IGW05, IGW06, IGW08, IGW09, IGW12, IGW13, IGW14, IGW19, and IGW20. Spatially-weighted averaging was used to evaluate compliance in these FAs. The maximum spatially-weighted mean concentration of TCE in the subsurface was 0.099 mg/kg (IGW08), which is below Site-specific IGWSRS.

Summary tables and Thiessen polygon maps are enclosed in Appendix L. Detailed RL analysis is presented in Tables 7 and 8. Based on the IGW pathway evaluation results for trichloroethene in the surface and subsurface zones, trichloroethene is below Site-specific IGWSRS.

5.4.2.8 Vinyl Chloride

The Site-specific IGWSRS calculated for vinyl chloride is 0.06 mg/kg. In the surface zone, vinyl chloride sampling results indicated exceedance of Site-specific IGWSRS at individual sample locations in every FAs, IGW02 through IGW24. Revised RLs enabled compliance achievement in IGW02, IGW03, IGW08, IGW14, IGW15, IGW16, IGW18, IGW19, IGW20, IGW23, and IGW24 (see Section 5.4.1.4). The spatially-weighted averaging method was used to evaluate vinyl chloride in the remaining FAs. The maximum spatially-weighted mean concentration of vinyl chloride in the surface zone was 0.051 mg/kg (IGW05), which is below Site-specific IGWSRS.

In the subsurface zone, vinyl chloride was found to be in exceedance of Site-specific IGWSRS at individual sample locations in six FAs: IGW03, IGW04, IGW05, IGW06, IGW12, IGW14. Spatially-weighted averaging was used to evaluate compliance in these FAs. The maximum spatially-weighted mean concentration of vinyl chloride in the subsurface zone was 0.05 mg/kg (IGW04), which is below Site-specific IGWSRS.

Summary tables and Thiessen polygon maps are enclosed in Appendix L. Detailed RL analysis is presented in Tables VII and VIII. Based on the IGW pathway evaluation results for vinyl chloride in the surface and subsurface zones, vinyl chloride is below the Site-specific IGWSRS.

6. Conclusions and Recommendations

This Addendum to the October 2016 Soil RAR presented findings and conclusions based on supplemental IGW pathway evaluations conducted in accordance with the requirements of N.J.A.C. 7:26E for the Site. The original Soil RAR submittal in October 2016 summarized remedial actions conducted at the Site prior to 1990 through November 2013, which included excavation of targeted hot spot areas: Gold Run Pond, Southern Swale, AOC-09 PCB area, and Plater Pits #5 and #6. The potential for soil IGW was initially assessed utilizing a conservative approach and the default IGWSSLs in the GwRIR dated May 2016, which identified nine constituents that could potentially pose an IGW above Class II-A Groundwater Quality Standards[3] with the NJDEP GWQS. As detailed in the GwRIR, due to the presence of groundwater impacts at the Site, a Site-wide CEA was required with an indeterminate duration. This CEA is a continuation of the CEA established for the Parkway Avenue sewers on the north side of the Site that the Naval Air Warfare Center implemented, and connects to the Roller Bearing Corporation CEA to the south. As such, on-Site and downgradient potable use of groundwater is not permitted. In their review of the May 2016 GwRIR, NJDEP indicated their desire to include chromium and zinc in this evaluation, as such these constituents were included for further evaluation. Through communications and correspondence, NJDEP indicated that soil IGW evaluations should be documented as part of soil remediation activities for the Site, as provided herein. The following list of constituents were evaluated:

- Metals
  - Arsenic
  - Chromium
  - Lead
  - Nickel
  - Zinc
- PAHs
  - Benzo(a)anthracene
  - Benzo(a)pyrene
- VOCs
  - Benzene
  - Chlorobenzene
  - Trichloroethene
  - Vinyl Chloride

The list of constituents retained for the final IGW analysis described herein are derived from the initial analysis provided above. These constituents were identified as being potentially significant based on an AOC-by-AOC approach. This approach is conservative (that is, more constituents are identified and thus retained) because groundwater at adjacent and downgradient AOCs was used as the downgradient

[3] We note that the groundwater beneath the Site is not currently used for potable purposes nor is it reasonably anticipated to be used for such purposes in the future. In addition, most of the groundwater beneath the Site flows towards, and discharges into, Gold Run (2016 Groundwater RIR).

compliance point instead of the property boundary. The final IGW analysis of retained constituents (provided in the remainder of this document) is more appropriately based on a Site-wide basis because:

1. Remediation at individual AOCs has been completed,
2. Remaining contamination is sporadic and distributed across the Site, and
3. All sample results are above the water table.

This Site-wide approach is consistent with *24 July 2014 NJDEP "Hot Topic" Training Impact to Ground Water Pathway* training provided by the NJDEP.

The additional IGW evaluation, performed herein, was performed in a step-wise process as detailed below:

Step 1: COCs were evaluated in accordance with N.J.A.C. 7:26E and Guidance for the Evaluation of Immobile Chemicals for the Impact to Ground Water Pathway (NJDEP, 2008; "Immobile Chemical Guidance").

Step 2: COCs which remained an issue after Step 1 were evaluated by single point comparison to the Site-specific IGWSRS.

Step 3: COCs which remained an issue after Step 2 were evaluated by calculating spatially-weighted averages using Thiessen polygons and comparing results with applicable Site-specific IGWSRS.

For Step 1, based on the above conditions, benzo(a)anthracene, benzo(a)pyrene, and lead were determined to be immobile and therefore the pathway for IGW was determined not complete. For Step 2, a single point comparison to Site-specific IGWSRS indicated that one or more samples exceeded Site-specific IGWSRS or default IGWSSL for all eight of the remaining constituents, as summarized in Appendix L. Therefore, further IGW evaluation was required for all of these constituents.

Spatially weighted averaging, Step 3, further evaluated for the 8 remaining constituents, arsenic, nickel, zinc, benzene, chlorobenzene, trichloroethene, and vinyl chloride. As identified in the *24 September 2012 Technical Guidance for the Attainment of Remediation Standards and Site Specific Criteria*:

> "Unlike the direct contact pathways, determining compliance for the impact to ground water pathway is based on the full extent of the contamination. On-site and offsite areas are not evaluated separately. The reason for this is because the receptor, the ground water, is not confined to a site, but extends across the adjacent site and beyond. The same compliance procedures are used whether an AOC extends offsite or not."

Spatially weighted averaging is a method to evaluate concentrations based on representative sample areas and sample concentrations to provide an area-weighted mean over larger areas. The calculation process evaluates the average across individual FAs in comparison to the Site-specific IGWSRS. The FAs are developed to represent the potential IGW, and as such, are Site-wide. This is consistent with the fact that the sources of significant releases, such as Plater Pits #5 and #6 where elevated chromium and nickel soil impacts were observed, have been excavated, leaving sporadic level contamination

distributed across the Site. The FAs are broken down into individual Thiessen polygons using GIS and representative concentration values to calculate the area-weighted average across the FA for comparison to the Site-specific IGWSRS. The results of this analysis indicate that the spatially weighted averages for arsenic, nickel, zinc, benzene, chlorobenzene, trichloroethene, and vinyl chloride in the surface and subsurface zones, either meet or are below the Site-specific IGWSRS, depending upon the constituent. As such, the pathway for potential IGW is not complete for these constituents.

Based on our analysis, no further soil remedial action is required for the 11 constituents (arsenic, chromium, lead, nickel, zinc, benzo(a)anthracene, benzo(a)pyrene, benzene, chlorobenzene, trichloroethene, vinyl chloride) under current Site setting and conditions for the IGW pathway. Table IX summarizes the stepwise process utilized to assess IGW and which method determined that each of the above referenced constituents met the Site-specific IGWSRS.

References

1. MacDonald, D.D., Ingersoll, C.G., and Berger, T.A., Development and Evaluation of Consensus-Based Sediment Quality Guidelines for Freshwater Ecosystems, Archives of Environmental Contamination and Toxicology, v. 39, p. 20-31 (2000).

2. New Jersey Department of Environmental Protection, Field Sampling Procedures Manual (2005).

3. New Jersey Department of Environmental Protection, Guidance for the Evaluation of Immobile Chemicals for the Impact to Ground Water Pathway (2008).

4. New Jersey Department of Environmental Protection, Technical Guidance for the Attainment of Remediation Standards and Site-Specific Criteria, version 1.0 (2012).

5. New Jersey Department of Environmental Protection, Development of Impact to Ground Water Soil Remediation Standards Using the Soil-Water Partition Equation, version 2.0 (2013).

6. New Jersey Department of Environmental Protection, Development of Site-Specific Impact to Ground Water Soil Remediation Standards Using the Synthetic Precipitation Leaching Procedure, version 3.0 (2013).

7. New Jersey Department of Environmental Protection, Data Quality Assessment and Data Usability Evaluation Technical Guidance, version 1.0 (2014)

8. New Jersey Department of Environmental Protection, Quality Assurance Project Plan Technical Guidance, version 1.0 (2014).

9. New Jersey Department of Environmental Protection, Ecological Evaluation Technical Guidance, version 1.3 (2015).

10. Sanders, P.F., Ambient Levels of Metals in New Jersey Soils, NJDEP Research Project Summary (2003).

11. State of New Jersey, Cleanup Standards for Contaminated Sites, N.J.A.C. 7:26D (1992).

12. State of New Jersey, Technical Requirements for Site Remediation, N.J.A.C. 7:26E (2012).

13. State of New Jersey, Site Remediation Professional Licensing and Regulation, N.J.A.C. 58:10C (2013).

TABLES

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-1A	MW-1A	MW-1A	MW-1A	MW-1A	MW-1A	MW-2	MW-2	MW-2	MW-2
Sample ID	Groundwater	MW1A-032415-0921	MW1A-060915-1107	MW-1A-091615-0917	MW1A-121515-1352	MW1A-302116-1311	MW1A-101816-1426	MW02-032415-0951	MW02-060915-0954	MW02-091515-0931	MW02-121515-0927
Lab Sample ID	Quality	460-92177-5	460-96192-3	460-101215-6	460-106412-10	460-110804-9	460-122278-9	460-92177-6	460-96192-2	460-101265-4	460-106412-4
Sample Date	Standard	03/24/2015	06/09/2015	09/16/2015	12/15/2015	03/21/2016	10/18/2016	03/24/2015	06/09/2015	09/15/2015	12/15/2015
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.271**	**0.386**	**0.359**	**0.331**	**0.354**	**0.342**	**0.688**	**0.603**	**0.755**	**0.528**
Dissolved Oxygen, Field (mg/L)	-	**0.28**	**0.16**	**0.97**	**0.61**	**0.38**	**0.38**	**0.55**	**0.22**	**0.61**	**0.84**
ORP, Field (mV)	-	**-100.7**	**-44.5**	**-49.1**	**4.6**	**-33.1**	**-11.7**	**14.8**	**93**	**57.6**	**-37.2**
pH, Field (s.u)	-	**6.3**	**6.22**	**6.34**	**5.84**	**6.15**	**6.13**	**6.67**	**6.6**	**6.37**	**6.46**
Temperature (Deg C)	-	**12.03**	**14.1**	**14.4**	**14.19**	**12.41**	**15.19**	**6.35**	**15**	**16.3**	**14.28**
Turbidity, Field (NTU)	-	**30.2**	**19.7**	**10.8**	**14.3**	**38.6**	**6.11**	**1.29**	**3**	**107**	**4.27**
Inorganic Compounds - Total (ug/L)											
Cyanide	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	**2.6 J**	ND (10) F1	ND (10)	ND (10)	ND (10)
Antimony, Total	6	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	**1.1 J**	ND (2)	**1.8 J**	ND (2)
Arsenic, Total	3	ND (2)	**1.1 J**	**0.93 J**	**1 J**	**1.1 J**	ND (2)	ND (2)	ND (2)	**0.89 J**	ND (2)
Barium, Total	6000	**103**	**104**	**95.5**	**106**	**99.2**	**101**	**53.1**	**40.7**	**76.3**	**32.1**
Beryllium, Total	1	**0.47 J**	**0.41 J**	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)
Cadmium, Total	4	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	**10.5** [A]	**6.8** [A]	**15.1** [A]	**0.83 J**
Chromium, Total	70	ND (4)	**1.6 J**	ND (4)	**2.1 J**	ND (4)	ND (4)	**3.4 J**	**2.5 J**	**22**	**1.7 J**
Chromium VI (Hexavalent), Total	NC	-	-	-	-	-	-	-	-	-	-
Cobalt, Total	100	**5.9**	**6.8**	**21**	**10.7**	**5.3**	**2.9 J**	ND (4)	ND (4)	ND (4)	ND (4)
Copper, Total	1300	**2.9 J**	**3 J**	**1.8 J**	**4.1**	ND (4)	ND (4)	**5.1**	**3.3 J**	**15.7**	**2 J**
Lead, Total	5	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	**11.2** [A]	ND (1.2)
Manganese, Total	50	**3580** [A]	**3680** [A]	**3390** [A]	**3710** [A]	**3720** [A]	**3750** [A]	**175** [A]	**523** [A]	**1620** [A]	**280** [A]
Mercury, Total	2	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	**0.25**
Nickel, Total	100	**10.4**	**19.7**	**45.3**	**41.7**	**8.8**	**5.2**	**13.4**	**14.2**	**25.9**	**5.9**
Selenium, Total	40	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	**2.7 J**	ND (10)	ND (10)	ND (10)
Silver, Total	40	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Zinc, Total	2000	**8.3 J**	**32.2**	**38.5**	**162**	ND (16)	ND (16)	**745**	**502**	**776**	**120**
Inorganic Compounds - Dissolved (ug/L)											
Antimony, Dissolved	6	-	-	-	-	ND (2)	-	-	-	-	-
Arsenic, Dissolved	3	-	-	-	-	ND (2)	-	-	-	-	-
Barium, Dissolved	6000	-	-	-	-	**98.8**	-	-	-	-	-
Beryllium, Dissolved	1	-	-	-	-	ND (0.8)	-	-	-	-	-
Cadmium, Dissolved	4	-	-	-	-	ND (2)	-	-	-	-	-
Chromium, Dissolved	70	-	-	-	-	ND (4)	-	-	-	-	-
Cobalt, Dissolved	100	-	-	-	-	**4.4**	-	-	-	-	-
Copper, Dissolved	1300	-	-	-	-	ND (4)	-	-	-	-	-
Lead, Dissolved	5	-	-	-	-	ND (1.2)	-	-	-	-	-
Manganese, Dissolved	50	-	-	-	-	**3460** [A]	-	-	-	-	-
Mercury, Dissolved	2	-	-	-	-	ND (0.2)	-	-	-	-	-
Nickel, Dissolved	100	-	-	-	-	**7.8**	-	-	-	-	-
Selenium, Dissolved	40	-	-	-	-	ND (10)	-	-	-	-	-
Silver, Dissolved	40	-	-	-	-	ND (2)	-	-	-	-	-
Zinc, Dissolved	2000	-	-	-	-	ND (16)	-	-	-	-	-
PCBs (ug/L)											
Aroclor-1016 (PCB-1016)	0.5	-	-	-	-	-	-	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)
Aroclor-1221 (PCB-1221)	0.5	-	-	-	-	-	-	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)
Aroclor-1232 (PCB-1232)	0.5	-	-	-	-	-	-	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)
Aroclor-1242 (PCB-1242)	0.5	-	-	-	-	-	-	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)
Aroclor-1248 (PCB-1248)	0.5	-	-	-	-	-	-	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)
Aroclor-1254 (PCB-1254)	0.5	-	-	-	-	-	-	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)
Aroclor-1260 (PCB-1260)	0.5	-	-	-	-	-	-	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)
Aroclor-1262 (PCB-1262)	0.5	-	-	-	-	-	-	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)
Aroclor-1268 (PCB-1268)	0.5	-	-	-	-	-	-	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)
Polychlorinated biphenyls (PCBs)	0.5	-	-	-	-	-	-	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-1A	MW-1A	MW-1A	MW-1A	MW-1A	MW-1A	MW-2	MW-2	MW-2	MW-2
Sample ID	Groundwater	MW1A-032415-0921	MW1A-060915-1107	MW-1A-091615-0917	MW1A-121515-1352	MW1A-302116-1311	MW1A-101816-1426	MW02-032415-0951	MW02-060915-0954	MW02-091515-0931	MW02-121515-0927
Lab Sample ID	Quality	460-92177-5	460-96192-3	460-101215-6	460-106412-10	460-110804-9	460-122278-9	460-92177-6	460-96192-2	460-101265-4	460-106412-4
Sample Date	Standard	03/24/2015	06/09/2015	09/16/2015	12/15/2015	03/21/2016	10/18/2016	03/24/2015	06/09/2015	09/15/2015	12/15/2015
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.271**	**0.386**	**0.359**	**0.331**	**0.354**	**0.342**	**0.688**	**0.603**	**0.755**	**0.528**
Dissolved Oxygen, Field (mg/L)	-	**0.28**	**0.16**	**0.97**	**0.61**	**0.38**	**0.38**	**0.55**	**0.22**	**0.61**	**0.84**
ORP, Field (mV)	-	**-100.7**	**-44.5**	**-49.1**	**4.6**	**-33.1**	**-11.7**	**14.8**	**93**	**57.6**	**-37.2**
pH, Field (s.u)	-	**6.3**	**6.22**	**6.34**	**5.84**	**6.15**	**6.13**	**6.67**	**6.6**	**6.37**	**6.46**
Temperature (Deg C)	-	**12.03**	**14.1**	**14.4**	**14.19**	**12.41**	**15.19**	**6.35**	**15**	**16.3**	**14.28**
Turbidity, Field (NTU)	-	**30.2**	**19.7**	**10.8**	**14.3**	**38.6**	**6.11**	**1.29**	**3**	**107**	**4.27**
Semi-Volatile Organic Compounds (ug/L)											
2,2'-oxybis(1-Chloropropane)	300	ND (11)	ND (10)	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4,5-Trichlorophenol	700	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4,6-Trichlorophenol	20	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4-Dichlorophenol	20	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4-Dimethylphenol	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4-Dinitrophenol	40	ND (22)	ND (21)	ND (21)	ND (20)	ND (20)	ND (21)	ND (21)	ND (20)	ND (21)	ND (20)
2,4-Dinitrotoluene	10	ND (2.2)	ND (2.1)	ND (2.1)	ND (2)	ND (2)	ND (2.1)	ND (2.1)	ND (2)	ND (2.1)	ND (2)
2,6-Dinitrotoluene	10	ND (2.2)	ND (2.1)	ND (2.1)	ND (2)	ND (2)	ND (2.1)	ND (2.1)	ND (2)	ND (2.1)	ND (2)
2-Chloronaphthalene	600	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2-Chlorophenol	40	ND (11) *	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)	ND (10)
2-Methylnaphthalene	30	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2-Methylphenol	50	ND (11) *	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10) *	ND (10) *	ND (10) *	ND (10)
2-Nitroaniline	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2-Nitrophenol	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
3,3'-Dichlorobenzidine	30	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
3-Nitroaniline	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4,6-Dinitro-2-methylphenol	1	ND (22)	ND (21)	ND (21)	ND (20)	ND (20)	ND (21)	ND (21)	ND (20)	ND (21)	ND (20)
4-Bromophenyl phenyl ether	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Chloro-3-methylphenol	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Chloroaniline	30	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Chlorophenyl phenyl ether	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Methylphenol	50	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Nitroaniline	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Nitrophenol	100	ND (22)	ND (21)	ND (21)	ND (20)	ND (20)	ND (21)	ND (21)	ND (20)	ND (21)	ND (20)
Acenaphthene	400	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Acenaphthylene	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Acetophenone	700	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Anthracene	2000	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Atrazine	3	ND (2.2)	ND (2.1)	ND (2.1) *	ND (2)	ND (2)	ND (2.1)	ND (2.1)	ND (2)	ND (2.1)	ND (2)
Benzaldehyde	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Benzo(a)anthracene	0.1	ND (0.054)	ND (0.052)	ND (0.05)	**0.062**	ND (0.05) *	ND (0.052)	ND (0.052)	ND (0.05)	ND (0.052)	ND (0.05)
Benzo(a)pyrene	0.1	ND (0.054)	ND (0.052)	ND (0.05)	**0.09**	ND (0.05) *	ND (0.052)	ND (0.052)	ND (0.05)	ND (0.052)	ND (0.05)
Benzo(b)fluoranthene	0.2	ND (0.054)	ND (0.052)	**0.016 J**	**0.16 ***	ND (0.05) *	ND (0.052)	ND (0.052)	ND (0.05)	**0.017 J**	ND (0.05)
Benzo(g,h,i)perylene	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Benzo(k)fluoranthene	0.5	ND (1.1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Biphenyl	400	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
bis(2-Chloroethoxy)methane	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
bis(2-Chloroethyl)ether	7	ND (1.1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
bis(2-Ethylhexyl)phthalate	3	ND (2.2)	ND (2.1)	**10 B*** [A]	ND (2)	ND (2)	ND (2.1)	ND (2.1)	ND (2)	**5.2** [A]	ND (2)
Butyl benzylphthalate	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Caprolactam	5000	ND (11)	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10) *
Carbazole	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Chrysene	5	ND (2.2)	ND (2.1)	ND (2.1)	ND (2)	ND (2)	ND (2.1)	ND (2.1)	ND (2)	ND (2.1)	ND (2)
Dibenz(a,h)anthracene	0.3	ND (1.1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Dibenzofuran	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Diethyl phthalate	6000	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-1A	MW-1A	MW-1A	MW-1A	MW-1A	MW-1A	MW-2	MW-2	MW-2	MW-2
Sample ID	Groundwater	MW1A-032415-0921	MW1A-060915-1107	MW-1A-091615-0917	MW1A-121515-1352	MW1A-302116-1311	MW1A-101816-1426	MW02-032415-0951	MW02-060915-0954	MW02-091515-0931	MW02-121515-0927
Lab Sample ID	Quality	460-92177-5	460-96192-3	460-101215-6	460-106412-10	460-110804-9	460-122278-9	460-92177-6	460-96192-2	460-101265-4	460-106412-4
Sample Date	Standard	03/24/2015	06/09/2015	09/16/2015	12/15/2015	03/21/2016	10/18/2016	03/24/2015	06/09/2015	09/15/2015	12/15/2015
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.271**	**0.386**	**0.359**	**0.331**	**0.354**	**0.342**	**0.688**	**0.603**	**0.755**	**0.528**
Dissolved Oxygen, Field (mg/L)	-	**0.28**	**0.16**	**0.97**	**0.61**	**0.38**	**0.38**	**0.55**	**0.22**	**0.61**	**0.84**
ORP, Field (mV)	-	**-100.7**	**-44.5**	**-49.1**	**4.6**	**-33.1**	**-11.7**	**14.8**	**93**	**57.6**	**-37.2**
pH, Field (s.u)	-	**6.3**	**6.22**	**6.34**	**5.84**	**6.15**	**6.13**	**6.67**	**6.6**	**6.37**	**6.46**
Temperature (Deg C)	-	**12.03**	**14.1**	**14.4**	**14.19**	**12.41**	**15.19**	**6.35**	**15**	**16.3**	**14.28**
Turbidity, Field (NTU)	-	**30.2**	**19.7**	**10.8**	**14.3**	**38.6**	**6.11**	**1.29**	**3**	**107**	**4.27**
Dimethyl phthalate	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Di-n-butylphthalate	700	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Di-n-octyl phthalate	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Fluoranthene	300	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Fluorene	300	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Semi-Volatile Organic Compounds (ug/L) (con't)											
Hexachlorobenzene	0.02	ND (0.022)	ND (0.021)	ND (0.021)	ND (0.02)	ND (0.02) *	ND (0.021)	ND (0.021)	ND (0.02)	ND (0.021)	ND (0.02)
Hexachlorobutadiene	1	ND (1.1) *	ND (1) *	ND (1) *	ND (1) *	ND (1)	ND (1)	ND (1) *	ND (1) *	ND (1)	ND (1) *
Hexachlorocyclopentadiene	40	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Hexachloroethane	7	ND (1.1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Indeno(1,2,3-cd)pyrene	0.2	ND (1.1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Isophorone	40	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Naphthalene	300	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Nitrobenzene	6	ND (1.1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
N-Nitrosodi-n-propylamine	10	ND (1.1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
N-Nitrosodiphenylamine	10	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Pentachlorophenol	0.3	ND (0.22)	ND (0.21)	ND (0.21)	ND (0.2)	ND (0.2) *	ND (0.21)	ND (0.21)	ND (0.2)	ND (0.21)	ND (0.2)
Phenanthrene	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Phenol	2000	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Pyrene	200	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Volatile Organic Compounds (ug/L)											
1,1,1-Trichloroethane	30	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1,2,2-Tetrachloroethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1,2-Trichloroethane	3	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.1 J**	ND (1)	ND (1)	ND (1)	ND (1)
1,1-Dichloroethane	50	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1-Dichloroethene	1	ND (1)	**0.42 J**	**0.41 J**	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2,4-Trichlorobenzene	9	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dibromo-3-chloropropane (DBCP)	0.02	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dibromoethane (Ethylene Dibromide)	0.03	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dichlorobenzene	600	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dichloroethane	2	ND (1)	**0.31 J**	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dichloropropane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,3-Dichlorobenzene	600	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,4-Dichlorobenzene	75	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,4-Dioxane	0.4	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	300	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
2-Hexanone	300	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	100	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Acetone	6000	ND (5)	ND (5)	ND (5)	**8.2**	ND (5)	**17**	ND (5)	ND (5)	ND (5)	**20**
Benzene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Bromodichloromethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Bromoform	4	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Bromomethane (Methyl Bromide)	10	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Carbon disulfide	700	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Carbon tetrachloride	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Chlorobenzene	50	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Chloroethane	5	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-1A	MW-1A	MW-1A	MW-1A	MW-1A	MW-1A	MW-2	MW-2	MW-2	MW-2
Sample ID	Groundwater	MW1A-032415-0921	MW1A-060915-1107	MW-1A-091615-0917	MW1A-121515-1352	MW1A-302116-1311	MW1A-101816-1426	MW02-032415-0951	MW02-060915-0954	MW02-091515-0931	MW02-121515-0927
Lab Sample ID	Quality	460-92177-5	460-96192-3	460-101215-6	460-106412-10	460-110804-9	460-122278-9	460-92177-6	460-96192-2	460-101265-4	460-106412-4
Sample Date	Standard	03/24/2015	06/09/2015	09/16/2015	12/15/2015	03/21/2016	10/18/2016	03/24/2015	06/09/2015	09/15/2015	12/15/2015
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.271**	**0.386**	**0.359**	**0.331**	**0.354**	**0.342**	**0.688**	**0.603**	**0.755**	**0.528**
Dissolved Oxygen, Field (mg/L)	-	**0.28**	**0.16**	**0.97**	**0.61**	**0.38**	**0.38**	**0.55**	**0.22**	**0.61**	**0.84**
ORP, Field (mV)	-	**-100.7**	**-44.5**	**-49.1**	**4.6**	**-33.1**	**-11.7**	**14.8**	**93**	**57.6**	**-37.2**
pH, Field (s.u)	-	**6.3**	**6.22**	**6.34**	**5.84**	**6.15**	**6.13**	**6.67**	**6.6**	**6.37**	**6.46**
Temperature (Deg C)	-	**12.03**	**14.1**	**14.4**	**14.19**	**12.41**	**15.19**	**6.35**	**15**	**16.3**	**14.28**
Turbidity, Field (NTU)	-	**30.2**	**19.7**	**10.8**	**14.3**	**38.6**	**6.11**	**1.29**	**3**	**107**	**4.27**
Chloroform (Trichloromethane)	70	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Chloromethane (Methyl Chloride)	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
cis-1,2-Dichloroethene	70	**13**	**25**	**23**	**13**	**12**	**22**	**0.87 J**	**1.1**	**0.95 J**	**0.94 J**
cis-1,3-Dichloropropene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Cyclohexane	100	ND (1)	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) *
Dibromochloromethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Dichlorodifluoromethane (CFC-12)	1000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Ethylbenzene	700	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Isopropylbenzene	700	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Volatile Organic Compounds (ug/L) (cont')											
Methyl acetate	7000	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Methyl cyclohexane	100	ND (1)	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) *
Methyl Tert Butyl Ether	70	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Methylene chloride	3	**0.4 J**	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Styrene	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Tetrachloroethene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Toluene	600	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
trans-1,2-Dichloroethene	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
trans-1,3-Dichloropropene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Trichloroethene	1	**3.8** [A]	**30** [A]	**33** [A]	**1.1** [A]	**2.7** [A]	**42** [A]	**0.71 J**	**0.71 J**	**0.94 J**	**0.39 J**
Trichlorofluoromethane (CFC-11)	2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Trifluorotrichloroethane (Freon 113)	20000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Vinyl chloride	1	**0.21 J**	**0.4 J**	ND (1)	ND (1)	**0.21 J**	**0.25 J**	ND (1)	**0.065 J**	ND (1)	ND (1)
Xylene (total)	1000	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)

Notes:
1. ND: Result is not detected above the indicated reporting limit.
   J: Estimated value
   B: Possible blank contamination
   E: Exceeds calibration limits
   F1: MS and/or MSD recovery exceeds the control limits.
   * - Recovery Exceeds control limits
2. Results in red exceed the following criteria:
   - Groundwater Quality Standards (GWQS)
3. Results in **bold** are detected.

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-2	MW-2	MW-2	MW-2A	MW-2A	MW-2A	MW-2A	MW-2A	MW-2A	MW-2A
Sample ID	Groundwater	MW02-302116-1026	1000-302116-0003	MW02-101816-1201	MW2A-032415-0846	1000-032415-0003	MW2A-060915-0854	MW2A-091515-1036	MW2A-121515-1032	MW2A-302116-1127	MW2A-101816-1306
Lab Sample ID	Quality	460-110804-6	460-110804-3	460-122278-10	460-92177-7	460-92177-3	460-96192-1	460-101265-5	460-106412-5	460-110804-7	460-122278-11
Sample Date	Standard	03/21/2016	03/21/2016	10/18/2016	03/24/2015	03/24/2015	06/09/2015	09/15/2015	12/15/2015	03/21/2016	10/18/2016
Field Parameters											
Conductivity, Field (mS/cm)	-	**573**	-	**0.542**	**0.493**	-	**0.402**	**0.534**	**0.429**	**446**	**0.435**
Dissolved Oxygen, Field (mg/L)	-	**0.29**	-	**0.66**	**0.91**	-	**0.38**	**0.2**	**0.17**	**0.14**	**1.35**
ORP, Field (mV)	-	**79.1**	-	**111.7**	**19.7**	-	**-4.1**	**-27.8**	**-14**	**-41.9**	**-18.7**
pH, Field (s.u)	-	**6.62**	-	**6.44**	**6.19**	-	**6.21**	**6.11**	**5.95**	**6.3**	**6.21**
Temperature (Deg C)	-	**9.61**	-	**17.91**	**8.3**	-	**14.3**	**15.7**	**14.1**	**12.59**	**23.65**
Turbidity, Field (NTU)	-	**0.71**	-	**99.8**	**23.7**	-	**18.7**	**1.4**	**16.3**	**33.2**	**10.9**
Inorganic Compounds - Total (ug/L)											
Cyanide	100	ND (10)	**4.2 J**	**2.2 J**	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	**3.4 J**
Antimony, Total	6	ND (2)	ND (2)	**1.3 J**	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Arsenic, Total	3	**1 J**	**0.99 J**	ND (2)	ND (2)	**0.93 J**	**1.1 J**	ND (2)	**0.82 J**	**1.2 J**	**0.81 J**
Barium, Total	6000	**33**	**34.1**	**65.8**	**48.1**	**46.3**	**48.7**	**41.8**	**43**	**45.6**	**55**
Beryllium, Total	1	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)
Cadmium, Total	4	**2.2**	**2.4**	**4**	ND (2)	ND (2)	**2**	ND (2)	ND (2)	ND (2)	ND (2)
Chromium, Total	70	ND (4)	ND (4)	**9.7**	**4**	**4.6**	**12.7**	**3.4 J**	**7.6**	**6.1**	**12.9**
Chromium VI (Hexavalent), Total	NC	-	-	-	-	-	-	-	-	-	-
Cobalt, Total	100	ND (4)	ND (4)	**1.4 J**	ND (4)	ND (4)	**1.6 J**	ND (4)	**1.9 J**	ND (4)	**1.8 J**
Copper, Total	1300	ND (4)	**1.6 J**	**7.6**	**5.6**	**19.9**	**11**	**6.4**	**14.1**	**6.9**	**27**
Lead, Total	5	ND (1.2)	ND (1.2)	**3.1**	ND (1.2)	**0.78 J**	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)
Manganese, Total	50	**220** [A]	**226** [A]	**317** [A]	**1260** [A]	**1220** [A]	**1310** [A]	**1230** [A]	**1170** [A]	**1260** [A]	**1440** [A]
Mercury, Total	2	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)
Nickel, Total	100	**7.3**	**7.2**	**13.3**	**51.7**	**57.3**	**49.4**	**26.4**	**46.1**	**21**	**33.3**
Selenium, Total	40	ND (10)	ND (10)	**1.9 J**	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Silver, Total	40	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Zinc, Total	2000	**323**	**325**	**448**	**13.9 J**	**29**	**21**	**7 J**	**9.1 J**	ND (16)	**7.8 J**
Inorganic Compounds - Dissolved (ug/L)											
Antimony, Dissolved	6	-	-	-	-	-	-	-	-	ND (2)	-
Arsenic, Dissolved	3	-	-	-	-	-	-	-	-	ND (2)	-
Barium, Dissolved	6000	-	-	-	-	-	-	-	-	**44.7**	-
Beryllium, Dissolved	1	-	-	-	-	-	-	-	-	ND (0.8)	-
Cadmium, Dissolved	4	-	-	-	-	-	-	-	-	ND (2)	-
Chromium, Dissolved	70	-	-	-	-	-	-	-	-	ND (4)	-
Cobalt, Dissolved	100	-	-	-	-	-	-	-	-	ND (4)	-
Copper, Dissolved	1300	-	-	-	-	-	-	-	-	ND (4)	-
Lead, Dissolved	5	-	-	-	-	-	-	-	-	ND (1.2)	-
Manganese, Dissolved	50	-	-	-	-	-	-	-	-	**1190** [A]	-
Mercury, Dissolved	2	-	-	-	-	-	-	-	-	ND (0.2)	-
Nickel, Dissolved	100	-	-	-	-	-	-	-	-	**14.3**	-
Selenium, Dissolved	40	-	-	-	-	-	-	-	-	ND (10)	-
Silver, Dissolved	40	-	-	-	-	-	-	-	-	ND (2)	-
Zinc, Dissolved	2000	-	-	-	-	-	-	-	-	ND (16)	-
PCBs (ug/L)											
Aroclor-1016 (PCB-1016)	0.5	ND (0.4)	ND (0.41)	ND (0.4) *	ND (0.41)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4) *
Aroclor-1221 (PCB-1221)	0.5	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)
Aroclor-1232 (PCB-1232)	0.5	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)
Aroclor-1242 (PCB-1242)	0.5	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)
Aroclor-1248 (PCB-1248)	0.5	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)
Aroclor-1254 (PCB-1254)	0.5	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)
Aroclor-1260 (PCB-1260)	0.5	ND (0.4)	ND (0.41)	ND (0.4) *	ND (0.41)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4) *
Aroclor-1262 (PCB-1262)	0.5	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)
Aroclor-1268 (PCB-1268)	0.5	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)
Polychlorinated biphenyls (PCBs)	0.5	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-2	MW-2	MW-2	MW-2A	MW-2A	MW-2A	MW-2A	MW-2A	MW-2A	MW-2A
Sample ID	Groundwater	MW02-302116-1026	1000-302116-0003	MW02-101816-1201	MW2A-032415-0846	1000-032415-0003	MW2A-060915-0854	MW2A-091515-1036	MW2A-121515-1032	MW2A-302116-1127	MW2A-101816-1306
Lab Sample ID	Quality	460-110804-6	460-110804-3	460-122278-10	460-92177-7	460-92177-3	460-96192-1	460-101265-5	460-106412-5	460-110804-7	460-122278-11
Sample Date	Standard	03/21/2016	03/21/2016	10/18/2016	03/24/2015	03/24/2015	06/09/2015	09/15/2015	12/15/2015	03/21/2016	10/18/2016
Field Parameters											
Conductivity, Field (mS/cm)	-	**573**	-	**0.542**	**0.493**	-	**0.402**	**0.534**	**0.429**	**446**	**0.435**
Dissolved Oxygen, Field (mg/L)	-	**0.29**	-	**0.66**	**0.91**	-	**0.38**	**0.2**	**0.17**	**0.14**	**1.35**
ORP, Field (mV)	-	**79.1**	-	**111.7**	**19.7**	-	**-4.1**	**-27.8**	**-14**	**-41.9**	**-18.7**
pH, Field (s.u)	-	**6.62**	-	**6.44**	**6.19**	-	**6.21**	**6.11**	**5.95**	**6.3**	**6.21**
Temperature (Deg C)	-	**9.61**	-	**17.91**	**8.3**	-	**14.3**	**15.7**	**14.1**	**12.59**	**23.65**
Turbidity, Field (NTU)	-	**0.71**	-	**99.8**	**23.7**	-	**18.7**	**1.4**	**16.3**	**33.2**	**10.9**
Semi-Volatile Organic Compounds (ug/L)											
2,2'-oxybis(1-Chloropropane)	300	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) F1F2	ND (10)	ND (10)	ND (10)
2,4,5-Trichlorophenol	700	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4,6-Trichlorophenol	20	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4-Dichlorophenol	20	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4-Dimethylphenol	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4-Dinitrophenol	40	ND (20)	ND (20)	ND (21)	ND (21)	ND (21)	ND (20)	ND (21)	ND (20)	ND (20)	ND (21)
2,4-Dinitrotoluene	10	ND (2)	ND (2)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2)	ND (2.1)	ND (2)	ND (2)	ND (2.1)
2,6-Dinitrotoluene	10	ND (2)	ND (2)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2)	ND (2.1)	ND (2)	ND (2)	ND (2.1)
2-Chloronaphthalene	600	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2-Chlorophenol	40	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2-Methylnaphthalene	30	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2-Methylphenol	50	ND (10)	ND (10)	ND (10) *	ND (10) *	ND (10) *	ND (10) *	ND (10) F1*	ND (10)	ND (10)	ND (10) *
2-Nitroaniline	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2-Nitrophenol	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
3,3'-Dichlorobenzidine	30	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
3-Nitroaniline	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4,6-Dinitro-2-methylphenol	1	ND (20)	ND (20)	ND (21)	ND (21)	ND (21)	ND (20)	ND (21)	ND (20)	ND (20)	ND (21)
4-Bromophenyl phenyl ether	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Chloro-3-methylphenol	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Chloroaniline	30	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Chlorophenyl phenyl ether	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Methylphenol	50	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) F2	ND (10)	ND (10)	ND (10)
4-Nitroaniline	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Nitrophenol	100	ND (20)	ND (20)	ND (21)	ND (21)	ND (21)	ND (20)	ND (21)	ND (20)	ND (20)	ND (21)
Acenaphthene	400	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Acenaphthylene	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Acetophenone	700	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Anthracene	2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Atrazine	3	ND (2)	ND (2)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2)	ND (2.1)	ND (2)	ND (2)	ND (2.1)
Benzaldehyde	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Benzo(a)anthracene	0.1	ND (0.05) *	ND (0.05) *	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.05)	ND (0.052)	**0.063**	ND (0.05) *	ND (0.052)
Benzo(a)pyrene	0.1	ND (0.05) *	ND (0.05) *	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.05)	ND (0.052)	**0.052**	ND (0.05) *	ND (0.052)
Benzo(b)fluoranthene	0.2	ND (0.05) *	ND (0.05) *	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.05)	ND (0.052)	**0.073**	ND (0.05) *	ND (0.052)
Benzo(g,h,i)perylene	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Benzo(k)fluoranthene	0.5	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F1	ND (1)	ND (1)	ND (1)
Biphenyl	400	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
bis(2-Chloroethoxy)methane	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
bis(2-Chloroethyl)ether	7	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
bis(2-Ethylhexyl)phthalate	3	ND (2)	ND (2)	ND (2.1)	ND (2.1)	ND (2.1)	**0.97 J**	ND (2.1) F1	ND (2)	ND (2)	ND (2.1)
Butyl benzylphthalate	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (10)
Caprolactam	5000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) F1*	ND (10) *	ND (10)	ND (10)
Carbazole	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Chrysene	5	ND (2)	ND (2)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2)	ND (2.1) F1	ND (2)	ND (2)	ND (2.1)
Dibenz(a,h)anthracene	0.3	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Dibenzofuran	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Diethyl phthalate	6000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-2	MW-2	MW-2	MW-2A	MW-2A	MW-2A	MW-2A	MW-2A	MW-2A	MW-2A
Sample ID	Groundwater	MW02-302116-1026	1000-302116-0003	MW02-101816-1201	MW2A-032415-0846	1000-032415-0003	MW2A-060915-0854	MW2A-091515-1036	MW2A-121515-1032	MW2A-302116-1127	MW2A-101816-1306
Lab Sample ID	Quality	460-110804-6	460-110804-3	460-122278-10	460-92177-7	460-92177-3	460-96192-1	460-101265-5	460-106412-5	460-110804-7	460-122278-11
Sample Date	Standard	03/21/2016	03/21/2016	10/18/2016	03/24/2015	03/24/2015	06/09/2015	09/15/2015	12/15/2015	03/21/2016	10/18/2016
Field Parameters											
Conductivity, Field (mS/cm)	-	**573**	-	**0.542**	**0.493**	-	**0.402**	**0.534**	**0.429**	**446**	**0.435**
Dissolved Oxygen, Field (mg/L)	-	**0.29**	-	**0.66**	**0.91**	-	**0.38**	**0.2**	**0.17**	**0.14**	**1.35**
ORP, Field (mV)	-	**79.1**	-	**111.7**	**19.7**	-	**-4.1**	**-27.8**	**-14**	**-41.9**	**-18.7**
pH, Field (s.u)	-	**6.62**	-	**6.44**	**6.19**	-	**6.21**	**6.11**	**5.95**	**6.3**	**6.21**
Temperature (Deg C)	-	**9.61**	-	**17.91**	**8.3**	-	**14.3**	**15.7**	**14.1**	**12.59**	**23.65**
Turbidity, Field (NTU)	-	**0.71**	-	**99.8**	**23.7**	-	**18.7**	**1.4**	**16.3**	**33.2**	**10.9**
Dimethyl phthalate	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Di-n-butylphthalate	700	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Di-n-octyl phthalate	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (10)
Fluoranthene	300	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Fluorene	300	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Semi-Volatile Organic Compounds (ug/L) (con't)											
Hexachlorobenzene	0.02	ND (0.02) *	ND (0.02) *	ND (0.021)	ND (0.021)	ND (0.021)	ND (0.02)	ND (0.021)	ND (0.02)	ND (0.02) *	ND (0.021)
Hexachlorobutadiene	1	ND (1)	ND (1)	ND (1)	ND (1) *	ND (1) *	ND (1) *	ND (1) F1	ND (1) *	ND (1)	ND (1)
Hexachlorocyclopentadiene	40	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Hexachloroethane	7	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Indeno(1,2,3-cd)pyrene	0.2	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Isophorone	40	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Naphthalene	300	ND (10)	ND (10)	**1 J**	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Nitrobenzene	6	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
N-Nitrosodi-n-propylamine	10	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F2	ND (1)	ND (1)	ND (1)
N-Nitrosodiphenylamine	10	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Pentachlorophenol	0.3	ND (0.2) *	ND (0.2) *	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.2)	ND (0.21)	ND (0.2)	ND (0.2) *	**0.097 J**
Phenanthrene	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Phenol	2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) F2	ND (10)	ND (10)	ND (10)
Pyrene	200	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Volatile Organic Compounds (ug/L)											
1,1,1-Trichloroethane	30	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1,2,2-Tetrachloroethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1,2-Trichloroethane	3	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1-Dichloroethane	50	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F2	ND (1)	ND (1)	ND (1)
1,1-Dichloroethene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2,4-Trichlorobenzene	9	ND (1)	ND (1)	ND (1)	**0.33 J**	**0.32 J**	**0.35 J**	**0.46 J**	ND (1)	**0.33 J**	ND (1)
1,2-Dibromo-3-chloropropane (DBCP)	0.02	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dibromoethane (Ethylene Dibromide)	0.03	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dichlorobenzene	600	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dichloroethane	2	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dichloropropane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,3-Dichlorobenzene	600	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,4-Dichlorobenzene	75	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.47 J**	ND (1)	ND (1)	**0.33 J**
1,4-Dioxane	0.4	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	300	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
2-Hexanone	300	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	100	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Acetone	6000	ND (5)	ND (5)	ND (5)	ND (5)	**5.3**	ND (5)	ND (5)	ND (5)	ND (5)	**22**
Benzene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Bromodichloromethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Bromoform	4	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Bromomethane (Methyl Bromide)	10	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F1F2	ND (1)	ND (1)	ND (1)
Carbon disulfide	700	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Carbon tetrachloride	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Chlorobenzene	50	ND (1)	ND (1)	ND (1)	**1.1**	**1.1**	**1.5**	**1.9**	**1.6**	**1**	**1.7**
Chloroethane	5	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-2	MW-2	MW-2	MW-2A	MW-2A	MW-2A	MW-2A	MW-2A	MW-2A	MW-2A
Sample ID	Groundwater	MW02-302116-1026	1000-302116-0003	MW02-101816-1201	MW2A-032415-0846	1000-032415-0003	MW2A-060915-0854	MW2A-091515-1036	MW2A-121515-1032	MW2A-302116-1127	MW2A-101816-1306
Lab Sample ID	Quality	460-110804-6	460-110804-3	460-122278-10	460-92177-7	460-92177-3	460-96192-1	460-101265-5	460-106412-5	460-110804-7	460-122278-11
Sample Date	Standard	03/21/2016	03/21/2016	10/18/2016	03/24/2015	03/24/2015	06/09/2015	09/15/2015	12/15/2015	03/21/2016	10/18/2016
Field Parameters											
Conductivity, Field (mS/cm)	-	**573**	-	**0.542**	**0.493**	-	**0.402**	**0.534**	**0.429**	**446**	**0.435**
Dissolved Oxygen, Field (mg/L)	-	**0.29**	-	**0.66**	**0.91**	-	**0.38**	**0.2**	**0.17**	**0.14**	**1.35**
ORP, Field (mV)	-	**79.1**	-	**111.7**	**19.7**	-	**-4.1**	**-27.8**	**-14**	**-41.9**	**-18.7**
pH, Field (s.u)	-	**6.62**	-	**6.44**	**6.19**	-	**6.21**	**6.11**	**5.95**	**6.3**	**6.21**
Temperature (Deg C)	-	**9.61**	-	**17.91**	**8.3**	-	**14.3**	**15.7**	**14.1**	**12.59**	**23.65**
Turbidity, Field (NTU)	-	**0.71**	-	**99.8**	**23.7**	-	**18.7**	**1.4**	**16.3**	**33.2**	**10.9**
Chloroform (Trichloromethane)	70	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Chloromethane (Methyl Chloride)	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F2	ND (1)	ND (1)	ND (1)
cis-1,2-Dichloroethene	70	**0.73 J**	**0.7 J**	**0.74 J**	**1.6**	**1.5**	**2.4**	**1.4**	**1.2**	**1.5**	**1.2**
cis-1,3-Dichloropropene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Cyclohexane	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)
Dibromochloromethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Dichlorodifluoromethane (CFC-12)	1000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Ethylbenzene	700	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Isopropylbenzene	700	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Volatile Organic Compounds (ug/L) (cont')											
Methyl acetate	7000	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Methyl cyclohexane	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)
Methyl Tert Butyl Ether	70	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Methylene chloride	3	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Styrene	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Tetrachloroethene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Toluene	600	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
trans-1,2-Dichloroethene	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
trans-1,3-Dichloropropene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Trichloroethene	1	**0.39 J**	**0.37 J**	**0.49 J**	**1.4** [A]	**1.5** [A]	**2.1** [A]	**1.1** [A]	**0.95 J**	**1.2** [A]	**0.84 J**
Trichlorofluoromethane (CFC-11)	2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Trifluorotrichloroethane (Freon 113)	20000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Vinyl chloride	1	ND (1)	ND (1)	**0.1 J**	**0.22 J**	**0.22 J**	**0.27 J**	ND (1)	ND (1)	**0.28 J**	**0.24 J**
Xylene (total)	1000	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)

Notes:
1. ND: Result is not detected above the indicated reporting limit.
   J: Estimated value
   B: Possible blank contamination
   E: Exceeds calibration limits
   F1: MS and/or MSD recovery exceeds the control limits.
   * - Recovery Exceeds control limits
2. Results in red exceed the following criteria:
   - Groundwater Quality Standards (GWQS)
3. Results in **bold** are detected.

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3A	MW-3A	MW-3A	MW-3A
Sample ID	Groundwater	MW03-032415-1021	MW03-060915-0842	MW03-091515-1146	MW03-121515-1152	MW03-302116-0847	MW03-101816-1031	MW3A-032415-1111	MW3A-060915-0952	1000-060915-0003	MW3A-091515-1246
Lab Sample ID	Quality	460-92177-8	460-96192-5	460-101265-6	460-106412-6	460-110804-4	460-122278-12	460-92177-9	460-96192-6	460-96192-9	460-101265-7
Sample Date	Standard	03/24/2015	06/09/2015	09/15/2015	12/15/2015	03/21/2016	10/18/2016	03/24/2015	06/09/2015	06/09/2015	09/15/2015
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.365**	**0.439**	**0.514**	**0.75**	**442**	**0.428**	**0.365**	**0.372**	-	**0.555**
Dissolved Oxygen, Field (mg/L)	-	**0.12**	**0.87**	**0.33**	**0.76**	**0.31**	**0.61**	**0.17**	**0.27**	-	**0.4**
ORP, Field (mV)	-	**2.7**	**204.7**	**39.7**	**4**	**114.2**	**68.3**	**-100.9**	**-18.3**	-	**-43.6**
pH, Field (s.u)	-	**6.47**	**6.08**	**6.08**	**6.41**	**6.41**	**6.23**	**6.5**	**6.17**	-	**6.28**
Temperature (Deg C)	-	**9.81**	**13**	**19.5**	**15.71**	**10.38**	**18.62**	**12.97**	**13.1**	-	**18.6**
Turbidity, Field (NTU)	-	**10.45**	**9.1**	**1.8**	**6.31**	**0.92**	**10.1**	**27.8**	**13.6**	-	**3**
Inorganic Compounds - Total (ug/L)											
Cyanide	100	ND (10) F1F2	ND (10)	ND (10)	**4.7 J**	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Antimony, Total	6	ND (2)	ND (2)	**0.81 J**	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	**0.84 J**
Arsenic, Total	3	ND (2)	ND (2)	ND (2)	**0.73 J**	**1 J**	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Barium, Total	6000	**60.4**	**61.8**	**57.6**	**78.4**	**56.4**	**77.7**	**194**	**183**	**172**	**171**
Beryllium, Total	1	ND (0.8)	**0.3 J**	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	**0.29 J**	**0.31 J**	ND (0.8)
Cadmium, Total	4	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Chromium, Total	70	ND (4)	**2.9 J**	ND (4)	**4.4**	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)
Chromium VI (Hexavalent), Total	NC	-	-	-	-	-	-	-	-	-	-
Cobalt, Total	100	**1.8 J**	**1.9 J**	ND (4)	**1.6 J**	ND (4)	**2.9 J**	ND (4)	**1.6 J**	ND (4)	**2.8 J**
Copper, Total	1300	ND (4)	**2 J**	ND (4)	**3.5 J**	ND (4)	ND (4)	**2.8 J**	**2.7 J**	**2 J**	**2.9 J**
Lead, Total	5	ND (1.2)	**0.57 J**	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)
Manganese, Total	50	**2840** [A]	**2960** [A]	**2840** [A]	**1140** [A]	**2760** [A]	**3630** [A]	**1540** [A]	**1810** [A]	**1700** [A]	**2100** [A]
Mercury, Total	2	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)
Nickel, Total	100	**15.2**	**16**	**13.6**	**16**	**14.1**	**16.6**	**11.8**	**9.9**	**7.5**	**21.7**
Selenium, Total	40	ND (10)	ND (10)	ND (10)	**1.3 J**	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Silver, Total	40	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Zinc, Total	2000	**55.5**	**39.6**	**8.7 J**	**217**	**34.7**	**184**	**8.5 J**	**9.1 J**	**7.1 J**	**12.5 J**
Inorganic Compounds - Dissolved (ug/L)											
Antimony, Dissolved	6	-	-	-	-	-	-	-	-	-	-
Arsenic, Dissolved	3	-	-	-	-	-	-	-	-	-	-
Barium, Dissolved	6000	-	-	-	-	-	-	-	-	-	-
Beryllium, Dissolved	1	-	-	-	-	-	-	-	-	-	-
Cadmium, Dissolved	4	-	-	-	-	-	-	-	-	-	-
Chromium, Dissolved	70	-	-	-	-	-	-	-	-	-	-
Cobalt, Dissolved	100	-	-	-	-	-	-	-	-	-	-
Copper, Dissolved	1300	-	-	-	-	-	-	-	-	-	-
Lead, Dissolved	5	-	-	-	-	-	-	-	-	-	-
Manganese, Dissolved	50	-	-	-	-	-	-	-	-	-	-
Mercury, Dissolved	2	-	-	-	-	-	-	-	-	-	-
Nickel, Dissolved	100	-	-	-	-	-	-	-	-	-	-
Selenium, Dissolved	40	-	-	-	-	-	-	-	-	-	-
Silver, Dissolved	40	-	-	-	-	-	-	-	-	-	-
Zinc, Dissolved	2000	-	-	-	-	-	-	-	-	-	-
PCBs (ug/L)											
Aroclor-1016 (PCB-1016)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4) *	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)
Aroclor-1221 (PCB-1221)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)
Aroclor-1232 (PCB-1232)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)
Aroclor-1242 (PCB-1242)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)
Aroclor-1248 (PCB-1248)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)
Aroclor-1254 (PCB-1254)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)
Aroclor-1260 (PCB-1260)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4) *	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)
Aroclor-1262 (PCB-1262)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)
Aroclor-1268 (PCB-1268)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)
Polychlorinated biphenyls (PCBs)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3A	MW-3A	MW-3A	MW-3A
Sample ID	Groundwater	MW03-032415-1021	MW03-060915-0842	MW03-091515-1146	MW03-121515-1152	MW03-302116-0847	MW03-101816-1031	MW3A-032415-1111	MW3A-060915-0952	1000-060915-0003	MW3A-091515-1246
Lab Sample ID	Quality	460-92177-8	460-96192-5	460-101265-6	460-106412-6	460-110804-4	460-122278-12	460-92177-9	460-96192-6	460-96192-9	460-101265-7
Sample Date	Standard	03/24/2015	06/09/2015	09/15/2015	12/15/2015	03/21/2016	10/18/2016	03/24/2015	06/09/2015	06/09/2015	09/15/2015
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.365**	**0.439**	**0.514**	**0.75**	**442**	**0.428**	**0.365**	**0.372**	-	**0.555**
Dissolved Oxygen, Field (mg/L)	-	**0.12**	**0.87**	**0.33**	**0.76**	**0.31**	**0.61**	**0.17**	**0.27**	-	**0.4**
ORP, Field (mV)	-	**2.7**	**204.7**	**39.7**	**4**	**114.2**	**68.3**	**-100.9**	**-18.3**	-	**-43.6**
pH, Field (s.u)	-	**6.47**	**6.08**	**6.08**	**6.41**	**6.41**	**6.23**	**6.5**	**6.17**	-	**6.28**
Temperature (Deg C)	-	**9.81**	**13**	**19.5**	**15.71**	**10.38**	**18.62**	**12.97**	**13.1**	-	**18.6**
Turbidity, Field (NTU)	-	**10.45**	**9.1**	**1.8**	**6.31**	**0.92**	**10.1**	**27.8**	**13.6**	-	**3**
Semi-Volatile Organic Compounds (ug/L)											
2,2'-oxybis(1-Chloropropane)	300	ND (11) F1	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
2,4,5-Trichlorophenol	700	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
2,4,6-Trichlorophenol	20	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
2,4-Dichlorophenol	20	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
2,4-Dimethylphenol	100	ND (11) F1	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
2,4-Dinitrophenol	40	ND (22)	ND (21)	ND (21)	ND (20)	ND (20)	ND (21)	ND (23)	ND (21)	ND (21)	ND (21)
2,4-Dinitrotoluene	10	ND (2.2)	ND (2.1)	ND (2.1)	ND (2)	ND (2)	ND (2.1)	ND (2.3)	ND (2.1)	ND (2.1)	ND (2.1)
2,6-Dinitrotoluene	10	ND (2.2)	ND (2.1)	ND (2.1)	ND (2)	ND (2)	ND (2.1)	ND (2.3)	ND (2.1)	ND (2.1)	ND (2.1)
2-Chloronaphthalene	600	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
2-Chlorophenol	40	ND (11) F1*	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11) *	ND (10)	ND (10)	ND (10)
2-Methylnaphthalene	30	ND (11) F1	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
2-Methylphenol	50	ND (11) F1*	ND (10) *	ND (10) *	ND (10)	ND (10)	ND (10) *	ND (11) *	ND (10) *	ND (10) *	ND (10) *
2-Nitroaniline	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
2-Nitrophenol	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
3,3'-Dichlorobenzidine	30	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
3-Nitroaniline	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
4,6-Dinitro-2-methylphenol	1	ND (22)	ND (21)	ND (21)	ND (20)	ND (20)	ND (21)	ND (23)	ND (21)	ND (21)	ND (21)
4-Bromophenyl phenyl ether	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
4-Chloro-3-methylphenol	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
4-Chloroaniline	30	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
4-Chlorophenyl phenyl ether	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
4-Methylphenol	50	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
4-Nitroaniline	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
4-Nitrophenol	100	ND (22) F2	ND (21)	ND (21)	ND (20)	ND (20)	ND (21)	ND (23)	ND (21)	ND (21)	ND (21)
Acenaphthene	400	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
Acenaphthylene	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
Acetophenone	700	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
Anthracene	2000	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
Atrazine	3	ND (2.2)	ND (2.1)	ND (2.1)	ND (2)	ND (2)	ND (2.1)	ND (2.3)	ND (2.1)	ND (2.1)	ND (2.1)
Benzaldehyde	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
Benzo(a)anthracene	0.1	ND (0.054)	ND (0.052)	ND (0.052)	ND (0.05)	ND (0.05) *	ND (0.052)	ND (0.057)	ND (0.052)	ND (0.052)	ND (0.052)
Benzo(a)pyrene	0.1	ND (0.054)	ND (0.052)	ND (0.052)	ND (0.05)	ND (0.05) *	ND (0.052)	ND (0.057)	ND (0.052)	ND (0.052)	ND (0.052)
Benzo(b)fluoranthene	0.2	ND (0.054)	ND (0.052)	ND (0.052)	ND (0.05)	ND (0.05) *	ND (0.052)	ND (0.057)	ND (0.052)	ND (0.052)	ND (0.052)
Benzo(g,h,i)perylene	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
Benzo(k)fluoranthene	0.5	ND (1.1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.1)	ND (1)	ND (1)	ND (1)
Biphenyl	400	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
bis(2-Chloroethoxy)methane	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
bis(2-Chloroethyl)ether	7	ND (1.1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.1)	ND (1)	ND (1)	ND (1)
bis(2-Ethylhexyl)phthalate	3	ND (2.2)	ND (2.1)	**5.8** [A]	ND (2)	ND (2)	ND (2.1)	ND (2.3)	ND (2.1)	**0.89 J**	**5.3** [A]
Butyl benzylphthalate	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
Caprolactam	5000	ND (11) F1	ND (10)	ND (10) *	ND (10) *	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10) *
Carbazole	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
Chrysene	5	ND (2.2)	ND (2.1)	ND (2.1)	ND (2)	ND (2)	ND (2.1)	ND (2.3)	ND (2.1)	ND (2.1)	ND (2.1)
Dibenz(a,h)anthracene	0.3	ND (1.1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.1)	ND (1)	ND (1)	ND (1)
Dibenzofuran	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
Diethyl phthalate	6000	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3A	MW-3A	MW-3A	MW-3A
Sample ID	Groundwater	MW03-032415-1021	MW03-060915-0842	MW03-091515-1146	MW03-121515-1152	MW03-302116-0847	MW03-101816-1031	MW3A-032415-1111	MW3A-060915-0952	1000-060915-0003	MW3A-091515-1246
Lab Sample ID	Quality	460-92177-8	460-96192-5	460-101265-6	460-106412-6	460-110804-4	460-122278-12	460-92177-9	460-96192-6	460-96192-9	460-101265-7
Sample Date	Standard	03/24/2015	06/09/2015	09/15/2015	12/15/2015	03/21/2016	10/18/2016	03/24/2015	06/09/2015	06/09/2015	09/15/2015
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.365**	**0.439**	**0.514**	**0.75**	**442**	**0.428**	**0.365**	**0.372**	-	**0.555**
Dissolved Oxygen, Field (mg/L)	-	**0.12**	**0.87**	**0.33**	**0.76**	**0.31**	**0.61**	**0.17**	**0.27**	-	**0.4**
ORP, Field (mV)	-	**2.7**	**204.7**	**39.7**	**4**	**114.2**	**68.3**	**-100.9**	**-18.3**	-	**-43.6**
pH, Field (s.u)	-	**6.47**	**6.08**	**6.08**	**6.41**	**6.41**	**6.23**	**6.5**	**6.17**	-	**6.28**
Temperature (Deg C)	-	**9.81**	**13**	**19.5**	**15.71**	**10.38**	**18.62**	**12.97**	**13.1**	-	**18.6**
Turbidity, Field (NTU)	-	**10.45**	**9.1**	**1.8**	**6.31**	**0.92**	**10.1**	**27.8**	**13.6**	-	**3**
Dimethyl phthalate	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
Di-n-butylphthalate	700	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
Di-n-octyl phthalate	100	ND (11) F1	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
Fluoranthene	300	ND (11) F1	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
Fluorene	300	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
Semi-Volatile Organic Compounds (ug/L) (con't)											
Hexachlorobenzene	0.02	ND (0.022)	ND (0.021)	ND (0.021)	ND (0.02)	ND (0.02) *	ND (0.021)	ND (0.023)	ND (0.021)	ND (0.021)	ND (0.021)
Hexachlorobutadiene	1	ND (1.1) F1*	ND (1) *	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1.1) *	ND (1) *	ND (1) *	ND (1)
Hexachlorocyclopentadiene	40	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
Hexachloroethane	7	ND (1.1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.1)	ND (1)	ND (1)	ND (1)
Indeno(1,2,3-cd)pyrene	0.2	ND (1.1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.1)	ND (1)	ND (1)	ND (1)
Isophorone	40	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
Naphthalene	300	ND (11) F1	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
Nitrobenzene	6	ND (1.1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.1)	ND (1)	ND (1)	ND (1)
N-Nitrosodi-n-propylamine	10	ND (1.1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.1)	ND (1)	ND (1)	ND (1)
N-Nitrosodiphenylamine	10	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
Pentachlorophenol	0.3	ND (0.22)	ND (0.21)	ND (0.21)	ND (0.2)	ND (0.2) *	**0.094 J**	ND (0.23)	ND (0.21)	ND (0.21)	ND (0.21)
Phenanthrene	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
Phenol	2000	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
Pyrene	200	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)
Volatile Organic Compounds (ug/L)											
1,1,1-Trichloroethane	30	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1,2,2-Tetrachloroethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1,2-Trichloroethane	3	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1-Dichloroethane	50	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.81 J**	**0.47 J**	**0.48 J**	**0.37 J**
1,1-Dichloroethene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2,4-Trichlorobenzene	9	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.29 J**	**3.1**	**1.3**	**1.3**	**1.3**
1,2-Dibromo-3-chloropropane (DBCP)	0.02	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dibromoethane (Ethylene Dibromide)	0.03	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dichlorobenzene	600	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.29 J**	ND (1)	**0.22 J**	**0.25 J**
1,2-Dichloroethane	2	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dichloropropane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,3-Dichlorobenzene	600	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.98 J**	**0.77 J**	**0.81 J**	**0.87 J**
1,4-Dichlorobenzene	75	**1**	ND (1)	ND (1)	ND (1)	**0.53 J**	**0.66 J**	**2.6**	**2.3**	**2.2**	**2.4**
1,4-Dioxane	0.4	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	300	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
2-Hexanone	300	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	100	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Acetone	6000	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	**6.5**	ND (5)	ND (5)	ND (5)	ND (5)
Benzene	1	**0.24 J**	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.11 J**	**0.1 J**	ND (1)
Bromodichloromethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Bromoform	4	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Bromomethane (Methyl Bromide)	10	ND (1) F1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Carbon disulfide	700	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Carbon tetrachloride	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Chlorobenzene	50	**0.93 J**	**1**	**1.2**	**0.75 J**	**0.99 J**	**1.5**	**1.1**	**1.5**	**1.6**	**1.4**
Chloroethane	5	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3A	MW-3A	MW-3A	MW-3A
Sample ID	Groundwater	MW03-032415-1021	MW03-060915-0842	MW03-091515-1146	MW03-121515-1152	MW03-302116-0847	MW03-101816-1031	MW3A-032415-1111	MW3A-060915-0952	1000-060915-0003	MW3A-091515-1246
Lab Sample ID	Quality	460-92177-8	460-96192-5	460-101265-6	460-106412-6	460-110804-4	460-122278-12	460-92177-9	460-96192-6	460-96192-9	460-101265-7
Sample Date	Standard	03/24/2015	06/09/2015	09/15/2015	12/15/2015	03/21/2016	10/18/2016	03/24/2015	06/09/2015	06/09/2015	09/15/2015
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.365**	**0.439**	**0.514**	**0.75**	**442**	**0.428**	**0.365**	**0.372**	-	**0.555**
Dissolved Oxygen, Field (mg/L)	-	**0.12**	**0.87**	**0.33**	**0.76**	**0.31**	**0.61**	**0.17**	**0.27**	-	**0.4**
ORP, Field (mV)	-	**2.7**	**204.7**	**39.7**	**4**	**114.2**	**68.3**	**-100.9**	**-18.3**	-	**-43.6**
pH, Field (s.u)	-	**6.47**	**6.08**	**6.08**	**6.41**	**6.41**	**6.23**	**6.5**	**6.17**	-	**6.28**
Temperature (Deg C)	-	**9.81**	**13**	**19.5**	**15.71**	**10.38**	**18.62**	**12.97**	**13.1**	-	**18.6**
Turbidity, Field (NTU)	-	**10.45**	**9.1**	**1.8**	**6.31**	**0.92**	**10.1**	**27.8**	**13.6**	-	**3**
Chloroform (Trichloromethane)	70	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Chloromethane (Methyl Chloride)	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
cis-1,2-Dichloroethene	70	**1.9**	**2**	**0.96 J**	**1.6**	**0.97 J**	**1**	**9.4**	**6.3**	**6.5**	**4.1**
cis-1,3-Dichloropropene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Cyclohexane	100	ND (1)	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Dibromochloromethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Dichlorodifluoromethane (CFC-12)	1000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Ethylbenzene	700	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Isopropylbenzene	700	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Volatile Organic Compounds (ug/L) (cont')											
Methyl acetate	7000	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Methyl cyclohexane	100	ND (1)	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Methyl Tert Butyl Ether	70	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.21 J**	ND (1)	**0.13 J**	ND (1)
Methylene chloride	3	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.41 J**	ND (1)	ND (1)	ND (1)
Styrene	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Tetrachloroethene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Toluene	600	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
trans-1,2-Dichloroethene	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
trans-1,3-Dichloropropene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Trichloroethene	1	**0.51 J**	**0.8 J**	**0.66 J**	**2.9** [A]	**0.35 J**	**0.4 J**	**8.6** [A]	**2.5** [A]	**2.3** [A]	**1.7** [A]
Trichlorofluoromethane (CFC-11)	2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Trifluorotrichloroethane (Freon 113)	20000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Vinyl chloride	1	**0.28 J**	**0.22 J**	**0.18 J**	ND (1)	**0.27 J**	**0.17 J**	ND (1)	**0.47 J**	**0.5 J**	**0.28 J**
Xylene (total)	1000	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)

Notes:
1. ND: Result is not detected above the indicated reporting limit.
   J: Estimated value
   B: Possible blank contamination
   E: Exceeds calibration limits
   F1: MS and/or MSD recovery exceeds the control limits.
   * - Recovery Exceeds control limits
2. Results in red exceed the following criteria:
   - Groundwater Quality Standards (GWQS)
3. Results in **bold** are detected.

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-3A	MW-3A	MW-3A	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4
Sample ID	Groundwater	MW3A-121515-1252	MW3A-302116-0936	MW3A-101816-0921	MW04-032415-1206	MW04-060915-1247	MW04-091515-0937	MW04-121515-0907	1000-121515-0003	MW04-302116-1347	MW04-101816-1016
Lab Sample ID	Quality	460-106412-7	460-110804-5	460-122278-13	460-92177-10	460-96192-7	460-101265-8	460-106412-8	460-106412-3	460-110804-14	460-122278-14
Sample Date	Standard	12/15/2015	03/21/2016	10/18/2016	03/24/2015	06/09/2015	09/15/2015	12/15/2015	12/15/2015	03/21/2016	10/18/2016
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.464**	**468**	**0.448**	**1.578**	**1.225**	**1.341**	**1.526**	-	**1.24**	**0.899**
Dissolved Oxygen, Field (mg/L)	-	**0.17**	**0.45**	**0.29**	**0.18**	**0.19**	**0.72**	**0.68**	-	**0.17**	**0.2**
ORP, Field (mV)	-	**-17.7**	**-25.9**	**-31.1**	**-86.4**	**-79.9**	**-88.4**	**-87.9**	-	**-307.6**	**-106.3**
pH, Field (s.u)	-	**6.08**	**6.49**	**6.3**	**6.79**	**6.9**	**6.84**	**6.55**	-	**7**	**6.76**
Temperature (Deg C)	-	**14.92**	**11.94**	**15.57**	**7.51**	**13.7**	**16.8**	**14.61**	-	**12.14**	**17.51**
Turbidity, Field (NTU)	-	**43.5**	**95.5**	**7.31**	**8.87**	**12.4**	**18.9**	**19.4**	-	**17.2**	**5.14**
Inorganic Compounds - Total (ug/L)											
Cyanide	100	ND (10)	ND (20)	ND (10)	ND (10)	ND (10)	**4.7 J**	**4.4 J**	**5.7 J**	ND (10)	**3.2 J**
Antimony, Total	6	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	**0.88 J**	**1.7 J**	**1.1 J**	ND (2)	ND (2)
Arsenic, Total	3	**0.9 J**	**1.3 J**	ND (2)	**1.8 J**	**2.7**	**2.9**	**18.9** [A]	**8.4** [A]	**4.1** [A]	**3**
Barium, Total	6000	**179**	**203**	**213**	**1020**	**1050**	**947**	**1150**	**964**	**548**	**647**
Beryllium, Total	1	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	**0.45 J**	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)
Cadmium, Total	4	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	**2.3**	ND (2)	ND (2)	ND (2)
Chromium, Total	70	**2.2 J**	**1.6 J**	**1.5 J**	**3.2 J**	**10**	**11.1**	**37.3**	**17.4**	ND (4)	**1.8 J**
Chromium VI (Hexavalent), Total	NC	-	-	-	-	-	-	-	-	-	-
Cobalt, Total	100	**4.6**	**2 J**	**3.1 J**	**1.8 J**	**4.5**	**4.5**	**15.5**	**7.1**	ND (4)	ND (4)
Copper, Total	1300	**5.5**	**3.5 J**	**5**	**6.7**	**23.4**	**7.9**	**211**	**87.1**	**2.7 J**	**3.1 J**
Lead, Total	5	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	**2.2**	**5**	**20.5** [A]	**7.7** [A]	ND (1.2)	ND (1.2)
Manganese, Total	50	**1940** [A]	**1710** [A]	**2030** [A]	**2220** [A]	**3100** [A]	**3450** [A]	**2350** [A]	**2360** [A]	**4180** [A]	**3960** [A]
Mercury, Total	2	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	**0.15 J**	ND (0.2)	**0.25**	ND (0.2)	ND (0.2)	ND (0.2)
Nickel, Total	100	**32.4**	**11.9**	**15.1**	**24.3**	**612** [A]	**584** [A]	**1370** [A]	**503** [A]	**18.6**	**10.4**
Selenium, Total	40	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (50)	ND (10)	ND (10)
Silver, Total	40	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Zinc, Total	2000	**13.6 J**	ND (16)	**9.3 J**	**132**	**8310** [A]	**8610 E** [A]	**11100** [A]	**266**	**80**	**45.2**
Inorganic Compounds - Dissolved (ug/L)											
Antimony, Dissolved	6	-	ND (2) F1	-	-	-	-	-	-	-	-
Arsenic, Dissolved	3	-	ND (2)	-	-	-	-	-	-	-	-
Barium, Dissolved	6000	-	**172**	-	-	-	-	-	-	-	-
Beryllium, Dissolved	1	-	ND (0.8)	-	-	-	-	-	-	-	-
Cadmium, Dissolved	4	-	ND (2)	-	-	-	-	-	-	-	-
Chromium, Dissolved	70	-	ND (4)	-	-	-	-	-	-	-	-
Cobalt, Dissolved	100	-	ND (4)	-	-	-	-	-	-	-	-
Copper, Dissolved	1300	-	ND (4)	-	-	-	-	-	-	-	-
Lead, Dissolved	5	-	ND (1.2)	-	-	-	-	-	-	-	-
Manganese, Dissolved	50	-	**1570** [A]	-	-	-	-	-	-	-	-
Mercury, Dissolved	2	-	ND (0.2)	-	-	-	-	-	-	-	-
Nickel, Dissolved	100	-	**4.4**	-	-	-	-	-	-	-	-
Selenium, Dissolved	40	-	ND (10)	-	-	-	-	-	-	-	-
Silver, Dissolved	40	-	ND (2) F1	-	-	-	-	-	-	-	-
Zinc, Dissolved	2000	-	ND (16)	-	-	-	-	-	-	-	-
PCBs (ug/L)											
Aroclor-1016 (PCB-1016)	0.5	ND (0.4)	ND (0.4)	ND (0.4) *	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4) *
Aroclor-1221 (PCB-1221)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4)
Aroclor-1232 (PCB-1232)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4)
Aroclor-1242 (PCB-1242)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4)
Aroclor-1248 (PCB-1248)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4)
Aroclor-1254 (PCB-1254)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4)
Aroclor-1260 (PCB-1260)	0.5	ND (0.4)	ND (0.4)	ND (0.4) *	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4) *
Aroclor-1262 (PCB-1262)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4)
Aroclor-1268 (PCB-1268)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4)
Polychlorinated biphenyls (PCBs)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-3A	MW-3A	MW-3A	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4
Sample ID	Groundwater	MW3A-121515-1252	MW3A-302116-0936	MW3A-101816-0921	MW04-032415-1206	MW04-060915-1247	MW04-091515-0937	MW04-121515-0907	1000-121515-0003	MW04-302116-1347	MW04-101816-1016
Lab Sample ID	Quality	460-106412-7	460-110804-5	460-122278-13	460-92177-10	460-96192-7	460-101265-8	460-106412-8	460-106412-3	460-110804-14	460-122278-14
Sample Date	Standard	12/15/2015	03/21/2016	10/18/2016	03/24/2015	06/09/2015	09/15/2015	12/15/2015	12/15/2015	03/21/2016	10/18/2016
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.464**	**468**	**0.448**	**1.578**	**1.225**	**1.341**	**1.526**	-	**1.24**	**0.899**
Dissolved Oxygen, Field (mg/L)	-	**0.17**	**0.45**	**0.29**	**0.18**	**0.19**	**0.72**	**0.68**	-	**0.17**	**0.2**
ORP, Field (mV)	-	**-17.7**	**-25.9**	**-31.1**	**-86.4**	**-79.9**	**-88.4**	**-87.9**	-	**-307.6**	**-106.3**
pH, Field (s.u)	-	**6.08**	**6.49**	**6.3**	**6.79**	**6.9**	**6.84**	**6.55**	-	**7**	**6.76**
Temperature (Deg C)	-	**14.92**	**11.94**	**15.57**	**7.51**	**13.7**	**16.8**	**14.61**	-	**12.14**	**17.51**
Turbidity, Field (NTU)	-	**43.5**	**95.5**	**7.31**	**8.87**	**12.4**	**18.9**	**19.4**	-	**17.2**	**5.14**
Semi-Volatile Organic Compounds (ug/L)											
2,2'-oxybis(1-Chloropropane)	300	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4,5-Trichlorophenol	700	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4,6-Trichlorophenol	20	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4-Dichlorophenol	20	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4-Dimethylphenol	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4-Dinitrophenol	40	ND (20)	ND (20)	ND (20)	ND (21)	ND (100)	ND (21)	ND (21)	ND (21)	ND (20)	ND (21)
2,4-Dinitrotoluene	10	ND (2)	ND (2)	ND (2)	ND (2.1)	ND (10)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2)	ND (2.1)
2,6-Dinitrotoluene	10	ND (2)	ND (2)	ND (2)	ND (2.1)	ND (10)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2)	ND (2.1)
2-Chloronaphthalene	600	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2-Chlorophenol	40	ND (10)	ND (10)	ND (10)	ND (10) *	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2-Methylnaphthalene	30	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	**2.3 J**	**1.5 J**	**1.5 J**	ND (10)	**0.98 J**
2-Methylphenol	50	ND (10)	ND (10)	ND (10) *	ND (10) *	ND (52) *	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10) *
2-Nitroaniline	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2-Nitrophenol	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
3,3'-Dichlorobenzidine	30	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
3-Nitroaniline	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4,6-Dinitro-2-methylphenol	1	ND (20)	ND (20)	ND (20)	ND (21)	ND (100)	ND (21)	ND (21)	ND (21)	ND (20)	ND (21)
4-Bromophenyl phenyl ether	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Chloro-3-methylphenol	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Chloroaniline	30	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Chlorophenyl phenyl ether	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Methylphenol	50	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Nitroaniline	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Nitrophenol	100	ND (20)	ND (20)	ND (20)	ND (21)	ND (100)	ND (21)	ND (21)	ND (21)	ND (20)	ND (21)
Acenaphthene	400	ND (10)	ND (10)	ND (10)	**5.2 J**	ND (52)	**5 J**	**3.2 J**	**3.1 J**	**4.7 J**	**6.2 J**
Acenaphthylene	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Acetophenone	700	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Anthracene	2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	**0.67 J**	ND (10)	ND (10)	ND (10)	ND (10)
Atrazine	3	ND (2)	ND (2)	ND (2)	ND (2.1)	ND (10)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2)	ND (2.1)
Benzaldehyde	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Benzo(a)anthracene	0.1	ND (0.05)	ND (0.05) *	ND (0.051)	ND (1)	ND (0.26)	**0.15** [A]	**0.11** [A]	**0.09**	ND (0.05) *	ND (0.052)
Benzo(a)pyrene	0.1	ND (0.05)	ND (0.05) *	ND (0.051)	ND (1)	ND (0.26)	**0.1**	**0.072**	**0.072**	ND (0.05) *	ND (0.052)
Benzo(b)fluoranthene	0.2	ND (0.05)	ND (0.05) *	ND (0.051)	ND (1)	**0.17 J**	**0.15**	**0.12**	**0.12**	ND (0.05) *	ND (0.052)
Benzo(g,h,i)perylene	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Benzo(k)fluoranthene	0.5	ND (1)	ND (1)	ND (1)	ND (1)	ND (5.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Biphenyl	400	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
bis(2-Chloroethoxy)methane	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
bis(2-Chloroethyl)ether	7	ND (1)	ND (1)	ND (1)	ND (1)	ND (5.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
bis(2-Ethylhexyl)phthalate	3	ND (2)	ND (2)	ND (2)	ND (2.1)	ND (10)	**9.4** [A]	ND (2.1)	**0.79 J**	ND (2)	ND (2.1)
Butyl benzylphthalate	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Caprolactam	5000	ND (10) *	ND (10)	ND (10)	ND (10)	ND (52)	ND (10) *	ND (10) *	ND (10) *	ND (10)	ND (10)
Carbazole	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Chrysene	5	ND (2)	ND (2)	ND (2)	ND (2.1)	ND (10)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2)	ND (2.1)
Dibenz(a,h)anthracene	0.3	ND (1)	ND (1)	ND (1)	ND (1)	ND (5.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Dibenzofuran	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	**0.89 J**	ND (10)	ND (10)	ND (10)	**1.3 J**
Diethyl phthalate	6000	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-3A	MW-3A	MW-3A	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4
Sample ID	Groundwater	MW3A-121515-1252	MW3A-302116-0936	MW3A-101816-0921	MW04-032415-1206	MW04-060915-1247	MW04-091515-0937	MW04-121515-0907	1000-121515-0003	MW04-302116-1347	MW04-101816-1016
Lab Sample ID	Quality	460-106412-7	460-110804-5	460-122278-13	460-92177-10	460-96192-7	460-101265-8	460-106412-8	460-106412-3	460-110804-14	460-122278-14
Sample Date	Standard	12/15/2015	03/21/2016	10/18/2016	03/24/2015	06/09/2015	09/15/2015	12/15/2015	12/15/2015	03/21/2016	10/18/2016
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.464**	**468**	**0.448**	**1.578**	**1.225**	**1.341**	**1.526**	-	**1.24**	**0.899**
Dissolved Oxygen, Field (mg/L)	-	**0.17**	**0.45**	**0.29**	**0.18**	**0.19**	**0.72**	**0.68**	-	**0.17**	**0.2**
ORP, Field (mV)	-	**-17.7**	**-25.9**	**-31.1**	**-86.4**	**-79.9**	**-88.4**	**-87.9**	-	**-307.6**	**-106.3**
pH, Field (s.u)	-	**6.08**	**6.49**	**6.3**	**6.79**	**6.9**	**6.84**	**6.55**	-	**7**	**6.76**
Temperature (Deg C)	-	**14.92**	**11.94**	**15.57**	**7.51**	**13.7**	**16.8**	**14.61**	-	**12.14**	**17.51**
Turbidity, Field (NTU)	-	**43.5**	**95.5**	**7.31**	**8.87**	**12.4**	**18.9**	**19.4**	-	**17.2**	**5.14**
Dimethyl phthalate	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Di-n-butylphthalate	700	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Di-n-octyl phthalate	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Fluoranthene	300	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Fluorene	300	ND (10)	ND (10)	ND (10)	**1.8 J**	ND (52)	**3 J**	**2.1 J**	**2.2 J**	**3.1 J**	**5.1 J**
Semi-Volatile Organic Compounds (ug/L) (con't)											
Hexachlorobenzene	0.02	ND (0.02)	ND (0.02) *	ND (0.02)	ND (0.021)	ND (0.1)	ND (0.021)	ND (0.021)	ND (0.021)	ND (0.02) *	ND (0.021)
Hexachlorobutadiene	1	ND (1) *	ND (1)	ND (1)	ND (1) *	ND (5.2) *	ND (1)	ND (1) *	ND (1) *	ND (1)	ND (1)
Hexachlorocyclopentadiene	40	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Hexachloroethane	7	ND (1)	ND (1)	ND (1)	ND (1)	ND (5.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Indeno(1,2,3-cd)pyrene	0.2	ND (1)	ND (1)	ND (1)	ND (1)	ND (5.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Isophorone	40	ND (10)	ND (10)	ND (10)	**2.3 J**	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Naphthalene	300	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Nitrobenzene	6	ND (1)	ND (1)	ND (1)	ND (1)	ND (5.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
N-Nitrosodi-n-propylamine	10	ND (1)	ND (1)	ND (1)	ND (1)	ND (5.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
N-Nitrosodiphenylamine	10	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Pentachlorophenol	0.3	ND (0.2)	ND (0.2) *	**0.1 J**	ND (0.21)	ND (1)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.2) *	**0.12 J**
Phenanthrene	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	**1.1 J**	**0.83 J**	ND (10)	ND (10)	**0.96 J**
Phenol	2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Pyrene	200	ND (10)	ND (10)	ND (10)	ND (10)	ND (52)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Volatile Organic Compounds (ug/L)											
1,1,1-Trichloroethane	30	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1,2,2-Tetrachloroethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1,2-Trichloroethane	3	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1-Dichloroethane	50	ND (1)	**0.61 J**	**0.35 J**	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1-Dichloroethene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2,4-Trichlorobenzene	9	**1**	**1.9**	**1.1**	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dibromo-3-chloropropane (DBCP)	0.02	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dibromoethane (Ethylene Dibromide)	0.03	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dichlorobenzene	600	ND (1)	**0.22 J**	ND (1)	**0.3 J**	**0.35 J**	**0.34 J**	**0.23 J**	ND (1)	**0.24 J**	**0.27 J**
1,2-Dichloroethane	2	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dichloropropane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,3-Dichlorobenzene	600	**0.69 J**	**0.84 J**	**0.66 J**	ND (1)	**0.34 J**	**0.48 J**	**0.35 J**	**0.44 J**	ND (1)	**0.35 J**
1,4-Dichlorobenzene	75	**2.1**	**2.3**	**1.9**	**3**	**3.4**	**4.4**	**3.4**	**3.7**	**2.2**	**3**
1,4-Dioxane	0.4	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	300	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
2-Hexanone	300	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	100	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Acetone	6000	ND (5)	ND (5)	**15**	**17**	**48**	**81**	**80**	**49**	**9.6**	ND (5)
Benzene	1	ND (1)	**0.12 J**	ND (1)	**6.1** [A]	**7.6** [A]	**8.3** [A]	**7.6** [A]	**7.8** [A]	**3.3** [A]	**3.3** [A]
Bromodichloromethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Bromoform	4	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Bromomethane (Methyl Bromide)	10	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Carbon disulfide	700	ND (1)	ND (1)	ND (1)	ND (1)	**0.54 J**	**0.45 J**	ND (1)	ND (1)	ND (1)	ND (1)
Carbon tetrachloride	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Chlorobenzene	50	**1.4**	**0.97 J**	**1.7**	**37**	**47**	**48**	**39**	**42**	**26**	**26**
Chloroethane	5	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-3A	MW-3A	MW-3A	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4
Sample ID	Groundwater	MW3A-121515-1252	MW3A-302116-0936	MW3A-101816-0921	MW04-032415-1206	MW04-060915-1247	MW04-091515-0937	MW04-121515-0907	1000-121515-0003	MW04-302116-1347	MW04-101816-1016
Lab Sample ID	Quality	460-106412-7	460-110804-5	460-122278-13	460-92177-10	460-96192-7	460-101265-8	460-106412-8	460-106412-3	460-110804-14	460-122278-14
Sample Date	Standard	12/15/2015	03/21/2016	10/18/2016	03/24/2015	06/09/2015	09/15/2015	12/15/2015	12/15/2015	03/21/2016	10/18/2016
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.464**	**468**	**0.448**	**1.578**	**1.225**	**1.341**	**1.526**	-	**1.24**	**0.899**
Dissolved Oxygen, Field (mg/L)	-	**0.17**	**0.45**	**0.29**	**0.18**	**0.19**	**0.72**	**0.68**	-	**0.17**	**0.2**
ORP, Field (mV)	-	**-17.7**	**-25.9**	**-31.1**	**-86.4**	**-79.9**	**-88.4**	**-87.9**	-	**-307.6**	**-106.3**
pH, Field (s.u)	-	**6.08**	**6.49**	**6.3**	**6.79**	**6.9**	**6.84**	**6.55**	-	**7**	**6.76**
Temperature (Deg C)	-	**14.92**	**11.94**	**15.57**	**7.51**	**13.7**	**16.8**	**14.61**	-	**12.14**	**17.51**
Turbidity, Field (NTU)	-	**43.5**	**95.5**	**7.31**	**8.87**	**12.4**	**18.9**	**19.4**	-	**17.2**	**5.14**
Chloroform (Trichloromethane)	70	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Chloromethane (Methyl Chloride)	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
cis-1,2-Dichloroethene	70	**3.8**	**7.1**	**3.3**	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
cis-1,3-Dichloropropene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Cyclohexane	100	ND (1) *	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) *	ND (1) *	ND (1)	ND (1)
Dibromochloromethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Dichlorodifluoromethane (CFC-12)	1000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Ethylbenzene	700	ND (1)	ND (1)	ND (1)	**0.93 J**	**3**	ND (1)	ND (1)	**0.3 J**	ND (1)	ND (1)
Isopropylbenzene	700	ND (1)	ND (1)	ND (1)	**2.4**	**3**	**4.3**	**3.1**	**3.2**	**1.3**	**1.7**
Volatile Organic Compounds (ug/L) (cont')											
Methyl acetate	7000	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Methyl cyclohexane	100	ND (1) *	ND (1)	ND (1)	**0.68 J**	**1.3**	**0.78 J**	ND (1) *	ND (1) *	**0.44 J**	**0.48 J**
Methyl Tert Butyl Ether	70	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Methylene chloride	3	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**5.5** [A]
Styrene	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Tetrachloroethene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Toluene	600	ND (1)	ND (1)	ND (1)	**0.97 J**	**0.78 J**	**0.32 J**	**0.96 J**	**1.1**	ND (1)	**0.26 J**
trans-1,2-Dichloroethene	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
trans-1,3-Dichloropropene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Trichloroethene	1	**1.9** [A]	**5.3** [A]	**1.6** [A]	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Trichlorofluoromethane (CFC-11)	2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Trifluorotrichloroethane (Freon 113)	20000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Vinyl chloride	1	ND (1)	**0.54 J**	**0.32 J**	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Xylene (total)	1000	ND (2)	ND (2)	ND (2)	**17**	**21**	ND (2)	**0.91 J**	**1.1 J**	**0.87 J**	ND (2)

Notes:
1. ND: Result is not detected above the indicated reporting limit.
   J: Estimated value
   B: Possible blank contamination
   E: Exceeds calibration limits
   F1: MS and/or MSD recovery exceeds the control limits.
   * - Recovery Exceeds control limits
2. Results in red exceed the following criteria:
   - Groundwater Quality Standards (GWQS)
3. Results in **bold** are detected.

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-4A	MW-4A	MW-4A	MW-4A	MW-4A	MW-4A	MW-4A	MW-5	MW-5	MW-5
Sample ID	Groundwater	MW4A-032415-1056	MW4A-060915-1132	MW4A-091515-1052	1000-091515-0003	MW4A-121515-1032	MW4A-302116-1247	MW4A-101816-0906	MW5-032415-1156	MW05-061015-1142	MW05-091515-1317
Lab Sample ID	Quality	460-92177-11	460-96192-8	460-101265-9	460-101265-3	460-106412-9	460-110804-13	460-122278-15	460-92177-12	460-96337-3	460-101265-10
Sample Date	Standard	03/24/2015	06/09/2015	09/15/2015	09/15/2015	12/15/2015	03/21/2016	10/18/2016	03/24/2015	06/10/2015	09/15/2015
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.662**	**0.573**	**0.577**	-	**0.554**	**0.615**	**0.459**	**1.096**	**1.145**	**1.443**
Dissolved Oxygen, Field (mg/L)	-	**0.34**	**0.41**	**0.36**	-	**0.54**	**0.21**	**0.32**	**0.13**	**0.13**	**0.15**
ORP, Field (mV)	-	**-42.7**	**-31.4**	**-31.6**	-	**77.9**	**-337.4**	**-106.3**	**-63.8**	**-62.3**	**-86.2**
pH, Field (s.u)	-	**6.57**	**6.32**	**6.71**	-	**6.37**	**6.64**	**6.59**	**6.61**	**6.43**	**6.89**
Temperature (Deg C)	-	**10.79**	**14.2**	**14.8**	-	**14.05**	**12.49**	**14.65**	**8.46**	**12.6**	**17**
Turbidity, Field (NTU)	-	**33.1**	**5.8**	**7.2**	-	**12.5**	**21.5**	**19.4**	**24.9**	**34.9**	**63.8**
Inorganic Compounds - Total (ug/L)											
Cyanide	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) F1	ND (10)	**3.6 JF1F2**	ND (10)	**21 B**	**5.5 J**
Antimony, Total	6	ND (2)	ND (2)	ND (2)	**1.2 J**	**2.4**	ND (2)	ND (5)	ND (2)	**4.4**	**14.7** [A]
Arsenic, Total	3	**2.4**	**3.9** [A]	**1.3 J**	**1.3 J**	**13.8** [A]	**1.5 J**	**4.4 J** [A]	**9** [A]	**92.8** [A]	**352** [A]
Barium, Total	6000	**148**	**133**	**135**	**139**	**136**	**130**	**145**	**1170**	**1530**	**2790**
Beryllium, Total	1	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	**0.32 J**	ND (0.8)	ND (2)	ND (0.8)	**0.42 J**	**2.3** [A]
Cadmium, Total	4	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (5)	ND (2)	**2.5**	**13** [A]
Chromium, Total	70	**21.1**	**17.1**	**11.6**	**12.4**	**112** [A]	**4**	**59.3**	**3.9 J**	**36.5**	**192** [A]
Chromium VI (Hexavalent), Total	NC	-	-	-	-	-	-	-	-	-	-
Cobalt, Total	100	**9.4**	**24.2**	**4**	**4.3**	**104** [A]	**4**	**11.4**	**2.2 J**	**25.4**	**90.4**
Copper, Total	1300	**15**	**39.4**	**6.8**	**8**	**308**	**10.9**	**124**	**19.6**	**362**	**2260** [A]
Lead, Total	5	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	**1.1 J**	ND (1.2)	ND (3)	**2.4**	**29** [A]	**148** [A]
Manganese, Total	50	**3410** [A]	**3260** [A]	**3700** [A]	**3800** [A]	**3370** [A]	**3700** [A]	**4030** [A]	**604** [A]	**893** [A]	**1290** [A]
Mercury, Total	2	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	**0.43**
Nickel, Total	100	**42.8**	**79.8**	**13.8**	**14.3**	**350** [A]	**8.2**	**36.4**	**141** [A]	**2300** [A]	**9540** [A]
Selenium, Total	40	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (25)	ND (10)	**0.8 J**	**3.1 J**
Silver, Total	40	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (5)	ND (2)	ND (2)	ND (2)
Zinc, Total	2000	**9.6 J**	**12.4 J**	ND (16)	ND (16)	**58.9**	ND (16)	ND (40)	**459**	**7990** [A]	**27100** [A]
Inorganic Compounds - Dissolved (ug/L)											
Antimony, Dissolved	6	-	-	-	-	-	ND (2)	-	-	-	-
Arsenic, Dissolved	3	-	-	-	-	-	**1.2 J**	-	-	-	-
Barium, Dissolved	6000	-	-	-	-	-	**135**	-	-	-	-
Beryllium, Dissolved	1	-	-	-	-	-	ND (0.8)	-	-	-	-
Cadmium, Dissolved	4	-	-	-	-	-	ND (2)	-	-	-	-
Chromium, Dissolved	70	-	-	-	-	-	**3.1 J**	-	-	-	-
Cobalt, Dissolved	100	-	-	-	-	-	**3.8 J**	-	-	-	-
Copper, Dissolved	1300	-	-	-	-	-	**7.6**	-	-	-	-
Lead, Dissolved	5	-	-	-	-	-	ND (1.2)	-	-	-	-
Manganese, Dissolved	50	-	-	-	-	-	**3550** [A]	-	-	-	-
Mercury, Dissolved	2	-	-	-	-	-	ND (0.2)	-	-	-	-
Nickel, Dissolved	100	-	-	-	-	-	**8.1**	-	-	-	-
Selenium, Dissolved	40	-	-	-	-	-	ND (10)	-	-	-	-
Silver, Dissolved	40	-	-	-	-	-	ND (2)	-	-	-	-
Zinc, Dissolved	2000	-	-	-	-	-	ND (16)	-	-	-	-
PCBs (ug/L)											
Aroclor-1016 (PCB-1016)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4) *	-	-	-
Aroclor-1221 (PCB-1221)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4)	-	-	-
Aroclor-1232 (PCB-1232)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4)	-	-	-
Aroclor-1242 (PCB-1242)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4)	-	-	-
Aroclor-1248 (PCB-1248)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4)	-	-	-
Aroclor-1254 (PCB-1254)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4)	-	-	-
Aroclor-1260 (PCB-1260)	0.5	ND (0.4)	ND (0.4) F1	ND (0.4)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4) *	-	-	-
Aroclor-1262 (PCB-1262)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4)	-	-	-
Aroclor-1268 (PCB-1268)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4)	-	-	-
Polychlorinated biphenyls (PCBs)	0.5	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.41)	ND (0.4)	ND (0.4)	-	-	-

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-4A	MW-4A	MW-4A	MW-4A	MW-4A	MW-4A	MW-4A	MW-5	MW-5	MW-5
Sample ID	Groundwater	MW4A-032415-1056	MW4A-060915-1132	MW4A-091515-1052	1000-091515-0003	MW4A-121515-1032	MW4A-302116-1247	MW4A-101816-0906	MW5-032415-1156	MW05-061015-1142	MW05-091515-1317
Lab Sample ID	Quality	460-92177-11	460-96192-8	460-101265-9	460-101265-3	460-106412-9	460-110804-13	460-122278-15	460-92177-12	460-96337-3	460-101265-10
Sample Date	Standard	03/24/2015	06/09/2015	09/15/2015	09/15/2015	12/15/2015	03/21/2016	10/18/2016	03/24/2015	06/10/2015	09/15/2015
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.662**	**0.573**	**0.577**	-	**0.554**	**0.615**	**0.459**	**1.096**	**1.145**	**1.443**
Dissolved Oxygen, Field (mg/L)	-	**0.34**	**0.41**	**0.36**	-	**0.54**	**0.21**	**0.32**	**0.13**	**0.13**	**0.15**
ORP, Field (mV)	-	**-42.7**	**-31.4**	**-31.6**	-	**77.9**	**-337.4**	**-106.3**	**-63.8**	**-62.3**	**-86.2**
pH, Field (s.u)	-	**6.57**	**6.32**	**6.71**	-	**6.37**	**6.64**	**6.59**	**6.61**	**6.43**	**6.89**
Temperature (Deg C)	-	**10.79**	**14.2**	**14.8**	-	**14.05**	**12.49**	**14.65**	**8.46**	**12.6**	**17**
Turbidity, Field (NTU)	-	**33.1**	**5.8**	**7.2**	-	**12.5**	**21.5**	**19.4**	**24.9**	**34.9**	**63.8**
Semi-Volatile Organic Compounds (ug/L)											
2,2'-oxybis(1-Chloropropane)	300	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
2,4,5-Trichlorophenol	700	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
2,4,6-Trichlorophenol	20	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
2,4-Dichlorophenol	20	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
2,4-Dimethylphenol	100	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
2,4-Dinitrophenol	40	ND (21)	ND (21)	ND (21)	ND (21)	ND (21)	ND (20)	ND (21)	ND (23)	ND (21)	ND (21)
2,4-Dinitrotoluene	10	ND (2.1)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2)	ND (2.1)	ND (2.3)	ND (2.1)	ND (2.1)
2,6-Dinitrotoluene	10	ND (2.1)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2.1) F1	ND (2)	ND (2.1)	ND (2.3)	ND (2.1)	ND (2.1)
2-Chloronaphthalene	600	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
2-Chlorophenol	40	ND (10) *	ND (10) F1	ND (10)	ND (10)	ND (10) F1	ND (10)	ND (10) F1	ND (11) *	ND (10)	ND (10)
2-Methylnaphthalene	30	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (11)	**2.9 J**	**2 J**
2-Methylphenol	50	ND (10) *	ND (10) F1*	ND (10) *	ND (10) *	ND (10) F1	ND (10)	ND (10) F1*	ND (11) *	ND (10)	ND (10) *
2-Nitroaniline	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
2-Nitrophenol	100	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
3,3'-Dichlorobenzidine	30	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) F1	ND (11)	ND (10)	ND (10)
3-Nitroaniline	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
4,6-Dinitro-2-methylphenol	1	ND (21)	ND (21)	ND (21)	ND (21)	ND (21)	ND (20)	ND (21)	ND (23)	ND (21)	ND (21)
4-Bromophenyl phenyl ether	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
4-Chloro-3-methylphenol	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
4-Chloroaniline	30	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
4-Chlorophenyl phenyl ether	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
4-Methylphenol	50	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
4-Nitroaniline	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
4-Nitrophenol	100	ND (21)	ND (21)	ND (21)	ND (21)	ND (21) F1	ND (20)	ND (21)	ND (23)	ND (21)	ND (21)
Acenaphthene	400	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (11)	**2.8 J**	**3.4 J**
Acenaphthylene	100	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
Acetophenone	700	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (11)	**1.7 J**	ND (10)
Anthracene	2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
Atrazine	3	ND (2.1)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2)	ND (2.1) F1	ND (2.3)	ND (2.1)	ND (2.1)
Benzaldehyde	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	**3.7 J**	**1.2 J**
Benzo(a)anthracene	0.1	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.05) *	ND (0.052)	ND (0.057)	ND (0.052)	**0.13** [A]
Benzo(a)pyrene	0.1	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.05) *	ND (0.052)	ND (0.057)	**0.35** [A]	**0.22** [A]
Benzo(b)fluoranthene	0.2	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.05) *	ND (0.052)	ND (0.057)	**0.36** [A]	**0.24** [A]
Benzo(g,h,i)perylene	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
Benzo(k)fluoranthene	0.5	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F1	ND (1)	ND (1)	ND (1.1)	ND (1)	ND (1)
Biphenyl	400	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
bis(2-Chloroethoxy)methane	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
bis(2-Chloroethyl)ether	7	ND (1)	ND (1) F1	ND (1)	ND (1)	ND (1) F1	ND (1)	ND (1)	ND (1.1)	ND (1)	ND (1)
bis(2-Ethylhexyl)phthalate	3	ND (2.1)	**1.3 J**	**6.5** [A]	**4.9** [A]	ND (2.1)	ND (2)	ND (2.1)	ND (2.3)	**1.8 J**	**8.4** [A]
Butyl benzylphthalate	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
Caprolactam	5000	ND (10)	ND (10) F1	ND (10) *	ND (10) *	ND (10) *F1	ND (10)	ND (10)	ND (11)	ND (10)	ND (10) *
Carbazole	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
Chrysene	5	ND (2.1)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2)	ND (2.1)	ND (2.3)	ND (2.1)	ND (2.1)
Dibenz(a,h)anthracene	0.3	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.1)	ND (1)	ND (1)
Dibenzofuran	100	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (11)	ND (10)	**1.1 J**
Diethyl phthalate	6000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-4A	MW-4A	MW-4A	MW-4A	MW-4A	MW-4A	MW-4A	MW-5	MW-5	MW-5
Sample ID	Groundwater	MW4A-032415-1056	MW4A-060915-1132	MW4A-091515-1052	1000-091515-0003	MW4A-121515-1032	MW4A-302116-1247	MW4A-101816-0906	MW5-032415-1156	MW05-061015-1142	MW05-091515-1317
Lab Sample ID	Quality	460-92177-11	460-96192-8	460-101265-9	460-101265-3	460-106412-9	460-110804-13	460-122278-15	460-92177-12	460-96337-3	460-101265-10
Sample Date	Standard	03/24/2015	06/09/2015	09/15/2015	09/15/2015	12/15/2015	03/21/2016	10/18/2016	03/24/2015	06/10/2015	09/15/2015
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.662**	**0.573**	**0.577**	-	**0.554**	**0.615**	**0.459**	**1.096**	**1.145**	**1.443**
Dissolved Oxygen, Field (mg/L)	-	**0.34**	**0.41**	**0.36**	-	**0.54**	**0.21**	**0.32**	**0.13**	**0.13**	**0.15**
ORP, Field (mV)	-	**-42.7**	**-31.4**	**-31.6**	-	**77.9**	**-337.4**	**-106.3**	**-63.8**	**-62.3**	**-86.2**
pH, Field (s.u)	-	**6.57**	**6.32**	**6.71**	-	**6.37**	**6.64**	**6.59**	**6.61**	**6.43**	**6.89**
Temperature (Deg C)	-	**10.79**	**14.2**	**14.8**	-	**14.05**	**12.49**	**14.65**	**8.46**	**12.6**	**17**
Turbidity, Field (NTU)	-	**33.1**	**5.8**	**7.2**	-	**12.5**	**21.5**	**19.4**	**24.9**	**34.9**	**63.8**
Dimethyl phthalate	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
Di-n-butylphthalate	700	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
Di-n-octyl phthalate	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
Fluoranthene	300	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (11)	ND (10)	**0.88 J**
Fluorene	300	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (11)	**2.3 J**	**2.7 J**
Semi-Volatile Organic Compounds (ug/L) (con't)											
Hexachlorobenzene	0.02	ND (0.021)	ND (0.021)	ND (0.021)	ND (0.021)	ND (0.021)	ND (0.02) *	ND (0.021)	ND (0.023)	ND (0.021)	ND (0.021)
Hexachlorobutadiene	1	ND (1) *	ND (1) F1*	ND (1)	ND (1)	ND (1) F1*	ND (1)	ND (1)	ND (1.1) *	ND (1) *	ND (1)
Hexachlorocyclopentadiene	40	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
Hexachloroethane	7	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.1)	ND (1)	ND (1)
Indeno(1,2,3-cd)pyrene	0.2	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F1	ND (1.1)	ND (1)	ND (1)
Isophorone	40	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
Naphthalene	300	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (11)	**3.1 J**	**1.2 J**
Nitrobenzene	6	ND (1)	ND (1) F1	ND (1)	ND (1)	ND (1) F1	ND (1)	ND (1)	ND (1.1)	ND (1)	ND (1)
N-Nitrosodi-n-propylamine	10	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F1	ND (1)	ND (1)	ND (1.1)	ND (1)	ND (1)
N-Nitrosodiphenylamine	10	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
Pentachlorophenol	0.3	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.2) *	**0.11 J**	ND (0.23)	ND (0.21)	ND (0.21)
Phenanthrene	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	**1.9 J**	**2 J**
Phenol	2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)
Pyrene	200	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) F1	ND (10)	ND (10)	ND (11)	ND (10) *	**1.2 J**
Volatile Organic Compounds (ug/L)											
1,1,1-Trichloroethane	30	ND (1)	ND (1) F1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1,2,2-Tetrachloroethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1,2-Trichloroethane	3	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1-Dichloroethane	50	**0.28 J**	**0.47 J**	**0.26 J**	**0.28 J**	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1-Dichloroethene	1	ND (1)	ND (1) F1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2,4-Trichlorobenzene	9	**0.33 J**	**0.41 J**	**0.33 J**	**0.36 J**	**0.37 J**	ND (1)	**0.32 J**	ND (1)	ND (1)	ND (1)
1,2-Dibromo-3-chloropropane (DBCP)	0.02	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dibromoethane (Ethylene Dibromide)	0.03	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dichlorobenzene	600	**0.23 J**	**0.28 J**	**0.32 J**	**0.31 J**	**0.29 J**	**0.25 J**	**0.25 J**	ND (1)	**0.31 J**	**0.28 J**
1,2-Dichloroethane	2	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dichloropropane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,3-Dichlorobenzene	600	**1**	**1.2**	**1.3**	**1.3**	**1.1**	**0.92 J**	**1.2**	**2.1**	**2.7**	**2.6**
1,4-Dichlorobenzene	75	**3.8**	**4.1**	**4.4**	**4.6**	**3.8**	**3.4**	**3.8**	**8**	**11**	**11**
1,4-Dioxane	0.4	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	300	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	**3.3 J**
2-Hexanone	300	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	100	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Acetone	6000	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	**32**	**22**	**670**
Benzene	1	**0.31 J**	**0.36 J**	**0.34 J**	**0.32 J**	**0.36 J**	**0.25 J**	**0.25 J**	**13** [A]	**16** [A]	**15** [A]
Bromodichloromethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Bromoform	4	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F1	ND (1)	ND (1)	ND (1)
Bromomethane (Methyl Bromide)	10	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Carbon disulfide	700	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.65 J**	**1.2**
Carbon tetrachloride	1	ND (1)	ND (1) F1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Chlorobenzene	50	**2.8**	**3.3**	**3**	**3**	**3.2**	**2.6**	**2.4**	**40**	**51** [A]	**41**
Chloroethane	5	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-4A	MW-4A	MW-4A	MW-4A	MW-4A	MW-4A	MW-4A	MW-5	MW-5	MW-5
Sample ID	Groundwater	MW4A-032415-1056	MW4A-060915-1132	MW4A-091515-1052	1000-091515-0003	MW4A-121515-1032	MW4A-302116-1247	MW4A-101816-0906	MW5-032415-1156	MW05-061015-1142	MW05-091515-1317
Lab Sample ID	Quality	460-92177-11	460-96192-8	460-101265-9	460-101265-3	460-106412-9	460-110804-13	460-122278-15	460-92177-12	460-96337-3	460-101265-10
Sample Date	Standard	03/24/2015	06/09/2015	09/15/2015	09/15/2015	12/15/2015	03/21/2016	10/18/2016	03/24/2015	06/10/2015	09/15/2015
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.662**	**0.573**	**0.577**	-	**0.554**	**0.615**	**0.459**	**1.096**	**1.145**	**1.443**
Dissolved Oxygen, Field (mg/L)	-	**0.34**	**0.41**	**0.36**	-	**0.54**	**0.21**	**0.32**	**0.13**	**0.13**	**0.15**
ORP, Field (mV)	-	**-42.7**	**-31.4**	**-31.6**	-	**77.9**	**-337.4**	**-106.3**	**-63.8**	**-62.3**	**-86.2**
pH, Field (s.u)	-	**6.57**	**6.32**	**6.71**	-	**6.37**	**6.64**	**6.59**	**6.61**	**6.43**	**6.89**
Temperature (Deg C)	-	**10.79**	**14.2**	**14.8**	-	**14.05**	**12.49**	**14.65**	**8.46**	**12.6**	**17**
Turbidity, Field (NTU)	-	**33.1**	**5.8**	**7.2**	-	**12.5**	**21.5**	**19.4**	**24.9**	**34.9**	**63.8**
Chloroform (Trichloromethane)	70	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Chloromethane (Methyl Chloride)	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
cis-1,2-Dichloroethene	70	**2.3**	**3.7**	**2.7**	**2.7**	**1.6**	**1.8**	**2.3**	ND (1)	ND (1)	ND (1)
cis-1,3-Dichloropropene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Cyclohexane	100	ND (1)	ND (1) F1	ND (1)	ND (1)	ND (1) F1*	ND (1)	ND (1)	**0.47 J**	**0.64 J**	**0.49 J**
Dibromochloromethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Dichlorodifluoromethane (CFC-12)	1000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Ethylbenzene	700	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**3.1**	**5.4**	**0.72 J**
Isopropylbenzene	700	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**11**	**27**	**27**
Volatile Organic Compounds (ug/L) (cont')											
Methyl acetate	7000	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Methyl cyclohexane	100	ND (1)	ND (1) F1	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)	**1.5**	**2.3**	**1.6**
Methyl Tert Butyl Ether	70	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Methylene chloride	3	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**1.8**	**0.4 J**	ND (1)	ND (1)
Styrene	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Tetrachloroethene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Toluene	600	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**1.1**	**2.6**	**1.9**
trans-1,2-Dichloroethene	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
trans-1,3-Dichloropropene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Trichloroethene	1	**0.42 J**	**0.76 JF1**	**0.46 J**	**0.36 J**	ND (1)	**0.36 J**	**0.33 J**	ND (1)	ND (1)	ND (1)
Trichlorofluoromethane (CFC-11)	2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Trifluorotrichloroethane (Freon 113)	20000	ND (1)	ND (1) F1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Vinyl chloride	1	ND (1)	**0.47 J**	**0.44 J**	**0.41 J**	**0.21 J**	**0.32 J**	**0.33 J**	ND (1)	ND (1)	ND (1)
Xylene (total)	1000	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	**5.1**	**5.4**	**2.2**

Notes:
1. ND: Result is not detected above the indicated reporting limit.
   J: Estimated value
   B: Possible blank contamination
   E: Exceeds calibration limits
   F1: MS and/or MSD recovery exceeds the control limits.
   * - Recovery Exceeds control limits
2. Results in red exceed the following criteria:
   - Groundwater Quality Standards (GWQS)
3. Results in **bold** are detected.

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-5	MW-5	MW-5	MW-5A	MW-5A	MW-5A	MW-5A	MW-5A	MW-5A	MW-6
Sample ID	Groundwater	MW05-121615-1027	MW05-032216-0826	MW05-101816-1246	MW5A-032515-0856	MW5A-061015-1243	MW05A-091515-1423	MW5A-121615-1342	MW5A-032216-0917	MW5A-101816-1341	MW06-032515-0951
Lab Sample ID	Quality	460-106433-15	460-110957-7	460-122278-16	460-92212-4	460-96337-4	460-101265-11	460-106433-16	460-110957-8	460-122278-17	460-92212-5
Sample Date	Standard	12/16/2015	03/22/2016	10/18/2016	03/25/2015	06/10/2015	09/15/2015	12/16/2015	03/22/2016	10/18/2016	03/25/2015
Field Parameters											
Conductivity, Field (mS/cm)	-	**1.329**	**1.44**	**0.997**	**0.699**	**0.607**	**0.669**	**0.578**	**0.712**	**0.504**	**0.421**
Dissolved Oxygen, Field (mg/L)	-	**0.19**	**0.25**	**0.2**	**0.22**	**0.19**	**0.28**	**0.27**	**0.22**	**0.15**	**0.21**
ORP, Field (mV)	-	**-118.3**	**-84.1**	**-86.4**	**-110.8**	**-67.5**	**-57.1**	**-36.2**	**-58.6**	**-88.7**	**35.8**
pH, Field (s.u)	-	**6.64**	**6.58**	**6.68**	**6.88**	**6.71**	**7**	**6.76**	**6.77**	**6.78**	**6.87**
Temperature (Deg C)	-	**13.95**	**10.2**	**19.24**	**12.43**	**12.2**	**15**	**13.68**	**11.88**	**15.38**	**9.56**
Turbidity, Field (NTU)	-	**40.2**	**4.96**	**9.73**	**21.9**	**9.7**	**11.3**	**7.32**	**29.1**	**39.6**	**12.8**
Inorganic Compounds - Total (ug/L)											
Cyanide	100	**7.1 J**	ND (10)	**3 J**	ND (10)	**7 JB**	ND (10)	ND (10)	ND (10)	**3.2 J**	ND (10)
Antimony, Total	6	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	**1.2 J**	ND (2)
Arsenic, Total	3	**23.4** [A]	**2.9**	**3.2** [A]	**3.4** [A]	**6** [A]	**3.4** [A]	**6.8** [A]	**2.8**	**7.5** [A]	**1.5 J**
Barium, Total	6000	**1790**	**1130**	**1260**	**633**	**486**	**408**	**499**	**523**	**532**	**422**
Beryllium, Total	1	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	**0.24 J**	ND (0.8)
Cadmium, Total	4	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	**1.8 J**
Chromium, Total	70	**11.4**	**3 J**	**5.7**	**4.4**	**13.6**	**8.5**	**22**	**7.1**	**37.3**	ND (4)
Chromium VI (Hexavalent), Total	NC	-	-	-	-	-	-	-	-	-	-
Cobalt, Total	100	**8.9**	**1.5 J**	**2.1 J**	**7.2**	**20.4**	**13.6**	**41.5**	**9.2**	**21.1**	ND (4)
Copper, Total	1300	**54.2**	ND (4)	**9.6**	**8.7**	**26.1**	**13.2**	**15.3**	**7.1**	**121**	**59.9**
Lead, Total	5	**6.6** [A]	ND (1.2)	**1 J**	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	**0.58 J**	**0.82 J**
Manganese, Total	50	**733** [A]	**1090** [A]	**969** [A]	**6660** [A]	**6210** [A]	**5620** [A]	**6620** [A]	**6020** [A]	**6970** [A]	**216** [A]
Mercury, Total	2	**0.18 J**	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)
Nickel, Total	100	**1110** [A]	**33.4**	**44.9**	**17.1**	**46.1**	**28.1**	**97.6**	**20.5**	**52.3**	**208** [A]
Selenium, Total	40	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Silver, Total	40	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Zinc, Total	2000	**2670** [A]	**12 J**	**69.9**	**7.1 J**	**42.7**	ND (16)	**17.6**	ND (16)	**134**	**2490** [A]
Inorganic Compounds - Dissolved (ug/L)											
Antimony, Dissolved	6	-	-	-	-	-	-	-	ND (2)	-	-
Arsenic, Dissolved	3	-	-	-	-	-	-	-	**1.3 J**	-	-
Barium, Dissolved	6000	-	-	-	-	-	-	-	**504**	-	-
Beryllium, Dissolved	1	-	-	-	-	-	-	-	ND (0.8)	-	-
Cadmium, Dissolved	4	-	-	-	-	-	-	-	ND (2)	-	-
Chromium, Dissolved	70	-	-	-	-	-	-	-	ND (4)	-	-
Cobalt, Dissolved	100	-	-	-	-	-	-	-	**1.7 J**	-	-
Copper, Dissolved	1300	-	-	-	-	-	-	-	ND (4)	-	-
Lead, Dissolved	5	-	-	-	-	-	-	-	ND (1.2)	-	-
Manganese, Dissolved	50	-	-	-	-	-	-	-	**5500** [A]	-	-
Mercury, Dissolved	2	-	-	-	-	-	-	-	ND (0.2)	-	-
Nickel, Dissolved	100	-	-	-	-	-	-	-	**3.7 J**	-	-
Selenium, Dissolved	40	-	-	-	-	-	-	-	ND (10)	-	-
Silver, Dissolved	40	-	-	-	-	-	-	-	ND (2)	-	-
Zinc, Dissolved	2000	-	-	-	-	-	-	-	ND (16)	-	-
PCBs (ug/L)											
Aroclor-1016 (PCB-1016)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1262 (PCB-1262)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1268 (PCB-1268)	0.5	-	-	-	-	-	-	-	-	-	-
Polychlorinated biphenyls (PCBs)	0.5	-	-	-	-	-	-	-	-	-	-

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-5	MW-5	MW-5	MW-5A	MW-5A	MW-5A	MW-5A	MW-5A	MW-5A	MW-6
Sample ID	Groundwater	MW05-121615-1027	MW05-032216-0826	MW05-101816-1246	MW5A-032515-0856	MW5A-061015-1243	MW05A-091515-1423	MW5A-121615-1342	MW5A-032216-0917	MW5A-101816-1341	MW06-032515-0951
Lab Sample ID	Quality	460-106433-15	460-110957-7	460-122278-16	460-92212-4	460-96337-4	460-101265-11	460-106433-16	460-110957-8	460-122278-17	460-92212-5
Sample Date	Standard	12/16/2015	03/22/2016	10/18/2016	03/25/2015	06/10/2015	09/15/2015	12/16/2015	03/22/2016	10/18/2016	03/25/2015
Field Parameters											
Conductivity, Field (mS/cm)	-	**1.329**	**1.44**	**0.997**	**0.699**	**0.607**	**0.669**	**0.578**	**0.712**	**0.504**	**0.421**
Dissolved Oxygen, Field (mg/L)	-	**0.19**	**0.25**	**0.2**	**0.22**	**0.19**	**0.28**	**0.27**	**0.22**	**0.15**	**0.21**
ORP, Field (mV)	-	**-118.3**	**-84.1**	**-86.4**	**-110.8**	**-67.5**	**-57.1**	**-36.2**	**-58.6**	**-88.7**	**35.8**
pH, Field (s.u)	-	**6.64**	**6.58**	**6.68**	**6.88**	**6.71**	**7**	**6.76**	**6.77**	**6.78**	**6.87**
Temperature (Deg C)	-	**13.95**	**10.2**	**19.24**	**12.43**	**12.2**	**15**	**13.68**	**11.88**	**15.38**	**9.56**
Turbidity, Field (NTU)	-	**40.2**	**4.96**	**9.73**	**21.9**	**9.7**	**11.3**	**7.32**	**29.1**	**39.6**	**12.8**
Semi-Volatile Organic Compounds (ug/L)											
2,2'-oxybis(1-Chloropropane)	300	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4,5-Trichlorophenol	700	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4,6-Trichlorophenol	20	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *
2,4-Dichlorophenol	20	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4-Dimethylphenol	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4-Dinitrophenol	40	ND (20)	ND (21)	ND (21)	ND (21)	ND (21)	ND (21)	ND (20)	ND (20)	ND (21)	ND (21)
2,4-Dinitrotoluene	10	ND (2)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2)	ND (2)	ND (2.1)	ND (2.1)
2,6-Dinitrotoluene	10	ND (2)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2)	ND (2)	ND (2.1)	ND (2.1)
2-Chloronaphthalene	600	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2-Chlorophenol	40	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)	ND (10)
2-Methylnaphthalene	30	**1.7 J**	**2.6 J**	**3.6 J**	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2-Methylphenol	50	ND (10) *	ND (10) *	ND (10) *	ND (10)	ND (10)	ND (10) *	ND (10) *	ND (10) *	ND (10) *	ND (10)
2-Nitroaniline	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2-Nitrophenol	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
3,3'-Dichlorobenzidine	30	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
3-Nitroaniline	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4,6-Dinitro-2-methylphenol	1	ND (20)	ND (21)	ND (21)	ND (21)	ND (21)	ND (21)	ND (20)	ND (20)	ND (21)	ND (21)
4-Bromophenyl phenyl ether	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Chloro-3-methylphenol	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Chloroaniline	30	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Chlorophenyl phenyl ether	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Methylphenol	50	ND (10)	ND (10)	**1.1 J**	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Nitroaniline	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Nitrophenol	100	ND (20)	ND (21)	ND (21)	ND (21)	ND (21)	ND (21)	ND (20)	ND (20)	ND (21)	ND (21)
Acenaphthene	400	**2 J**	**4.5 J**	**6.4 J**	ND (10)	ND (10)	ND (10)	**1.2 J**	**1.2 J**	ND (10)	ND (10)
Acenaphthylene	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Acetophenone	700	ND (10)	ND (10)	**1.4 J**	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Anthracene	2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Atrazine	3	ND (2)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2)	ND (2)	ND (2.1)	ND (2.1)
Benzaldehyde	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Benzo(a)anthracene	0.1	ND (0.05)	ND (0.26)	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.05)	ND (0.05)	**0.068**	ND (0.052)
Benzo(a)pyrene	0.1	**0.036 J**	ND (0.26)	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.05)	ND (0.05)	ND (0.052)	ND (0.052)
Benzo(b)fluoranthene	0.2	**0.049 J**	ND (0.26) *	**0.019 J**	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.05)	ND (0.05) *	**0.035 J**	ND (0.052)
Benzo(g,h,i)perylene	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Benzo(k)fluoranthene	0.5	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Biphenyl	400	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
bis(2-Chloroethoxy)methane	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
bis(2-Chloroethyl)ether	7	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
bis(2-Ethylhexyl)phthalate	3	ND (2)	ND (2.1)	ND (2.1)	ND (2.1)	7.4 [A]	5.4 [A]	ND (2)	ND (2)	ND (2.1)	ND (2.1)
Butyl benzylphthalate	100	ND (10)	ND (10)	ND (10)	ND (10)	**5.1 J**	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Caprolactam	5000	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10) *	ND (10)	ND (10)	ND (10)
Carbazole	100	ND (10)	**0.91 J**	**0.98 J**	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Chrysene	5	ND (2)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2)	ND (2)	ND (2.1)	ND (2.1)
Dibenz(a,h)anthracene	0.3	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Dibenzofuran	100	ND (10)	**1.4 J**	**2.5 J**	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Diethyl phthalate	6000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-5	MW-5	MW-5	MW-5A	MW-5A	MW-5A	MW-5A	MW-5A	MW-5A	MW-6
Sample ID	Groundwater	MW05-121615-1027	MW05-032216-0826	MW05-101816-1246	MW5A-032515-0856	MW5A-061015-1243	MW05A-091515-1423	MW5A-121615-1342	MW5A-032216-0917	MW5A-101816-1341	MW06-032515-0951
Lab Sample ID	Quality	460-106433-15	460-110957-7	460-122278-16	460-92212-4	460-96337-4	460-101265-11	460-106433-16	460-110957-8	460-122278-17	460-92212-5
Sample Date	Standard	12/16/2015	03/22/2016	10/18/2016	03/25/2015	06/10/2015	09/15/2015	12/16/2015	03/22/2016	10/18/2016	03/25/2015
Field Parameters											
Conductivity, Field (mS/cm)	-	**1.329**	**1.44**	**0.997**	**0.699**	**0.607**	**0.669**	**0.578**	**0.712**	**0.504**	**0.421**
Dissolved Oxygen, Field (mg/L)	-	**0.19**	**0.25**	**0.2**	**0.22**	**0.19**	**0.28**	**0.27**	**0.22**	**0.15**	**0.21**
ORP, Field (mV)	-	**-118.3**	**-84.1**	**-86.4**	**-110.8**	**-67.5**	**-57.1**	**-36.2**	**-58.6**	**-88.7**	**35.8**
pH, Field (s.u)	-	**6.64**	**6.58**	**6.68**	**6.88**	**6.71**	**7**	**6.76**	**6.77**	**6.78**	**6.87**
Temperature (Deg C)	-	**13.95**	**10.2**	**19.24**	**12.43**	**12.2**	**15**	**13.68**	**11.88**	**15.38**	**9.56**
Turbidity, Field (NTU)	-	**40.2**	**4.96**	**9.73**	**21.9**	**9.7**	**11.3**	**7.32**	**29.1**	**39.6**	**12.8**
Dimethyl phthalate	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Di-n-butylphthalate	700	ND (10)	ND (10)	ND (10)	ND (10)	**1.2 J**	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Di-n-octyl phthalate	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Fluoranthene	300	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Fluorene	300	**0.91 J**	**2.2 J**	**4.4 J**	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Semi-Volatile Organic Compounds (ug/L) (con't)											
Hexachlorobenzene	0.02	ND (0.02) *	ND (0.1) *	ND (0.021)	ND (0.021)	ND (0.021)	ND (0.021)	ND (0.02) *	ND (0.02) *	ND (0.021)	ND (0.021)
Hexachlorobutadiene	1	ND (1) *	ND (1) *	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1) *	ND (1) *	ND (1)	ND (1)
Hexachlorocyclopentadiene	40	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Hexachloroethane	7	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Indeno(1,2,3-cd)pyrene	0.2	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Isophorone	40	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Naphthalene	300	ND (10)	**2.7 J**	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Nitrobenzene	6	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
N-Nitrosodi-n-propylamine	10	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
N-Nitrosodiphenylamine	10	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Pentachlorophenol	0.3	ND (0.2)	ND (1)	**0.11 J**	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.2)	ND (0.2)	ND (0.21)	ND (0.21)
Phenanthrene	100	**0.69 J**	**1.2 J**	**2.8 J**	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Phenol	2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Pyrene	200	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Volatile Organic Compounds (ug/L)											
1,1,1-Trichloroethane	30	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1,2,2-Tetrachloroethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1,2-Trichloroethane	3	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1-Dichloroethane	50	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1-Dichloroethene	1	ND (1)	ND (1)	ND (1)	**0.35 J**	ND (1)	ND (1)	ND (1)	**0.48 J**	ND (1)	ND (1)
1,2,4-Trichlorobenzene	9	ND (1)	ND (1)	ND (1)	**0.32 J**	ND (1)	ND (1)	ND (1)	**0.67 J**	ND (1)	ND (1)
1,2-Dibromo-3-chloropropane (DBCP)	0.02	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dibromoethane (Ethylene Dibromide)	0.03	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dichlorobenzene	600	ND (1)	**0.4 J**	**0.29 J**	**0.37 J**	**0.28 J**	**0.33 J**	**0.28 J**	**0.4 J**	**0.24 J**	ND (1)
1,2-Dichloroethane	2	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dichloropropane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,3-Dichlorobenzene	600	**2.2**	**3.1**	**2.4**	**0.69 J**	**0.49 J**	**0.57 J**	**0.42 J**	**0.54 J**	**0.49 J**	ND (1)
1,4-Dichlorobenzene	75	**8.5**	**13**	**11**	**2.9**	**2.5**	**2.6**	**2**	**2.7**	**2.3**	**0.63 J**
1,4-Dioxane	0.4	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	300	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
2-Hexanone	300	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	100	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Acetone	6000	**31**	ND (5)	**9.7**	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Benzene	1	**13** [A]	**18** [A]	**11** [A]	**1.9** [A]	**2.1** [A]	**2.4** [A]	**2.3** [A]	**2.5** [A]	**2** [A]	**2.6** [A]
Bromodichloromethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Bromoform	4	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Bromomethane (Methyl Bromide)	10	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Carbon disulfide	700	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Carbon tetrachloride	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Chlorobenzene	50	**26**	**49**	**32**	**22**	**25**	**24**	**23**	**23**	**18**	**5.2**
Chloroethane	5	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-5	MW-5	MW-5	MW-5A	MW-5A	MW-5A	MW-5A	MW-5A	MW-5A	MW-6
Sample ID	Groundwater	MW05-121615-1027	MW05-032216-0826	MW05-101816-1246	MW5A-032515-0856	MW5A-061015-1243	MW05A-091515-1423	MW5A-121615-1342	MW5A-032216-0917	MW5A-101816-1341	MW06-032515-0951
Lab Sample ID	Quality	460-106433-15	460-110957-7	460-122278-16	460-92212-4	460-96337-4	460-101265-11	460-106433-16	460-110957-8	460-122278-17	460-92212-5
Sample Date	Standard	12/16/2015	03/22/2016	10/18/2016	03/25/2015	06/10/2015	09/15/2015	12/16/2015	03/22/2016	10/18/2016	03/25/2015
Field Parameters											
Conductivity, Field (mS/cm)	-	**1.329**	**1.44**	**0.997**	**0.699**	**0.607**	**0.669**	**0.578**	**0.712**	**0.504**	**0.421**
Dissolved Oxygen, Field (mg/L)	-	**0.19**	**0.25**	**0.2**	**0.22**	**0.19**	**0.28**	**0.27**	**0.22**	**0.15**	**0.21**
ORP, Field (mV)	-	**-118.3**	**-84.1**	**-86.4**	**-110.8**	**-67.5**	**-57.1**	**-36.2**	**-58.6**	**-88.7**	**35.8**
pH, Field (s.u)	-	**6.64**	**6.58**	**6.68**	**6.88**	**6.71**	**7**	**6.76**	**6.77**	**6.78**	**6.87**
Temperature (Deg C)	-	**13.95**	**10.2**	**19.24**	**12.43**	**12.2**	**15**	**13.68**	**11.88**	**15.38**	**9.56**
Turbidity, Field (NTU)	-	**40.2**	**4.96**	**9.73**	**21.9**	**9.7**	**11.3**	**7.32**	**29.1**	**39.6**	**12.8**
Chloroform (Trichloromethane)	70	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Chloromethane (Methyl Chloride)	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
cis-1,2-Dichloroethene	70	ND (1)	ND (1)	ND (1)	**18**	**5.6**	**1.7**	**1.5**	**7.8**	**0.89 J**	ND (1)
cis-1,3-Dichloropropene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Cyclohexane	100	**0.63 J**	**0.48 J**	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) *
Dibromochloromethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Dichlorodifluoromethane (CFC-12)	1000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Ethylbenzene	700	**2.2**	**13**	**1.2**	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Isopropylbenzene	700	**17**	**44**	**30**	ND (1)	ND (1)	ND (1)	ND (1)	**0.43 J**	ND (1)	ND (1)
Volatile Organic Compounds (ug/L) (cont')											
Methyl acetate	7000	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Methyl cyclohexane	100	**2.3 ***	**2.1**	**1.2**	ND (1) *	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1) *
Methyl Tert Butyl Ether	70	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Methylene chloride	3	ND (1)	ND (1)	**2.7**	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**1.6**	ND (1)
Styrene	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Tetrachloroethene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Toluene	600	**3.4**	**0.93 J**	**0.55 J**	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
trans-1,2-Dichloroethene	100	ND (1)	ND (1)	ND (1)	**0.28 J**	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
trans-1,3-Dichloropropene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Trichloroethene	1	ND (1)	ND (1)	ND (1)	**3.3** [A]	**0.46 J**	ND (1)	ND (1)	**5.1** [A]	ND (1)	ND (1)
Trichlorofluoromethane (CFC-11)	2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Trifluorotrichloroethane (Freon 113)	20000	ND (1) *	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1)
Vinyl chloride	1	ND (1)	ND (1)	ND (1)	**3.5** [A]	**3.3** [A]	**2** [A]	**1.7** [A]	**2.7** [A]	**1.4** [A]	ND (1)
Xylene (total)	1000	**6.8**	**4.2**	**0.34 J**	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	**0.32 J**

Notes:
1. ND: Result is not detected above the indicated reporting limit.
   J: Estimated value
   B: Possible blank contamination
   E: Exceeds calibration limits
   F1: MS and/or MSD recovery exceeds the control limits.
   * - Recovery Exceeds control limits
2. Results in red exceed the following criteria:
   - Groundwater Quality Standards (GWQS)
3. Results in **bold** are detected.

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-6	MW-6	MW-6	MW-6	MW-6	MW-6A	MW-6A	MW-6A	MW-6A	MW-6A
Sample ID	Groundwater	MW06-060915-1157	MW06-091515-1416	MW06-121515-1252	MW06-032216-1111	MW06-102016-1016	MW6A-032515-1032	MW6A-061015-0916	MW06A-091515-1212	MW6A-121515-1347	MW6A-032216-1212
Lab Sample ID	Quality	460-96192-4	460-101265-12	460-106412-12	460-110957-10	460-122534-3	460-92212-6	460-96337-5	460-101265-13	460-106412-13	460-110957-11
Sample Date	Standard	06/09/2015	09/15/2015	12/15/2015	03/22/2016	10/20/2016	03/25/2015	06/10/2015	09/15/2015	12/15/2015	03/22/2016
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.775**	**0.717**	**0.486**	**0.745**	**1.008**	**0.665**	**1.04**	**1.043**	**1.012**	**0.567**
Dissolved Oxygen, Field (mg/L)	-	**0.46**	**2.25**	**1.99**	**1.21**	**0.28**	**0.13**	**0.27**	**0.27**	**0.32**	**0.11**
ORP, Field (mV)	-	**-63.2**	**-6.9**	**-106.3**	**54.6**	**-72.9**	**-102.6**	**-50.1**	**-40.5**	**-30.5**	**58.9**
pH, Field (s.u)	-	**6.9**	**6.39**	**6.93**	**6.66**	**6.61**	**6.9**	**6.64**	**6.71**	**6.62**	**6.86**
Temperature (Deg C)	-	**18.6**	**20.4**	**15.3**	**11.41**	**19.23**	**12.07**	**14.5**	**16.7**	**14.36**	**13.06**
Turbidity, Field (NTU)	-	**9**	**13**	**8.4**	**9.69**	**44.3**	**31**	**74.2**	**8.2**	**8.62**	**216**
Inorganic Compounds - Total (ug/L)											
Cyanide	100	ND (10)	ND (10)	ND (10)	ND (10)	**3.8 J**	ND (10)	**6.5 JB**	ND (10)	**4.7 J**	ND (10)
Antimony, Total	6	ND (2)	**1.4 J**	**1.3 J**	ND (2)	**0.83 J**	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Arsenic, Total	3	**3.9** [A]	**2**	**6** [A]	**1.1 J**	**7.3** [A]	**2.9**	**5.2** [A]	**6.8** [A]	**8.1** [A]	**1.6 J**
Barium, Total	6000	**628**	**546**	**515**	**578**	**1300**	**751**	**1200**	**1220**	**1320**	**381**
Beryllium, Total	1	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)
Cadmium, Total	4	ND (2)	**1.8 J**	**2.6**	**1.3 J**	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Chromium, Total	70	ND (4)	ND (4)	**4.3**	ND (4)	**10.5**	ND (4)	ND (4)	ND (4)	**1.9 J**	ND (4)
Chromium VI (Hexavalent), Total	NC	-	-	-	-	-	-	-	-	-	-
Cobalt, Total	100	**3.1 J**	ND (4)	ND (4)	**1.8 J**	**3.9 J**	**4**	**10.3**	**17.3**	**26.1**	**2 J**
Copper, Total	1300	**22.5**	**78.8**	**91.6**	**56.9**	**66**	ND (4)	ND (4)	ND (4)	**3.8 J**	ND (4)
Lead, Total	5	**0.54 J**	ND (1.2)	**2.5**	ND (1.2)	**7.8** [A]	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)
Manganese, Total	50	**596** [A]	**98.1** [A]	**115** [A]	**425** [A]	**621** [A]	**4200** [A]	**6610** [A]	**7250** [A]	**8640** [A]	**916** [A]
Mercury, Total	2	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)
Nickel, Total	100	**215** [A]	**167** [A]	**176** [A]	**146** [A]	**137** [A]	**8.7**	**22**	**38.9**	**70**	**6.2**
Selenium, Total	40	ND (10)	ND (10)	ND (25)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Silver, Total	40	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Zinc, Total	2000	**2600** [A]	**1710**	**1970**	**1820**	**1280**	ND (16)	**7.7 J**	ND (16)	**18.3**	ND (16)
Inorganic Compounds - Dissolved (ug/L)											
Antimony, Dissolved	6	-	-	-	-	-	-	-	-	-	ND (2)
Arsenic, Dissolved	3	-	-	-	-	-	-	-	-	-	ND (2)
Barium, Dissolved	6000	-	-	-	-	-	-	-	-	-	**346**
Beryllium, Dissolved	1	-	-	-	-	-	-	-	-	-	ND (0.8)
Cadmium, Dissolved	4	-	-	-	-	-	-	-	-	-	ND (2)
Chromium, Dissolved	70	-	-	-	-	-	-	-	-	-	ND (4)
Cobalt, Dissolved	100	-	-	-	-	-	-	-	-	-	ND (4)
Copper, Dissolved	1300	-	-	-	-	-	-	-	-	-	ND (4)
Lead, Dissolved	5	-	-	-	-	-	-	-	-	-	ND (1.2)
Manganese, Dissolved	50	-	-	-	-	-	-	-	-	-	**855** [A]
Mercury, Dissolved	2	-	-	-	-	-	-	-	-	-	ND (0.2)
Nickel, Dissolved	100	-	-	-	-	-	-	-	-	-	**5.3**
Selenium, Dissolved	40	-	-	-	-	-	-	-	-	-	ND (10)
Silver, Dissolved	40	-	-	-	-	-	-	-	-	-	ND (2)
Zinc, Dissolved	2000	-	-	-	-	-	-	-	-	-	ND (16)
PCBs (ug/L)											
Aroclor-1016 (PCB-1016)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1262 (PCB-1262)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1268 (PCB-1268)	0.5	-	-	-	-	-	-	-	-	-	-
Polychlorinated biphenyls (PCBs)	0.5	-	-	-	-	-	-	-	-	-	-

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-6	MW-6	MW-6	MW-6	MW-6	MW-6A	MW-6A	MW-6A	MW-6A	MW-6A
Sample ID	Groundwater	MW06-060915-1157	MW06-091515-1416	MW06-121515-1252	MW06-032216-1111	MW06-102016-1016	MW6A-032515-1032	MW6A-061015-0916	MW06A-091515-1212	MW6A-121515-1347	MW6A-032216-1212
Lab Sample ID	Quality	460-96192-4	460-101265-12	460-106412-12	460-110957-10	460-122534-3	460-92212-6	460-96337-5	460-101265-13	460-106412-13	460-110957-11
Sample Date	Standard	06/09/2015	09/15/2015	12/15/2015	03/22/2016	10/20/2016	03/25/2015	06/10/2015	09/15/2015	12/15/2015	03/22/2016
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.775**	**0.717**	**0.486**	**0.745**	**1.008**	**0.665**	**1.04**	**1.043**	**1.012**	**0.567**
Dissolved Oxygen, Field (mg/L)	-	**0.46**	**2.25**	**1.99**	**1.21**	**0.28**	**0.13**	**0.27**	**0.27**	**0.32**	**0.11**
ORP, Field (mV)	-	**-63.2**	**-6.9**	**-106.3**	**54.6**	**-72.9**	**-102.6**	**-50.1**	**-40.5**	**-30.5**	**58.9**
pH, Field (s.u)	-	**6.9**	**6.39**	**6.93**	**6.66**	**6.61**	**6.9**	**6.64**	**6.71**	**6.62**	**6.86**
Temperature (Deg C)	-	**18.6**	**20.4**	**15.3**	**11.41**	**19.23**	**12.07**	**14.5**	**16.7**	**14.36**	**13.06**
Turbidity, Field (NTU)	-	**9**	**13**	**8.4**	**9.69**	**44.3**	**31**	**74.2**	**8.2**	**8.62**	**216**
Semi-Volatile Organic Compounds (ug/L)											
2,2'-oxybis(1-Chloropropane)	300	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4,5-Trichlorophenol	700	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4,6-Trichlorophenol	20	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10)
2,4-Dichlorophenol	20	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4-Dimethylphenol	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4-Dinitrophenol	40	ND (21)	ND (21)	ND (21)	ND (20)	ND (20)	ND (21)	ND (21)	ND (21)	ND (21)	ND (20)
2,4-Dinitrotoluene	10	ND (2.1)	ND (2.1)	ND (2.1)	ND (2)	ND (2)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2)
2,6-Dinitrotoluene	10	ND (2.1)	ND (2.1)	ND (2.1)	ND (2)	ND (2)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2)
2-Chloronaphthalene	600	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2-Chlorophenol	40	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)	**0.98 J**	ND (10)	ND (10)
2-Methylnaphthalene	30	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2-Methylphenol	50	ND (10) *	ND (10) *	ND (10)	ND (10) *	ND (10) *	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10) *
2-Nitroaniline	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2-Nitrophenol	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
3,3'-Dichlorobenzidine	30	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
3-Nitroaniline	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4,6-Dinitro-2-methylphenol	1	ND (21)	ND (21)	ND (21)	ND (20)	ND (20)	ND (21)	ND (21)	ND (21)	ND (21)	ND (20)
4-Bromophenyl phenyl ether	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Chloro-3-methylphenol	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Chloroaniline	30	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Chlorophenyl phenyl ether	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Methylphenol	50	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Nitroaniline	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Nitrophenol	100	ND (21)	ND (21)	ND (21)	ND (20)	ND (20)	ND (21)	ND (21)	ND (21)	ND (21)	ND (20)
Acenaphthene	400	ND (10)	ND (10)	ND (10)	ND (10)	**1.7 J**	**1.1 J**	**2.8 J**	**4 J**	**3.2 J**	ND (10)
Acenaphthylene	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Acetophenone	700	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Anthracene	2000	ND (10)	ND (10)	ND (10)	ND (10)	**0.65 J**	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Atrazine	3	ND (2.1)	ND (2.1)	ND (2.1)	ND (2)	ND (2)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2)
Benzaldehyde	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Benzo(a)anthracene	0.1	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.05)	**0.094**	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.05)
Benzo(a)pyrene	0.1	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.05)	**0.048 J**	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.05)
Benzo(b)fluoranthene	0.2	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.05) *	**0.076**	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.05) *
Benzo(g,h,i)perylene	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Benzo(k)fluoranthene	0.5	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Biphenyl	400	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
bis(2-Chloroethoxy)methane	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
bis(2-Chloroethyl)ether	7	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
bis(2-Ethylhexyl)phthalate	3	**0.85 J**	**6.3** [A]	ND (2.1)	ND (2)	ND (2)	ND (2.1)	**3.2** [A]	**6** [A]	ND (2.1)	ND (2)
Butyl benzylphthalate	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Caprolactam	5000	ND (10)	ND (10) *	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10) *	ND (10)
Carbazole	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Chrysene	5	ND (2.1)	ND (2.1)	ND (2.1)	ND (2)	ND (2)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2.1)	ND (2)
Dibenz(a,h)anthracene	0.3	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Dibenzofuran	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Diethyl phthalate	6000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-6	MW-6	MW-6	MW-6	MW-6	MW-6A	MW-6A	MW-6A	MW-6A	MW-6A
Sample ID	Groundwater	MW06-060915-1157	MW06-091515-1416	MW06-121515-1252	MW06-032216-1111	MW06-102016-1016	MW6A-032515-1032	MW6A-061015-0916	MW06A-091515-1212	MW6A-121515-1347	MW6A-032216-1212
Lab Sample ID	Quality	460-96192-4	460-101265-12	460-106412-12	460-110957-10	460-122534-3	460-92212-6	460-96337-5	460-101265-13	460-106412-13	460-110957-11
Sample Date	Standard	06/09/2015	09/15/2015	12/15/2015	03/22/2016	10/20/2016	03/25/2015	06/10/2015	09/15/2015	12/15/2015	03/22/2016
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.775**	**0.717**	**0.486**	**0.745**	**1.008**	**0.665**	**1.04**	**1.043**	**1.012**	**0.567**
Dissolved Oxygen, Field (mg/L)	-	**0.46**	**2.25**	**1.99**	**1.21**	**0.28**	**0.13**	**0.27**	**0.27**	**0.32**	**0.11**
ORP, Field (mV)	-	**-63.2**	**-6.9**	**-106.3**	**54.6**	**-72.9**	**-102.6**	**-50.1**	**-40.5**	**-30.5**	**58.9**
pH, Field (s.u)	-	**6.9**	**6.39**	**6.93**	**6.66**	**6.61**	**6.9**	**6.64**	**6.71**	**6.62**	**6.86**
Temperature (Deg C)	-	**18.6**	**20.4**	**15.3**	**11.41**	**19.23**	**12.07**	**14.5**	**16.7**	**14.36**	**13.06**
Turbidity, Field (NTU)	-	**9**	**13**	**8.4**	**9.69**	**44.3**	**31**	**74.2**	**8.2**	**8.62**	**216**
Dimethyl phthalate	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Di-n-butylphthalate	700	ND (10)	ND (10)	ND (10)	ND (10)	**1.1 J**	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Di-n-octyl phthalate	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Fluoranthene	300	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Fluorene	300	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	**2 J**	**2.9 J**	**2.1 J**	ND (10)
Semi-Volatile Organic Compounds (ug/L) (con't)											
Hexachlorobenzene	0.02	ND (0.021)	ND (0.021)	ND (0.021)	ND (0.02) *	ND (0.02)	ND (0.021)	ND (0.021)	ND (0.021)	ND (0.021)	ND (0.02) *
Hexachlorobutadiene	1	ND (1) *	ND (1)	ND (1) *	ND (1) *	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1) *	ND (1) *
Hexachlorocyclopentadiene	40	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Hexachloroethane	7	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Indeno(1,2,3-cd)pyrene	0.2	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Isophorone	40	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Naphthalene	300	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Nitrobenzene	6	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
N-Nitrosodi-n-propylamine	10	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
N-Nitrosodiphenylamine	10	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Pentachlorophenol	0.3	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.2)	**0.16 J**	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.2)
Phenanthrene	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Phenol	2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Pyrene	200	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)	ND (10)
Volatile Organic Compounds (ug/L)											
1,1,1-Trichloroethane	30	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1,2,2-Tetrachloroethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1,2-Trichloroethane	3	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.3 J**
1,1-Dichloroethane	50	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.53 J**	ND (1)	ND (1)	ND (1)	**0.39 J**
1,1-Dichloroethene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2,4-Trichlorobenzene	9	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dibromo-3-chloropropane (DBCP)	0.02	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dibromoethane (Ethylene Dibromide)	0.03	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dichlorobenzene	600	ND (1)	ND (1)	ND (1)	ND (1)	**0.26 J**	ND (1)	**0.32 J**	**0.31 J**	**0.26 J**	ND (1)
1,2-Dichloroethane	2	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.29 J**	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dichloropropane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,3-Dichlorobenzene	600	ND (1)	ND (1)	ND (1)	**0.56 J**	**0.81 J**	**0.39 J**	**0.98 J**	**1.4**	**1.1**	ND (1)
1,4-Dichlorobenzene	75	**1.1**	ND (1)	ND (1)	**1.7**	**2.9**	**1.6**	**4.5**	**5.3**	**4.7**	ND (1)
1,4-Dioxane	0.4	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	300	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
2-Hexanone	300	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	100	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Acetone	6000	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	**14**	ND (5)	ND (5)	ND (5)
Benzene	1	**4.6** [A]	**0.13 J**	**0.22 J**	**8.1** [A]	**12** [A]	**4** [A]	**11** [A]	**15** [A]	**13** [A]	**0.11 J**
Bromodichloromethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Bromoform	4	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Bromomethane (Methyl Bromide)	10	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Carbon disulfide	700	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Carbon tetrachloride	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Chlorobenzene	50	**12**	**0.53 J**	**0.79 J**	**22**	**45**	**28**	**110** [A]	**140** [A]	**130** [A]	**0.93 J**
Chloroethane	5	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-6	MW-6	MW-6	MW-6	MW-6	MW-6A	MW-6A	MW-6A	MW-6A	MW-6A
Sample ID	Groundwater	MW06-060915-1157	MW06-091515-1416	MW06-121515-1252	MW06-032216-1111	MW06-102016-1016	MW6A-032515-1032	MW6A-061015-0916	MW06A-091515-1212	MW6A-121515-1347	MW6A-032216-1212
Lab Sample ID	Quality	460-96192-4	460-101265-12	460-106412-12	460-110957-10	460-122534-3	460-92212-6	460-96337-5	460-101265-13	460-106412-13	460-110957-11
Sample Date	Standard	06/09/2015	09/15/2015	12/15/2015	03/22/2016	10/20/2016	03/25/2015	06/10/2015	09/15/2015	12/15/2015	03/22/2016
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.775**	**0.717**	**0.486**	**0.745**	**1.008**	**0.665**	**1.04**	**1.043**	**1.012**	**0.567**
Dissolved Oxygen, Field (mg/L)	-	**0.46**	**2.25**	**1.99**	**1.21**	**0.28**	**0.13**	**0.27**	**0.27**	**0.32**	**0.11**
ORP, Field (mV)	-	**-63.2**	**-6.9**	**-106.3**	**54.6**	**-72.9**	**-102.6**	**-50.1**	**-40.5**	**-30.5**	**58.9**
pH, Field (s.u)	-	**6.9**	**6.39**	**6.93**	**6.66**	**6.61**	**6.9**	**6.64**	**6.71**	**6.62**	**6.86**
Temperature (Deg C)	-	**18.6**	**20.4**	**15.3**	**11.41**	**19.23**	**12.07**	**14.5**	**16.7**	**14.36**	**13.06**
Turbidity, Field (NTU)	-	**9**	**13**	**8.4**	**9.69**	**44.3**	**31**	**74.2**	**8.2**	**8.62**	**216**
Chloroform (Trichloromethane)	70	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.61 J**
Chloromethane (Methyl Chloride)	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
cis-1,2-Dichloroethene	70	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**4.4**	**3.9**	**2**	**1.6**	**4.2**
cis-1,3-Dichloropropene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Cyclohexane	100	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1) *	ND (1)
Dibromochloromethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Dichlorodifluoromethane (CFC-12)	1000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Ethylbenzene	700	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Isopropylbenzene	700	ND (1)	ND (1)	ND (1)	**0.65 J**	ND (1)	**0.68 J**	**0.79 J**	**0.34 J**	ND (1)	ND (1)
Volatile Organic Compounds (ug/L) (cont')											
Methyl acetate	7000	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Methyl cyclohexane	100	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1) *	ND (1)
Methyl Tert Butyl Ether	70	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.22 J**	ND (1)	ND (1)	ND (1)	**0.19 J**
Methylene chloride	3	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Styrene	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Tetrachloroethene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.5 J**	ND (1)	ND (1)	ND (1)	**0.81 J**
Toluene	600	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
trans-1,2-Dichloroethene	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.21 J**	ND (1)	ND (1)	ND (1)	**0.33 J**
trans-1,3-Dichloropropene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Trichloroethene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**2.9** [A]	ND (1)	ND (1)	ND (1)	**1.7** [A]
Trichlorofluoromethane (CFC-11)	2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.39 J**
Trifluorotrichloroethane (Freon 113)	20000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Vinyl chloride	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.38 J**	**0.88 J**	**1.5** [A]	**0.88 J**	ND (1)
Xylene (total)	1000	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)

Notes:
1. ND: Result is not detected above the indicated reporting limit.
   J: Estimated value
   B: Possible blank contamination
   E: Exceeds calibration limits
   F1: MS and/or MSD recovery exceeds the control limits.
   * - Recovery Exceeds control limits
2. Results in red exceed the following criteria:
   - Groundwater Quality Standards (GWQS)
3. Results in **bold** are detected.

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-6A	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-77	MW-15	MW-15
Sample ID	Groundwater	MW6A-102016-0911	MW07-032515-1001	MW07-061115-1033	MW07-091615-1213	MW07-121715-1107	MW07-302116-1002	MW07-102016-1216	MW77-032615-0903	MW15-033115-0919	MW15-061215-1001
Lab Sample ID	Quality	460-122534-4	460-92212-9	460-96327-9	460-101215-12	460-106444-3	460-110804-11	460-122534-5	460-92288-9	460-92615-4	460-96394-5
Sample Date	Standard	10/20/2016	03/25/2015	06/11/2015	09/16/2015	12/17/2015	03/21/2016	10/20/2016	03/26/2015	03/31/2015	06/12/2015
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.994**	**0.476**	**0.913**	**0.809**	**0.599**	**0.99**	**1.373**	**1.275**	**1.633**	**0.999**
Dissolved Oxygen, Field (mg/L)	-	**0.65**	**0.44**	**0.23**	**0.44**	**0.69**	**0.56**	**0.28**	**2.35**	**7.22**	**3.83**
ORP, Field (mV)	-	**-88.2**	**-43**	**-2.8**	**-108.7**	**-95.2**	**-317.6**	**-63.3**	**-0.04**	**246.3**	**217.1**
pH, Field (s.u)	-	**6.53**	**7.01**	**6.44**	**6.3**	**6.5**	**6.55**	**6.43**	**6.68**	**5.11**	**5.13**
Temperature (Deg C)	-	**14.48**	**7.93**	**16.7**	**19.6**	**11.7**	**10.07**	**17.83**	**14.78**	**9.44**	**16.6**
Turbidity, Field (NTU)	-	**12.4**	**7.49**	**21.1**	**23.2**	**999**	**10**	**56**	**999**	**1.86**	**30.4**
Inorganic Compounds - Total (ug/L)											
Cyanide	100	**3.1 J**	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	**4.3 J**	ND (10)	ND (10)	**4.1 JB**
Antimony, Total	6	ND (2)	ND (2)	**0.9 J**	**2.6**	**27.4** [A]	**0.81 J**	**1.1 J**	**5.1**	ND (2)	ND (2)
Arsenic, Total	3	**4.7** [A]	ND (2)	**1.5 J**	**5** [A]	**13.8** [A]	**1.8 J**	**3.6** [A]	**14.5** [A]	ND (2)	**0.74 J**
Barium, Total	6000	**1320**	**761**	**1540**	**3350**	**3970**	**6190** [A]	**1340**	**706**	**334**	**419**
Beryllium, Total	1	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	ND (0.8)	**2.2** [A]	**1.1** [A]	**2** [A]
Cadmium, Total	4	ND (2)	ND (2)	**3**	ND (2)	**14.9** [A]	ND (2)	**1.9 J**	**1.1 J**	ND (2)	ND (2)
Chromium, Total	70	**1.6 J**	ND (4)	**4.6**	**13.5**	**24.3**	**6.3**	**138** [A]	**604** [A]	**70.9** [A]	**528** [A]
Chromium VI (Hexavalent), Total	NC	-	-	-	-	-	-	-	ND (10)	-	-
Cobalt, Total	100	**12.3**	ND (4)	**3.6 J**	ND (4)	**12.9**	ND (4)	**4.8**	**22.7**	ND (4)	ND (4)
Copper, Total	1300	**1.6 J**	**19.5**	**208**	**36.1**	**1200**	**15.3**	**63.5**	**252**	**2.9 J**	**4.9**
Lead, Total	5	ND (1.2)	**1.5**	**6.7** [A]	**8.1** [A]	**60.4** [A]	**2.9**	**50.8** [A]	**153** [A]	ND (1.2)	**0.6 J**
Manganese, Total	50	**6540** [A]	**218** [A]	**461** [A]	**377** [A]	**432** [A]	**413** [A]	**514** [A]	**1720** [A]	**19**	**27.2**
Mercury, Total	2	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	**0.15 J**
Nickel, Total	100	**26.8**	**27.5**	**390** [A]	**51.6**	**1430** [A]	**18.6**	**262** [A]	**408** [A]	**27.6**	**36.2**
Selenium, Total	40	ND (10)	ND (10)	ND (10)	ND (10)	**0.96 J**	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Silver, Total	40	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Zinc, Total	2000	**16.3**	**289**	**2210** [A]	**587**	**17800** [A]	**193**	**3880** [A]	**2300** [A]	**13.8 J**	**16.6**
Inorganic Compounds - Dissolved (ug/L)											
Antimony, Dissolved	6	-	-	-	-	-	-	-	-	-	-
Arsenic, Dissolved	3	-	-	-	-	-	-	-	-	-	-
Barium, Dissolved	6000	-	-	-	-	-	-	-	-	-	-
Beryllium, Dissolved	1	-	-	-	-	-	-	-	-	-	-
Cadmium, Dissolved	4	-	-	-	-	-	-	-	-	-	-
Chromium, Dissolved	70	-	-	-	-	-	-	-	-	-	-
Cobalt, Dissolved	100	-	-	-	-	-	-	-	-	-	-
Copper, Dissolved	1300	-	-	-	-	-	-	-	-	-	-
Lead, Dissolved	5	-	-	-	-	-	-	-	-	-	-
Manganese, Dissolved	50	-	-	-	-	-	-	-	-	-	-
Mercury, Dissolved	2	-	-	-	-	-	-	-	-	-	-
Nickel, Dissolved	100	-	-	-	-	-	-	-	-	-	-
Selenium, Dissolved	40	-	-	-	-	-	-	-	-	-	-
Silver, Dissolved	40	-	-	-	-	-	-	-	-	-	-
Zinc, Dissolved	2000	-	-	-	-	-	-	-	-	-	-
PCBs (ug/L)											
Aroclor-1016 (PCB-1016)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1262 (PCB-1262)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1268 (PCB-1268)	0.5	-	-	-	-	-	-	-	-	-	-
Polychlorinated biphenyls (PCBs)	0.5	-	-	-	-	-	-	-	-	-	-

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-6A	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-77	MW-15	MW-15
Sample ID	Groundwater	MW6A-102016-0911	MW07-032515-1001	MW07-061115-1033	MW07-091615-1213	MW07-121715-1107	MW07-302116-1002	MW07-102016-1216	MW77-032615-0903	MW15-033115-0919	MW15-061215-1001
Lab Sample ID	Quality	460-122534-4	460-92212-9	460-96327-9	460-101215-12	460-106444-3	460-110804-11	460-122534-5	460-92288-9	460-92615-4	460-96394-5
Sample Date	Standard	10/20/2016	03/25/2015	06/11/2015	09/16/2015	12/17/2015	03/21/2016	10/20/2016	03/26/2015	03/31/2015	06/12/2015
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.994**	**0.476**	**0.913**	**0.809**	**0.599**	**0.99**	**1.373**	**1.275**	**1.633**	**0.999**
Dissolved Oxygen, Field (mg/L)	-	**0.65**	**0.44**	**0.23**	**0.44**	**0.69**	**0.56**	**0.28**	**2.35**	**7.22**	**3.83**
ORP, Field (mV)	-	**-88.2**	**-43**	**-2.8**	**-108.7**	**-95.2**	**-317.6**	**-63.3**	**-0.04**	**246.3**	**217.1**
pH, Field (s.u)	-	**6.53**	**7.01**	**6.44**	**6.3**	**6.5**	**6.55**	**6.43**	**6.68**	**5.11**	**5.13**
Temperature (Deg C)	-	**14.48**	**7.93**	**16.7**	**19.6**	**11.7**	**10.07**	**17.83**	**14.78**	**9.44**	**16.6**
Turbidity, Field (NTU)	-	**12.4**	**7.49**	**21.1**	**23.2**	**999**	**10**	**56**	**999**	**1.86**	**30.4**
Semi-Volatile Organic Compounds (ug/L)											
2,2'-oxybis(1-Chloropropane)	300	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4,5-Trichlorophenol	700	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4,6-Trichlorophenol	20	ND (10)	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4-Dichlorophenol	20	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4-Dimethylphenol	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)
2,4-Dinitrophenol	40	ND (20)	ND (21)	ND (21)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (21) F2	ND (20)
2,4-Dinitrotoluene	10	ND (2)	ND (2.1)	ND (2.1)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2.1) F1	ND (2)
2,6-Dinitrotoluene	10	ND (2)	ND (2.1)	ND (2.1)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2.1) F1	ND (2)
2-Chloronaphthalene	600	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2-Chlorophenol	40	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10) *	ND (10) *	ND (10)
2-Methylnaphthalene	30	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	**1.1 J**	ND (10)	ND (10)	ND (10)	ND (10)
2-Methylphenol	50	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10) *	ND (10) *	ND (10) *	ND (10) *
2-Nitroaniline	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)
2-Nitrophenol	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
3,3'-Dichlorobenzidine	30	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
3-Nitroaniline	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4,6-Dinitro-2-methylphenol	1	ND (20)	ND (21)	ND (21)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (21)	ND (20)
4-Bromophenyl phenyl ether	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Chloro-3-methylphenol	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Chloroaniline	30	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Chlorophenyl phenyl ether	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Methylphenol	50	ND (10)	ND (10)	ND (10)	**3.3 J**	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Nitroaniline	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Nitrophenol	100	ND (20)	ND (21)	ND (21)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (21)	ND (20)
Acenaphthene	400	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Acenaphthylene	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) F1	ND (10)
Acetophenone	700	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Anthracene	2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Atrazine	3	ND (2)	ND (2.1)	ND (2.1)	ND (2) *	ND (2)	ND (2)	ND (2)	ND (2)	ND (2.1) F1	ND (2) *
Benzaldehyde	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Benzo(a)anthracene	0.1	ND (0.051)	ND (0.052)	ND (0.052)	ND (0.05)	**0.062**	ND (0.05) *	**0.18** [A]	ND (0.05)	ND (0.052)	ND (0.05)
Benzo(a)pyrene	0.1	ND (0.051)	ND (0.052)	ND (0.052)	ND (0.05)	**0.09**	ND (0.05) *	**0.13** [A]	ND (0.05)	ND (0.052)	ND (0.05)
Benzo(b)fluoranthene	0.2	ND (0.051)	ND (0.052)	ND (0.052)	**0.016 J**	**0.16 ***	ND (0.05) *	**0.23** [A]	**0.059**	ND (0.052)	ND (0.05)
Benzo(g,h,i)perylene	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Benzo(k)fluoranthene	0.5	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Biphenyl	400	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
bis(2-Chloroethoxy)methane	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
bis(2-Chloroethyl)ether	7	ND (1) *	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1)
bis(2-Ethylhexyl)phthalate	3	ND (2)	ND (2.1)	ND (2.1)	**19 B*** [A]	ND (2) *	ND (2)	**1.7 J**	ND (2)	ND (2.1) F1	ND (2)
Butyl benzylphthalate	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) F1	ND (10)
Caprolactam	5000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Carbazole	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Chrysene	5	ND (2)	ND (2.1)	ND (2.1)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2.1)	ND (2)
Dibenz(a,h)anthracene	0.3	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F1	ND (1)
Dibenzofuran	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Diethyl phthalate	6000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) F1	ND (10)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-6A	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-77	MW-15	MW-15
Sample ID	Groundwater	MW6A-102016-0911	MW07-032515-1001	MW07-061115-1033	MW07-091615-1213	MW07-121715-1107	MW07-302116-1002	MW07-102016-1216	MW77-032615-0903	MW15-033115-0919	MW15-061215-1001
Lab Sample ID	Quality	460-122534-4	460-92212-9	460-96327-9	460-101215-12	460-106444-3	460-110804-11	460-122534-5	460-92288-9	460-92615-4	460-96394-5
Sample Date	Standard	10/20/2016	03/25/2015	06/11/2015	09/16/2015	12/17/2015	03/21/2016	10/20/2016	03/26/2015	03/31/2015	06/12/2015
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.994**	**0.476**	**0.913**	**0.809**	**0.599**	**0.99**	**1.373**	**1.275**	**1.633**	**0.999**
Dissolved Oxygen, Field (mg/L)	-	**0.65**	**0.44**	**0.23**	**0.44**	**0.69**	**0.56**	**0.28**	**2.35**	**7.22**	**3.83**
ORP, Field (mV)	-	**-88.2**	**-43**	**-2.8**	**-108.7**	**-95.2**	**-317.6**	**-63.3**	**-0.04**	**246.3**	**217.1**
pH, Field (s.u)	-	**6.53**	**7.01**	**6.44**	**6.3**	**6.5**	**6.55**	**6.43**	**6.68**	**5.11**	**5.13**
Temperature (Deg C)	-	**14.48**	**7.93**	**16.7**	**19.6**	**11.7**	**10.07**	**17.83**	**14.78**	**9.44**	**16.6**
Turbidity, Field (NTU)	-	**12.4**	**7.49**	**21.1**	**23.2**	**999**	**10**	**56**	**999**	**1.86**	**30.4**
Dimethyl phthalate	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) F1	ND (10)
Di-n-butylphthalate	700	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10)	**1 J**	ND (10)	ND (10) F1	ND (10)
Di-n-octyl phthalate	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Fluoranthene	300	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	**0.79 J**	ND (10)	ND (10)	ND (10)
Fluorene	300	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) F1	ND (10)
Semi-Volatile Organic Compounds (ug/L) (con't)											
Hexachlorobenzene	0.02	ND (0.02)	ND (0.021)	ND (0.021)	ND (0.02)	ND (0.02)	ND (0.02) *	ND (0.02)	ND (0.02)	ND (0.021)	ND (0.02)
Hexachlorobutadiene	1	ND (1)	ND (1)	ND (1) *	ND (1) *	ND (1) *	ND (1)	ND (1)	ND (1)	ND (1) *	ND (1)
Hexachlorocyclopentadiene	40	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Hexachloroethane	7	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Indeno(1,2,3-cd)pyrene	0.2	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F2	ND (1)
Isophorone	40	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Naphthalene	300	ND (10)	ND (10)	ND (10)	ND (10)	**1.1 J**	**3.8 J**	ND (10)	ND (10)	ND (10)	ND (10)
Nitrobenzene	6	ND (1) *	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1)
N-Nitrosodi-n-propylamine	10	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
N-Nitrosodiphenylamine	10	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Pentachlorophenol	0.3	ND (0.2)	ND (0.21)	ND (0.21)	ND (0.2)	ND (0.2)	ND (0.2) *	ND (0.2)	ND (0.2)	ND (0.21)	ND (0.2)
Phenanthrene	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Phenol	2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Pyrene	200	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Volatile Organic Compounds (ug/L)											
1,1,1-Trichloroethane	30	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F2	ND (1)
1,1,2,2-Tetrachloroethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F2	ND (1)
1,1,2-Trichloroethane	3	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F2	ND (1)
1,1-Dichloroethane	50	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F1F2	ND (1)
1,1-Dichloroethene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F2	ND (1)
1,2,4-Trichlorobenzene	9	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F2	ND (1)
1,2-Dibromo-3-chloropropane (DBCP)	0.02	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.02)	ND (1) F2	ND (1)
1,2-Dibromoethane (Ethylene Dibromide)	0.03	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.02)	ND (1) F2	ND (1)
1,2-Dichlorobenzene	600	**0.34 J**	ND (1)	**0.43 J**	**0.35 J**	**0.69 J**	**0.83 J**	**0.62 J**	ND (1)	ND (1) F2	ND (1)
1,2-Dichloroethane	2	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F1F2	ND (1)
1,2-Dichloropropane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F2	ND (1)
1,3-Dichlorobenzene	600	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F2	ND (1)
1,4-Dichlorobenzene	75	**3.6**	**0.77 J**	**2**	**2.7**	**2.5**	**3.4**	**2.8**	ND (1)	ND (1) F2	ND (1)
1,4-Dioxane	0.4	-	-	-	-	-	-	-	ND (2)	-	-
2-Butanone (Methyl Ethyl Ketone)	300	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
2-Hexanone	300	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5) F2	ND (5)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	100	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5) F2	ND (5)
Acetone	6000	ND (5)	**25**	**13**	**33**	**130**	**10**	**38**	ND (5)	ND (5)	ND (5)
Benzene	1	**8.2** [A]	**0.92 J**	**5.5** [A]	**5.9** [A]	**3.9** [A]	**11** [A]	**17** [A]	ND (1)	ND (1) F1F2	ND (1)
Bromodichloromethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F2	ND (1)
Bromoform	4	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Bromomethane (Methyl Bromide)	10	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F2	ND (1)
Carbon disulfide	700	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F2	ND (1)
Carbon tetrachloride	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F2	ND (1)
Chlorobenzene	50	**89** [A]	**7.4**	**51** [A]	**47**	**49**	**120** [A]	**80** [A]	ND (1)	ND (1) F2	ND (1)
Chloroethane	5	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F2	ND (1)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-6A	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-77	MW-15	MW-15
Sample ID	Groundwater	MW6A-102016-0911	MW07-032515-1001	MW07-061115-1033	MW07-091615-1213	MW07-121715-1107	MW07-302116-1002	MW07-102016-1216	MW77-032615-0903	MW15-033115-0919	MW15-061215-1001
Lab Sample ID	Quality	460-122534-4	460-92212-9	460-96327-9	460-101215-12	460-106444-3	460-110804-11	460-122534-5	460-92288-9	460-92615-4	460-96394-5
Sample Date	Standard	10/20/2016	03/25/2015	06/11/2015	09/16/2015	12/17/2015	03/21/2016	10/20/2016	03/26/2015	03/31/2015	06/12/2015
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.994**	**0.476**	**0.913**	**0.809**	**0.599**	**0.99**	**1.373**	**1.275**	**1.633**	**0.999**
Dissolved Oxygen, Field (mg/L)	-	**0.65**	**0.44**	**0.23**	**0.44**	**0.69**	**0.56**	**0.28**	**2.35**	**7.22**	**3.83**
ORP, Field (mV)	-	**-88.2**	**-43**	**-2.8**	**-108.7**	**-95.2**	**-317.6**	**-63.3**	**-0.04**	**246.3**	**217.1**
pH, Field (s.u)	-	**6.53**	**7.01**	**6.44**	**6.3**	**6.5**	**6.55**	**6.43**	**6.68**	**5.11**	**5.13**
Temperature (Deg C)	-	**14.48**	**7.93**	**16.7**	**19.6**	**11.7**	**10.07**	**17.83**	**14.78**	**9.44**	**16.6**
Turbidity, Field (NTU)	-	**12.4**	**7.49**	**21.1**	**23.2**	**999**	**10**	**56**	**999**	**1.86**	**30.4**
Chloroform (Trichloromethane)	70	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**1.6 F2**	**1.6**
Chloromethane (Methyl Chloride)	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F2	ND (1)
cis-1,2-Dichloroethene	70	**2.7**	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**10**	**0.85 JF1F2**	**0.87 J**
cis-1,3-Dichloropropene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F2	ND (1)
Cyclohexane	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F1F2	ND (1)
Dibromochloromethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Dichlorodifluoromethane (CFC-12)	1000	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F2	ND (1)
Ethylbenzene	700	ND (1)	ND (1)	**0.57 J**	ND (1)	**0.31 J**	**2.3**	**0.81 J**	ND (1)	ND (1) F2	ND (1)
Isopropylbenzene	700	ND (1)	**0.35 J**	**1.5**	**1.6**	**1.9**	**2.6**	**6.1**	ND (1)	ND (1) F1F2	ND (1)
Volatile Organic Compounds (ug/L) (cont')											
Methyl acetate	7000	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5) *F2	ND (5)
Methyl cyclohexane	100	ND (1)	**1.3**	**1.8**	**1.1**	**1.4**	**1.5**	**0.96 J**	ND (1)	ND (1) F1F2	ND (1)
Methyl Tert Butyl Ether	70	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F2	ND (1)
Methylene chloride	3	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F1F2	ND (1)
Styrene	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Tetrachloroethene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**1.3** [A]	**1.6** [A]
Toluene	600	ND (1)	ND (1)	**0.62 J**	**0.72 J**	**0.68 J**	**1**	**0.45 J**	ND (1)	ND (1) F1F2	ND (1)
trans-1,2-Dichloroethene	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.3 J**	ND (1) F1F2	ND (1)
trans-1,3-Dichloropropene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F2	ND (1)
Trichloroethene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.56 J**	**1.2 F2** [A]	**1**
Trichlorofluoromethane (CFC-11)	2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F2	ND (1)
Trifluorotrichloroethane (Freon 113)	20000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) F2	ND (1)
Vinyl chloride	1	**0.9 J**	ND (1)	ND (1) *	ND (1)	ND (1)	**0.19 J**	ND (1)	**1.5** [A]	ND (1) F2	ND (1)
Xylene (total)	1000	ND (2)	ND (2)	**0.54 J**	**0.45 J**	**1.9 J**	**4.8**	**1.6 J**	ND (2)	ND (2) F2	ND (2)

Notes:
1. ND: Result is not detected above the indicated reporting limit.
   J: Estimated value
   B: Possible blank contamination
   E: Exceeds calibration limits
   F1: MS and/or MSD recovery exceeds the control limits.
   * - Recovery Exceeds control limits
2. Results in red exceed the following criteria:
   - Groundwater Quality Standards (GWQS)
3. Results in **bold** are detected.

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-15	MW-15	MW-15	MW-15	MW-15A	MW-15A	MW-15A	MW-15A	MW-15A	MW-15A
Sample ID	Groundwater	MW15-091715-1028	MW15-121615-1047	MW15-032416-1030	MW15-101916-1126	MW15A-033115-1052	MW15A-061215-0858	1000-061215-0003	MW15A-091715-0918	MW15A-121615-1142	MW15A-032416-1116
Lab Sample ID	Quality	460-101286-11	460-106433-11	460-111067-8	460-122517-3	460-92615-5	460-96394-4	460-96394-3	460-101286-12	460-106433-12	460-111067-9
Sample Date	Standard	09/17/2015	12/16/2015	03/24/2016	10/19/2016	03/31/2015	06/12/2015	06/12/2015	09/17/2015	12/16/2015	03/24/2016
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.901**	**1.033**	**1066**	**1.121**	**1.631**	**1.054**	-	**1.008**	**0.988**	**1156**
Dissolved Oxygen, Field (mg/L)	-	**1.06**	**2.55**	**4.03**	**1**	**0.78**	**0.41**	-	**0.32**	**0.36**	**0.33**
ORP, Field (mV)	-	**100.7**	**176.6**	**335.7**	**234.1**	**-98.1**	**-112.3**	-	**-71.4**	**-65.1**	**-101.1**
pH, Field (s.u)	-	**5.02**	**4.9**	**5.07**	**5**	**7.03**	**7.02**	-	**6.7**	**6.7**	**7.02**
Temperature (Deg C)	-	**19.3**	**13.2**	**11.21**	**18.37**	**8.46**	**16.7**	-	**17.1**	**13.1**	**11.85**
Turbidity, Field (NTU)	-	**26.9**	**20.9**	**1.93**	**2.84**	**351**	**210**	-	**97.8**	**80.6**	**173**
Inorganic Compounds - Total (ug/L)											
Cyanide	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	**4.2 JB**	ND (10)	ND (10) F1	ND (10)
Antimony, Total	6	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Arsenic, Total	3	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Barium, Total	6000	**322**	**433**	**475**	**470**	**726**	**903**	**921**	**737**	**708**	**854**
Beryllium, Total	1	**1.6** [A]	**1.8** [A]	**1.5** [A]	**1.9** [A]	ND (0.8)	**0.77 J**	**0.82**	ND (0.8)	ND (0.8)	**0.29 J**
Cadmium, Total	4	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Chromium, Total	70	**167** [A]	**126** [A]	**25**	**17.5**	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)
Chromium VI (Hexavalent), Total	NC	-	-	-	-	-	-	-	-	-	-
Cobalt, Total	100	**1.5 J**	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)
Copper, Total	1300	**3 J**	**2.6 J**	ND (4)	**2.6 J**	**4**	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)
Lead, Total	5	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)
Manganese, Total	50	**79.3** [A]	**32.2**	**24**	**112** [A]	**836** [A]	**980** [A]	**983** [A]	**891** [A]	**982** [A]	**823** [A]
Mercury, Total	2	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	**0.18 J**	ND (0.2)
Nickel, Total	100	**71.8**	**37.7**	**30.9**	**48.1**	**3.8 J**	**5.3**	**5.2**	**5.1**	**11.6**	**5.5**
Selenium, Total	40	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Silver, Total	40	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Zinc, Total	2000	**17.8**	**14.6 J**	**10.9 J**	**25.6**	ND (16)	**7.1 J**	**6.6 J**	ND (16)	ND (16)	ND (16)
Inorganic Compounds - Dissolved (ug/L)											
Antimony, Dissolved	6	-	-	-	-	-	-	-	-	-	-
Arsenic, Dissolved	3	-	-	-	-	-	-	-	-	-	-
Barium, Dissolved	6000	-	-	-	-	-	-	-	-	-	-
Beryllium, Dissolved	1	-	-	-	-	-	-	-	-	-	-
Cadmium, Dissolved	4	-	-	-	-	-	-	-	-	-	-
Chromium, Dissolved	70	-	-	-	-	-	-	-	-	-	-
Cobalt, Dissolved	100	-	-	-	-	-	-	-	-	-	-
Copper, Dissolved	1300	-	-	-	-	-	-	-	-	-	-
Lead, Dissolved	5	-	-	-	-	-	-	-	-	-	-
Manganese, Dissolved	50	-	-	-	-	-	-	-	-	-	-
Mercury, Dissolved	2	-	-	-	-	-	-	-	-	-	-
Nickel, Dissolved	100	-	-	-	-	-	-	-	-	-	-
Selenium, Dissolved	40	-	-	-	-	-	-	-	-	-	-
Silver, Dissolved	40	-	-	-	-	-	-	-	-	-	-
Zinc, Dissolved	2000	-	-	-	-	-	-	-	-	-	-
PCBs (ug/L)											
Aroclor-1016 (PCB-1016)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1262 (PCB-1262)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1268 (PCB-1268)	0.5	-	-	-	-	-	-	-	-	-	-
Polychlorinated biphenyls (PCBs)	0.5	-	-	-	-	-	-	-	-	-	-

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-15	MW-15	MW-15	MW-15	MW-15A	MW-15A	MW-15A	MW-15A	MW-15A	MW-15A
Sample ID	Groundwater	MW15-091715-1028	MW15-121615-1047	MW15-032416-1030	MW15-101916-1126	MW15A-033115-1052	MW15A-061215-0858	1000-061215-0003	MW15A-091715-0918	MW15A-121615-1142	MW15A-032416-1116
Lab Sample ID	Quality	460-101286-11	460-106433-11	460-111067-8	460-122517-3	460-92615-5	460-96394-4	460-96394-3	460-101286-12	460-106433-12	460-111067-9
Sample Date	Standard	09/17/2015	12/16/2015	03/24/2016	10/19/2016	03/31/2015	06/12/2015	06/12/2015	09/17/2015	12/16/2015	03/24/2016
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.901**	**1.033**	**1066**	**1.121**	**1.631**	**1.054**	-	**1.008**	**0.988**	**1156**
Dissolved Oxygen, Field (mg/L)	-	**1.06**	**2.55**	**4.03**	**1**	**0.78**	**0.41**	-	**0.32**	**0.36**	**0.33**
ORP, Field (mV)	-	**100.7**	**176.6**	**335.7**	**234.1**	**-98.1**	**-112.3**	-	**-71.4**	**-65.1**	**-101.1**
pH, Field (s.u)	-	**5.02**	**4.9**	**5.07**	**5**	**7.03**	**7.02**	-	**6.7**	**6.7**	**7.02**
Temperature (Deg C)	-	**19.3**	**13.2**	**11.21**	**18.37**	**8.46**	**16.7**	-	**17.1**	**13.1**	**11.85**
Turbidity, Field (NTU)	-	**26.9**	**20.9**	**1.93**	**2.84**	**351**	**210**	-	**97.8**	**80.6**	**173**
Semi-Volatile Organic Compounds (ug/L)											
2,2'-oxybis(1-Chloropropane)	300	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *
2,4,5-Trichlorophenol	700	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4,6-Trichlorophenol	20	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4-Dichlorophenol	20	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4-Dimethylphenol	100	ND (10)	ND (10)	ND (10) *	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *
2,4-Dinitrophenol	40	ND (21)	ND (20)	ND (20)	ND (20)	ND (21)	ND (21)	ND (20)	ND (21)	ND (20)	ND (20)
2,4-Dinitrotoluene	10	ND (2.1)	ND (2)	ND (2)	ND (2)	ND (2.1)	ND (2.1)	ND (2)	ND (2.1)	ND (2)	ND (2)
2,6-Dinitrotoluene	10	ND (2.1)	ND (2)	ND (2)	ND (2)	ND (2.1)	ND (2.1)	ND (2)	ND (2.1)	ND (2)	ND (2)
2-Chloronaphthalene	600	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2-Chlorophenol	40	ND (10)	ND (10) *	ND (10) *	ND (10) *	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10) *
2-Methylnaphthalene	30	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *
2-Methylphenol	50	ND (10)	ND (10) *	ND (10) *	ND (10) *	ND (10) *	ND (10) *	ND (10) *	ND (10)	ND (10) *	ND (10) *
2-Nitroaniline	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2-Nitrophenol	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
3,3'-Dichlorobenzidine	30	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
3-Nitroaniline	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4,6-Dinitro-2-methylphenol	1	ND (21)	ND (20)	ND (20)	ND (20)	ND (21)	ND (21)	ND (20)	ND (21)	ND (20)	ND (20)
4-Bromophenyl phenyl ether	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Chloro-3-methylphenol	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Chloroaniline	30	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Chlorophenyl phenyl ether	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Methylphenol	50	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Nitroaniline	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Nitrophenol	100	ND (21)	ND (20)	ND (20)	ND (20)	ND (21)	ND (21)	ND (20)	ND (21)	ND (20)	ND (20)
Acenaphthene	400	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Acenaphthylene	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Acetophenone	700	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Anthracene	2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Atrazine	3	ND (2.1)	ND (2)	ND (2)	ND (2)	ND (2.1)	ND (2.1) *	ND (2) *	ND (2.1)	ND (2)	ND (2)
Benzaldehyde	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Benzo(a)anthracene	0.1	ND (0.052)	ND (0.05)	ND (0.05) *	ND (0.051)	ND (0.052)	ND (0.052)	ND (0.05)	ND (0.052)	ND (0.05)	ND (0.05) *
Benzo(a)pyrene	0.1	ND (0.052)	ND (0.05)	ND (0.05)	ND (0.051)	ND (0.052)	ND (0.052)	ND (0.05)	ND (0.052)	ND (0.05)	ND (0.05)
Benzo(b)fluoranthene	0.2	ND (0.052)	ND (0.05)	ND (0.05) *	ND (0.051)	ND (0.052)	ND (0.052)	ND (0.05)	**0.02 J**	ND (0.05)	ND (0.05) *
Benzo(g,h,i)perylene	100	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *
Benzo(k)fluoranthene	0.5	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Biphenyl	400	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
bis(2-Chloroethoxy)methane	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
bis(2-Chloroethyl)ether	7	ND (1)	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
bis(2-Ethylhexyl)phthalate	3	**7.8 B** [A]	ND (2)	ND (2)	ND (2)	ND (2.1)	ND (2.1)	ND (2)	**7.2 B** [A]	ND (2)	ND (2)
Butyl benzylphthalate	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Caprolactam	5000	ND (10)	ND (10) *	ND (10)	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10)
Carbazole	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Chrysene	5	ND (2.1)	ND (2)	ND (2)	ND (2)	ND (2.1)	ND (2.1)	ND (2)	ND (2.1)	ND (2)	ND (2)
Dibenz(a,h)anthracene	0.3	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) *
Dibenzofuran	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Diethyl phthalate	6000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-15	MW-15	MW-15	MW-15	MW-15A	MW-15A	MW-15A	MW-15A	MW-15A	MW-15A
Sample ID	Groundwater	MW15-091715-1028	MW15-121615-1047	MW15-032416-1030	MW15-101916-1126	MW15A-033115-1052	MW15A-061215-0858	1000-061215-0003	MW15A-091715-0918	MW15A-121615-1142	MW15A-032416-1116
Lab Sample ID	Quality	460-101286-11	460-106433-11	460-111067-8	460-122517-3	460-92615-5	460-96394-4	460-96394-3	460-101286-12	460-106433-12	460-111067-9
Sample Date	Standard	09/17/2015	12/16/2015	03/24/2016	10/19/2016	03/31/2015	06/12/2015	06/12/2015	09/17/2015	12/16/2015	03/24/2016
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.901**	**1.033**	**1066**	**1.121**	**1.631**	**1.054**	-	**1.008**	**0.988**	**1156**
Dissolved Oxygen, Field (mg/L)	-	**1.06**	**2.55**	**4.03**	**1**	**0.78**	**0.41**	-	**0.32**	**0.36**	**0.33**
ORP, Field (mV)	-	**100.7**	**176.6**	**335.7**	**234.1**	**-98.1**	**-112.3**	-	**-71.4**	**-65.1**	**-101.1**
pH, Field (s.u)	-	**5.02**	**4.9**	**5.07**	**5**	**7.03**	**7.02**	-	**6.7**	**6.7**	**7.02**
Temperature (Deg C)	-	**19.3**	**13.2**	**11.21**	**18.37**	**8.46**	**16.7**	-	**17.1**	**13.1**	**11.85**
Turbidity, Field (NTU)	-	**26.9**	**20.9**	**1.93**	**2.84**	**351**	**210**	-	**97.8**	**80.6**	**173**
Dimethyl phthalate	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Di-n-butylphthalate	700	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Di-n-octyl phthalate	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Fluoranthene	300	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Fluorene	300	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Semi-Volatile Organic Compounds (ug/L) (con't)											
Hexachlorobenzene	0.02	ND (0.021)	ND (0.02) *	ND (0.02) *	ND (0.02)	ND (0.021)	ND (0.021)	ND (0.02)	ND (0.021)	ND (0.02) *	ND (0.02) *
Hexachlorobutadiene	1	ND (1) *	ND (1) *	ND (1) *	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1) *	ND (1) *	ND (1) *
Hexachlorocyclopentadiene	40	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Hexachloroethane	7	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Indeno(1,2,3-cd)pyrene	0.2	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) *
Isophorone	40	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Naphthalene	300	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *
Nitrobenzene	6	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
N-Nitrosodi-n-propylamine	10	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
N-Nitrosodiphenylamine	10	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Pentachlorophenol	0.3	ND (0.21)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.21)	ND (0.21)	ND (0.2)	ND (0.21)	ND (0.2)	ND (0.2)
Phenanthrene	100	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Phenol	2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Pyrene	200	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Volatile Organic Compounds (ug/L)											
1,1,1-Trichloroethane	30	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1,2,2-Tetrachloroethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1,2-Trichloroethane	3	ND (1)	ND (1)	**0.16 J**	**0.18 J**	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1-Dichloroethane	50	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1-Dichloroethene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2,4-Trichlorobenzene	9	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.3 J**	ND (1)
1,2-Dibromo-3-chloropropane (DBCP)	0.02	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)
1,2-Dibromoethane (Ethylene Dibromide)	0.03	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02) *	ND (0.02)	ND (0.02)
1,2-Dichlorobenzene	600	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dichloroethane	2	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dichloropropane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,3-Dichlorobenzene	600	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,4-Dichlorobenzene	75	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.42 J**	ND (1)
1,4-Dioxane	0.4	-	-	-	-	ND (2)	ND (2)	ND (2)	ND (2)	ND (0.4)	ND (0.4)
2-Butanone (Methyl Ethyl Ketone)	300	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
2-Hexanone	300	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	100	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Acetone	6000	ND (5)	**46**	ND (5)	ND (5)	ND (5)	**18**	**23**	**22**	**32**	ND (5)
Benzene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Bromodichloromethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Bromoform	4	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Bromomethane (Methyl Bromide)	10	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Carbon disulfide	700	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Carbon tetrachloride	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Chlorobenzene	50	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.25 J**	ND (1)
Chloroethane	5	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-15	MW-15	MW-15	MW-15	MW-15A	MW-15A	MW-15A	MW-15A	MW-15A	MW-15A
Sample ID	Groundwater	MW15-091715-1028	MW15-121615-1047	MW15-032416-1030	MW15-101916-1126	MW15A-033115-1052	MW15A-061215-0858	1000-061215-0003	MW15A-091715-0918	MW15A-121615-1142	MW15A-032416-1116
Lab Sample ID	Quality	460-101286-11	460-106433-11	460-111067-8	460-122517-3	460-92615-5	460-96394-4	460-96394-3	460-101286-12	460-106433-12	460-111067-9
Sample Date	Standard	09/17/2015	12/16/2015	03/24/2016	10/19/2016	03/31/2015	06/12/2015	06/12/2015	09/17/2015	12/16/2015	03/24/2016
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.901**	**1.033**	**1066**	**1.121**	**1.631**	**1.054**	-	**1.008**	**0.988**	**1156**
Dissolved Oxygen, Field (mg/L)	-	**1.06**	**2.55**	**4.03**	**1**	**0.78**	**0.41**	-	**0.32**	**0.36**	**0.33**
ORP, Field (mV)	-	**100.7**	**176.6**	**335.7**	**234.1**	**-98.1**	**-112.3**	-	**-71.4**	**-65.1**	**-101.1**
pH, Field (s.u)	-	**5.02**	**4.9**	**5.07**	**5**	**7.03**	**7.02**	-	**6.7**	**6.7**	**7.02**
Temperature (Deg C)	-	**19.3**	**13.2**	**11.21**	**18.37**	**8.46**	**16.7**	-	**17.1**	**13.1**	**11.85**
Turbidity, Field (NTU)	-	**26.9**	**20.9**	**1.93**	**2.84**	**351**	**210**	-	**97.8**	**80.6**	**173**
Chloroform (Trichloromethane)	70	**1.1**	**1.9**	**1.1**	**1.1**	ND (1)	ND (1)	ND (1)	ND (1)	**0.41 J**	ND (1)
Chloromethane (Methyl Chloride)	100	**0.91 J**	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.31 J**	ND (1)	ND (1)
cis-1,2-Dichloroethene	70	**0.88 J**	**1.2**	**0.77 J**	**0.73 J**	ND (1)	**0.51 J**	**0.49 J**	**1**	**0.82 J**	**0.28 J**
cis-1,3-Dichloropropene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Cyclohexane	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Dibromochloromethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Dichlorodifluoromethane (CFC-12)	1000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Ethylbenzene	700	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Isopropylbenzene	700	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Volatile Organic Compounds (ug/L) (cont')											
Methyl acetate	7000	ND (5)	ND (5)	ND (5)	ND (5)	ND (5) *	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Methyl cyclohexane	100	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) *	ND (1)
Methyl Tert Butyl Ether	70	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Methylene chloride	3	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Styrene	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Tetrachloroethene	1	**1.6** [A]	**1.6** [A]	**1.2** [A]	**1.5** [A]	ND (1)	**0.2 J**	**0.18 J**	ND (1)	**0.49 J**	**0.26 J**
Toluene	600	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
trans-1,2-Dichloroethene	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
trans-1,3-Dichloropropene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Trichloroethene	1	**1.4** [A]	**2** [A]	**1**	**1.5** [A]	**0.64 J**	**0.61 J**	**0.71 J**	**0.78 J**	**0.86 J**	**0.44 J**
Trichlorofluoromethane (CFC-11)	2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Trifluorotrichloroethane (Freon 113)	20000	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) *	ND (1)
Vinyl chloride	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.25 J**	**0.38 J**	**0.68 J**	**1.1** [A]	**0.21 J**
Xylene (total)	1000	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)

Notes:
1. ND: Result is not detected above the indicated reporting limit.
   J: Estimated value
   B: Possible blank contamination
   E: Exceeds calibration limits
   F1: MS and/or MSD recovery exceeds the control limits.
   * - Recovery Exceeds control limits
2. Results in red exceed the following criteria:
   - Groundwater Quality Standards (GWQS)
3. Results in **bold** are detected.

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-15A	MW-21A	MW-25	MW-35	MW-35	MW-35	MW-35	MW-35	MW-35	MW-35A
Sample ID	Groundwater	MW15A-101916-1231	MW21A-101916-1242	MW25-101916-1147	MW35-033115-1152	MW35-061215-1137	MW35-091715-1223	MW35-121615-1242	MW35-032416-1311	MW35-101916-0906	MW35A-033115-1247
Lab Sample ID	Quality	460-122517-4	460-122517-7	460-122517-8	460-92615-6	460-96394-7	460-101286-10	460-106433-13	460-111067-10	460-122517-5	460-92615-7
Sample Date	Standard	10/19/2016	10/19/2016	10/19/2016	03/31/2015	06/12/2015	09/17/2015	12/16/2015	03/24/2016	10/19/2016	03/31/2015
Field Parameters											
Conductivity, Field (mS/cm)	-	**1.117**	**0.771**	**1.097**	**1.309**	**0.412**	**0.557**	**0.482**	**503**	**0.508**	**1.275**
Dissolved Oxygen, Field (mg/L)	-	**0.15**	**0.17**	**1.89**	**3.5**	**0.41**	**1.07**	**1.59**	**1.35**	**1.49**	**0.95**
ORP, Field (mV)	-	**-126.1**	**-66.9**	**147.2**	**177.9**	**75.9**	**95.8**	**106.9**	**251.3**	**207**	**-127**
pH, Field (s.u)	-	**6.74**	**6.17**	**3.89**	**5.88**	**6.34**	**5.28**	**5.74**	**5.39**	**5.41**	**7.22**
Temperature (Deg C)	-	**19.91**	**17.73**	**20.07**	**8.22**	**20.2**	**22.1**	**11.8**	**10.47**	**18.28**	**9.39**
Turbidity, Field (NTU)	-	**118**	**9.53**	**6.62**	**6.01**	**22.1**	**14.3**	**13.7**	**1.36**	**38.1**	**58.6**
Inorganic Compounds - Total (ug/L)											
Cyanide	100	ND (10)	-	-	ND (10)	**5.6 JB**	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Antimony, Total	6	ND (2)	-	-	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Arsenic, Total	3	ND (2)	-	-	ND (2)	**1.1 J**	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Barium, Total	6000	**750**	-	-	**340**	**284**	**528**	**317**	**444**	**527**	**251**
Beryllium, Total	1	ND (0.8)	-	-	ND (0.8)	**0.31 J**	**0.54 J**	ND (0.8)	**0.36 J**	**0.58 J**	ND (0.8)
Cadmium, Total	4	ND (2)	-	-	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Chromium, Total	70	ND (4)	-	-	**2.1 J**	**6.5**	**4.2**	**3 J**	**3.3 J**	**3.9 J**	ND (4)
Chromium VI (Hexavalent), Total	NC	-	-	-	-	-	-	-	-	-	-
Cobalt, Total	100	ND (4)	-	-	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)
Copper, Total	1300	ND (4)	-	-	**3.2 J**	**8.2**	**1.6 J**	**2.7 J**	ND (4)	**1.5 J**	**2.5 J**
Lead, Total	5	ND (1.2)	-	-	ND (1.2)	**0.66 J**	ND (1.2)	ND (1.2)	ND (1.2)	**0.45 J**	ND (1.2)
Manganese, Total	50	**984** [A]	-	-	**12.9**	**179** [A]	**78.1** [A]	**32.3**	**78.5** [A]	**120** [A]	**1020** [A]
Mercury, Total	2	ND (0.2)	-	-	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)
Nickel, Total	100	**4.2**	-	-	**4.2**	**10.8**	**19.3**	**7.8**	**15.8**	**18.2**	**9.8**
Selenium, Total	40	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Silver, Total	40	ND (2)	-	-	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)
Zinc, Total	2000	ND (16)	-	-	**9.4 J**	**22.2**	**18.7**	**9.6 J**	**11.6 J**	**20.4**	ND (16)
Inorganic Compounds - Dissolved (ug/L)											
Antimony, Dissolved	6	-	-	-	-	-	-	-	-	-	-
Arsenic, Dissolved	3	-	-	-	-	-	-	-	-	-	-
Barium, Dissolved	6000	-	-	-	-	-	-	-	-	-	-
Beryllium, Dissolved	1	-	-	-	-	-	-	-	-	-	-
Cadmium, Dissolved	4	-	-	-	-	-	-	-	-	-	-
Chromium, Dissolved	70	-	-	-	-	-	-	-	-	-	-
Cobalt, Dissolved	100	-	-	-	-	-	-	-	-	-	-
Copper, Dissolved	1300	-	-	-	-	-	-	-	-	-	-
Lead, Dissolved	5	-	-	-	-	-	-	-	-	-	-
Manganese, Dissolved	50	-	-	-	-	-	-	-	-	-	-
Mercury, Dissolved	2	-	-	-	-	-	-	-	-	-	-
Nickel, Dissolved	100	-	-	-	-	-	-	-	-	-	-
Selenium, Dissolved	40	-	-	-	-	-	-	-	-	-	-
Silver, Dissolved	40	-	-	-	-	-	-	-	-	-	-
Zinc, Dissolved	2000	-	-	-	-	-	-	-	-	-	-
PCBs (ug/L)											
Aroclor-1016 (PCB-1016)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1262 (PCB-1262)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1268 (PCB-1268)	0.5	-	-	-	-	-	-	-	-	-	-
Polychlorinated biphenyls (PCBs)	0.5	-	-	-	-	-	-	-	-	-	-

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-15A	MW-21A	MW-25	MW-35	MW-35	MW-35	MW-35	MW-35	MW-35	MW-35A
Sample ID	Groundwater	MW15A-101916-1231	MW21A-101916-1242	MW25-101916-1147	MW35-033115-1152	MW35-061215-1137	MW35-091715-1223	MW35-121615-1242	MW35-032416-1311	MW35-101916-0906	MW35A-033115-1247
Lab Sample ID	Quality	460-122517-4	460-122517-7	460-122517-8	460-92615-6	460-96394-7	460-101286-10	460-106433-13	460-111067-10	460-122517-5	460-92615-7
Sample Date	Standard	10/19/2016	10/19/2016	10/19/2016	03/31/2015	06/12/2015	09/17/2015	12/16/2015	03/24/2016	10/19/2016	03/31/2015
Field Parameters											
Conductivity, Field (mS/cm)	-	**1.117**	**0.771**	**1.097**	**1.309**	**0.412**	**0.557**	**0.482**	**503**	**0.508**	**1.275**
Dissolved Oxygen, Field (mg/L)	-	**0.15**	**0.17**	**1.89**	**3.5**	**0.41**	**1.07**	**1.59**	**1.35**	**1.49**	**0.95**
ORP, Field (mV)	-	**-126.1**	**-66.9**	**147.2**	**177.9**	**75.9**	**95.8**	**106.9**	**251.3**	**207**	**-127**
pH, Field (s.u)	-	**6.74**	**6.17**	**3.89**	**5.88**	**6.34**	**5.28**	**5.74**	**5.39**	**5.41**	**7.22**
Temperature (Deg C)	-	**19.91**	**17.73**	**20.07**	**8.22**	**20.2**	**22.1**	**11.8**	**10.47**	**18.28**	**9.39**
Turbidity, Field (NTU)	-	**118**	**9.53**	**6.62**	**6.01**	**22.1**	**14.3**	**13.7**	**1.36**	**38.1**	**58.6**
Semi-Volatile Organic Compounds (ug/L)											
2,2'-oxybis(1-Chloropropane)	300	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)
2,4,5-Trichlorophenol	700	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4,6-Trichlorophenol	20	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4-Dichlorophenol	20	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2,4-Dimethylphenol	100	ND (10) *	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10) *	ND (10)
2,4-Dinitrophenol	40	ND (21)	-	-	ND (21)	ND (21)	ND (21)	ND (20)	ND (20)	ND (20)	ND (21)
2,4-Dinitrotoluene	10	ND (2.1)	-	-	ND (2.1)	ND (2.1)	ND (2.1)	ND (2)	ND (2)	ND (2)	ND (2.1)
2,6-Dinitrotoluene	10	ND (2.1)	-	-	ND (2.1)	ND (2.1)	ND (2.1)	ND (2)	ND (2)	ND (2)	ND (2.1)
2-Chloronaphthalene	600	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2-Chlorophenol	40	ND (10) *	-	-	ND (10) *	ND (10)	ND (10)	ND (10) *	ND (10) *	ND (10) *	ND (10) *
2-Methylnaphthalene	30	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)
2-Methylphenol	50	ND (10) *	-	-	ND (10) *	ND (10) *	ND (10)	ND (10) *	ND (10) *	ND (10) *	ND (10) *
2-Nitroaniline	100	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
2-Nitrophenol	100	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
3,3'-Dichlorobenzidine	30	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
3-Nitroaniline	100	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4,6-Dinitro-2-methylphenol	1	ND (21)	-	-	ND (21)	ND (21)	ND (21)	ND (20)	ND (20)	ND (20)	ND (21)
4-Bromophenyl phenyl ether	100	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Chloro-3-methylphenol	100	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Chloroaniline	30	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Chlorophenyl phenyl ether	100	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Methylphenol	50	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Nitroaniline	100	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
4-Nitrophenol	100	ND (21)	-	-	ND (21)	ND (21)	ND (21)	ND (20)	ND (20)	ND (20)	ND (21)
Acenaphthene	400	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Acenaphthylene	100	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Acetophenone	700	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Anthracene	2000	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Atrazine	3	ND (2.1)	-	-	ND (2.1)	ND (2.1) *	ND (2.1)	ND (2)	ND (2)	ND (2)	ND (2.1)
Benzaldehyde	100	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Benzo(a)anthracene	0.1	ND (0.052)	-	-	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.05)	ND (0.05) *	ND (0.051)	ND (0.052)
Benzo(a)pyrene	0.1	ND (0.052)	-	-	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.05)	ND (0.05)	ND (0.051)	ND (0.052)
Benzo(b)fluoranthene	0.2	ND (0.052)	-	-	ND (0.052)	ND (0.052)	ND (0.052)	ND (0.05)	ND (0.05) *	ND (0.051)	ND (0.052)
Benzo(g,h,i)perylene	100	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)
Benzo(k)fluoranthene	0.5	ND (1)	-	-	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Biphenyl	400	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
bis(2-Chloroethoxy)methane	100	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
bis(2-Chloroethyl)ether	7	ND (1) *	-	-	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) *	ND (1)
bis(2-Ethylhexyl)phthalate	3	ND (2.1)	-	-	ND (2.1)	ND (2.1)	**7.9 B** [A]	ND (2)	ND (2)	ND (2)	ND (2.1)
Butyl benzylphthalate	100	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Caprolactam	5000	ND (10) *	-	-	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10) *	ND (10)
Carbazole	100	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Chrysene	5	ND (2.1)	-	-	ND (2.1)	ND (2.1)	ND (2.1)	ND (2)	ND (2)	ND (2)	ND (2.1)
Dibenz(a,h)anthracene	0.3	ND (1)	-	-	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)
Dibenzofuran	100	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Diethyl phthalate	6000	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-15A	MW-21A	MW-25	MW-35	MW-35	MW-35	MW-35	MW-35	MW-35	MW-35A
Sample ID	Groundwater	MW15A-101916-1231	MW21A-101916-1242	MW25-101916-1147	MW35-033115-1152	MW35-061215-1137	MW35-091715-1223	MW35-121615-1242	MW35-032416-1311	MW35-101916-0906	MW35A-033115-1247
Lab Sample ID	Quality	460-122517-4	460-122517-7	460-122517-8	460-92615-6	460-96394-7	460-101286-10	460-106433-13	460-111067-10	460-122517-5	460-92615-7
Sample Date	Standard	10/19/2016	10/19/2016	10/19/2016	03/31/2015	06/12/2015	09/17/2015	12/16/2015	03/24/2016	10/19/2016	03/31/2015
Field Parameters											
Conductivity, Field (mS/cm)	-	**1.117**	**0.771**	**1.097**	**1.309**	**0.412**	**0.557**	**0.482**	**503**	**0.508**	**1.275**
Dissolved Oxygen, Field (mg/L)	-	**0.15**	**0.17**	**1.89**	**3.5**	**0.41**	**1.07**	**1.59**	**1.35**	**1.49**	**0.95**
ORP, Field (mV)	-	**-126.1**	**-66.9**	**147.2**	**177.9**	**75.9**	**95.8**	**106.9**	**251.3**	**207**	**-127**
pH, Field (s.u)	-	**6.74**	**6.17**	**3.89**	**5.88**	**6.34**	**5.28**	**5.74**	**5.39**	**5.41**	**7.22**
Temperature (Deg C)	-	**19.91**	**17.73**	**20.07**	**8.22**	**20.2**	**22.1**	**11.8**	**10.47**	**18.28**	**9.39**
Turbidity, Field (NTU)	-	**118**	**9.53**	**6.62**	**6.01**	**22.1**	**14.3**	**13.7**	**1.36**	**38.1**	**58.6**
Dimethyl phthalate	100	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Di-n-butylphthalate	700	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Di-n-octyl phthalate	100	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Fluoranthene	300	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Fluorene	300	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Semi-Volatile Organic Compounds (ug/L) (con't)											
Hexachlorobenzene	0.02	ND (0.021)	-	-	ND (0.021)	ND (0.021)	ND (0.021)	ND (0.02) *	ND (0.02) *	ND (0.02)	ND (0.021)
Hexachlorobutadiene	1	ND (1)	-	-	ND (1) *	ND (1)	ND (1) *	ND (1) *	ND (1) *	ND (1)	ND (1) *
Hexachlorocyclopentadiene	40	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Hexachloroethane	7	ND (1)	-	-	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Indeno(1,2,3-cd)pyrene	0.2	ND (1)	-	-	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)
Isophorone	40	ND (10) *	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10)
Naphthalene	300	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)
Nitrobenzene	6	ND (1)	-	-	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
N-Nitrosodi-n-propylamine	10	ND (1)	-	-	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
N-Nitrosodiphenylamine	10	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Pentachlorophenol	0.3	ND (0.21)	-	-	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.21)
Phenanthrene	100	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Phenol	2000	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Pyrene	200	ND (10)	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Volatile Organic Compounds (ug/L)											
1,1,1-Trichloroethane	30	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1,2,2-Tetrachloroethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1,2-Trichloroethane	3	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1-Dichloroethane	50	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,1-Dichloroethene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2,4-Trichlorobenzene	9	**0.3 J**	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.35 J**
1,2-Dibromo-3-chloropropane (DBCP)	0.02	ND (0.02)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dibromoethane (Ethylene Dibromide)	0.03	ND (0.02)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dichlorobenzene	600	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dichloroethane	2	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,2-Dichloropropane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
1,3-Dichlorobenzene	600	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.54 J**
1,4-Dichlorobenzene	75	**0.49 J**	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**1.3**
1,4-Dioxane	0.4	**29** [A]	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	300	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
2-Hexanone	300	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	100	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
Acetone	6000	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	**18**	ND (5)	ND (5)	ND (5)
Benzene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Bromodichloromethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Bromoform	4	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Bromomethane (Methyl Bromide)	10	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Carbon disulfide	700	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Carbon tetrachloride	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Chlorobenzene	50	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.73 J**
Chloroethane	5	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

		MW-15A	MW-21A	MW-25	MW-35	MW-35	MW-35	MW-35	MW-35	MW-35	MW-35A
Sample ID	Groundwater	MW15A-101916-1231	MW21A-101916-1242	MW25-101916-1147	MW35-033115-1152	MW35-061215-1137	MW35-091715-1223	MW35-121615-1242	MW35-032416-1311	MW35-101916-0906	MW35A-033115-1247
Lab Sample ID	Quality	460-122517-4	460-122517-7	460-122517-8	460-92615-6	460-96394-7	460-101286-10	460-106433-13	460-111067-10	460-122517-5	460-92615-7
Sample Date	Standard	10/19/2016	10/19/2016	10/19/2016	03/31/2015	06/12/2015	09/17/2015	12/16/2015	03/24/2016	10/19/2016	03/31/2015
Field Parameters											
Conductivity, Field (mS/cm)	-	**1.117**	**0.771**	**1.097**	**1.309**	**0.412**	**0.557**	**0.482**	**503**	**0.508**	**1.275**
Dissolved Oxygen, Field (mg/L)	-	**0.15**	**0.17**	**1.89**	**3.5**	**0.41**	**1.07**	**1.59**	**1.35**	**1.49**	**0.95**
ORP, Field (mV)	-	**-126.1**	**-66.9**	**147.2**	**177.9**	**75.9**	**95.8**	**106.9**	**251.3**	**207**	**-127**
pH, Field (s.u)	-	**6.74**	**6.17**	**3.89**	**5.88**	**6.34**	**5.28**	**5.74**	**5.39**	**5.41**	**7.22**
Temperature (Deg C)	-	**19.91**	**17.73**	**20.07**	**8.22**	**20.2**	**22.1**	**11.8**	**10.47**	**18.28**	**9.39**
Turbidity, Field (NTU)	-	**118**	**9.53**	**6.62**	**6.01**	**22.1**	**14.3**	**13.7**	**1.36**	**38.1**	**58.6**
Chloroform (Trichloromethane)	70	ND (1)	**1.8**	**1.1**	**1.8**	**1.4**	**2.4**	**1**	**1.7**	**1.5**	**0.32 J**
Chloromethane (Methyl Chloride)	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.42 J**	ND (1)	ND (1)	ND (1)	ND (1)
cis-1,2-Dichloroethene	70	**1.6**	**27**	**0.72 J**	**20**	**13**	**19**	**5**	**17**	**10**	**2.3**
cis-1,3-Dichloropropene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Cyclohexane	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Dibromochloromethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Dichlorodifluoromethane (CFC-12)	1000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Ethylbenzene	700	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Isopropylbenzene	700	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Volatile Organic Compounds (ug/L) (cont')											
Methyl acetate	7000	ND (5)	ND (5)	ND (5)	ND (5) *	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5) *
Methyl cyclohexane	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1)
Methyl Tert Butyl Ether	70	ND (1)	ND (1)	ND (1)	**0.13 J**	ND (1)	**0.13 J**	ND (1)	ND (1)	ND (1)	**0.24 J**
Methylene chloride	3	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Styrene	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Tetrachloroethene	1	**0.64 J**	**0.99 J**	1.2 [A]	ND (1)	**0.65 J**	1.1 [A]	**0.54 J**	**0.7 J**	**0.73 J**	ND (1)
Toluene	600	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
trans-1,2-Dichloroethene	100	ND (1)	ND (1)	ND (1)	**0.49 J**	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
trans-1,3-Dichloropropene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Trichloroethene	1	1.8 [A]	2.5 [A]	1.6 [A]	5.9 [A]	4.6 [A]	6.8 [A]	2.7 [A]	5.3 [A]	3.8 [A]	**0.65 J**
Trichlorofluoromethane (CFC-11)	2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)
Trifluorotrichloroethane (Freon 113)	20000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1)
Vinyl chloride	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	2.6 [A]
Xylene (total)	1000	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)

Notes:
1. ND: Result is not detected above the indicated reporting limit.
   J: Estimated value
   B: Possible blank contamination
   E: Exceeds calibration limits
   F1: MS and/or MSD recovery exceeds the control limits.
   * - Recovery Exceeds control limits
2. Results in red exceed the following criteria:
   - Groundwater Quality Standards (GWQS)
3. Results in **bold** are detected.

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-35A	MW-35A	MW-35A	MW-35A	MW-35A	MW-77	MW-77	MW-77	MW-77	MW-77
Sample ID	Groundwater	MW35A-061215-1052	MW35A-091715-1128	MW35A-121615-1347	MW35A-032416-1222	MW35A-101916-1006	MW77-061515-1027	MW77-091615-1141	MW77-121715-1007	MW77-020516-1221	MW77-032316-1031
Lab Sample ID	Quality	460-96394-6	460-101286-9	460-106433-14	460-111067-11	460-122517-6	460-96461-9	460-101215-5	460-106444-9	460-108647-1	460-110896-6
Sample Date	Standard	06/12/2015	09/17/2015	12/16/2015	03/24/2016	10/19/2016	06/15/2015	09/16/2015	12/17/2015	02/05/2016	03/23/2016
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.74**	**0.708**	**0.726**	**709**	**0.603**	**0.557**	**0.694**	**0.701**	-	**0.682**
Dissolved Oxygen, Field (mg/L)	-	**0.27**	**0.11**	**0.03**	**0.23**	**0.46**	**0.37**	**0.42**	**0.44**	-	**0.13**
ORP, Field (mV)	-	**-120.9**	**-126.8**	**-146.4**	**-150.7**	**-74.2**	**-12.4**	**-69.1**	**-36.9**	-	**32.6**
pH, Field (s.u)	-	**6.95**	**6.98**	**7.09**	**7.17**	**6.61**	**6.3**	**6.67**	**6.79**	-	**6.69**
Temperature (Deg C)	-	**16.8**	**16.7**	**12.7**	**12.17**	**15.89**	**20.8**	**22.7**	**14.8**	-	**15.96**
Turbidity, Field (NTU)	-	**35.1**	**170**	**999**	**83**	**129**	**63.8**	**117**	**154**	-	**3.64**
Inorganic Compounds - Total (ug/L)											
Cyanide	100	**4 JB**	ND (10)	ND (10)	ND (10)	ND (10)	**5.4 JB**	ND (10)	ND (10)	-	ND (10)
Antimony, Total	6	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	**2.2**	**2.4**	**7.1** [A]	-	**3.4**
Arsenic, Total	3	ND (2)	ND (2)	**0.94 J**	ND (2)	**0.8 J**	**5.3** [A]	**6.4** [A]	**29.1** [A]	-	**3.4** [A]
Barium, Total	6000	**315**	**271**	**394**	**268**	**214**	**122**	**234**	**1870**	-	**66.1**
Beryllium, Total	1	ND (0.8)	ND (0.8)	**0.38 J**	ND (0.8)	**0.27 J**	**0.48 J**	**0.65 J**	**5.3** [A]	-	ND (0.8)
Cadmium, Total	4	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	**2.9**	-	ND (2)
Chromium, Total	70	ND (4)	**2.2 J**	**4.5**	ND (4)	**41.8**	**96.1** [A]	**178** [A]	**1780** [A]	ND (4)	**1.5 J**
Chromium VI (Hexavalent), Total	NC	-	-	-	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Cobalt, Total	100	ND (4)	**1.5 J**	**6.5**	ND (4)	**3 J**	**5.2**	**7.2**	**52.3**	-	**2.7 J**
Copper, Total	1300	ND (4)	**1.9 J**	**2.4 J**	ND (4)	**4.1**	**45**	**80.4**	**622**	-	**4**
Lead, Total	5	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	**24** [A]	**47.2** [A]	**427** [A]	-	ND (1.2)
Manganese, Total	50	**996** [A]	**939** [A]	**1100** [A]	**946** [A]	**517** [A]	**1640** [A]	**1640** [A]	**4590** [A]	-	**3350** [A]
Mercury, Total	2	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	**0.15 J**	-	ND (0.2)
Nickel, Total	100	**1.7 J**	**12.4**	**42.6**	**5.7**	**38.7**	**147** [A]	**178** [A]	**1080** [A]	-	**68.8**
Selenium, Total	40	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	**1.4 J**	-	ND (10)
Silver, Total	40	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	-	ND (2)
Zinc, Total	2000	ND (16)	ND (16)	**9.6 J**	ND (16)	**11.5 J**	**446**	**733**	**6250** [A]	-	**56.1**
Inorganic Compounds - Dissolved (ug/L)											
Antimony, Dissolved	6	-	-	-	-	-	-	-	-	-	-
Arsenic, Dissolved	3	-	-	-	-	-	-	-	-	-	-
Barium, Dissolved	6000	-	-	-	-	-	-	-	-	-	-
Beryllium, Dissolved	1	-	-	-	-	-	-	-	-	-	-
Cadmium, Dissolved	4	-	-	-	-	-	-	-	-	-	-
Chromium, Dissolved	70	-	-	-	-	-	-	-	-	-	-
Cobalt, Dissolved	100	-	-	-	-	-	-	-	-	-	-
Copper, Dissolved	1300	-	-	-	-	-	-	-	-	-	-
Lead, Dissolved	5	-	-	-	-	-	-	-	-	-	-
Manganese, Dissolved	50	-	-	-	-	-	-	-	-	-	-
Mercury, Dissolved	2	-	-	-	-	-	-	-	-	-	-
Nickel, Dissolved	100	-	-	-	-	-	-	-	-	-	-
Selenium, Dissolved	40	-	-	-	-	-	-	-	-	-	-
Silver, Dissolved	40	-	-	-	-	-	-	-	-	-	-
Zinc, Dissolved	2000	-	-	-	-	-	-	-	-	-	-
PCBs (ug/L)											
Aroclor-1016 (PCB-1016)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1262 (PCB-1262)	0.5	-	-	-	-	-	-	-	-	-	-
Aroclor-1268 (PCB-1268)	0.5	-	-	-	-	-	-	-	-	-	-
Polychlorinated biphenyls (PCBs)	0.5	-	-	-	-	-	-	-	-	-	-

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-35A	MW-35A	MW-35A	MW-35A	MW-35A	MW-77	MW-77	MW-77	MW-77	MW-77
Sample ID	Groundwater	MW35A-061215-1052	MW35A-091715-1128	MW35A-121615-1347	MW35A-032416-1222	MW35A-101916-1006	MW77-061515-1027	MW77-091615-1141	MW77-121715-1007	MW77-020516-1221	MW77-032316-1031
Lab Sample ID	Quality	460-96394-6	460-101286-9	460-106433-14	460-111067-11	460-122517-6	460-96461-9	460-101215-5	460-106444-9	460-108647-1	460-110896-6
Sample Date	Standard	06/12/2015	09/17/2015	12/16/2015	03/24/2016	10/19/2016	06/15/2015	09/16/2015	12/17/2015	02/05/2016	03/23/2016
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.74**	**0.708**	**0.726**	**709**	**0.603**	**0.557**	**0.694**	**0.701**	-	**0.682**
Dissolved Oxygen, Field (mg/L)	-	**0.27**	**0.11**	**0.03**	**0.23**	**0.46**	**0.37**	**0.42**	**0.44**	-	**0.13**
ORP, Field (mV)	-	**-120.9**	**-126.8**	**-146.4**	**-150.7**	**-74.2**	**-12.4**	**-69.1**	**-36.9**	-	**32.6**
pH, Field (s.u)	-	**6.95**	**6.98**	**7.09**	**7.17**	**6.61**	**6.3**	**6.67**	**6.79**	-	**6.69**
Temperature (Deg C)	-	**16.8**	**16.7**	**12.7**	**12.17**	**15.89**	**20.8**	**22.7**	**14.8**	-	**15.96**
Turbidity, Field (NTU)	-	**35.1**	**170**	**999**	**83**	**129**	**63.8**	**117**	**154**	-	**3.64**
Semi-Volatile Organic Compounds (ug/L)											
2,2'-oxybis(1-Chloropropane)	300	ND (11)	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)	ND (10) *	ND (10)	-	ND (10)
2,4,5-Trichlorophenol	700	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
2,4,6-Trichlorophenol	20	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
2,4-Dichlorophenol	20	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
2,4-Dimethylphenol	100	ND (11)	ND (10)	ND (10)	ND (10) *	ND (10) *	ND (10)	ND (10)	ND (10)	-	ND (10)
2,4-Dinitrophenol	40	ND (22)	ND (21)	ND (20)	ND (20)	ND (20)	ND (20)	ND (21)	ND (20)	-	ND (21)
2,4-Dinitrotoluene	10	ND (2.2)	ND (2.1)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2.1)	ND (2)	-	ND (2.1)
2,6-Dinitrotoluene	10	ND (2.2)	ND (2.1)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2.1)	ND (2)	-	ND (2.1)
2-Chloronaphthalene	600	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
2-Chlorophenol	40	ND (11)	ND (10)	ND (10) *	ND (10) *	ND (10) *	ND (10)	ND (10)	ND (10)	-	ND (10) *
2-Methylnaphthalene	30	ND (11)	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
2-Methylphenol	50	ND (11) *	ND (10)	ND (10) *	ND (10) *	ND (10) *	ND (10) *	ND (10)	ND (10) *	-	ND (10) *
2-Nitroaniline	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
2-Nitrophenol	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
3,3'-Dichlorobenzidine	30	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
3-Nitroaniline	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
4,6-Dinitro-2-methylphenol	1	ND (22)	ND (21)	ND (20)	ND (20)	ND (20)	ND (20)	ND (21)	ND (20)	-	ND (21)
4-Bromophenyl phenyl ether	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
4-Chloro-3-methylphenol	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
4-Chloroaniline	30	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
4-Chlorophenyl phenyl ether	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
4-Methylphenol	50	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
4-Nitroaniline	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
4-Nitrophenol	100	ND (22)	ND (21)	ND (20)	ND (20)	ND (20)	ND (20)	ND (21)	ND (20)	-	ND (21)
Acenaphthene	400	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
Acenaphthylene	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
Acetophenone	700	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
Anthracene	2000	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
Atrazine	3	ND (2.2) *	ND (2.1)	ND (2)	ND (2)	ND (2)	ND (2) *	ND (2.1) *	ND (2)	-	ND (2.1)
Benzaldehyde	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
Benzo(a)anthracene	0.1	ND (0.054)	ND (0.052)	ND (0.05)	ND (0.05) *	ND (0.05)	ND (0.05)	ND (0.052)	ND (0.05)	-	ND (0.052)
Benzo(a)pyrene	0.1	ND (0.054)	ND (0.052)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.052)	**0.036 J**	-	ND (0.052)
Benzo(b)fluoranthene	0.2	ND (0.054)	ND (0.052)	ND (0.05)	ND (0.05) *	ND (0.05)	ND (0.05)	ND (0.052)	**0.054 ***	-	ND (0.052)
Benzo(g,h,i)perylene	100	ND (11)	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
Benzo(k)fluoranthene	0.5	ND (1.1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
Biphenyl	400	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
bis(2-Chloroethoxy)methane	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
bis(2-Chloroethyl)ether	7	ND (1.1)	ND (1)	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1)	-	ND (1)
bis(2-Ethylhexyl)phthalate	3	ND (2.2)	**8.3 B** [A]	ND (2)	ND (2)	ND (2)	ND (2)	**11 B*** [A]	ND (2) *	-	ND (2.1)
Butyl benzylphthalate	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
Caprolactam	5000	ND (11)	ND (10)	ND (10) *	ND (10)	ND (10) *	ND (10) *	ND (10)	ND (10)	-	ND (10) *
Carbazole	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
Chrysene	5	ND (2.2)	ND (2.1)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2.1)	ND (2)	-	ND (2.1)
Dibenz(a,h)anthracene	0.3	ND (1.1)	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
Dibenzofuran	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
Diethyl phthalate	6000	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-35A	MW-35A	MW-35A	MW-35A	MW-35A	MW-77	MW-77	MW-77	MW-77	MW-77
Sample ID	Groundwater	MW35A-061215-1052	MW35A-091715-1128	MW35A-121615-1347	MW35A-032416-1222	MW35A-101916-1006	MW77-061515-1027	MW77-091615-1141	MW77-121715-1007	MW77-020516-1221	MW77-032316-1031
Lab Sample ID	Quality	460-96394-6	460-101286-9	460-106433-14	460-111067-11	460-122517-6	460-96461-9	460-101215-5	460-106444-9	460-108647-1	460-110896-6
Sample Date	Standard	06/12/2015	09/17/2015	12/16/2015	03/24/2016	10/19/2016	06/15/2015	09/16/2015	12/17/2015	02/05/2016	03/23/2016
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.74**	**0.708**	**0.726**	**709**	**0.603**	**0.557**	**0.694**	**0.701**	-	**0.682**
Dissolved Oxygen, Field (mg/L)	-	**0.27**	**0.11**	**0.03**	**0.23**	**0.46**	**0.37**	**0.42**	**0.44**	-	**0.13**
ORP, Field (mV)	-	**-120.9**	**-126.8**	**-146.4**	**-150.7**	**-74.2**	**-12.4**	**-69.1**	**-36.9**	-	**32.6**
pH, Field (s.u)	-	**6.95**	**6.98**	**7.09**	**7.17**	**6.61**	**6.3**	**6.67**	**6.79**	-	**6.69**
Temperature (Deg C)	-	**16.8**	**16.7**	**12.7**	**12.17**	**15.89**	**20.8**	**22.7**	**14.8**	-	**15.96**
Turbidity, Field (NTU)	-	**35.1**	**170**	**999**	**83**	**129**	**63.8**	**117**	**154**	-	**3.64**
Dimethyl phthalate	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
Di-n-butylphthalate	700	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *	-	ND (10)
Di-n-octyl phthalate	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10) *	-	ND (10)
Fluoranthene	300	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
Fluorene	300	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
Semi-Volatile Organic Compounds (ug/L) (con't)											
Hexachlorobenzene	0.02	ND (0.022)	ND (0.021)	ND (0.02) *	ND (0.02) *	ND (0.02)	ND (0.02)	ND (0.021)	ND (0.02)	-	ND (0.021) *
Hexachlorobutadiene	1	ND (1.1)	ND (1) *	ND (1) *	ND (1) *	ND (1)	ND (1)	ND (1) *	ND (1) *	-	ND (1)
Hexachlorocyclopentadiene	40	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
Hexachloroethane	7	ND (1.1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
Indeno(1,2,3-cd)pyrene	0.2	ND (1.1)	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
Isophorone	40	ND (11)	ND (10)	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)	ND (10)	-	ND (10)
Naphthalene	300	ND (11)	ND (10)	ND (10)	ND (10) *	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
Nitrobenzene	6	ND (1.1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
N-Nitrosodi-n-propylamine	10	ND (1.1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
N-Nitrosodiphenylamine	10	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
Pentachlorophenol	0.3	ND (0.22)	ND (0.21)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.21)	ND (0.2)	-	ND (0.21) *
Phenanthrene	100	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
Phenol	2000	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
Pyrene	200	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	-	ND (10)
Volatile Organic Compounds (ug/L)											
1,1,1-Trichloroethane	30	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
1,1,2,2-Tetrachloroethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
1,1,2-Trichloroethane	3	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
1,1-Dichloroethane	50	ND (1)	ND (1)	ND (1)	ND (1)	**0.3 J**	ND (1)	ND (1)	ND (1)	-	ND (1)
1,1-Dichloroethene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
1,2,4-Trichlorobenzene	9	ND (1)	ND (1)	**0.62 J**	**0.28 J**	**0.63 J**	ND (1)	ND (1)	ND (1)	-	ND (1)
1,2-Dibromo-3-chloropropane (DBCP)	0.02	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.02)	ND (0.02)	ND (0.02)	-	ND (0.02)
1,2-Dibromoethane (Ethylene Dibromide)	0.03	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.02)	ND (0.02) *	ND (0.02)	-	ND (0.02)
1,2-Dichlorobenzene	600	ND (1)	ND (1)	ND (1)	ND (1)	**0.25 J**	ND (1)	ND (1)	ND (1)	-	ND (1)
1,2-Dichloroethane	2	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
1,2-Dichloropropane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
1,3-Dichlorobenzene	600	ND (1)	**0.78 J**	**0.85 J**	**0.43 J**	**0.87 J**	ND (1)	ND (1)	ND (1)	-	ND (1)
1,4-Dichlorobenzene	75	ND (1)	**2.2**	**2.6**	**1.2**	**2.8**	ND (1)	ND (1)	ND (1)	-	ND (1)
1,4-Dioxane	0.4	-	-	-	-	-	ND (2)	ND (2)	ND (0.4)	-	ND (0.4)
2-Butanone (Methyl Ethyl Ketone)	300	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	-	ND (5)
2-Hexanone	300	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	-	ND (5)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	100	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	-	ND (5)
Acetone	6000	ND (5)	ND (5)	**220**	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	-	ND (5)
Benzene	1	ND (1)	**0.13 J**	**0.19 J**	ND (1)	**0.18 J**	**0.17 J**	**0.15 J**	**0.32 J**	-	ND (1)
Bromodichloromethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
Bromoform	4	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
Bromomethane (Methyl Bromide)	10	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
Carbon disulfide	700	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
Carbon tetrachloride	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
Chlorobenzene	50	ND (1)	**1.4**	**2.1**	**0.75 J**	**2.1**	ND (1)	**0.34 J**	**0.25 J**	-	ND (1)
Chloroethane	5	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-35A	MW-35A	MW-35A	MW-35A	MW-35A	MW-77	MW-77	MW-77	MW-77	MW-77
Sample ID	Groundwater	MW35A-061215-1052	MW35A-091715-1128	MW35A-121615-1347	MW35A-032416-1222	MW35A-101916-1006	MW77-061515-1027	MW77-091615-1141	MW77-121715-1007	MW77-020516-1221	MW77-032316-1031
Lab Sample ID	Quality	460-96394-6	460-101286-9	460-106433-14	460-111067-11	460-122517-6	460-96461-9	460-101215-5	460-106444-9	460-108647-1	460-110896-6
Sample Date	Standard	06/12/2015	09/17/2015	12/16/2015	03/24/2016	10/19/2016	06/15/2015	09/16/2015	12/17/2015	02/05/2016	03/23/2016
Field Parameters											
Conductivity, Field (mS/cm)	-	**0.74**	**0.708**	**0.726**	**709**	**0.603**	**0.557**	**0.694**	**0.701**	-	**0.682**
Dissolved Oxygen, Field (mg/L)	-	**0.27**	**0.11**	**0.03**	**0.23**	**0.46**	**0.37**	**0.42**	**0.44**	-	**0.13**
ORP, Field (mV)	-	**-120.9**	**-126.8**	**-146.4**	**-150.7**	**-74.2**	**-12.4**	**-69.1**	**-36.9**	-	**32.6**
pH, Field (s.u)	-	**6.95**	**6.98**	**7.09**	**7.17**	**6.61**	**6.3**	**6.67**	**6.79**	-	**6.69**
Temperature (Deg C)	-	**16.8**	**16.7**	**12.7**	**12.17**	**15.89**	**20.8**	**22.7**	**14.8**	-	**15.96**
Turbidity, Field (NTU)	-	**35.1**	**170**	**999**	**83**	**129**	**63.8**	**117**	**154**	-	**3.64**
Chloroform (Trichloromethane)	70	**0.51 J**	ND (1)	ND (1)	**0.44 J**	**0.29 J**	ND (1)	ND (1)	ND (1)	-	ND (1)
Chloromethane (Methyl Chloride)	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
cis-1,2-Dichloroethene	70	**2.3**	**0.67 J**	**0.6 J**	**3.1**	**4.6**	**12**	**7.4**	**5.6**	-	**20**
cis-1,3-Dichloropropene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
Cyclohexane	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
Dibromochloromethane	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
Dichlorodifluoromethane (CFC-12)	1000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
Ethylbenzene	700	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
Isopropylbenzene	700	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
Volatile Organic Compounds (ug/L) (cont')											
Methyl acetate	7000	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	-	ND (5)
Methyl cyclohexane	100	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
Methyl Tert Butyl Ether	70	**0.23 J**	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
Methylene chloride	3	ND (1)	ND (1)	**1.3**	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
Styrene	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
Tetrachloroethene	1	**0.14 J**	ND (1)	ND (1)	**0.21 J**	**0.16 J**	ND (1)	ND (1)	ND (1)	-	ND (1)
Toluene	600	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
trans-1,2-Dichloroethene	100	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	**0.43 J**	**0.44 J**	**0.18 J**	-	**0.5 J**
trans-1,3-Dichloropropene	1	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
Trichloroethene	1	**0.76 J**	ND (1)	**0.44 J**	**0.94 J**	**2.8** [A]	**0.61 J**	**0.48 J**	**0.48 J**	-	**0.68 J**
Trichlorofluoromethane (CFC-11)	2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
Trifluorotrichloroethane (Freon 113)	20000	ND (1)	ND (1)	ND (1) *	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	-	ND (1)
Vinyl chloride	1	**1.7** [A]	**0.4 J**	ND (1)	**1.6** [A]	ND (1)	**1.6** [A]	**1.3** [A]	**0.96 J**	-	**3.4** [A]
Xylene (total)	1000	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	-	ND (2)

Notes:
1. ND: Result is not detected above the indicated reporting limit.
   J: Estimated value
   B: Possible blank contamination
   E: Exceeds calibration limits
   F1: MS and/or MSD recovery exceeds the control limits.
   * - Recovery Exceeds control limits
2. Results in red exceed the following criteria:
   - Groundwater Quality Standards (GWQS)
3. Results in **bold** are detected.

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

	Location	MW-77
	Sample ID Groundwater	MW77-102116-1036
	Lab Sample ID Quality	460-122507-4
	Sample Date Standard	10/21/2016
Field Parameters		
Conductivity, Field (mS/cm)	-	**0.825**
Dissolved Oxygen, Field (mg/L)	-	**0.23**
ORP, Field (mV)	-	**-6.4**
pH, Field (s.u)	-	**6.45**
Temperature (Deg C)	-	**21.63**
Turbidity, Field (NTU)	-	**6.41**
Inorganic Compounds - Total (ug/L)		
Cyanide	100	ND (10)
Antimony, Total	6	**2**
Arsenic, Total	3	**2.8**
Barium, Total	6000	**94.3**
Beryllium, Total	1	ND (0.8)
Cadmium, Total	4	ND (2)
Chromium, Total	70	**10.2**
Chromium VI (Hexavalent), Total	NC	-
Cobalt, Total	100	**5.4**
Copper, Total	1300	**10.5**
Lead, Total	5	**1.6**
Manganese, Total	50	**5020** [A]
Mercury, Total	2	ND (0.2)
Nickel, Total	100	**124** [A]
Selenium, Total	40	ND (10)
Silver, Total	40	ND (2)
Zinc, Total	2000	**99.7**
Inorganic Compounds - Dissolved (ug/L)		
Antimony, Dissolved	6	-
Arsenic, Dissolved	3	-
Barium, Dissolved	6000	-
Beryllium, Dissolved	1	-
Cadmium, Dissolved	4	-
Chromium, Dissolved	70	-
Cobalt, Dissolved	100	-
Copper, Dissolved	1300	-
Lead, Dissolved	5	-
Manganese, Dissolved	50	-
Mercury, Dissolved	2	-
Nickel, Dissolved	100	-
Selenium, Dissolved	40	-
Silver, Dissolved	40	-
Zinc, Dissolved	2000	-
PCBs (ug/L)		
Aroclor-1016 (PCB-1016)	0.5	-
Aroclor-1221 (PCB-1221)	0.5	-
Aroclor-1232 (PCB-1232)	0.5	-
Aroclor-1242 (PCB-1242)	0.5	-
Aroclor-1248 (PCB-1248)	0.5	-
Aroclor-1254 (PCB-1254)	0.5	-
Aroclor-1260 (PCB-1260)	0.5	-
Aroclor-1262 (PCB-1262)	0.5	-
Aroclor-1268 (PCB-1268)	0.5	-
Polychlorinated biphenyls (PCBs)	0.5	-

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

	Location		MW-77
	Sample ID	Groundwater	MW77-102116-1036
	Lab Sample ID	Quality	460-122507-4
	Sample Date	Standard	10/21/2016
Field Parameters			
Conductivity, Field (mS/cm)		-	**0.825**
Dissolved Oxygen, Field (mg/L)		-	**0.23**
ORP, Field (mV)		-	**-6.4**
pH, Field (s.u)		-	**6.45**
Temperature (Deg C)		-	**21.63**
Turbidity, Field (NTU)		-	**6.41**
Semi-Volatile Organic Compounds (ug/L)			
2,2'-oxybis(1-Chloropropane)		300	ND (10)
2,4,5-Trichlorophenol		700	ND (10)
2,4,6-Trichlorophenol		20	ND (10)
2,4-Dichlorophenol		20	ND (10)
2,4-Dimethylphenol		100	ND (10)
2,4-Dinitrophenol		40	ND (20)
2,4-Dinitrotoluene		10	ND (2)
2,6-Dinitrotoluene		10	ND (2)
2-Chloronaphthalene		600	ND (10)
2-Chlorophenol		40	ND (10)
2-Methylnaphthalene		30	ND (10)
2-Methylphenol		50	ND (10) *
2-Nitroaniline		100	ND (10)
2-Nitrophenol		100	ND (10)
3,3'-Dichlorobenzidine		30	ND (10)
3-Nitroaniline		100	ND (10)
4,6-Dinitro-2-methylphenol		1	ND (20)
4-Bromophenyl phenyl ether		100	ND (10)
4-Chloro-3-methylphenol		100	ND (10)
4-Chloroaniline		30	ND (10)
4-Chlorophenyl phenyl ether		100	ND (10)
4-Methylphenol		50	ND (10)
4-Nitroaniline		100	ND (10)
4-Nitrophenol		100	ND (20)
Acenaphthene		400	ND (10)
Acenaphthylene		100	ND (10)
Acetophenone		700	ND (10)
Anthracene		2000	ND (10)
Atrazine		3	ND (2)
Benzaldehyde		100	ND (10)
Benzo(a)anthracene		0.1	ND (0.05)
Benzo(a)pyrene		0.1	ND (0.05)
Benzo(b)fluoranthene		0.2	ND (0.05)
Benzo(g,h,i)perylene		100	ND (10)
Benzo(k)fluoranthene		0.5	ND (1)
Biphenyl		400	ND (10)
bis(2-Chloroethoxy)methane		100	ND (10)
bis(2-Chloroethyl)ether		7	ND (1)
bis(2-Ethylhexyl)phthalate		3	**0.72 J**
Butyl benzylphthalate		100	ND (10)
Caprolactam		5000	ND (10) *
Carbazole		100	ND (10)
Chrysene		5	ND (2)
Dibenz(a,h)anthracene		0.3	ND (1)
Dibenzofuran		100	ND (10)
Diethyl phthalate		6000	ND (10)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location		MW-77
Sample ID	Groundwater	MW77-102116-1036
Lab Sample ID	Quality	460-122507-4
Sample Date	Standard	10/21/2016
Field Parameters		
Conductivity, Field (mS/cm)	-	**0.825**
Dissolved Oxygen, Field (mg/L)	-	**0.23**
ORP, Field (mV)	-	**-6.4**
pH, Field (s.u)	-	**6.45**
Temperature (Deg C)	-	**21.63**
Turbidity, Field (NTU)	-	**6.41**
Dimethyl phthalate	100	ND (10)
Di-n-butylphthalate	700	ND (10)
Di-n-octyl phthalate	100	ND (10)
Fluoranthene	300	ND (10)
Fluorene	300	ND (10)
Semi-Volatile Organic Compounds (ug/L) (con't)		
Hexachlorobenzene	0.02	ND (0.02) *
Hexachlorobutadiene	1	ND (1) *
Hexachlorocyclopentadiene	40	ND (10)
Hexachloroethane	7	ND (1)
Indeno(1,2,3-cd)pyrene	0.2	ND (1)
Isophorone	40	ND (10)
Naphthalene	300	ND (10)
Nitrobenzene	6	ND (1)
N-Nitrosodi-n-propylamine	10	ND (1)
N-Nitrosodiphenylamine	10	ND (10)
Pentachlorophenol	0.3	ND (0.2)
Phenanthrene	100	ND (10)
Phenol	2000	ND (10)
Pyrene	200	ND (10)
Volatile Organic Compounds (ug/L)		
1,1,1-Trichloroethane	30	ND (1)
1,1,2,2-Tetrachloroethane	1	ND (1)
1,1,2-Trichloroethane	3	ND (1)
1,1-Dichloroethane	50	ND (1)
1,1-Dichloroethene	1	ND (1)
1,2,4-Trichlorobenzene	9	ND (1)
1,2-Dibromo-3-chloropropane (DBCP)	0.02	ND (0.02)
1,2-Dibromoethane (Ethylene Dibromide)	0.03	ND (0.02)
1,2-Dichlorobenzene	600	ND (1)
1,2-Dichloroethane	2	ND (1)
1,2-Dichloropropane	1	ND (1)
1,3-Dichlorobenzene	600	ND (1)
1,4-Dichlorobenzene	75	ND (1)
1,4-Dioxane	0.4	ND (0.4)
2-Butanone (Methyl Ethyl Ketone)	300	ND (5)
2-Hexanone	300	ND (5)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	100	ND (5)
Acetone	6000	**13**
Benzene	1	**0.099 J**
Bromodichloromethane	1	ND (1)
Bromoform	4	ND (1)
Bromomethane (Methyl Bromide)	10	ND (1)
Carbon disulfide	700	ND (1)
Carbon tetrachloride	1	ND (1)
Chlorobenzene	50	**0.84 J**
Chloroethane	5	ND (1)

TABLE I
POST REDEVELOPEMENT GROUNDWATER COMPARISON
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

	Location		MW-77
	Sample ID	Groundwater	MW77-102116-1036
	Lab Sample ID	Quality	460-122507-4
	Sample Date	Standard	10/21/2016
Field Parameters			
Conductivity, Field (mS/cm)		-	**0.825**
Dissolved Oxygen, Field (mg/L)		-	**0.23**
ORP, Field (mV)		-	**-6.4**
pH, Field (s.u)		-	**6.45**
Temperature (Deg C)		-	**21.63**
Turbidity, Field (NTU)		-	**6.41**
Chloroform (Trichloromethane)		70	ND (1)
Chloromethane (Methyl Chloride)		100	ND (1)
cis-1,2-Dichloroethene		70	**4.9**
cis-1,3-Dichloropropene		1	ND (1)
Cyclohexane		100	ND (1)
Dibromochloromethane		1	ND (1)
Dichlorodifluoromethane (CFC-12)		1000	ND (1)
Ethylbenzene		700	ND (1)
Isopropylbenzene		700	ND (1)
Volatile Organic Compounds (ug/L) (cont')			
Methyl acetate		7000	ND (5)
Methyl cyclohexane		100	ND (1)
Methyl Tert Butyl Ether		70	ND (1)
Methylene chloride		3	ND (1)
Styrene		100	ND (1)
Tetrachloroethene		1	ND (1)
Toluene		600	ND (1)
trans-1,2-Dichloroethene		100	**0.3 J**
trans-1,3-Dichloropropene		1	ND (1)
Trichloroethene		1	ND (1)
Trichlorofluoromethane (CFC-11)		2000	ND (1)
Trifluorotrichloroethane (Freon 113)		20000	ND (1)
Vinyl chloride		1	**1.3** [A]
Xylene (total)		1000	ND (2)

Notes:
1. ND: Result is not detected above the indicated reporting limit.
   J: Estimated value
   B: Possible blank contamination
   E: Exceeds calibration limits
   F1: MS and/or MSD recovery exceeds the control limits.
   * - Recovery Exceeds control limits
2. Results in red exceed the following criteria:
   - Groundwater Quality Standards (GWQS)
3. Results in **bold** are detected.

TABLE II
SUMMARY OF 2012 SPLP ANALYTICAL RESULTS
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location	B3-4-200	B3-4-200	B6-201	B6-201	B9-16-200	B9-16-200	B9-16-200	GS08-200	GS08-200	PL05-200	PL05-201	PL05-201
Sample Name	2351-042312-1530	2351-042312-1540	2351-042312-1350	2351-042312-1400	2351-042512-1120	2351-042512-1140	2351-042512-0003	2351-042412-1500	2351-042412-1510	2351-042512-1605	2351-042512-1530	2351-042512-1535
Sample Date	4/23/2012	4/23/2012	4/23/2012	4/23/2012	4/25/2012	4/25/2012	4/25/2012	4/24/2012	4/24/2012	4/25/2012	4/25/2012	4/25/2012
Sample Depth (bgs)	0.5 - 1 (ft)	9.5 - 10 (ft)	0.5 - 1 (ft)	9.5 - 10 (ft)	0 - 0.5 (ft)	5 - 5.5 (ft)	5 - 5.5 (ft)	0.5 - 1 (ft)	11.5 - 12 (ft)	2.5 - 3 (ft)	0.5 - 1 (ft)	2.5 - 3 (ft)
INORGANIC COMPOUNDS (mg/kg)												
Antimony	0.54 U	0.53 U	**0.5 J**	0.57 U	0.51 U	0.56 U	0.59 U	0.58 U	0.62 U	0.58 U	0.57 U	0.57 U
Arsenic	**6**	**1.9**	**76.2**	**5.9**	**5**	**8.8**	**4.2**	**5**	**5.5**	**9.8**	**7.5**	**9.3**
Barium	**75.6**	**292**	**70.6**	**88.5**	**30.4**	**71.3**	**106**	**85.3**	**41.9**	**43.1**	**143**	**56.8**
Beryllium	**0.9**	**1.4**	**0.54**	**0.74**	**0.43**	**0.57**	**0.73**	**0.7**	**0.71**	**0.47**	**1.4**	**0.51**
Cadmium	0.54 U	0.53 U	**1.1**	0.57 U	0.51 U	0.56 U	0.59 U	0.58 U	0.62 U	0.58 U	0.57 U	0.57 U
Chromium VI (Hexavalent)	0.47 U	0.48 U	0.47 U	0.49 U	**10.7**	**19.5**	0.48 U	**2.1**	0.5 U	**2.1**	**1.4**	**0.49 J**
Chromium	**22.6**	**27.4**	**26.7**	**23.3**	0.44 U	**0.21 J**	**21.9**	**31.2**	**24.5**	**26.8**	**15.1**	**28.9**
Cobalt	**9.1**	**10.8**	**6.7**	**8.7**	**13.8**	**6**	**9.3**	**6.6**	**7.6**	**3.8**	**6.5**	**4.1**
Copper	**15.2**	**9.4**	**54.6**	**15.2**	**10.5**	**14.2**	**12.1**	**24.4**	**13.8**	**12.4**	**10.8**	**101**
Cyanide	0.58 U	0.6 U	**0.56 J**	0.59 U	**0.12 J**	**0.22 J**	0.61 U	**0.38 J**	0.6 U	0.62 U	**0.31 J**	0.61 U
Lead	**15.7**	**11.5**	**66.2**	**11.2**	**12.5**	**11.1**	**18**	**30.3**	**8.9**	**13.4**	**20.7**	**13.1**
Manganese	**438**	**808**	**283**	**298**	**215**	**300**	**375**	**356**	**258**	**88.1**	**1240**	**99.7**
Mercury	0.038 U	0.039 U	**0.1**	**0.026 J**	**0.031 J**	**0.041**	0.035 U	**0.03 J**	0.038 U	0.042 U	**0.056**	**0.029 J**
Nickel	**13.7**	**14.5**	**31.7**	**14.3**	**7.4**	**11.1**	**13**	**16.5**	**16.4**	**96.7**	**142**	**168**
Selenium	**1.9**	**2.4**	**1.8**	**2.8**	**0.93**	**0.73**	**1.4**	**1.8**	**1.5**	**1.2**	**3.4**	**1.1**
Silver	1.1 U	1.1 U	1.2 U	1.1 U	1 U	1.1 U	1.2 U	1.2 U	1.2 U	1.2 U	1.1 U	1.1 U
Zinc	**32.8**	**23.5**	**142**	**33**	**23.6**	**35.5**	**36.9**	**85.4**	**31.7**	**32.3**	**34.1**	**34.3**
Inorganic Compounds (mg/L)												
Chromium VI (Hexavalent)	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	-	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
SPLP COMPOUNDS (ug/L)												
Antimony	2.5 U	2.5 U	**1.9 J**	2.5 U	2.5 U	2.5 U	-	2.5 U	**1.9 J**	2.5 U	2.5 U	2.5 U
Arsenic	**4.2**	2.5 U	**13.2**	**2.8**	**7.4**	**3**	-	**2.3 J**	2.5 U	2.5 U	**7.1**	2.5 U
Barium	**18.9**	**30**	**26.5**	**15.6**	**19.4**	**12.3**	-	**30.8**	**10.2**	5 U	**4.2 J**	**15.1**
Beryllium	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U
Cadmium	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	-	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chromium	**3.9 J**	**4.7 J**	**22.7**	5 U	**7.1**	5 U	-	**7**	5 U	5 U	5 U	5 U
Cobalt	5 U	5 U	5 U	5 U	5 U	5 U	-	5 U	5 U	5 U	5 U	5 U
Copper	**4.2 J**	**7.3**	**10**	**3.8 J**	**8.5**	**82.8**	-	**8.6**	5 U	5 U	**7.4**	**46.9**
Cyanide	10 U	10 U	10 U	10 U	10 U	10 U	-	10 U	10 U	10 U	10 U	10 U
Lead	1.5 U	**1.3 J**	**3.2**	1.5 U	**6**	**24.4**	-	**7.1**	1.5 U	1.5 U	1.5 U	1.5 U
Manganese	**20.1**	**38.4**	10 U	**17.9**	**24.9**	**32.7**	-	**30.2**	**17.3**	10 U	10 U	**15.2**
Mercury	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	5 U	5 U	5 U	5 U	**5.8**	**7.1**	-	**5.2**	**5**	**30.7**	**11.4**	**332**
Selenium	**2.4 J**	2.5 U	**4.2**	**1.5 J**	2.5 U	2.5 U	-	2.5 U	**1.9 J**	2.5 U	**4.6**	2.5 U
Silver	5 U	5 U	5 U	5 U	5 U	5 U	-	5 U	5 U	5 U	5 U	5 U
Zinc	20 U	20 U	**63.3**	20 U	20 U	**168**	-	**34.3**	20 U	**50.1**	20 U	20 U

Notes:
1. U - Not detected above the reporting limit
2. Results in **bold** were detected
3. J - Estimated result

TABLE II
SUMMARY OF 2012 SPLP ANALYTICAL RESULTS
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location	PL05-202	PL05-202	SB-11-SO-200	SB-11-SO-200	SB-11-SO-201	SB-11-SO-201	TP9-2-202	TP9-2-202	TP9-3-203	TP9-3-203	TP9-3-203
Sample Name	2351-042512-1500	2351-042512-1510	2351-042512-1300	2351-042512-1305	2351-042512-1315	2351-042512-1320	2351-042612-1350	2351-042612-1355	2351-042712-0003	2351-042712-1240	2351-042712-1250
Sample Date	4/25/2012	4/25/2012	4/25/2012	4/25/2012	4/25/2012	4/25/2012	4/26/2012	4/26/2012	4/27/2012	4/27/2012	4/27/2012
Sample Depth (bgs)	0.5 - 1 (ft)	2.5 - 3 (ft)	0 - 0.5 (ft)	3.5 - 4 (ft)	0 - 0.5 (ft)	3.5 - 4 (ft)	2.5 - 3 (ft)	9 - 9.5 (ft)	9 - 9.5 (ft)	2.5 - 3 (ft)	9 - 9.5 (ft)
INORGANIC COMPOUNDS (mg/kg)											
Antimony	0.58 U	0.57 U	0.57 U	0.54 U	**0.66**	0.53 U	**2.5**	0.53 U	0.54 U	**1.1**	0.56 U
Arsenic	**2.8**	**5.7**	**4.2**	**6.5**	**8.2**	**8.5**	**43.4**	**8.4**	**5.9**	**23.4**	**8.9**
Barium	**107**	**34.8**	**47**	**201**	**166**	**457**	**247**	**48.5**	**84.2**	**4110**	**78.9**
Beryllium	**0.98**	**0.64**	**0.48**	**0.85**	**1.6**	**0.95**	0.29 U	**0.44**	**0.51**	**0.45**	**0.64**
Cadmium	0.58 U	0.57 U	0.57 U	0.54 U	0.62 U	0.53 U	**1**	0.53 U	0.54 U	**3**	0.56 U
Chromium VI (Hexavalent)	**2.4**	**0.47 J**	**0.81**	0.44 U	**1.4**	0.47 U	**0.76**	0.49 U	**0.58**	**0.4 J**	**0.19 J**
Chromium	**51.4**	**19**	**12.9**	**19.4**	**20.9**	**29.5**	**108**	**20.8**	**20.1**	**1540**	**24.3**
Cobalt	**4.9**	**5.9**	**3.6**	**18.9**	**9.5**	**20.5**	**32.8**	**10**	**5.1**	**15.8**	**5.9**
Copper	**27.2**	**17.7**	**7.4**	**59.2**	**22.5**	**20.4**	**7480**	**22.2**	**89.2**	**5270**	**98.4**
Cyanide	**0.12 J**	0.6 U	0.62 U	0.55 U	**0.18 J**	0.6 U	**9.1**	0.59 U	0.6 U	**7.4**	0.62 U
Lead	**11.6**	**9.2**	**8.7**	**13.7**	**228**	**19.4**	**40.1**	**11.3**	**10.8**	**328**	**13.5**
Manganese	**703**	**129**	**117**	**1730**	**927**	**2280**	**3190**	**207**	**443**	**137**	**391**
Mercury	0.038 U	**0.051**	**0.029 J**	0.035 U	**0.088**	0.036 U	**0.42**	**0.031 J**	**0.029 J**	**0.46**	**0.024 J**
Nickel	**12.4**	**13.3**	**8.7**	**16.7**	**19**	**16.9**	**203**	**19.3**	**21.7**	**546**	**32.2**
Selenium	**2.1**	**0.99**	**1.4**	**1.4**	**3.4**	**1.8**	0.72 U	**0.98**	**1.4**	**1.1**	**1.7**
Silver	1.2 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U	1.4 U	1.1 U	1.1 U	**3.1**	1.1 U
Zinc	**31.6**	**34**	**26.3**	**39.6**	**160**	**48.3**	**14200**	**52.6**	**53.9**	**10500**	**55.3**
Inorganic Compounds (mg/L)											
Chromium VI (Hexavalent)	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	-	0.01 U	0.01 U
SPLP COMPOUNDS (ug/L)											
Antimony	2.5 U	2.5 U	2.5 U	2.5 U	**64.2**	2.5 U	**27.1 B**	2.5 U	-	**8.2**	2.5 U
Arsenic	**4**	**17.5**	2.5 U	2.5 U	**2.4 J**	2.5 U	**4.3**	**11.7**	-	**12.3**	**6.6**
Barium	**51.2**	**43.5**	**10.3**	**4 J**	**14.6**	**5.2**	**428**	**159**	-	**973**	**31.2**
Beryllium	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U
Cadmium	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1 U	2.5 U	-	2.5 U	2.5 U
Chromium	**35.5**	**23.8**	5 U	5 U	5 U	5 U	**2.8**	**19**	-	**5.5**	**17.1**
Cobalt	5 U	**7.8**	5 U	5 U	5 U	5 U	**1**	**10.3**	-	5 U	5 U
Copper	**55.7**	**24**	5 U	5 U	**5.3**	5 U	**233**	**99**	-	**112**	**98.7**
Cyanide	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	-	10 U	10 U
Lead	**8.4**	**10.9**	1.5 U	1.5 U	**17.1**	1.5 U	**0.88 J B**	**16.5**	-	**6.6**	**7.1**
Manganese	**231**	**192**	**16.8**	**31.3**	**39**	**47.2**	**17.3 B**	**52.7**	-	**12.9**	**25.6**
Mercury	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U
Nickel	**14.2**	**11.7**	5 U	5 U	5 U	5 U	**31.8**	**205**	-	**28.1**	**16.2**
Selenium	**2.7**	**3.1**	2.5 U	2.5 U	2.5 U	2.5 U	5 U	2.5 U	-	2.5 U	2.5 U
Silver	5 U	5 U	5 U	5 U	5 U	5 U	**0.18 J B**	5 U	-	5 U	5 U
Zinc	**50.2**	**28.3**	20 U	20 U	20 U	**31.5**	**133**	**325**	-	**100**	**32**

Notes:
1. U - Not detected above the reporting limit
2. Results in **bold** were detected
3. J - Estimated result

TABLE III
SUMMARY OF 2016 SPLP ANALYTICAL RESULTS
RACER EWING INDUSTRIAL LAND
EWING, NJ

Location	268-2R	268-2R	268-2R	268-2R	B7-3R	B7-3R	B7-5R	B8-4	B8-4-100	B8-4-100	B8-4-102	B8-8-1	B8-8-1	B8-8-2-100	B8-8-2-100	B8-8-2-101
Sample Date	09/12/2016	09/12/2016	09/12/2016	09/12/2016	09/13/2016	09/13/2016	09/13/2016	09/15/2016	09/15/2016	09/15/2016	09/15/2016	09/14/2016	09/14/2016	09/14/2016	09/14/2016	09/14/2016
Sample Depth (bgs)	3.3 - 3.8 (ft)	6.5 - 7 (ft)	7 - 7.5 (ft)	7.5 - 8 (ft)	3.5 - 4 (ft)	10 - 10.5 (ft)	2.5 - 3 (ft)	6 - 8 (ft)	0 - 0.5 (ft)	8 - 8.5 (ft)	8 - 8.5 (ft)	7.8 - 8.3 (ft)	12 - 12.5 (ft)	7.8 - 8.3 (ft)	9.5 - 10 (ft)	7.8 - 8.3 (ft)
Sample Name	479-091216-152	479-091216-153	479-091216-154	4479-091216-1530	479-091316-111	479-091316-112	4479-091316-1525	479-091516-081	479-091516-082	479-091516-084	479-091516-085	479-091416-141	479-091416-142	479-091416-121	479-091416-122	479-091416-134
Inorganic Compounds (mg/kg)																
Arsenic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel	**9200**	**3000**	**2500**	-	**2300**	**630**	-	**4200**	-	-	-	**6.1**	**220**	-	-	-
SPLP Inorganics (ug/L)																
Arsenic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel	**1850**	**1640**	**2570**	-	ND (10)	**1.05 J**	-	**69.8**	-	-	-	-	**5.77**	-	-	-
Other (%)																
Clay Fine	-	-	-	**13.9**	-	-	-	**1.3**	-	-	-	-	-	-	-	-
Coarse Gravel	-	-	-	ND (0.1)	-	-	-	ND (0.1)	-	-	-	-	-	-	-	-
Coarse Sand	-	-	-	**2.4**	-	-	-	**14.1**	-	-	-	-	-	-	-	-
Cobbles	-	-	-	ND (0.1)	-	-	-	ND (0.1)	-	-	-	-	-	-	-	-
Fine Gravel	-	-	-	ND (0.1)	-	-	-	**19.7**	-	-	-	-	-	-	-	-
Fine Sand	-	-	-	**18.4**	-	-	-	**20.8**	-	-	-	-	-	-	-	-
Medium Sand	-	-	-	**7.8**	-	-	-	**24.7**	-	-	-	-	-	-	-	-
Silt Fine	-	-	-	**57.5**	-	-	-	**19.4**	-	-	-	-	-	-	-	-
Total Fines	-	-	-	**71.4**	-	-	-	**20.7**	-	-	-	-	-	-	-	-
Total Solids	**75.9**	**79.3**	**78.4**	**80.6**	**59.6**	**71.2**	**86.1**	**77.2**	**93.6**	**73.2**	**54**	**84.4**	**78.7**	**71.2**	**66.1**	**65.4**
Other (mg/kg)																
Total Organic Carbon (TOC) - Rep1	-	-	-	**683**	-	-	-	-	-	-	-	-	-	-	-	-
Total Organic Carbon (TOC) - Rep2	-	-	-	**687**	-	-	-	-	-	-	-	-	-	-	-	-
Volatile Organic Compounds (mg/kg)																
Benzene	-	-	-	-	-	-	-	-	-	**0.086 J**	**2.6**	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-	-	-	-	**2.6**	**83**	**0.084**	**0.0061**	**20**	**24**	**22**
Trichloroethene	-	-	-	-	-	-	**0.0054**	-	ND (0.0018)	-	-	-	-	-	-	-
Vinyl chloride	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPLP Volatile Organic Compounds (ug/L)																
Benzene	-	-	-	-	-	-	-	-	-	**1.3**	**29**	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-	-	-	-	**42**	**470**	-	-	**460**	**130**	**270**
Trichloroethene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. Results in **bold** were detected.
2. ND - Not detected above the reporting limit
3. J - Estimated result

TABLE III
SUMMARY OF 2016 SPLP ANALYTICAL RESULTS
RACER EWING INDUSTRIAL LAND
EWING, NJ

Location	B8-8-2-102	B8-8-2-102	B9-16	B9-16-100	B9-2-100R	B9-2-100R	B9-2-101R	B9-2-101R	B9-2-103R	B9-2-103R	B9-2R	B9-2R	B9-9	ISO5/ISO5-100R	ISO5/ISO5-100R	ISO5-102R
Sample Date	09/14/2016	09/14/2016	09/15/2016	09/15/2016	09/16/2016	09/16/2016	09/16/2016	09/16/2016	09/16/2016	09/16/2016	09/16/2016	09/16/2016	09/15/2016	09/13/2016	09/13/2016	09/13/2016
Sample Depth (bgs)	7.8 - 8.3 (ft)	9.5 - 10 (ft)	0 - 0.5 (ft)	0 - 0.5 (ft)	0 - 0.5 (ft)	2.5 - 3 (ft)	0 - 0.5 (ft)	2.5 - 3 (ft)	0 - 0.5 (ft)	2.5 - 3 (ft)	0 - 0.5 (ft)	2.5 - 3 (ft)	0 - 0.5 (ft)	1 - 1.5 (ft)	2.5 - 3 (ft)	1 - 1.5 (ft)
Sample Name	479-091416-113	479-091416-114	479-091516-130	479-091516-131	479-091616-114	479-091616-114	479-091616-113	479-091616-113	479-091616-113	479-091616-113	479-091616-114	479-091616-114	479-091516-142	4479-091316-0915	4479-091316-0930	479-091316-094
Inorganic Compounds (mg/kg)																
Arsenic	-	-	**69**	**50**	**24**	**6.5**	**68**	**7**	**47**	**7.5**	**34**	-	**62**	-	-	**7**
Nickel	-	-	-	-	-	-	-	-	-	-	-	-	-	**720**	-	-
SPLP Inorganics (ug/L)																
Arsenic	-	-	**17.6**	**24.6**	**13.6**	-	**54.6**	-	**16.4**	-	**10.1**	-	**8.42**	-	-	-
Nickel	-	-	-	-	-	-	-	-	-	-	-	-	-	**12.1**	-	-
Other (%)																
Clay Fine	-	-	-	-	-	-	-	-	-	-	-	**24.3**	-	-	-	-
Coarse Gravel	-	-	-	-	-	-	-	-	-	-	-	ND (0.1)	-	-	-	-
Coarse Sand	-	-	-	-	-	-	-	-	-	-	-	ND (0.1)	-	-	-	-
Cobbles	-	-	-	-	-	-	-	-	-	-	-	ND (0.1)	-	-	-	-
Fine Gravel	-	-	-	-	-	-	-	-	-	-	-	ND (0.1)	-	-	-	-
Fine Sand	-	-	-	-	-	-	-	-	-	-	-	**3.6**	-	-	-	-
Medium Sand	-	-	-	-	-	-	-	-	-	-	-	**0.6**	-	-	-	-
Silt Fine	-	-	-	-	-	-	-	-	-	-	-	**71.5**	-	-	-	-
Total Fines	-	-	-	-	-	-	-	-	-	-	-	**95.8**	-	-	-	-
Total Solids	**62.5**	**62.1**	**93.7**	**93.3**	**90.2**	**92.9**	**91.3**	**90.5**	**89.7**	**91.7**	**88.9**	**92.4**	**87.7**	**86.4**	**75.2**	**84.5**
Other (mg/kg)																
Total Organic Carbon (TOC) - Rep1	-	-	-	-	-	-	-	-	-	-	-	**1380**	-	-	-	-
Total Organic Carbon (TOC) - Rep2	-	-	-	-	-	-	-	-	-	-	-	**1480**	-	-	-	-
Volatile Organic Compounds (mg/kg)																
Benzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	**22**	**6.9**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	-	ND (1.5)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.001 J**	**0.31**	ND (0.0026)
SPLP Volatile Organic Compounds (ug/L)																
Benzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	**180**	**58**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**14**	-

Notes:
1. Results in **bold** were detected.
2. ND - Not detected above the reporting limit
3. J - Estimated result

TABLE III
SUMMARY OF 2016 SPLP ANALYTICAL RESULTS
RACER EWING INDUSTRIAL LAND
EWING, NJ

Location	ISO5-103R	ISO5-103R	ISO6-103R	ISO6R	ISO7-103R	PL07-01	PL07-01R	PL07-107R	PL107-107	SB-10-SO-10	SB-10-SO-10	SB-10-SO-10-100	SB-10-SO-10-103	SB-10-SO-10-103	SB-10-SO-5A
Sample Date	09/13/2016	09/16/2016	09/13/2016	09/13/2016	09/13/2016	09/14/2016	09/12/2016	09/12/2016	09/14/2016	09/15/2016	09/15/2016	09/15/2016	09/15/2016	09/15/2016	09/15/2016
Sample Depth (bgs)	2.5 - 3 (ft)	1 - 1.5 (ft)	1 - 1.5 (ft)	1 - 1.5 (ft)	2.5 - 3 (ft)	3.5 - 4 (ft)	4.5 - 5 (ft)	0.5 - 1 (ft)	4.5 - 5 (ft)	3 - 4 (ft)	4 - 6 (ft)	6 - 6.5 (ft)	4.5 - 5 (ft)	6.5 - 7 (ft)	2 - 4 (ft)
Sample Name	479-091316-085	479-091616-12(	479-091316-10	479-091316-12	479-091316-12(	479-091416-085	PL07-01R	PL07-107R	479-091416-084	479-091516-094	479-091516-10(	4479-091516-1020	4479-091516-1045	4479-091516-1055	4479-091516-1435
Inorganic Compounds (mg/kg)															
Arsenic	-	-	**46**	**62**	**45**	-	-	-	-	-	-	-	-	-	-
Nickel	-	-	-	**190**	-	**1100**	**930**	**5300**	**5.4**	**480**	**5000**	-	-	-	**860**
SPLP Inorganics (ug/L)															
Arsenic	-	-	**10.8**	**13**	**11.6**	-	-	-	-	-	-	-	-	-	-
Nickel	-	-	-	-	-	**348**	**103**	**70.3**	-	**122**	**127**	-	-	-	**0.962 J**
Other (%)															
Clay Fine	-	**3**	-	-	-	-	-	-	-	-	-	-	-	-	-
Coarse Gravel	-	ND (0.1)	-	-	-	-	-	-	-	-	-	-	-	-	-
Coarse Sand	-	**17.6**	-	-	-	-	-	-	-	-	-	-	-	-	-
Cobbles	-	ND (0.1)	-	-	-	-	-	-	-	-	-	-	-	-	-
Fine Gravel	-	**10**	-	-	-	-	-	-	-	-	-	-	-	-	-
Fine Sand	-	**19.6**	-	-	-	-	-	-	-	-	-	-	-	-	-
Medium Sand	-	**23.1**	-	-	-	-	-	-	-	-	-	-	-	-	-
Silt Fine	-	**26.7**	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Fines	-	**29.7**	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Solids	**75.7**	**84.7**	**80**	**79.2**	**84.2**	**85.9**	**82.4**	**84.7**	**84.9**	**85.9**	**60**	**66.6**	**77**	**72.7**	**91.3**
Other (mg/kg)															
Total Organic Carbon (TOC) - Rep1	-	**103000**	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Organic Carbon (TOC) - Rep2	-	**75500**	-	-	-	-	-	-	-	-	-	-	-	-	-
Volatile Organic Compounds (mg/kg)															
Benzene	-	-	-	-	-	-	-	-	-	-	-	**0.61 J**	-	**0.094**	-
Chlorobenzene	-	-	-	-	-	-	-	-	-	**2.9**	**12**	**29**	**5.3**	**3.4**	-
Trichloroethene	-	-	-	-	-	-	-	-	-	-	-	ND (1.2)	-	-	-
Vinyl chloride	**0.08 J**	-	ND (0.004)	**0.00072 J**	-	-	-	-	-	-	-	-	-	-	-
SPLP Volatile Organic Compounds (ug/L)															
Benzene	-	-	-	-	-	-	-	-	-	-	-	**9.6**	-	**1.1**	-
Chlorobenzene	-	-	-	-	-	-	-	-	-	**53**	**160**	**280**	**110**	**34**	-
Trichloroethene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	**3.4**	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. Results in **bold** were detected.
2. ND - Not detected above the reporting limit
3. J - Estimated result

TABLE III
SUMMARY OF 2016 SPLP ANALYTICAL RESULTS
RACER EWING INDUSTRIAL LAND
EWING, NJ

Location	SB-10-SO-7	SB-10-SO-7	SB-10SO-7-103	SB-7-SO-3-101R	SB-7-SO-3R	SB-7-SO-6R	SB-8-SO-11-103	SB-8-SO-14	SB-AOC010-2013-100	SB-AOC010-2013-117	SB-AOC010-2013-129	SB-AOC1C-2013-107R	SB-AOC8B-2013-104
Sample Date	09/15/2016	09/15/2016	09/15/2016	09/13/2016	09/13/2016	09/13/2016	09/14/2016	09/14/2016	09/15/2016	09/15/2016	09/15/2016	09/12/2016	09/14/2016
Sample Depth (bgs)	4 - 5 (ft)	8 - 10 (ft)	5.5 - 6 (ft)	3.5 - 4 (ft)	8 - 10 (ft)	2 - 4 (ft)	3.5 - 4 (ft)	8 - 10 (ft)	5 - 5.5 (ft)	4 - 4.5 (ft)	3.5 - 4 (ft)	0.5 - 1 (ft)	9.5 - 10 (ft)
Sample Name	479-091516-13	479-091516-13	4479-091516-1330	4479-091316-1410	479-091316-14	479-091316-15(	4479-091416-0920	479-091416-15(	4479-091516-1110	4479-091516-1415	4479-091516-1500	SB-AOC1C-2013-107R	4479-091416-1000
Inorganic Compounds (mg/kg)													
Arsenic	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel	**9.7**	**49**	**16**	-	-	**92**	-	-	**550**	-	**11**	-	**480**
SPLP Inorganics (ug/L)													
Arsenic	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel	-	-	-	-	-	-	-	-	**162**	-	-	-	**1760**
Other (%)													
Clay Fine	-	-	-	-	-	-	-	-	**3.9**	-	**2.3**	-	-
Coarse Gravel	-	-	-	-	-	-	-	-	ND (0.1)	-	**13.8**	-	-
Coarse Sand	-	-	-	-	-	-	-	-	**17.1**	-	**14.2**	-	-
Cobbles	-	-	-	-	-	-	-	-	ND (0.1)	-	ND (0.1)	-	-
Fine Gravel	-	-	-	-	-	-	-	-	**14.1**	-	**24.7**	-	-
Fine Sand	-	-	-	-	-	-	-	-	**14.6**	-	**10.9**	-	-
Medium Sand	-	-	-	-	-	-	-	-	**22.3**	-	**13**	-	-
Silt Fine	-	-	-	-	-	-	-	-	**28**	-	**21.1**	-	-
Total Fines	-	-	-	-	-	-	-	-	**31.9**	-	**23.4**	-	-
Total Solids	**91.1**	**85.3**	**84.9**	**86.5**	**76.1**	**90.5**	**92.5**	**70.2**	**71.8**	**76.4**	**92.2**	**78**	**78.1**
Other (mg/kg)													
Total Organic Carbon (TOC) - Rep1	-	-	-	-	-	-	-	-	-	-	**2380**	-	-
Total Organic Carbon (TOC) - Rep2	-	-	-	-	-	-	-	-	-	-	**2260**	-	-
Volatile Organic Compounds (mg/kg)													
Benzene	-	-	-	-	-	-	-	-	**0.18**	**0.12**	-	-	-
Chlorobenzene	-	ND (0.0012)	-	-	-	-	**0.002**	**5.7**	-	-	-	-	ND (8.5)
Trichloroethene	-	-	-	-	**0.0014**	ND (0.0014)	-	-	ND (0.097)	-	ND (0.0015)	**0.0012**	-
Vinyl chloride	-	-	-	**0.06 J**	-	-	-	-	-	-	-	-	-
SPLP Volatile Organic Compounds (ug/L)													
Benzene	-	-	-	-	-	-	-	-	**3.9**	**3.5**	-	-	-
Chlorobenzene	-	-	-	-	-	-	-	**28**	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-	-	-	**0.17 J**	-	-	-	-
Vinyl chloride	-	-	-	**0.49**	-	-	-	-	-	-	-	-	-

Notes:
1. Results in **bold** were detected.
2. ND - Not detected above the reporting limit
3. J - Estimated result

TABLE III
SUMMARY OF 2016 SPLP ANALYTICAL RESULTS
RACER EWING INDUSTRIAL LAND
EWING, NJ

Location	SB-AOC8B-2013-105	SB-C8R	SB-F10R	SB-F9R	TP9-2-201R	TP9-2-202R	TP9-2-204R	TP9-2-206R	TP9-2-300RR	TP9-2-300RR	TP9-3-304R	TP9-3-304R	TP9-3-305R	TP9-3-305R
Sample Date	09/14/2016	09/12/2016	09/12/2016	09/12/2016	09/16/2016	09/16/2016	09/16/2016	09/16/2016	09/16/2016	09/16/2016	09/16/2016	09/16/2016	09/16/2016	09/16/2016
Sample Depth (bgs)	9.5 - 10 (ft)	2 - 2.5 (ft)	1.5 - 2 (ft)	9.5 - 10 (ft)	2.5 - 3 (ft)	2.5 - 3 (ft)	2.5 - 3 (ft)	2.5 - 3 (ft)	3 - 3.5 (ft)	4.5 - 5 (ft)	3 - 3.5 (ft)	4.5 - 5 (ft)	0 - 0.5 (ft)	3 - 3.5 (ft)
Sample Name	4479-091416-1055	SB-C8R	SB-F10R	SB-F9R	479-091616-09	479-091616-09	479-091616-09	479-091616-09	479-091616-08	479-091616-08	479-091616-10	479-091616-10	479-091616-10	479-091616-10
Inorganic Compounds (mg/kg)														
Arsenic	-	-	-	-	-	**5.5**	-	-	-	**2.5**	-	-	**14**	-
Nickel	**3000**	-	-	-	-	**19**	-	-	-	-	**5.4**	**7.2**	**360**	-
SPLP Inorganics (ug/L)														
Arsenic	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel	**767**	-	-	-	-	-	-	-	-	-	-	-	**204**	-
Other (%)														
Clay Fine	-	-	-	**16.9**	-	-	-	-	-	-	-	**11.9**	-	-
Coarse Gravel	-	-	-	ND (0.1)	-	-	-	-	-	-	-	ND (0.1)	-	-
Coarse Sand	-	-	-	**2.8**	-	-	-	-	-	-	-	**1.4**	-	-
Cobbles	-	-	-	ND (0.1)	-	-	-	-	-	-	-	ND (0.1)	-	-
Fine Gravel	-	-	-	**1.9**	-	-	-	-	-	-	-	**2.8**	-	-
Fine Sand	-	-	-	**10.7**	-	-	-	-	-	-	-	**19.4**	-	-
Medium Sand	-	-	-	**9.2**	-	-	-	-	-	-	-	**18**	-	-
Silt Fine	-	-	-	**58.5**	-	-	-	-	-	-	-	**46.5**	-	-
Total Fines	-	-	-	**75.4**	-	-	-	-	-	-	-	**58.4**	-	-
Total Solids	**79.6**	**85**	**83.2**	**84.4**	**89.8**	**81.4**	**85.4**	**83**	**75.7**	**62.2**	**83.2**	**87**	**81.8**	**75.6**
Other (mg/kg)														
Total Organic Carbon (TOC) - Rep1	-	-	-	**1320**	-	-	-	-	-	-	-	**1230**	-	-
Total Organic Carbon (TOC) - Rep2	-	-	-	**1440**	-	-	-	-	-	-	-	**1450**	-	-
Volatile Organic Compounds (mg/kg)														
Benzene	-	-	-	-	ND (0.0011)	**0.00018 J**	**0.00016 J**	-	**0.1 J**	**0.2 J**	ND (0.001)	ND (0.0012)	ND (0.0017)	ND (0.0013)
Chlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	**0.13 J**	**35**	**0.064**	**0.0037**	ND (0.0011)	-	**0.0025**	**0.011 J**	-	-	**0.0017**	**0.0012**	-	-
Vinyl chloride	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPLP Volatile Organic Compounds (ug/L)														
Benzene	-	-	-	-	-	-	-	-	**2.7**	**3**	-	-	-	-
Chlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	**1.1**	**260**	**2.6**	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. Results in **bold** were detected.
2. ND - Not detected above the reporting limit
3. J - Estimated result

TABLE IV
SUMMARY OF ANALYTICAL RESULTS FOR 2016 SUPPLEMENTAL BORINGS
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Location	Sample Name	Sample Date	Sample Depth (bgs)	SDG	Arsenic (mg/kg)	Trichloroethene (mg/kg)
SB-C8-EX1A	SB-C8-EX1A-1027-1424	10/27/2016	2 - 2.5 (ft)	L1634792	-	**0.00025 J**
SB-C8-EX1A	SB-C8-EX1A-1027-1430	10/27/2016	3 - 3.5 (ft)	L1634840	-	**0.0045**
SB-C8-EX1B	SB-C8-EX1B-1027-1440	10/27/2016	2 - 2.5 (ft)	L1634840	-	**0.0016**
SB-C8-EX1B	SB-C8-EX1B-1027-1515	10/27/2016	3 - 3.5 (ft)	L1634792	-	**0.015**
SB-C8-EX1C	SB-C8-EX1C-1027-1518	10/27/2016	2 - 2.5 (ft)	L1634840	-	**0.0038**
SB-C8-EX1C	SB-C8-EX1C-1027-1521	10/27/2016	3 - 3.5 (ft)	L1634792	-	**0.00048 J**
SB-C8-EX1D	SB-C8-EX1D-1027-1505	10/27/2016	3 - 3.5 (ft)	L1634792	-	**0.019**
SB-F10-EX1A	SB-F10-EX1A-1027-1635	10/27/2016	1.5 - 2 (ft)	L1634840	-	**0.0054**
SB-F10-EX1B	SB-E10-EX1B-1027-1600	10/27/2016	1.5 - 2 (ft)	L1634792	-	**0.0059**
SB-F10-EX1B	SB-F10-EX1B-1027-1605	10/27/2016	2.5 - 3 (ft)	L1634840	-	**0.084**
SB-F10-EX1C	SB-F10-EX1C-1027-1540	10/27/2016	1.5 - 2 (ft)	L1634840	-	ND (0.00096)
SB-F10-EX1C	SB-F10-EX1C-1027-1545	10/27/2016	2.5 - 3 (ft)	L1634840	-	ND (0.0011)
SB-F10-EX1D	SB-F10-EX1D-1027-1610	10/27/2016	2.5 - 3 (ft)	L1634840	-	**0.015**
B7-2-EX1A	B7-2-EX1A-1027-1031	10/27/2016	0 - 0.5 (ft)	L1634792	**14**	-
B7-2-EX1A	B7-2-EX1A-1027-1036	10/27/2016	1.5 - 2 (ft)	L1634839	**19**	-
B7-2-EX1B	B7-2-EX1A-1027-1106	10/27/2016	0 - 0.5 (ft)	L1634839	**28**	-
B7-2-EX1B	B7-2-EX1B-1027-1115	10/27/2016	1.5 - 2 (ft)	L1634839	**6.6**	-
B7-2-EX1C	B7-2-EX1C-1027-1019	10/27/2016	0 - 0.5 (ft)	L1634839	**11**	-
B7-2-EX1C	B7-2-EX1C-1027-1021	10/27/2016	1.5 - 2 (ft)	L1634839	**20**	-
CE-1-102-EX1A	CEI-102-EX1A-1027-1151	10/27/2016	0 - 0.5 (ft)	L1634792	**6.9**	-
CE-1-102-EX1A	CEI-102-EX1A-1027-1200	10/27/2016	1.5 - 2 (ft)	L1634839	**3.3**	-
SB-9-SO-8-A-EX1A	SB-9-SO-8-A-EX1A-1026-1657	10/26/2016	0 - 0.5 (ft)	L1634605	**15**	-
SB-9-SO-8-A-EX1A	SB-9-SO-8-A-EX1A-1026-1700	10/26/2016	1.5 - 2 (ft)	L1634605	**34**	-
SB-9-SO-8-A-EX1B	SB-9-SO-8-A-EX1B-1026-1630	10/26/2016	0.5 - 1 (ft)	L1634605	**8.6**	-
SB-9-SO-8-A-EX1B	SB-9-SO-8-A-EX1B-1026-1646	10/26/2016	1.3 - 1.5 (ft)	L1634605	**6.5**	-
SB-9-SO-8-A-EX1C	SB-9-SO-8-A-EX1C-1026-1710	10/26/2016	0 - 0.5 (ft)	L1634605	**250**	-
SB-9-SO-8-A-EX1C	SB-9-SO-8-A-EX1C-1026-1725	10/26/2016	1.5 - 2 (ft)	L1634605	**8.2**	-
SB-9-SO-8-A-EX1D	SB-9-SO-8-A-EX1D-1027-0919	10/27/2016	0 - 0.5 (ft)	L1634792	**7**	-
SB-9-SO-8-A-EX1D	SB-9-SO-8-A-EX1D-1027-0921	10/27/2016	1.5 - 2 (ft)	L1634839	**6**	-
SB-9-SO-8-A-EX1E	SB-9-SO-8-A-EX1E-1026-1605	10/26/2016	1.5 - 2 (ft)	L1634605	**4.2**	-
SB-9-SO-8-A-EX1G	SB-9-SO-8-A-EX1G-1026-1545	10/26/2016	1.5 - 2 (ft)	L1634605	**9.1**	-
SB-AOC09-13-104-EX1A	SB-AOC09-2013-104-EX1A-1026-0953	10/26/2016	0 - 0.5 (ft)	L1634605	**43**	-
SB-AOC09-13-104-EX1A	SB-AOC09-2013-104-EX1A-1026-0956	10/26/2016	1.5 - 2 (ft)	L1634605	**220**	-
SB-AOC09-13-104-EX1B	SB-AOC09-2013-104-EX1B-1026-1022	10/26/2016	0 - 0.5 (ft)	L1634605	**16**	-
SB-AOC09-13-104-EX1B	SB-AOC09-2013-104-EX1B-1026-1027	10/26/2016	1.5 - 2 (ft)	L1634605	**6.4**	-
SB-AOC09-13-104-EX1C	SB-AOC09-2013-104-EX1C-1026-1201	10/26/2016	0 - 0.5 (ft)	L1634605	**60**	-
SB-AOC09-13-104-EX1C	SB-AOC09-2013-104-EX1C-1026-1205	10/26/2016	1.5 - 2 (ft)	L1634605	**6.4**	-
SB-AOC09-13-104-EX1D	SB-AOC09-2013-EX1D-1026-1109	10/26/2016	0 - 0.5 (ft)	L1634605	**12**	-
SB-AOC09-13-104-EX1D	SB-AOC09-2013-104-EX1D-1026-1111	10/26/2016	1.5 - 2 (ft)	L1634605	**4.7**	-
SB-AOC09-13-104-EX1E	SB-AOC09-2013-104-EX1E-1026-1121	10/26/2016	0 - 0.5 (ft)	L1634605	**21**	-
SB-AOC09-13-104-EX1E	SB-AOC09-2013-104-EX1E-1026-1130	10/26/2016	1.5 - 2 (ft)	L1634605	**4.1**	-

Notes:

1. Results in **bold** were detected.
2. ND - Not detected above the reporting limit.

TABLE V
USABILITY BIAS ASSESSMENT
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Method	*Parameters*	*Sample ID*	*Lab Sample ID*	*Result*	*RL*	*Units*	*Matrix*	*QC Non-Conformances*	*Recovery/RPD (%)*	*Valid Range*	*Collect Date*	*Batch ID*	*DQ Assessment*
6010C	NICKEL, TOTAL	4479-091316-0915	L1628787-02	720.0	1.1	mg/kg	SOIL	DUP RPD	34	<=20	2016-09-13 09:15:00.0	WG934545	non-directional bias
6010C	NICKEL, TOTAL	4479-091316-1225	L1628787-09	190.0	1.2	mg/kg	SOIL	DUP RPD	34	<=20	2016-09-13 12:25:00.0	WG934545	non-directional bias
D422	% COARSE SAND	4479-091616-1045	L1629399-10	1.4	0.1	%	SOIL	DUP RPD	30	<=20	2016-09-16 10:45:00.0	WG935908	non-directional bias
D422	% FINE GRAVEL	4479-091616-1045	L1629399-10	2.8	0.1	%	SOIL	DUP RPD	150	<=20	2016-09-16 10:45:00.0	WG935908	non-directional bias
D422	% COARSE SAND	4479-091616-1147	L1629399-18	ND	0.1	%	SOIL	DUP RPD	30	<=20	2016-09-16 11:47:00.0	WG935908	non-directional bias
D422	% FINE GRAVEL	4479-091616-1147	L1629399-18	ND	0.1	%	SOIL	DUP RPD	150	<=20	2016-09-16 11:47:00.0	WG935908	non-directional bias
D422	% COARSE SAND	4479-091616-1200	L1629399-19	17.6	0.1	%	SOIL	DUP RPD	30	<=20	2016-09-16 12:00:00.0	WG935908	non-directional bias
D422	% FINE GRAVEL	4479-091616-1200	L1629399-19	10.0	0.1	%	SOIL	DUP RPD	150	<=20	2016-09-16 12:00:00.0	WG935908	non-directional bias
6010C	ARSENIC, TOTAL	B7-2-EX1A-1027-1036	L1634839-01	19.0	0.48	mg/kg	SOIL	DUP RPD	93	<=20	2016-10-27 10:36:00.0	WG946712	non-directional bias
6010C	ARSENIC, TOTAL	CEI-102-EX1A-1027-1200	L1634839-02	3.3	0.44	mg/kg	SOIL	DUP RPD	93	<=20	2016-10-27 12:00:00.0	WG946712	non-directional bias
6010C	ARSENIC, TOTAL	B7-2-EX1C-1027-1019	L1634839-04	11.0	0.52	mg/kg	SOIL	DUP RPD	93	<=20	2016-10-27 10:19:00.0	WG946712	non-directional bias
6010C	ARSENIC, TOTAL	B7-2-EX1B-1027-1115	L1634839-05	6.6	0.48	mg/kg	SOIL	DUP RPD	93	<=20	2016-10-27 11:15:00.0	WG946712	non-directional bias
6010C	ARSENIC, TOTAL	B7-2-EX1C-1027-1021	L1634839-06	20.0	0.46	mg/kg	SOIL	DUP RPD	93	<=20	2016-10-27 10:21:00.0	WG946712	non-directional bias
6010C	ARSENIC, TOTAL	B7-2-EX1A-1027-1106	L1634839-07	28.0	0.41	mg/kg	SOIL	DUP RPD	93	<=20	2016-10-27 11:06:00.0	WG946712	non-directional bias
D422	% CLAY FINE	4479-091516-0810	L1629226-01	1.3	0.1	%	SOIL	DUP RPD	21	<=20	2016-09-15 08:10:00.0	WG936692	non-directional bias
D422	% COARSE SAND	4479-091516-0810	L1629226-01	14.1	0.1	%	SOIL	DUP RPD	31	<=20	2016-09-15 08:10:00.0	WG936692	non-directional bias
D422	% FINE GRAVEL	4479-091516-0810	L1629226-01	19.7	0.1	%	SOIL	DUP RPD	64	<=20	2016-09-15 08:10:00.0	WG936692	non-directional bias
D422	% FINE SAND	4479-091516-0810	L1629226-01	20.8	0.1	%	SOIL	DUP RPD	30	<=20	2016-09-15 08:10:00.0	WG936692	non-directional bias
D422	% CLAY FINE	4479-091516-1110	L1629226-10	3.9	0.1	%	SOIL	DUP RPD	21	<=20	2016-09-15 11:10:00.0	WG936692	non-directional bias
D422	% COARSE SAND	4479-091516-1110	L1629226-10	17.1	0.1	%	SOIL	DUP RPD	31	<=20	2016-09-15 11:10:00.0	WG936692	non-directional bias
D422	% FINE GRAVEL	4479-091516-1110	L1629226-10	14.1	0.1	%	SOIL	DUP RPD	64	<=20	2016-09-15 11:10:00.0	WG936692	non-directional bias
D422	% FINE SAND	4479-091516-1110	L1629226-10	14.6	0.1	%	SOIL	DUP RPD	30	<=20	2016-09-15 11:10:00.0	WG936692	non-directional bias
D422	% CLAY FINE	4479-091516-1500	L1629226-19	2.3	0.1	%	SOIL	DUP RPD	21	<=20	2016-09-15 15:00:00.0	WG936692	non-directional bias
D422	% COARSE SAND	4479-091516-1500	L1629226-19	14.2	0.1	%	SOIL	DUP RPD	31	<=20	2016-09-15 15:00:00.0	WG936692	non-directional bias
D422	% FINE GRAVEL	4479-091516-1500	L1629226-19	24.7	0.1	%	SOIL	DUP RPD	64	<=20	2016-09-15 15:00:00.0	WG936692	non-directional bias
D422	% FINE SAND	4479-091516-1500	L1629226-19	10.9	0.1	%	SOIL	DUP RPD	30	<=20	2016-09-15 15:00:00.0	WG936692	non-directional bias
8260C	TRICHLOROETHENE	SB-AOC1C-2013-107R	L1628635-01	0.0012	0.0011	mg/kg	SOIL	DUP RPD	51	<=30	2016-09-12 11:00:00.0	WG931439	non-directional bias
D422	% CLAY FINE	SB-F9R	L1628635-03	16.9	0.1	%	SOIL	DUP RPD	38	<=20	2016-09-12 12:00:00.0	WG936157	non-directional bias
D422	% COARSE SAND	SB-F9R	L1628635-03	2.8	0.1	%	SOIL	DUP RPD	120	<=20	2016-09-12 12:00:00.0	WG936157	non-directional bias
D422	% MEDIUM SAND	SB-F9R	L1628635-03	9.2	0.1	%	SOIL	DUP RPD	66	<=20	2016-09-12 12:00:00.0	WG936157	non-directional bias
D422	FINES	SB-F9R	L1628635-03	75.4	0.1	%	SOIL	DUP RPD	23	<=20	2016-09-12 12:00:00.0	WG936157	non-directional bias
8260C	TRICHLOROETHENE	SB-F9R	L1628635-03	0.0037	0.0010	mg/kg	SOIL	DUP RPD	51	<=30	2016-09-12 12:00:00.0	WG931439	non-directional bias
8260C	TRICHLOROETHENE	SB-F10R	L1628635-04	0.064	0.0010	mg/kg	SOIL	DUP RPD	51	<=30	2016-09-12 14:00:00.0	WG931439	non-directional bias
D422	% CLAY FINE	4479-091216-1530	L1628635-10	13.9	0.1	%	SOIL	DUP RPD	38	<=20	2016-09-12 15:30:00.0	WG936157	non-directional bias
D422	% COARSE SAND	4479-091216-1530	L1628635-10	2.4	0.1	%	SOIL	DUP RPD	120	<=20	2016-09-12 15:30:00.0	WG936157	non-directional bias
D422	% MEDIUM SAND	4479-091216-1530	L1628635-10	7.8	0.1	%	SOIL	DUP RPD	66	<=20	2016-09-12 15:30:00.0	WG936157	non-directional bias
D422	FINES	4479-091216-1530	L1628635-10	71.4	0.1	%	SOIL	DUP RPD	23	<=20	2016-09-12 15:30:00.0	WG936157	non-directional bias
6010C	NICKEL, TOTAL	4479-091316-1115	L1628787-06	2300.0	3.3	mg/kg	SOIL	MS High	398	75-125	2016-09-13 11:15:00.0	WG931636	potential high bias
6010C	NICKEL, TOTAL	4479-091316-1120	L1628787-07	630.0	1.3	mg/kg	SOIL	MS High	398	75-125	2016-09-13 11:20:00.0	WG931636	potential high bias
6010C	NICKEL, TOTAL	4479-091316-1500	L1628787-12	92.0	1.1	mg/kg	SOIL	MS High	398	75-125	2016-09-13 15:00:00.0	WG931636	potential high bias
8260C	TOLUENE-D8	4479-091616-1000	L1629399-07	-	-	-	SOIL	Surrogate high	133.	70-130	2016-09-16 09:55:00.0	WG933153	potential high bias
6010C	NICKEL, TOTAL	4479-091516-0810	L1629226-01	4200.0	13.0	mg/kg	SOIL	MS High	7660	75-125	2016-09-15 08:10:00.0	WG932535	potential high bias
6010C	NICKEL, TOTAL	4479-091516-0945	L1629226-05	480.0	1.1	mg/kg	SOIL	MS High	7660	75-125	2016-09-15 09:45:00.0	WG932535	potential high bias
6010C	NICKEL, TOTAL	4479-091516-1000	L1629226-06	5000.0	16.0	mg/kg	SOIL	MS High	7660	75-125	2016-09-15 10:00:00.0	WG932535	potential high bias
6010C	NICKEL, TOTAL	4479-091516-1110	L1629226-10	550.0	1.3	mg/kg	SOIL	MS High	7660	75-125	2016-09-15 11:10:00.0	WG932535	potential high bias
6010C	ARSENIC, TOTAL	4479-091516-1305	L1629226-11	50.0	0.41	mg/kg	SOIL	MS High	182	75-125	2016-09-15 13:05:00.0	WG932535	potential high bias
6010C	ARSENIC, TOTAL	4479-091516-1300	L1629226-12	69.0	0.41	mg/kg	SOIL	MS High	182	75-125	2016-09-15 13:00:00.0	WG932535	potential high bias
6010C	NICKEL, TOTAL	4479-091516-1330	L1629226-13	16.0	1.2	mg/kg	SOIL	MS High	7660	75-125	2016-09-15 13:30:00.0	WG932535	potential high bias
6010C	NICKEL, TOTAL	4479-091516-1340	L1629226-14	9.7	1.1	mg/kg	SOIL	MS High	7660	75-125	2016-09-15 13:40:00.0	WG932535	potential high bias
6010C	NICKEL, TOTAL	4479-091516-1345	L1629226-15	49.0	1.1	mg/kg	SOIL	MS High	7660	75-125	2016-09-15 13:45:00.0	WG932535	potential high bias
6010C	NICKEL, TOTAL	4479-091516-1435	L1629226-17	860.0	1.1	mg/kg	SOIL	MS High	7660	75-125	2016-09-15 14:35:00.0	WG932535	potential high bias
6010C	ARSENIC, TOTAL	4479-091516-1440	L1629226-18	62.0	0.45	mg/kg	SOIL	MS High	182	75-125	2016-09-15 14:40:00.0	WG932535	potential high bias
6010C	NICKEL, TOTAL	4479-091516-1500	L1629226-19	11.0	1.0	mg/kg	SOIL	MS High	7660	75-125	2016-09-15 15:00:00.0	WG932535	potential high bias
6010C	ARSENIC, TOTAL	SB-AOC09-2013-104-EX1D-1026-1111	L1634605-20	4.7	0.53	mg/kg	SOIL	MS High	153	75-125	2016-10-26 11:11:00.0	WG947133	potential high bias
6010C	ARSENIC, TOTAL	SB-9-SO-8-A-EX1G-1026-1545	L1634605-22	9.1	0.44	mg/kg	SOIL	MS High	153	75-125	2016-10-26 15:45:00.0	WG947133	potential high bias
6010C	ARSENIC, TOTAL	SB-AOC09-2013-104-EX1E-1026-1121	L1634605-23	21.0	0.46	mg/kg	SOIL	MS High	153	75-125	2016-10-26 11:21:00.0	WG947133	potential high bias
6010C	ARSENIC, TOTAL	SB-9-SO-8-A-EX1E-1026-1605	L1634605-24	4.2	0.44	mg/kg	SOIL	MS High	153	75-125	2016-10-26 16:05:00.0	WG947133	potential high bias
6010C	ARSENIC, TOTAL	SB-AOC09-2013-104-EX1E-1026-1130	L1634605-26	4.1	0.46	mg/kg	SOIL	MS High	153	75-125	2016-10-26 11:30:00.0	WG947133	potential high bias
6010C	ARSENIC, TOTAL	SB-AOC09-2013-EX1D-1026-1109	L1634605-29	12.0	0.46	mg/kg	SOIL	MS High	153	75-125	2016-10-26 11:09:00.0	WG947133	potential high bias
8260C	TRICHLOROETHENE	SB-AOC1C-2013-107R	L1628635-01	0.0012	0.0011	mg/kg	SOIL	MS High	247	70-130	2016-09-12 11:00:00.0	WG931439	potential high bias
8260C	TRICHLOROETHENE	SB-F9R	L1628635-03	0.0037	0.0010	mg/kg	SOIL	MS High	247	70-130	2016-09-12 12:00:00.0	WG931439	potential high bias
8260C	TRICHLOROETHENE	SB-F10R	L1628635-04	0.064	0.0010	mg/kg	SOIL	MS High	247	70-130	2016-09-12 14:00:00.0	WG931439	potential high bias

TABLE V
USABILITY BIAS ASSESSMENT
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Method	*Parameters*	*Sample ID*	*Lab Sample ID*	*Result*	*RL*	*Units*	*Matrix*	*QC Non-Conformances*	*Recovery/RPD (%)*	*Valid Range*	*Collect Date*	*Batch ID*	*DQ Assessment*
6010C	NICKEL, TOTAL	4479-091316-0915	L1628787-02	720.0	1.1	mg/kg	SOIL	MS Low	66	75-125	2016-09-13 09:15:00.0	WG934545	potential low bias
6010C	ARSENIC, TOTAL	4479-091316-0940	L1628787-04	7.0	0.47	mg/kg	SOIL	MS Low	0	75-125	2016-09-13 09:40:00.0	WG931636	potential low bias
6010C	ARSENIC, TOTAL	4479-091316-1010	L1628787-05	46.0	0.49	mg/kg	SOIL	MS Low	0	75-125	2016-09-13 10:10:00.0	WG931636	potential low bias
6010C	ARSENIC, TOTAL	4479-091316-1200	L1628787-08	45.0	0.47	mg/kg	SOIL	MS Low	0	75-125	2016-09-13 12:00:00.0	WG931636	potential low bias
6010C	NICKEL, TOTAL	4479-091316-1225	L1628787-09	190.0	1.2	mg/kg	SOIL	MS Low	66	75-125	2016-09-13 12:25:00.0	WG934545	potential low bias
6010C	NICKEL, TOTAL	4479-091616-0925	L1629399-04	19.0	1.2	mg/kg	SOIL	MS Low	0	75-125	2016-09-16 09:10:00.0	WG932977	potential low bias
6010C	NICKEL, TOTAL	4479-091616-1000	L1629399-07	360.0	1.2	mg/kg	SOIL	MS Low	0	75-125	2016-09-16 09:55:00.0	WG932977	potential low bias
6010C	NICKEL, TOTAL	4479-091616-1040	L1629399-09	5.4	1.2	mg/kg	SOIL	MS Low	0	75-125	2016-09-16 10:40:00.0	WG932977	potential low bias
6010C	NICKEL, TOTAL	4479-091616-1045	L1629399-10	7.2	1.1	mg/kg	SOIL	MS Low	0	75-125	2016-09-16 10:45:00.0	WG932977	potential low bias
6010C	ARSENIC, TOTAL	B7-2-EX1A-1027-1036	L1634839-01	19.0	0.48	mg/kg	SOIL	MS Low	26	75-125	2016-10-27 10:36:00.0	WG946712	potential low bias
6010C	ARSENIC, TOTAL	CEI-102-EX1A-1027-1200	L1634839-02	3.3	0.44	mg/kg	SOIL	MS Low	26	75-125	2016-10-27 12:00:00.0	WG946712	potential low bias
6010C	ARSENIC, TOTAL	B7-2-EX1C-1027-1019	L1634839-04	11.0	0.52	mg/kg	SOIL	MS Low	26	75-125	2016-10-27 10:19:00.0	WG946712	potential low bias
6010C	ARSENIC, TOTAL	B7-2-EX1B-1027-1115	L1634839-05	6.6	0.48	mg/kg	SOIL	MS Low	26	75-125	2016-10-27 11:15:00.0	WG946712	potential low bias
6010C	ARSENIC, TOTAL	B7-2-EX1C-1027-1021	L1634839-06	20.0	0.46	mg/kg	SOIL	MS Low	26	75-125	2016-10-27 10:21:00.0	WG946712	potential low bias
6010C	ARSENIC, TOTAL	B7-2-EX1A-1027-1106	L1634839-07	28.0	0.41	mg/kg	SOIL	MS Low	26	75-125	2016-10-27 11:06:00.0	WG946712	potential low bias
8260C	CHLOROBENZENE	4479-091516-1020	L1629226-07 D	0.28	0.005	mg/kg	SOIL	MS Low	60	70-130	2016-09-15 10:20:00.0	WG936703	potential low bias
8260C	CHLOROBENZENE	4479-091516-1020	L1629226-07 D	0.28	0.005	mg/kg	SOIL	MSD Low	60	70-130	2016-09-15 10:20:00.0	WG936703	potential low bias
6010C	NICKEL, TOTAL	4479-091316-0915	L1628787-02	720.0	1.1	mg/kg	SOIL	MS invalid - 4x Spike	66	75-125	2016-09-13 09:15:00.0	WG934545	
6010C	ARSENIC, TOTAL	4479-091316-0940	L1628787-04	7.0	0.47	mg/kg	SOIL	MS invalid - 4x Spike	0	75-125	2016-09-13 09:40:00.0	WG931636	
6010C	ARSENIC, TOTAL	4479-091316-1010	L1628787-05	46.0	0.49	mg/kg	SOIL	MS invalid - 4x Spike	0	75-125	2016-09-13 10:10:00.0	WG931636	
6010C	NICKEL, TOTAL	4479-091316-1115	L1628787-06	2300.0	3.3	mg/kg	SOIL	MS invalid - 4x Spike	398	75-125	2016-09-13 11:15:00.0	WG931636	
6010C	NICKEL, TOTAL	4479-091316-1120	L1628787-07	630.0	1.3	mg/kg	SOIL	MS invalid - 4x Spike	398	75-125	2016-09-13 11:20:00.0	WG931636	
6010C	ARSENIC, TOTAL	4479-091316-1200	L1628787-08	45.0	0.47	mg/kg	SOIL	MS invalid - 4x Spike	0	75-125	2016-09-13 12:00:00.0	WG931636	
6010C	NICKEL, TOTAL	4479-091316-1225	L1628787-09	190.0	1.2	mg/kg	SOIL	MS invalid - 4x Spike	66	75-125	2016-09-13 12:25:00.0	WG934545	
6010C	NICKEL, TOTAL	4479-091316-1500	L1628787-12	92.0	1.1	mg/kg	SOIL	MS invalid - 4x Spike	398	75-125	2016-09-13 15:00:00.0	WG931636	
6010C	NICKEL, TOTAL	4479-091616-0925	L1629399-04	19.0	1.2	mg/kg	SOIL	MS invalid - 4x Spike	0	75-125	2016-09-16 09:10:00.0	WG932977	
6010C	NICKEL, TOTAL	4479-091616-1000	L1629399-07	360.0	1.2	mg/kg	SOIL	MS invalid - 4x Spike	0	75-125	2016-09-16 09:55:00.0	WG932977	
6010C	NICKEL, TOTAL	4479-091616-1040	L1629399-09	5.4	1.2	mg/kg	SOIL	MS invalid - 4x Spike	0	75-125	2016-09-16 10:40:00.0	WG932977	
6010C	NICKEL, TOTAL	4479-091616-1045	L1629399-10	7.2	1.1	mg/kg	SOIL	MS invalid - 4x Spike	0	75-125	2016-09-16 10:45:00.0	WG932977	
6010C	NICKEL, TOTAL	4479-091516-0810	L1629226-01	4200.0	13.0	mg/kg	SOIL	MS invalid - 4x Spike	7660	75-125	2016-09-15 08:10:00.0	WG932535	
6010C	NICKEL, TOTAL	4479-091516-0945	L1629226-05	480.0	1.1	mg/kg	SOIL	MS invalid - 4x Spike	7660	75-125	2016-09-15 09:45:00.0	WG932535	
6010C	NICKEL, TOTAL	4479-091516-1000	L1629226-06	5000.0	16.0	mg/kg	SOIL	MS invalid - 4x Spike	7660	75-125	2016-09-15 10:00:00.0	WG932535	
6010C	NICKEL, TOTAL	4479-091516-1110	L1629226-10	550.0	1.3	mg/kg	SOIL	MS invalid - 4x Spike	7660	75-125	2016-09-15 11:10:00.0	WG932535	
6010C	NICKEL, TOTAL	4479-091516-1330	L1629226-13	16.0	1.2	mg/kg	SOIL	MS invalid - 4x Spike	7660	75-125	2016-09-15 13:30:00.0	WG932535	
6010C	NICKEL, TOTAL	4479-091516-1340	L1629226-14	9.7	1.1	mg/kg	SOIL	MS invalid - 4x Spike	7660	75-125	2016-09-15 13:40:00.0	WG932535	
6010C	NICKEL, TOTAL	4479-091516-1345	L1629226-15	49.0	1.1	mg/kg	SOIL	MS invalid - 4x Spike	7660	75-125	2016-09-15 13:45:00.0	WG932535	
6010C	NICKEL, TOTAL	4479-091516-1435	L1629226-17	860.0	1.1	mg/kg	SOIL	MS invalid - 4x Spike	7660	75-125	2016-09-15 14:35:00.0	WG932535	
6010C	NICKEL, TOTAL	4479-091516-1500	L1629226-19	11.0	1.0	mg/kg	SOIL	MS invalid - 4x Spike	7660	75-125	2016-09-15 15:00:00.0	WG932535	

TABLE VI
SCREENING CRITERIA FOR IMPACT TO GROUNDWATER
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Chemical	1999 NJDEP SCC (mg/kg)	2013 DEFAULT IGW SCREENING CRITERIA (mg/kg)	SPLP EVALUATION VALUES (mg/kg)	SITE-SPECIFIC SRS (mg/kg)
Inorganic Compounds				
Arsenic	-	19	10	**19**
Chromium (total)	-	-	1540	**1540**
Nickel	-	48	9200	**9200**
Zinc	-	930	14200	**14200**
Organic Compounds				
Benzene	1	0.005	0.2	**0.2**
Chlorobenzene	1	0.6	83	**83**
Trichloroethene	1	0.01	0.13	**0.13**
Vinyl Chloride	10	0.005	0.06	**0.06**

Notes:
1. **Bold** indicates a value used in IGW evaluation methods
2. "-" indicates value in NJDEP guidance

TABLE VII
IGW SAMPLING RAW DATA STATISTICAL EVALUATION
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

				Frequency of Detections			Non-Detections Summary							Detections Summary		
COC	Units	2013 Default IGW Screening Criteria	Site-Specific SRS	Number of Detections	Number of Samples	Percent Non-Detects	Range of Non-Detects	Frequency of Non-Detects > 2013 Default IGW Screening Criteria	Frequency of Non-Detects > Site-Specific SRS	10% ile	Mean	50% ile	75% ile	UCL95 RL without Outliers	Range of Detects	Frequency of Detects > 2013 Default IGW Screening Criteria	Frequency of Detects > Site-Specific SRS
Arsenic	mg/Kg	19	19	1003	/ 1118	10%	0.8 : 22	4	4	1.1	8.75	11	12	-	0.16 : 590	133	133
Chromium	mg/Kg	20	1540	927	/ 929	0.22%	2.5 : 2.5	0	0	-	-	-	-	-	0.72 : 14000	682	32
Nickel	mg/Kg	48	9200	924	/ 927	0.32%	2.5 : 4	0	0	-	-	-	-	-	2.70 : 36000	343	14
Zinc	mg/Kg	930	14200	957	/ 961	0.42%	2.5 : 6400	1	0	-	-	-	-	-	0.29 : 68000	202	25
Benzene	mg/Kg	0.005	0.2	122	/ 1080	89%	0.0008 : 16	337	42	0.00097	***0.11***	0.0012	***0.007***	***0.0611***	0.00 : 2.9	67	31
Chlorobenzene	mg/Kg	0.6	83	210	/ 1071	80%	0.0008 : 15	132	0	0.00097	***1.51***	0.0013	0.007	0.148	0.00019 : 130	43	2
Trichloroethene	mg/Kg	0.01	0.13	256	/ 1086	76%	0.0008 : 16	223	163	0.000979	**0.16**	0.0013	***0.09475***	***0.0816***	0.00012 : 31	90	46
Vinyl chloride	mg/Kg	0.005	0.06	42	/ 1071	96%	0.0008 : 33	412	264	0.00097	**0.33**	0.0013	**0.068**	**0.148**	0.0002 : 2.4	29	11

Notes:

1. Acronyms: NJDEP: New Jersey Department of Environmental Protection
   2013 Default IGW Screening Criteria: Default Impact to Groundwater Soil Remediation Standards
   Site-Specific SRS: Impact to Groundwater Site Specific Screening Criteria
2. **Bold** indicates exceedance of NJDEP 2013 Default IGW Screening Criteria
3. ***Bold italic*** indicates exceedance of NJDEP 2013 Default IGW Screening Criteria and Site-Specific SRS

TABLE VIII
IGW SAMPLING REPORTING LIMIT EVALUATION RESULTS
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

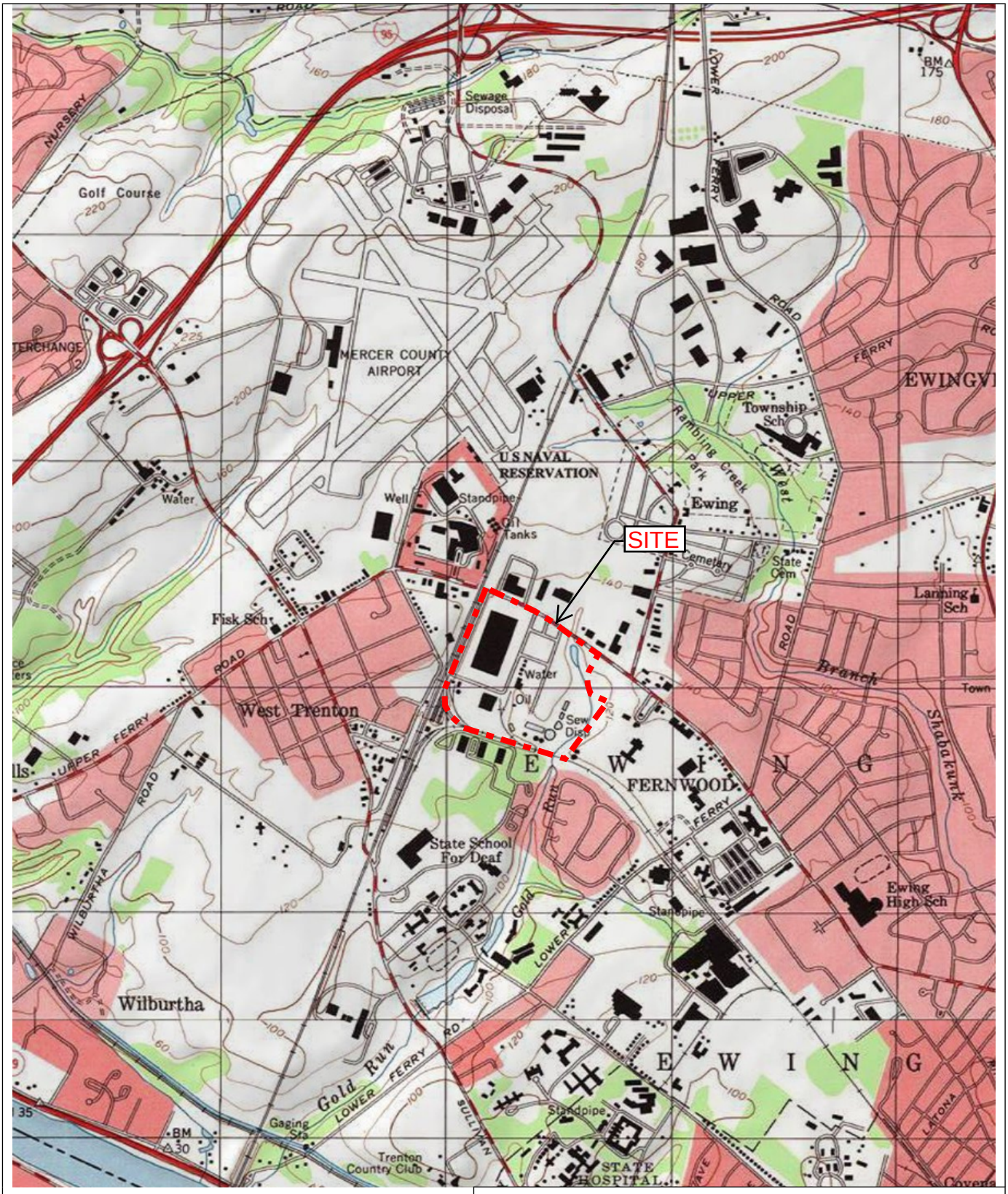
	Percentile Values of Site-Wide Reporting Limits					
COC	10%	Mean	50%	75%	UCL95 RL with Outliers	UCL95 RL without Outliers
Arsenic	1.1	8.75	11	12	11.07	
Benzene	0.00097	0.11	0.0012	0.007	0.229	0.0611
Chlorobenzene	0.00097	1.51	0.0013	0.007	0.318	0.148
Trichloroethene	0.000979	0.16	0.0013	0.095	0.298	0.0816
Vinyl chloride	0.00097	0.33	0.0013	0.068	0.568	0.148

Table IX
Impact to Groundwater Analysis Summary Table
Ewing Township Industrial Land
Ewing, New Jersey

Constituent	Horizontal and Vertical Delineation Achieved	Non-Issue Using Immobile Chemical Guidance	Non-Issue Using Spatially-Weighted Averaging via Thiessen Polygons and 2013 Default IGW Screening Criteria Values	Site-Specific SRS (MG/KG)	Non-issue Using Spatially-Weighted Averaging via Thiessen Polygons, Site-Specific SRS, Additional Borings, And Reporting Limit Evaluation
Arsenic	Yes	No	**Yes**	19	-
Lead	Yes	**Yes**	-	-	-
Nickel	Yes	No	No	9200	**Yes**
Chromium	Yes	No	No	1540	**Yes**
Zinc	Yes	No	No	14200	**Yes**
Benzo(a)anthracene	Yes	**Yes**	-	-	-
Benzo(a)pyrene	Yes	**Yes**	-	-	-
Benzene	Yes	No	No	0.2	**Yes**
Chlorobenzene	Yes	No	No	83	**Yes**
Trichloroethene	Yes	No	No	0.13	**Yes**
Vinyl chloride	Yes	No	No	0.06	**Yes**

Notes:
1. Chromium and Zinc were identified in the groundwater RIR NJDEP Comments.
2. "-" indicates that analysis or investigation was not completed.

FIGURES



MAP SOURCE: ESRI

SITE COORDINATES: 40°16'1"N, 74°48'32"W

HALEY ALDRICH

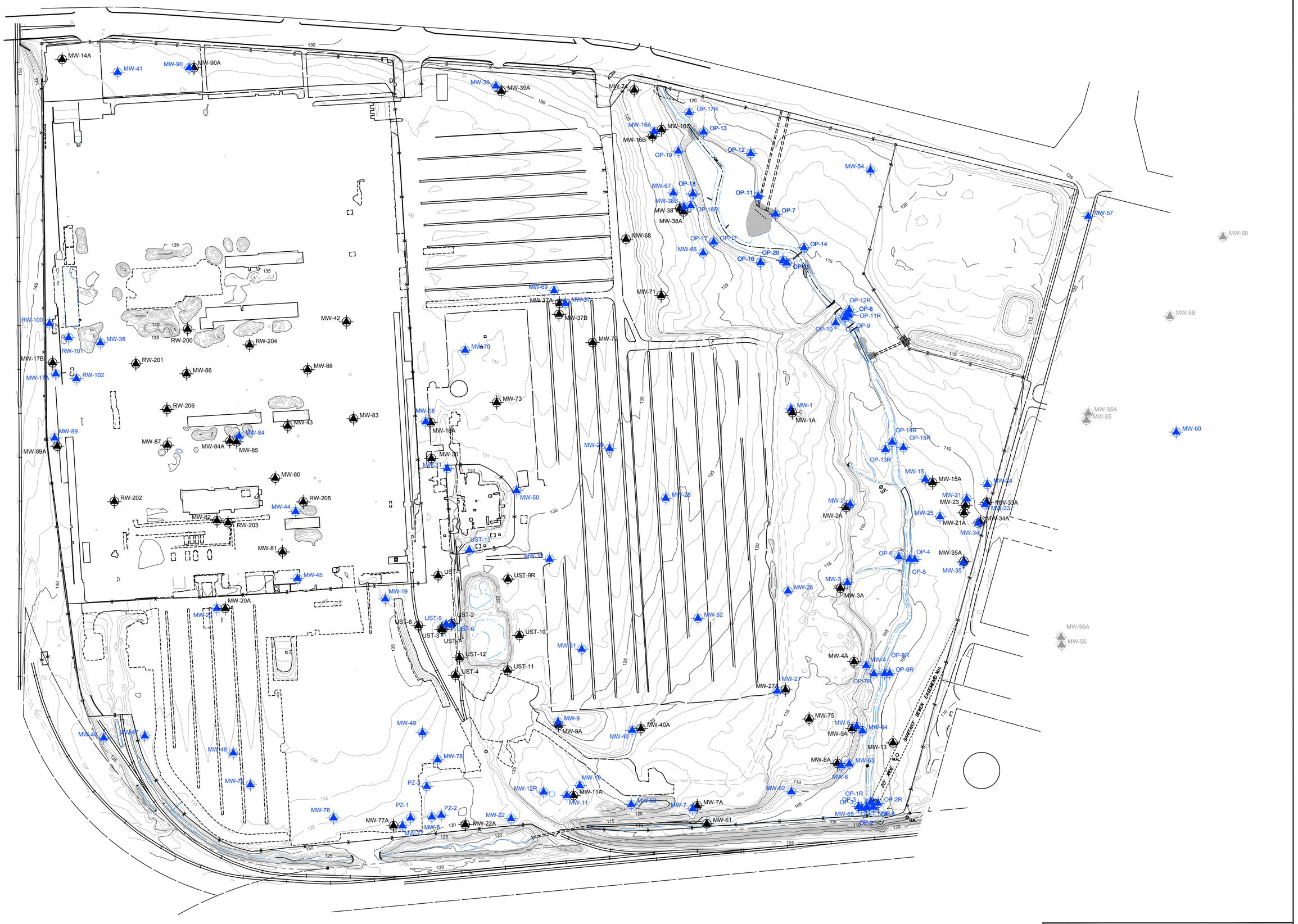
REMEDIAL ACTION REPORT ADDENDUM
RACER TRUST - EWING TOWNSHIP INDUSTRIAL LAND
EWING TOWNSHIP, NEW JERSEY

PROJECT LOCUS

APPROXIMATE SCALE: 1 IN = 2000 FT
APRIL 2017

FIGURE 1

70613_1_LOCUS.PDF



LEGEND:

- PROPERTY LINE
- FENCE
- WATER BODY
- 130 GROUND ELEVATION CONTOUR (1FT.)
- MONITORING WELL LOCATION (OVERBURDEN)
- MONITORING WELL LOCATION (BEDROCK)
- ABANDONED MONITORING WELL

NOTES:

1. SITE PLAN BASED ON A SURVEY PERFORMED BY GERALD G. DEGROAT, LS, DATED NOVEMBER 20, 2002, REVISED TO 10 JULY 2015.

0 150 300
SCALE IN FEET

HALEY ALDRICH

REMEDIAL ACTION REPORT ADDENDUM
RACER TRUST - EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

SITE PLAN WITH WELL LOCATIONS

SCALE: AS SHOWN
APRIL 2017

FIGURE 2

POSTOLOWSKI, KEVIN Printed: 4/27/2017 11:14 AM Layout: FIG 2
V:\PROJECTS\70613\421 - 2015 GROUNDWATER MONITORING\CAD\70613_821_0020_MON WELL SITE PLAN.DWG

LEGEND

- PROPERTY LINE
- FENCE
- WATER BODY
- 130 GROUND ELEVATION CONTOUR (1FT.)
- 2016 SPLP SOIL BORING LOCATIONS
- 2012 SPLP SOIL BORING LOCATIONS

NOTES:

1. SITE PLAN BASED ON A SURVEY PERFORMED BY GERALD G. DEGROAT, LS, DATED NOVEMBER 20, 2002, REVISED TO 10 JULY 2015.

N

0 150 300
SCALE IN FEET

HALEY ALDRICH

REMEDIAL ACTION REPORT ADDENDUM
RACER TRUST - EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

2012 AND 2016 SPLP SOIL BORING LOCATIONS

SCALE: AS SHOWN
APRIL 2017

FIGURE 3

POSTOLOWSKI, KEVIN Printed: 4/27/2017 11:23 AM Layout: FIG 3
V:\PROJECTS\70613\GLOBAL\CAD\DRAWINGS\2017\70613_821_0002_SPLP_SOIL_BORINGS.DWG

LEGEND

- PROPERTY LINE
- FENCE
- WATER BODY
- 130 GROUND ELEVATION CONTOUR (1FT.)
- 2016 SUPPLEMENTAL SOIL BORING LOCATIONS

NOTES:

1. SITE PLAN BASED ON A SURVEY PERFORMED BY GERALD G. DEGROAT, LS, DATED NOVEMBER 20, 2002, REVISED TO 10 JULY 2015.

N

0 150 300
SCALE IN FEET

HALEY ALDRICH

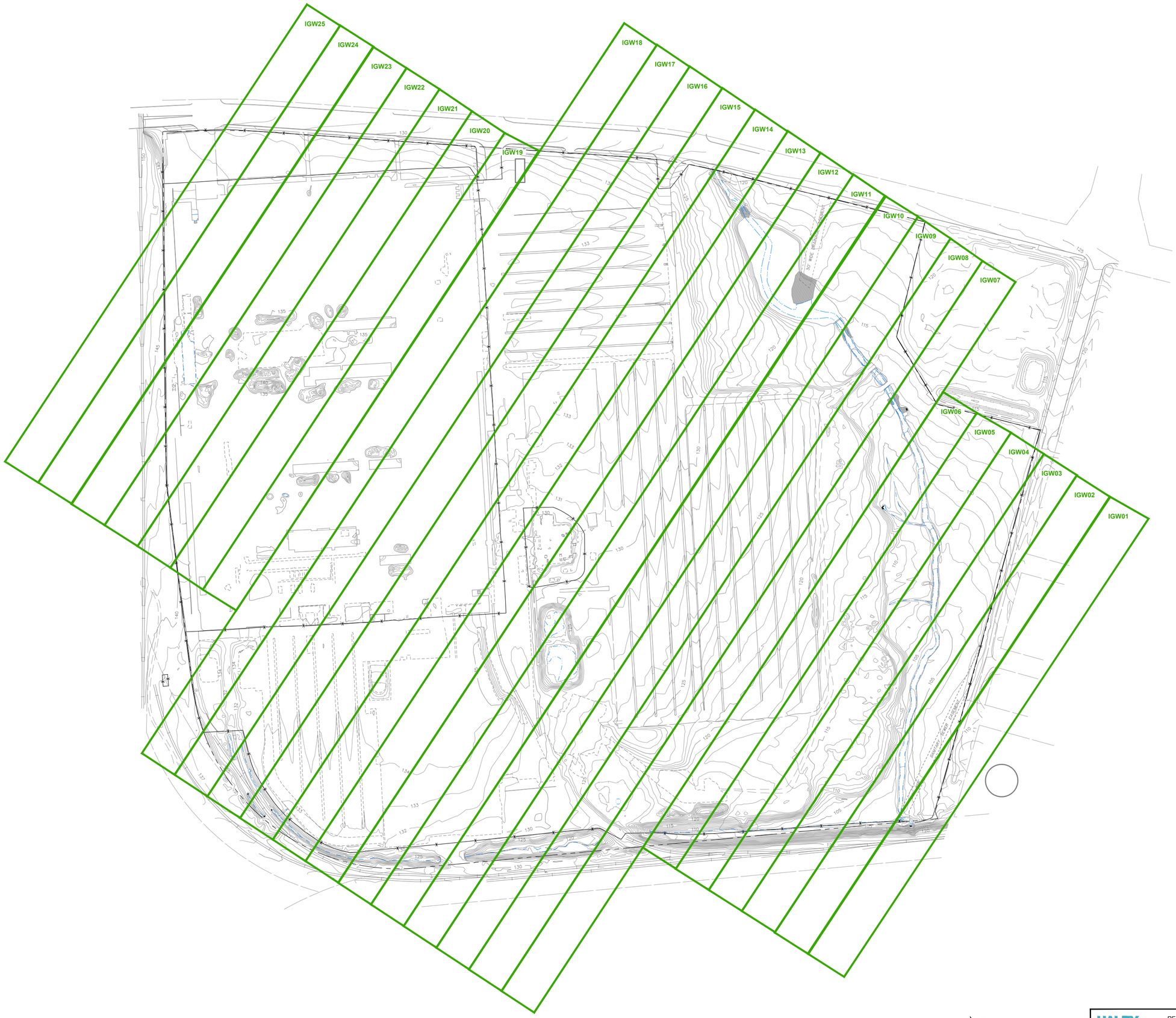
REMEDIAL ACTION REPORT ADDENDUM
RACER TRUST - EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

2016 SUPPLEMENTAL SOIL BORING LOCATIONS

SCALE: AS SHOWN
APRIL 2017

FIGURE 4

POSTOLOWSKI, KEVIN Printed: 4/27/2017 11:22 AM Layout: FIG 4
V:\PROJECTS\70613\GLOBAL\CAD\DRAWINGS\2017\70613_821_0002_SPLP_SOIL_BORINGS.DWG



LEGEND

- PROPERTY LINE
- FENCE
- WATER BODY
- 130 GROUND ELEVATION CONTOUR (1FT.)
- IGW01 FUNCTIONAL AREA & ID

NOTES:

1. SITE PLAN BASED ON A SURVEY PERFORMED BY GERALD G. DEGROAT, LS, DATED NOVEMBER 20, 2002, REVISED TO 10 JULY 2015.

N

0 180 360
SCALE IN FEET

HALEY ALDRICH

REMEDIAL ACTION REPORT ADDENDUM
RACER TRUST - EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

IMPACT TO GROUNDWATER COMPLIANCE EVALUATION FUNCTIONAL AREAS

SCALE: AS SHOWN
APRIL 2017

FIGURE 5

POSTOLOWSKI, KEVIN Printed: 4/27/2017 11:22 AM Layout: FIG 5
V:\PROJECTS\70613\GLOBAL\CAD\DRAWINGS\2017\70613_821_0002_SPLP SOIL BORINGS.DWG

APPENDIX A

NJDEP Training Materials

NJDEP "Hot Topic" Training

Impact to Ground Water Pathway

July 24, 2014, 3:00-6:00 pm
NJDEP Offices, Trenton NJ
1st Floor Hearing Room

Welcome

George Nicholas, Moderator
DEP/SRP Training Program, Co-Chair

"Housekeeping/Logistical" Items:

- Welcome: in-house and Webinar audience
- Refreshments: back of room (help yourselves)
- Please silence cell phones
- Hold questions until Q&A time; wait for mic
- DEP has applied to SRPLB for 3 Technical CECs for in-house participants; approval pending
  - Make sure to sign in before and after the session to obtain attendance Certificate.
  - Anyone arriving more than 45 minutes late for the session cannot be awarded an attendance Certificate for CECs

The Impact-to-Groundwater Pathway

June 24, 2014

4

NJ Licensed Site Remediation Professionals Association

Thank You To Our Sponsors

Diamond Sponsor

Platinum Sponsors

Gold Sponsors

Silver Sponsors

5

Thank You to Our Event Sponsors:

6

LSRP Continuing Education Requirements

36 Continuing Education Credits (CECs) over 3 year LSRP license renewal period

First LSRPs (July 2012) Need 36 CECs by 4/15

Minimum no. of CECs must be satisfied in these categories:

- 3 CECs Ethics
- 10 CECs Regulatory
- 14 CECs Technical

+9 CECs Discretionary

Board can require "CORE" courses

7

Continuing Ed Credits (CECs)

- One CEC is equivalent to 1 hour of instruction from university, college, DEP, LSRPA & other professional organizations
- Conferences Conventions Workshops 1hr = ½CEC
  - Up to 8 CECs allowed within 3 year renewal cycle
  - Changes to this policy are up to discretion of LSRP Board
- Webinar and On-Line Courses: CEC is 1:1 but exam is required
- CECs available for presentations, publications but not 1:1 credit

8

Dates & Events

- *Check LSRP Board's Current Course Listing for Course Offerings Approved for LSRP CECs-*
- Sep. 15 — UST Certification Course - NJWEA (5 Regulatory CECs)
- Sep.16 &17 — Groundwater Contamination & Remedial Principles & Practices (LSRPA/NWETC) 2 Days- 13 CECs
- Oct. 7 & 8 — Environmental Forensics (LSRPA/NWETC) 2 days- 13 CECs
- Oct 21 — Case Study Training for LSRPs by NJDEP- 7 Regulatory CECs

9

NJ LSRP Board Activities

- Board Regulates LSRPs
  - Professional Conduct / Disciplinary Actions
  - Licensure
  - Continuing Education
  - Audits
- Board issued draft rules / Comment period closed on 6/9
- LSRPA provided comments to the LSRP Board on 6/9
- Board has issued 3 new approval applications for CECs:
  - Presentation - submit application within 90 days
  - Instruction - "
  - Publication of Paper - "

10

Thank You

11

Impact to Ground Water Pathway: New Guidance and Attainment

July 24, 2014

12

Presenters

Barry Frasco, NJDEP
Michael Gonshor, Roux Associates Inc.
MaryAnne Kuserk, NJDEP
Stephen Posten, AMEC Environment & Infrastructure
Paul Sanders, NJDEP
Swati Toppin, NJDEP

IGW Framework

Default IGW Soil Screening Levels

Swati Toppin
NJDEP

Content of Presentations

- Will discuss highlights of new guidance documents
- Will discuss common errors in addressing IGW pathway
- Go over frequently asked questions

Framework for IGW Pathway

- IGW Default Soil Screening Levels found at http://www.nj.gov/dep/srp/guidance/rs/partition_equation.pdf
- ARS Options for Site Specific Remediation Standards found at http://www.nj.gov/dep/srp/guidance/rs/

Interaction Between the Various Options

- Use any option as described in guidance documents
- You may use the highest IGWSRS given by any option as the site specific IGWSRS

"Weight of Evidence"

Incomplete or wrongly implemented options may not be presented together as "weight of evidence" for no further action

For example:

- Only one sample for SPLP and immobile chemical option with no delineation
- Only one sample for SPLP and statement that contaminant is lab contaminant (not site related)

IGW Default Soil Screening Level (IGWSSL)

- Based on Soil Water Partition Equation
- Useful where no site specific data is available (Protective of ground water for cases with little or no site specific information
- Protective against potential future contamination

Soil Water Partition Equations

- Organic contaminants equation

$$IGWSRS = GWQC\left\{K_{oc}f_{oc} + \frac{\theta_w + \theta_a H'}{\rho_b}\right\}DAF$$

- Inorganic contaminants equation

$$IGWSRS = GWQC\left\{K_d + \frac{\theta_w + \theta_a H'}{\rho_b}\right\}DAF$$

Common Misconceptions

1. The IGWSRS has not been exceeded, therefore no ground water investigation is necessary. This is not correct. For guidance on when to conduct a GW investigation, see Technical Requirements and GW Guidance documents.

2. The ground water is clean therefore no IGW pathway investigation is needed. This is not correct.

3. If site specific conditions lead to a different conclusion, use professional judgment &/or contact the Department.

New Dilution-Attenuation Factor Guidance

Hot Topics Training
Impact to Groundwater Updates
July 24, 2014

Paul Sanders
Site Remediation Program

22

Dilution-Attenuation Factor

When infiltrating soil water reaches the water table, it mixes with GW and contaminants are diluted. The resulting concentration in GW is therefore lower than that in the infiltrating water. A DAF factor is used to account for this process.

$$DAF = 1 + \frac{Kid}{IL}$$

i = gradient
d = mixing zone depth
I = infiltration rate
L = length of AOC parallel to GW flow
K = hydraulic conductivity

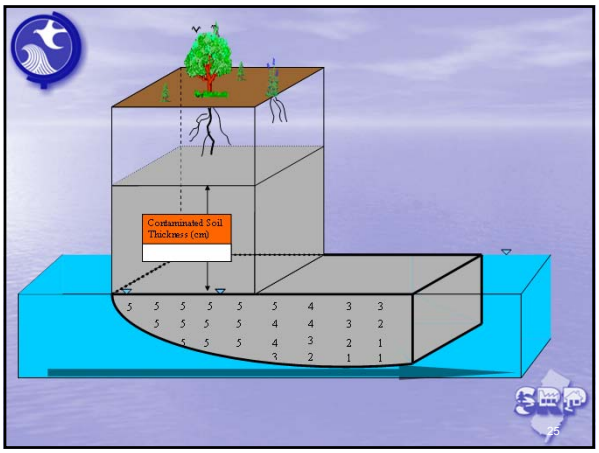
23

Dilution-Attenuation Factor: Mixing Zone Depth

$$d = (0.0112L^2)^{0.5} + d_a\{1 - \exp[(-LI)/(Kid_a)]\}$$

- Mixing zone depth is dependent on the same parameters and also the aquifer thickness, d_a

24



Dilution-Attenuation Factor

If plume does not reach the bottom of the aquifer as it flows under the contaminated zone, the DAF is unaffected by d and L

DAF as a function of the size of the area of concern (mg/kg)

	Length of Site Parallel to GW flow (m)		
	15.2	30.5	152
Aquifer thickness = 3.5 m	20	20	5
Aquifer thickness = 15.2 m	20	20	18

Historical Perspective: Dilution-Attenuation Factor (DAF) USEPA Soil Screening Level Guidance

- May 1996 Soil Screening Guidance published 2 sets of numbers using DAF of 1 and DAF of 20
- EPA used two studies and a "weight of evidence" approach to determine default DAF of 20:

1. A Monte Carlo approach not appropriate for New Jersey policy. The Monte Carlo approach does not use the DAF equation.
2. Calculated DAFs from two databases of hydrogeological site investigations. As part of NJDEP assessment, these databases were inspected for DAF values reported for hydrologic regions appropriate for New Jersey

Dilution-Attenuation Factor (DAF): USEPA Mid-Atlantic Regional Screening Level Tables

- Regional Screening Level table uses only a DAF of 1

(http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/docs/master_sl_table_run_NOV2013.pdf)

28

OLD (2008) NJDEP Dilution-Attenuation Factor (DAF)

- New Jersey conducted it's own assessment of DAFs based on data from the New Jersey Kirkwood-Cohansey aquifer
- Hydraulic conductivity GIS grid file of Kirkwood-Cohansey from NJDEP research project
- Two different methods were used to develop GIS grid files of the hydraulic gradient for the Kirkwood-Cohansey
- The GIS was used to multiply conductivities and gradients together at each point in the grid to get point-by-point aquifer flow rates
- Best estimate of DAF from this approach was 13

29

New NJDEP DAF – Hydraulic Gradient (i)

A representative gradient was determined from 235 actual measurements of gradient on water table elevation maps for the Kirkwood-Cohansey aquifer.

Median i=0.003

New NJDEP DAF – Hydraulic Conductivity (K)

- Results of 67 independent aquifer stress tests from NJGS and USGS were compiled for the Kirkwood-Cohansey aquifer.
- 33 NJGS (Canace and Sugarman, 2009)
- 13 USGS (Martin, 1990)
- 21 Basin Tests from the aquifer elevation maps (1992-2004)

Median K=142 ft/day

DAF – Recharge Rate (I)

- Unchanged from 2008, explained in Inhalation Basis and Background document
- Calculated from New Jersey Geological Survey groundwater recharge calculator for widespread soil types (e.g. Sassafras, Downer, Boonton, Rockaway) in municipalities where they occur
- Looked at landscaped open space, vegetated and general agricultural land uses

Table 2: Summary of infiltration rates of New Jersey Soils

	Average infiltration rates (in./yr)			
Soil Texture	*Landscaped*	*Unvegetated*	*Agriculture*	*Overall*
Sandy loam	12.8	8.4	11.3	10.9
Sand	16	13.6	15.2	15
Loamy sand	13.1	9	11.6	11.2
Loam	13.8	6.7	11.6	10.7
Silt loam	12.3	5.4	10.2	9.3
All soils	13.5	8.5	11.8	11.3

- 11"/year is a representative recharge rate for most soil textures

Kirkwood - Cohansey DAF Default Input Parameters

$$DAF = 1 + \frac{Kid}{IL}$$

- Length of AOC Parallel to GW Flow (L) = 100 ft
- Mixing zone depth, d = 3.4 m
- K = 142 ft/day
- i = 0.003
- I= 0.28 m/yr

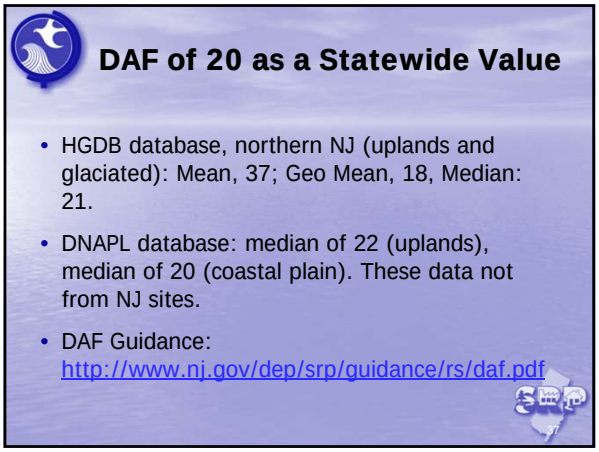
DAF = 20

DAF of 20 as a Statewide Value

- Inner coastal plain aquifers judged to be similar to outer coastal plain (Kirkwood-Cohansey), at least in terms of the surface aquifers and the product of K and i.
- For the rest of the state, two USEPA DAF databases presented in the 1996 USEPA Soil Screening Guidance were used to evaluate DAF values for 0.5 acre site size.

DAF of 20 as a Statewide Value

- HGDB database, northern NJ (uplands and glaciated): Mean, 37; Geo Mean, 18, Median: 21.
- DNAPL database: median of 22 (uplands), median of 20 (coastal plain). These data not from NJ sites.
- DAF Guidance: http://www.nj.gov/dep/srp/guidance/rs/daf.pdf



http://www.nj.gov/dep/srp/guidance/rs/

Site-Specific DAF Determination

- Use actual length of area of concern
- Aquifer thickness should be measured if plume extends to bottom of aquifer
- K and i are determined as described in the Department's Ground Water SI/RI/RA Technical Guidance:

http://www.nj.gov/dep/srp/guidance/srra/gw_inv_si_ri_ra.pdf

New Capping Guidance for the IGW Pathway

Swati Toppin
NJDEP

Capping Guidance

- http://www.nj.gov/dep/srp/guidance/rs/igw_capping.pdf
- Contaminants allowed for capping

-Inorganics and semivolatiles
(listed in Table 1 of the capping document)

- Capping for volatile contaminants is under consideration

IGW Pathway: Conditions for Capping

-Impermeable cap

-Area large enough to prevent infiltration of water around edges of cap

-No free or residual product (Tech Rules)

-if GW is clean, 2' clean buffer between water table and contaminants

-If GW contaminated, periodic monitoring of GW

-Deed Notice and approved Remedial Action Permit for Soil (ARRCS)

Interactions with Other Guidance

- Generally speaking, all guidance should be reviewed relative to other guidance documents to identify conflicts.
- For Example: Where both VOs and Inorganics are present, capping may not be used for inorganics if the new SESOIL/AT123D guidance is to be used for addressing the volatiles.

Questions

New Synthetic Precipitation Leaching Procedure (SPLP) Guidance

Paul Sanders, Michael Gonshor & Swati Toppin

SPLP Guidance, Primary Change: Addition of Volatiles

- NJ Science Advisory Board recommended volatiles be added to NJDEP SPLP guidance
- USEPA Method 1312 does provide for leach testing of volatiles using zero headspace extractor
- Problem with volatiles is during sample collection and sample preparation

USEPA Method 1312

- Describes the laboratory procedures to conduct the leaching test
- Does not discuss sample collection and preparation
- The method says to "Compare the analyte concentrations in the 1312 extract with the levels identified in the appropriate regulations"

NJDEP SPLP Guidance

- Uses Method 1312 to conduct the leaching test
- Uses Method 1312 results to calculate the Leachate Concentration that would be observed under field (environmental) conditions
- This leachate concentration is compared to the Leachate Criteria (LC) and is correlated with the corresponding total contaminant concentration in soil
- May be used to determine acceptable total contaminant concentration (alternative remediation standard) if some of the contaminated soil yields leachate concentrations above the leachate criteria

http://www.nj.gov/dep/srp/guidance/rs/

Leachate Criterion (LC)

- Leachate from soil is diluted when it mixes with the groundwater
- The amount of dilution is the DAF (default of 20 for NJ)
- Ground Water Quality Criteria (GWQC) should not be exceeded when leachate mixes with the ground water. Therefore: LC is 20 times the GWQC

Addition of Volatiles to SPLP Guidance

- NJDEP SPLP guidance needs matched samples to correlate total contaminant concentration in soil with field leachate concentrations
- With metals and semivolatiles, one sample can be well-mixed and split for total analysis and Method 1312 testing
- With volatiles, mixing and splitting one sample would cause volatile loss. Must collect separate matched samples for total analysis and leach testing. Uncertainty in whether total concentrations match for both samples

Addition of Volatiles to SPLP Guidance

- Generic procedures for collection of volatiles should be followed.
- Samples for total analysis and leach testing should be taken from immediately adjacent locations. An Encore® or equivalent sampler must be used for the sample for SPLP testing
- Recommend samples be taken from intact soil cores with plastic liners immediately upon cutting open the liner
- Sampling sidewalls after excavation is problematic, because of volatile loss. Recommend use of a hand coring device to sample a few inches in from the sidewall surface

Adjustment of SPLP Aqueous Extract Concentration to the Field Leachate Concentration (Env. Chemistry 101)

- USEPA Method 1312 is a batch equilibrium test.
- Batch equilibrium tests measure the ratio of concentrations in the sorbed and aqueous phases under equilibrium conditions.
- This equilibrium ratio is the Kd constant, or soil-water adsorption-desorption constant. It is best measured under high water/soil ratios. A 20:1 ratio is used in Method 1312

52

Adjustment of SPLP Aqueous Extract Concentration to the Field Leachate Concentration (Environmental Chemistry 101)

$$K_d = \frac{C_s}{C_w}$$

C_s is the concentration of the chemical in the soil sorbed phase, C_w is the concentration of the chemical in the aqueous phase, and K_d is the soil-water partition coefficient.

53

Adjustment of SPLP Aqueous Extract Concentration to the Field Leachate Concentration (Env. Chemistry 101)

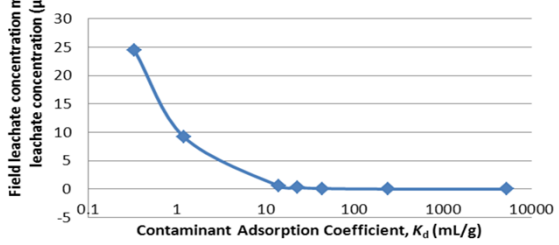
- Kd is assumed to be constant over a range of concentrations and soil-to-water ratios.
- Therefore, concentrations in the sorbed and solution phases must vary as the soil/water ratio changes in order to maintain the constant ratio (Kd)
- For highly adsorbed contaminants, the variation in aqueous concentration as the soil/water ratio changes is small.
- However, for MOBILE contaminants (low Kd values) the dependence of the aqueous concentration on the soil/water ratio is LARGE.

54

Method 1312 Extract Concentration Versus Field Leachate Concentration

- The aqueous concentration of contaminant in the Method 1312 extract (the SPLP leachate concentration) is NOT the same as the field (environmental) leachate concentration
- Method 1312 extract concentration is the equilibrium concentration of contaminant in aqueous solution at a 20:1 ratio of solution to soil
- We want the equilibrium concentration in soil moisture under field conditions (0.23:1.5 ratio of solution to soil).
  - 0.23 ml water and 1.5 gm soil in a ml of soil

Figure 1
Difference between SPLP leachate concentration and field leachate concentration as a function of contaminant K_d



Representative contaminant	K_d *Soil adsorption coefficient with default fraction organic carbon content of 0.002 (mL/g)*	*Conditions*	$C_{leachate}$ *Equilibrium leachate concentration after SPLP experiment (µg/mL)*
TCE	0.33	Field	27.77
		SPLP	0.66
1,4 Dichlorobenzene	1.2	Field	9.87
		SPLP	0.63
2-Methylnaphthalene	14	Field	0.94
		SPLP	0.39
Cadmium	23	Field	0.58
		SPLP	0.31
Dieldrin	43	Field	0.31
		SPLP	0.21
Chlordane	240	Field	0.056
		SPLP	0.051
DDT	5260	Field	0.00253
		SPLP	0.00252

Adjustment of SPLP Aqueous Extract Concentration to the Field Leachate Concentration

The USEPA 1312 extract concentration must be adjusted to field leachate concentration:

$$C_L = \frac{C_T}{K_d + \frac{\theta_w + \theta_a H'}{\rho_b}}$$

- C_L: Field (environmental) leachate concentration
- C_T: Total contaminant concentration in soil
- K_d: From leaching test and total contaminant concentration
- $\frac{\theta_w + \theta_a H'}{\rho_b}$: Soil conditions in environment

58

Rearrange Equation to Standard Form of USEPA Soil-Water Partition Equation to Calculate Acceptable Soil Concentration from Field Leachate Concentration and Kd:

$$C_T = C_L \left(K_d + \frac{\theta_w + \theta_a H'}{\rho_b} \right)$$

- C_T: Acceptable total contaminant concentration in soil
- C_L: Leachate criterion (LC)
- K_d: From leaching test (EPA Method 1312)
- $\frac{\theta_w + \theta_a H'}{\rho_b}$: Soil conditions in environment

59

Negative Kd Values from SPLP Test

- Can occur when contaminant concentration in the sample submitted for total analysis is less than the contaminant concentration in the sample submitted for SPLP testing.
- Indicates soil sample mismatch or volatile loss from sample submitted for total analysis during collection or handling

$$K_d = \frac{(C_T M_S - C_{SPLP} V_L)/M_S}{C_{SPLP}}$$

- C_T: Total mass of contaminant in soil (C_T from sample submitted for total analysis)
- C_{SPLP}: Total mass of contaminant in leachate (C_{SPLP} from sample submitted for SPLP testing). Cannot be more than total mass.

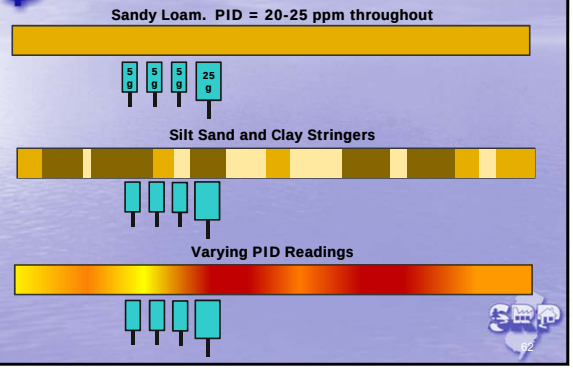
60

Sampling Considerations

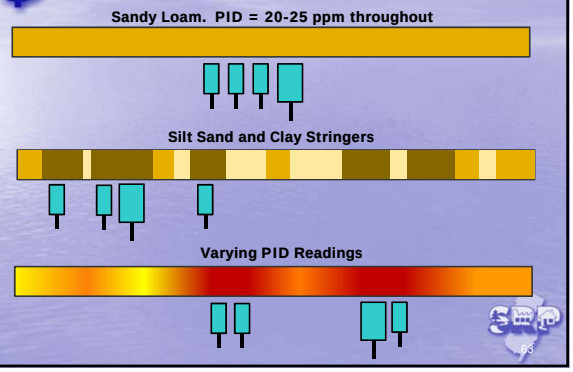
- **Lithology**
  - Highly variable lithology (e.g., silt-sand-clay stringers)
- **Field Screening Readings**
  - Varying field screening readings over short intervals

Each of the above conditions can complicate obtaining samples with consistent concentrations in each of the EnCore® samplers

Sampling Considerations (cont.)



Sampling Considerations (cont.)



Sampling Considerations (cont.)

- Collect a sufficient number of samples for potential SPLP analyses
- Have lab extract and hold for SPLP analyses
- Be mindful of holding times for SPLP extraction and VOC analyses
- Costs for "extra" 25g EnCore® samplers and SPLP extractions are minimal relative to re-sampling
- Don't forget the sample for dry weight

Sample Selection

Minimum Number of Samples vs A Good Idea

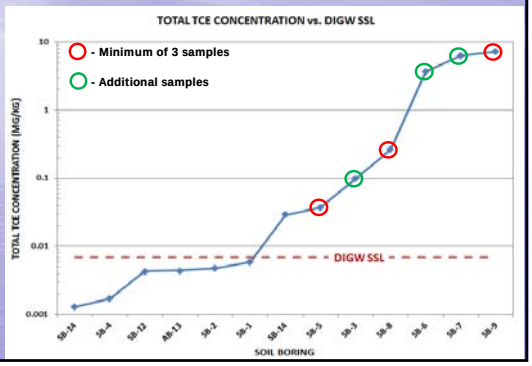
- Minimum - 3 samples per SPLP Guidance (per AOC and Soil Type)
  - UHOT exception: 1 sample (in current EPH guidance)
- A Good Idea – More than 3

Sample Selection cont.

- **Samples to Release for SPLP Analyses**
  - Guidance suggests range of concentrations including maximum detected total concentration
  - May not be a good idea for VOCs
  - Will be dependent of soil type, total organic carbon, individual VOC of concern, and total concentrations

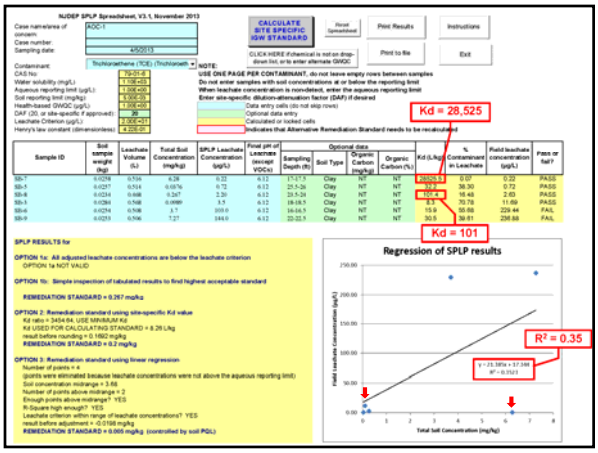
Use your Professional Judgment and Experience

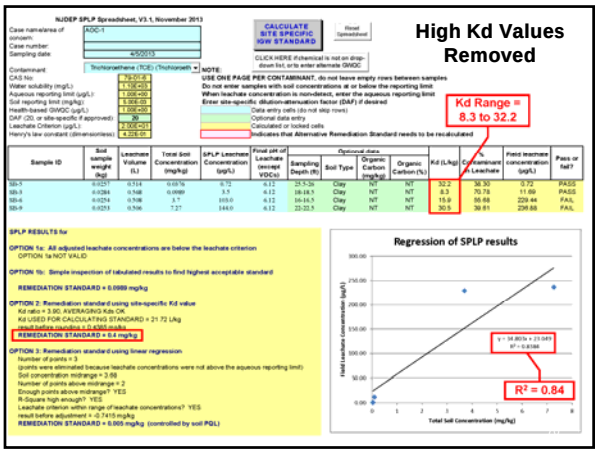
Sample Selection

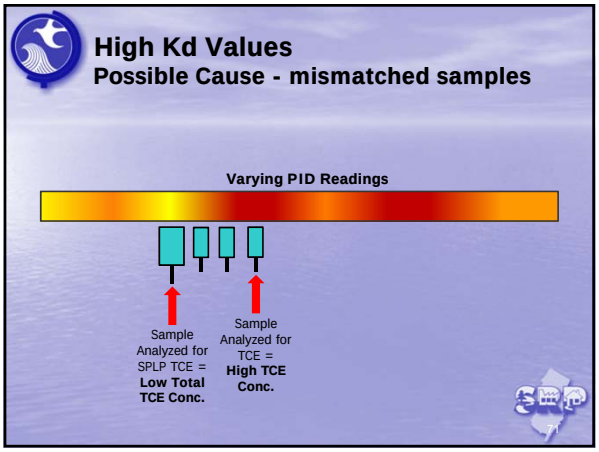


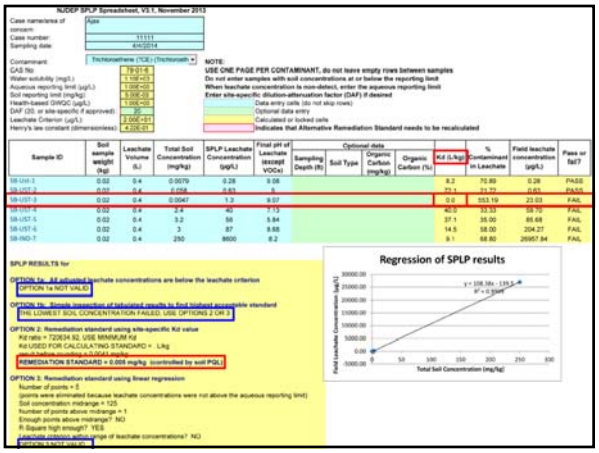
Data Evaluation

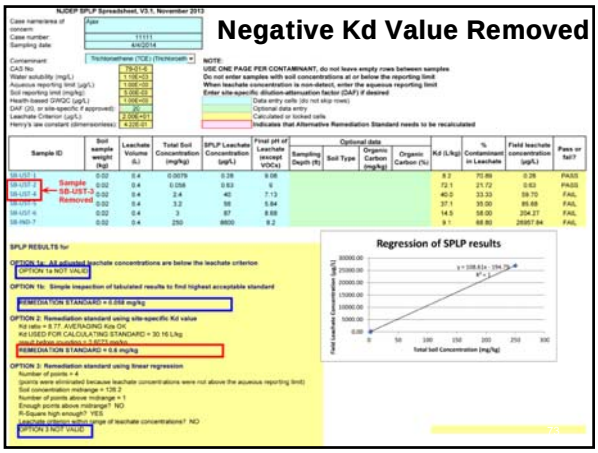
- Are Data Valid - Do Results Make Sense
- High Kd Outlier Example
- Negative Kd Outlier Example



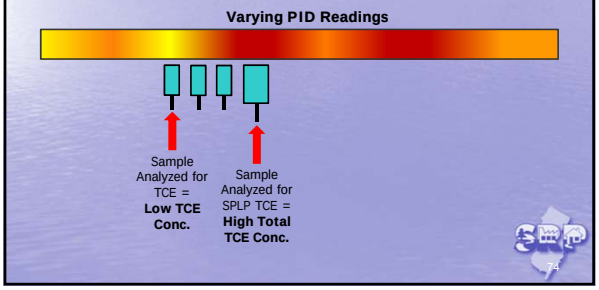

NJDEP SPLP Spreadsheet, V3.1, November 2013
CALCULATE SITE SPECIFIC IGW STANDARD
High Kd Values Removed
Kd Range = 8.3 to 32.2
Regression of SPLP results
R² = 0.84


High Kd Values
Possible Cause - mismatched samples
Varying PID Readings
Sample Analyzed for SPLP TCE = Low Total TCE Conc.
Sample Analyzed for TCE = High TCE Conc.


NJDEP SPLP Spreadsheet, V3.1, November 2013
Regression of SPLP results



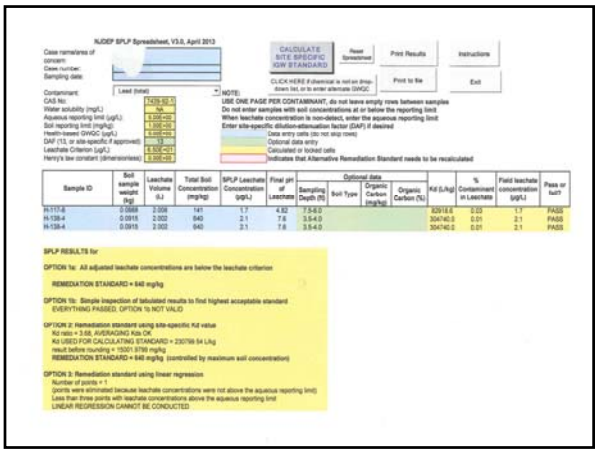
Negative Kd Value
Possible Cause - mismatched samples



Other Considerations

1. Cannot use samples where total contaminant concentrations are below MDL

- This may happen in cases with minimal exceedances above the IGWSRS. In such cases, one or two samples are acceptable, but the reason why there are only one or two samples must be explained in the report.
- With one or 2 samples, preferentially use the equation to manually calculate IGWSRS. If spreadsheet is used, replicate a sample to make up 3 samples. Explain in report
- Sample spreadsheet



Other Considerations

2. When leachate concentrations are non detect, the data can still be used. The spreadsheet will use aqueous reporting limits as the concentration present. The results are conservative, but the only alternative is to resample and obtain results that are not non detects.

3. Are the samples which are undergoing SPLP representative of the AOC? Has additional sampling revealed higher total concentrations or different soil?

77

Other Considerations

4. The same sample must be collected and split for total contaminant analysis and leachate procedure. The Department has received samples for total concentrations correlated with leachate samples sampled months or even years later. **This is not acceptable**

5. Samples used in the SPLP procedure show lower contaminant concentrations than initial sampling round. Resample, or use professional judgment to determine if sampling effort is adequate.

78

Questions

Using SESOIL/AT123D with New Jersey sites for mobile contaminants in the unsaturated soil zone

Paul Sanders
NJDEP

SESOIL/AT123D for NJ Sites

- May be used when ground water is already impacted
- SEVIEW 7 required, in order to simultaneously model contamination source in both vadose zone and ground water
- Models contaminant transport through both soil and groundwater
- Less restrictive than previous version of guidance with regards to length of time allowed to attain Ground Water Remediation Standards. Is now linked with the ground water Classification Exception Area (CEA) time frame, rather than a 5 year time frame

SESOIL/AT123D for NJ Sites

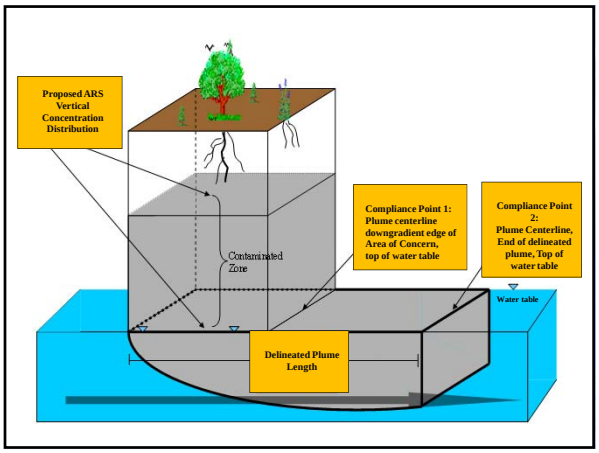
- Since groundwater remediation will be ongoing for several years, NJDEP allows for some additional contamination to enter groundwater from unsaturated soil zone
- No current or future receptors can be present in the ground water
- No vapor intrusion risk may be present
- Site may not be capped above contaminated vadose zone. Natural ground water recharge must occur
- Ground water monitoring required to confirm model predictions

SESOIL/AT123D for NJ Sites

- SESOIL used to model leaching from proposed contaminant concentration distribution in vadose zone
- SESOIL provides leaching input to AT123D model
- If AT123D results not acceptable, trial and error used to develop acceptable contaminant concentration distribution in vadose zone

AT123D Modeling

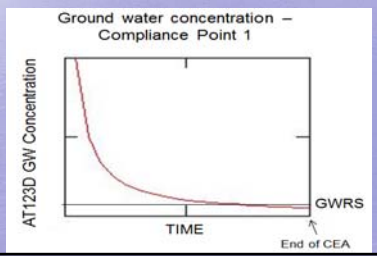
AT123D is used to model contaminant concentration in ground water as a function of time at two compliance points



AT123D Modeled GW Concentration at Compliance Point 1

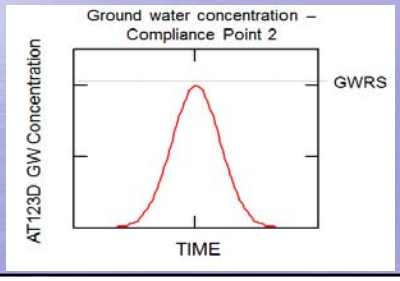
AT123D predicted GW concentration must be at or below the Ground Water Remediation Standard at the down gradient edge of the modeled SESOIL source input by the end of the duration of the CEA.

NOTE:
Time zero is when the SESOIL run starts, not when the contaminant hits the water table!



AT123D Modeled GW Concentration at Compliance Point 2

The AT123D predicted GW contaminant concentration must never exceed the Ground Water Remediation Standard at the down gradient edge of the delineated GW contaminant plume.



SESOIL / AT123D Guidance

- Soil texture:
  - MUST be determined for the vadose zone
  - optional for saturated zone
- Soil organic carbon (vadose and saturated zone)
  - MUST be determined when using the combination SESOIL/AT123D model in SEVIEW 7
- SEVIEW 7
  - required when running SESOIL/AT123D
- SEVIEW 6 or SEVIEW 7
  - OK when running SESOIL model alone

88

SESOIL: Entering Soil Concentrations into the Vadose Zone

- Can model existing concentrations
- Can model concentrations that will remain behind after remediation
- Can model theoretical maximum concentrations

89

SESOIL: Entering Soil Concentrations into the Vadose Zone (cont'd)

- Must enter a concentration for each depth interval (normally 1-foot interval)
- Depth intervals without data are not "0". They are filled in with data from above or below the interval
- Enter worst-case concentration from all borings in Area of Concern for a particular depth interval

90

Depth Interval (sublayer interval) (ft)	Boring #1	Boring #2	Boring #3	SESOIL model concentrations
0-1	-	-	-	74.1
1-2	-	74.1	-	74.1
2-3	-	-	-	487
3-4	487	-	-	487
4-5	-	-	-	487
5-6	-	nd	-	0
6-7	-	-	-	0
7-8	-	1.2	-	0
8-9	-	-	-	0
9-10	-	27	-	0
10-11	89.5	-	-	89.5
11-12	-	-	283	283
12-13	-	-	669	669
13-14	-	-	-	669
14-15	-	-	226	226
15-16	-	-	-	226
16-17	-	nd	183	183
17-18	342	-	-	342
18-19	-	-	-	342

- = not determined
nd = not detected

Note: IGW screening level = 30 mg/kg

SESOIL/AT123D Site Specific Standards

- Not a single number
- Are generally a depth-dependent concentration distribution in soil based on modeled soil concentrations. Standard is a depth-dependent table.

92

Determining Soil Texture

- Boring logs not sufficient
- Sieving alone generally not sufficient, does not separate out silt and clay
- Generally hydrometer or pipette method used to separate silt and clay
- SESOIL soil parameters “calibrated” to USDA soil texture

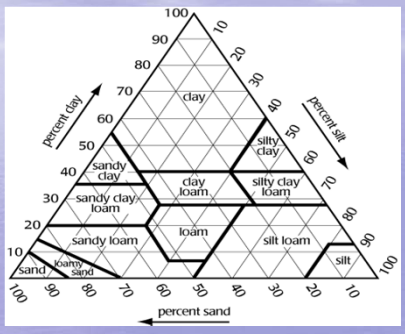
93

USDA Soil Texture

- First, remove gravel (> 2 mm)
- Sand: 2 mm to 0.05 mm
- Silt: 0.05 mm to 0.002 mm
- Clay: <0.002 mm

94

USDA Soil Texture



USDA Soil Triangle

95

Soil Texture Methods: ASTM Method D422-63

- Uses 0.075 mm cutoff for sand, instead of 0.05. Recommend substituting 0.05 mm sieve (#270)
- Determines <0.001 mm (colloids) and <0.005 mm fractions. USDA clay fraction (<0.002 mm) may be estimated by averaging the <0.001 mm and <0.005 mm fractions.

96

Soil Texture Methods: ASTM Method F1632-03

- For golf course putting greens and sports fields
- Determines sand, silt and clay with correct particle sizes using the pipette method

Determination of SESOIL Soil Texture

- For New Jersey, use of a single soil texture recommended
- Measure texture once every two feet or for each distinct soil layer
- Select a median soil texture
- Use soil parameters listed in NJDEP guidance (from SEVIEW and SESOIL documentation)

SESOIL: Multiple Soil Texture Layers

- It is preferred to use a single representative soil texture for the entire soil column
- Simulations submitted with multiple soil textures will be subject to more detailed review by NJDEP
- Only one parameter (intrinsic permeability) can be varied with depth
- Suggest using depth-weighted intrinsic permeability to determine representative soil texture for other two parameters
- Clay or silty clay layers probably won't work or be accepted

Site-Specific Determination of SESOIL Soil Input Parameters:

intrinsic permeability, disconnectedness index, effective porosity

- More involved than using lookup values based on soil texture
- Various ASTM methods are available for sample collection and preparation, moisture retention curve determination, permeability measurements, etc.
- Would require doing calculations beyond what is covered in the ASTM methods (e.g. disconnectedness index)

100

Site-Specific Determination of SESOIL Soil Input Parameters cont.

- Probably only worthwhile for large, expensive cases
- Would need to be adequately documented and reviewed by NJDEP
- Availability of labs to run the methods is issue
- Cost and time involved in running the methods is an issue

101

Site-specific Soil Organic Carbon

- Minimum 3 samples (if one soil layer modeled)
- Layer-specific foc samples allowed. Need 3 samples per layer
- Use Lloyd Khan method – high temperature oxidation followed by measurement of evolved CO_2
- Unacceptable methods: furnace method, wet oxidation method, EPA Method 9060, EPA Method 5310

102

Finding the climate station

Table of climate station locations by municipality and county added

County	Municipality	Climate Station	Latitude	Longitude
Atlantic	Egg Harbor	ATLANTIC CITY AIRPORT	39.450	74.567
Atlantic	Hamilton	MAYS LANDING 1 W	39.450	74.750
Atlantic	Hammonton Town	HAMMONTON 2 NNE	39.650	74.800
Bergen	Bergenfield	BERGENFIELD	40.924	73.999
Bergen	Cliffside Park	CLIFFSIDE PARK	40.821	73.989
Bergen	Englewood	ENGLEWOOD	40.893	73.973
Bergen	Fair Lawn	FAIR LAWN	40.936	74.120
Bergen	Fort Lee	FORT LEE	40.849	73.974
Bergen	Garfield	GARFIELD	40.880	74.108

RUNNING AT123D- SEVIEW 7

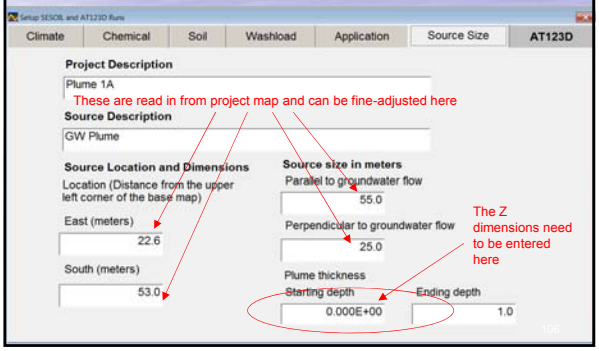
- When SESOIL model is run, ground water contaminant loads from unsaturated soil zone contamination will automatically be prepared for AT123D
- If you have filled in “Establish Default AT123D Data”, other parameters will be filled in as well.

RUNNING AT123D-SEVIEW 7

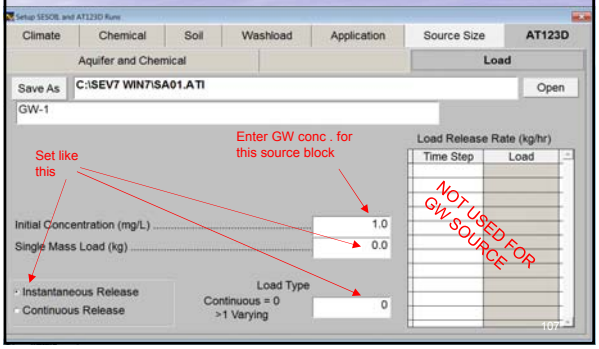
- Add one or more AT123 sources representing existing ground water contamination source onto the SEVIEW 7 project map
- Should be ground water concentrations in the source area, not the entire ground water plume
- Initial concentration for each source entered under “Load” tab for each source. Instantaneous Release, Load type=0

0.5 µg/L	0.5 µg/L
1 µg/L	
0.5 µg/L	

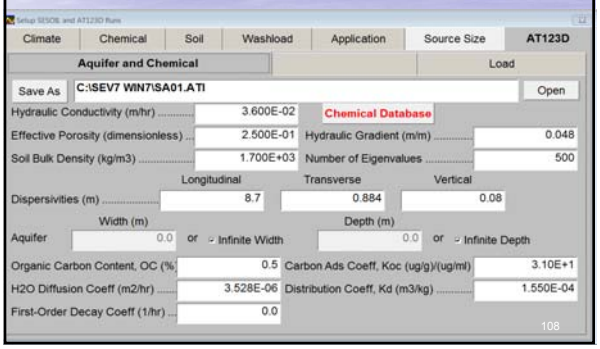
AT123D Input: Source Size Tab – One For Each Source Block in GW



AT123D Input: Load Tab – One For Each Source Block in GW



AT123D Input Parameters: Aquifer and Chemical Tab



AT123D Input Parameters: Aquifer and Chemical Tab

- Must use site-specific hydraulic conductivity and hydraulic gradient. Guidance on determination is in the Monitored Natural Attenuation Technical Guidance:

  http://www.nj.gov/dep/srp/guidance/srra/mna_guidance_v_1_0.pdf

- Set aquifer width to infinite

109

AT123D Input Parameters: Aquifer and Chemical Tab cont.

- If contaminated plume does not reach bottom of aquifer, set aquifer thickness to infinite
- If contaminated plume does reach bottom of aquifer, use actual aquifer thickness but compare to infinite thickness run for reasonableness

110

AT123D Input Parameters: Aquifer and Chemical Tab

- Calculate longitudinal dispersivity from delineated plume length using Xu and Eckstein formula:

$$\alpha_L = 0.83(\log_{10} L)^{2.414}$$

NOTE: UNITS ARE METERS!

- Transverse and vertical dispersivities are 1/10 and 1/100 the longitudinal dispersivity

111

AT123D Input Parameters: Aquifer and Chemical Tab

- Bulk density – can use 1,500 kg/m3, can determine site specifically, or can determine soil texture and use average value for texture type from SEVIEW documentation: sand, 1,400 kg/m3; silt, 1,500 kg/m3; clay, 1,800 kg/m3

AT123D Input Parameters: Aquifer and Chemical Tab

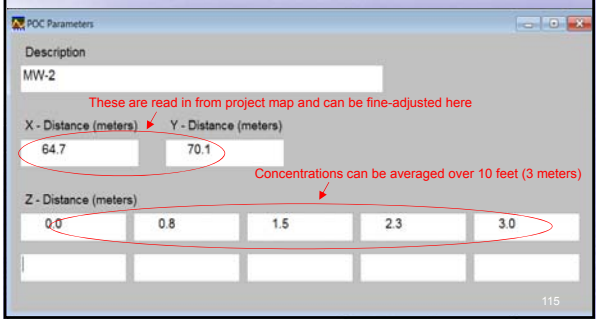
- Effective porosity – Can use 0.25, can determine site specifically, or can determine soil texture and use average value for texture type from SEVIEW documentation:

Clay	0.10
Silt	0.20
Fine Sand	0.20
Med. Sand	0.22
Coarse Sand	0.28
Gravel	0.22

AT123D Input Parameters: Aquifer and Chemical Tab

- Chemical properties should be same as for SESOIL, except BTEX degradation rate is zero in aquifer unless site-specific determination is made.
- If Kd entered directly, must divide SESOIL Kd by 1,000 to convert from L/kg to m3/kg.
- SESOIL diffusion coefficients are multiplied by 3,600/10,000 to convert from cm2/sec to m2/hour
- Must have site-specific organic carbon measurements of aquifer material

AT123D Input Parameters: Point of Compliance Input – Need at Least 2 of These: Compliance Point 1 and 2



SESOIL/AT123D Submission Requirements

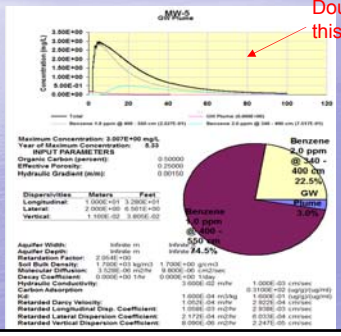
- Model output from SESOIL model (normally 4 pages per contaminant)
- Supporting documentation for SESOIL and AT123D site-specific input parameters
- Recommend submitting SESOIL model table, showing sampling results along with concentrations entered into SESOIL as a function of depth
- AT123D source concentration table
- Map of delineated GW plume, showing modeled AT123D sources

SESOIL/AT123D Submission Requirements (cont.)

- Submit SEVIEW project map
- Submit all SESOIL output pages
- Submit all point of compliance reports, showing that concentrations never exceed GWRS at compliance point 2, and that concentrations have decreased below GWRS at compliance point 1 at the end of the CEA time period
- Recommend submitting *.prj files

AT123D Output – Compliance Point 1 - Showing Concentrations at Final Timepoint

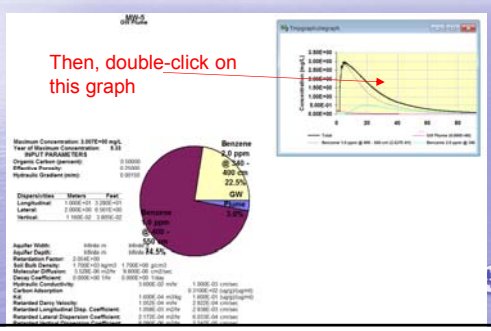
Double-click on this graph



118

AT123D Output – Compliance Point 1 -Showing Concentrations at Final Timepoint

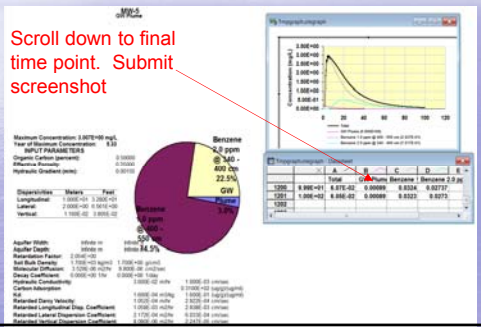
Then, double-click on this graph



119

AT123D Output – Compliance Point 1 - Showing Concentrations at Final Time Point

Scroll down to final time point. Submit screenshot



120

Questions

Appropriate Ground Water Quality Standards

MaryAnne Kuserk
NJDEP

Ground Water Quality Standards

- Default criteria are based on Class IIA GWQS's (N.J.A.C 7:9C).
- If the aquifer is not IIA, then IGW remediation criteria is derived on a site-specific basis.

IGW in Class I Ground Water

- GWQS's for Class I ground water are ecologically based and based on a anti-degradation policy.
- Numeric standards are based on "Natural Background" Levels.
- For VOC's and SVOC's the numeric criteria is set at the promulgated PQL.

IGW for Class III Ground Water

- Class III Ground Water
  - Class III-A: Aquitards
    - Based on permeability
    - Mapped in GWQS's or make site specific determination
  - Class III-B : Areas of Salt Water Intrusion
    - > 3000 mg/l chloride
    - > 5000 mg/l TDS
    - Mapped in GWQS's or make site specific determination

IGW Class III Ground Water

- No numeric criteria
- Narrative Criteria:
  - No impacts to structures (VI)
  - No violation of surface water criteria
  - No impairment of existing uses
  - Can't be flowing into gw with more stringent classification.

IGW Class III Ground Water

- In developing gw criteria, must demonstrate no impact to above.
- Many times just evaluating existing levels is appropriate. Use that level in calculating IGW.
- In other cases where receptors have potential to be impacted, using the default SSL's or SW standards in calculation is appropriate

127

Compliance

Stephen Posten & Swati Toppin

126

Compliance/ Attainment

http://www.nj.gov/dep/srp/guidance/srra/attainment_compliance.pdf

- Pre-requisite for implementing attainment options is that extent of contamination must be known
- Vertical Zones (note these differ from Direct Contact vertical zones)
  - first zone 0-2 above water table
  - second zone 2ft above WT to surface
- Functional Area – AOC (including offsite)

125

Options for Compliance

- Arithmetic Averaging
- ProUCL
- Thiessen Polygons
- 75/10x rule (post remediation)

130

Arithmetic Averaging

Arithmetic averaging can only be used in the following two scenarios:

When there are nine or fewer total sample values

- Example 1: 13, 12, 2, 5, 6, 12

or only two distinct sample values

- Example 2: 0.1, 4, 0.1, 4, 4, 0.1, 0.1, 4, 0.1, 0.1, 0.1 .....
- (where MDL is 0.1 and sample concentration is ND)

131

Pro UCL

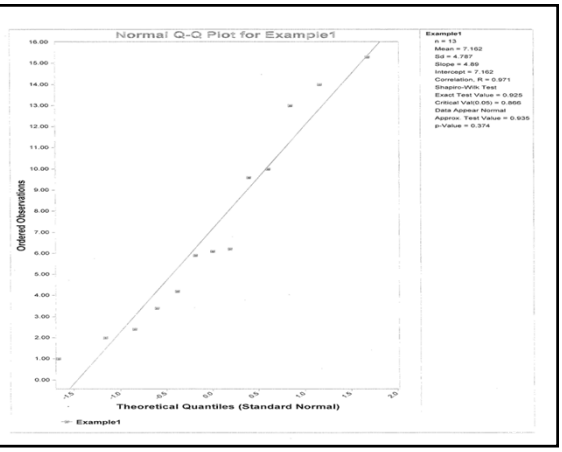
- Need a minimum of 10 values
- Need 3 or more distinct values
- Use 95% UCL of the mean

132

PRO UCL Version 4.1

Example data set:

15.3, 10, 9.6, 14, 13, 2, 1, 3.4, 4.2, 6.1, 2.4, 5.9 and 6.2



Normal UCL Statistics for Full Data Sets

User Selected Options

From File	WorkSheet.wst
Full Precision	OFF
Confidence Coefficient	95%

Example1

Number of Valid Observations	13
Number of Distinct Observations	13
Minimum	1
Maximum	15.3
Mean	7.162
Geometric Mean	5.487
Median	6.1
SD	4.787
Variance	22.91
Std. Error of Mean	1.328
Coefficient of Variation	0.668
Skewness	0.478
Shapiro Wilk Test Statistic	0.925
5% Shapiro Wilk Critical Value	0.866

Data appear Normal at 5% Significance Level

95% UCL (Assuming Normal Distribution)

Student's-t UCL	9.528

Potential UCL to Use

Student's-t UCL	9.528

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.

75/10X Option (only applicable after delineation and remediation)

- Example: When IGWSRS is 6 ppm, and post excavation sample results are : 10, 7, 2, 3, 4, 1, 5, 3.

  Compliance has been achieved because:

  No sample is over 60. 6/8 or 75% of samples are below 6 ppm.

- Sampling Requirements: Minimum of 8 post remediation samples needed for up to 125 cubic yards of impacted soil; 12 post remedial samples for up to 3000 cubic yards and 12 post remedial samples for every 3000 cubic yards thereafter

136

Thiessen Polygons

Steve Posten,
AMEC

137

Compliance Averaging - Spatially Weighted Average (e.g., Thiessen Polygons)

- Thiessen Polygons:

  Polygons generated from a set of sample points. Each Thiessen polygon defines an area of influence around its sample point, so that any location inside the polygon is closer to that point than any of the other sample points. Thiessen polygons are named for the American meteorologist Alfred H. Thiessen (1872-1931).

138

Example from Guidance (Thiessen Polygons)

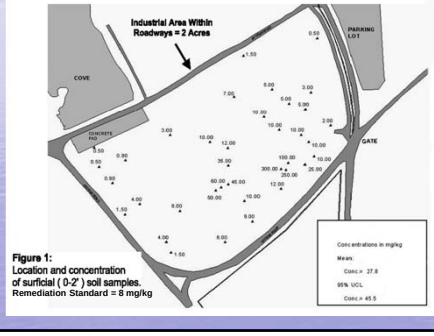


Figure 1:
Location and concentration of surficial (0-2') soil samples.
Remediation Standard = 8 mg/kg

139

Example from Guidance (Thiessen Polygons)

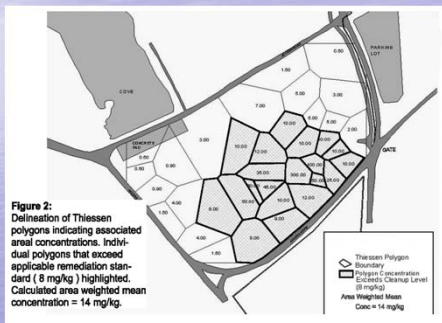


Figure 2:
Delineation of Thiessen polygons indicating associated areal concentrations. Individual polygons that exceed applicable remediation standard (8 mg/kg) highlighted.
Calculated area weighted mean concentration = 14 mg/kg.

140

Example from Guidance (Thiessen Polygons)

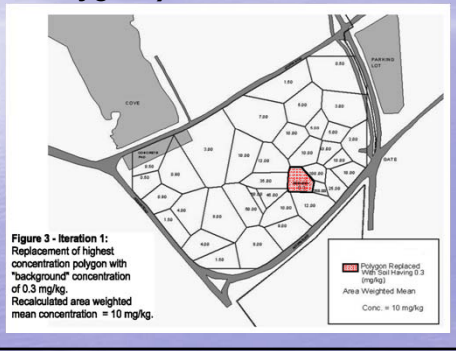


Figure 3 - Iteration 1:
Replacement of highest concentration polygon with "background" concentration of 0.3 mg/kg.
Recalculated area weighted mean concentration = 10 mg/kg.

141

Example from Guidance (Thiessen Polygons)

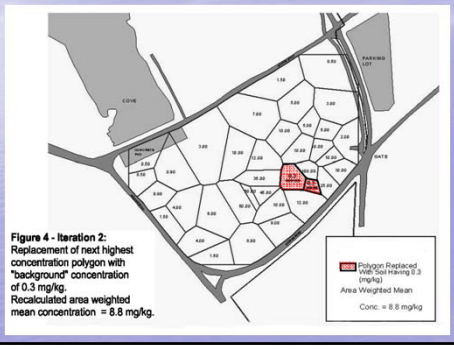


Figure 4 - Iteration 2:
Replacement of next highest concentration polygon with "background" concentration of 0.3 mg/kg.
Recalculated area weighted mean concentration = 8.8 mg/kg.

142

Example from Guidance (Thiessen Polygons)

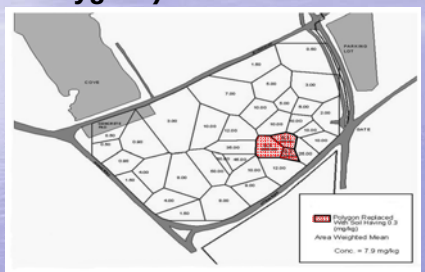


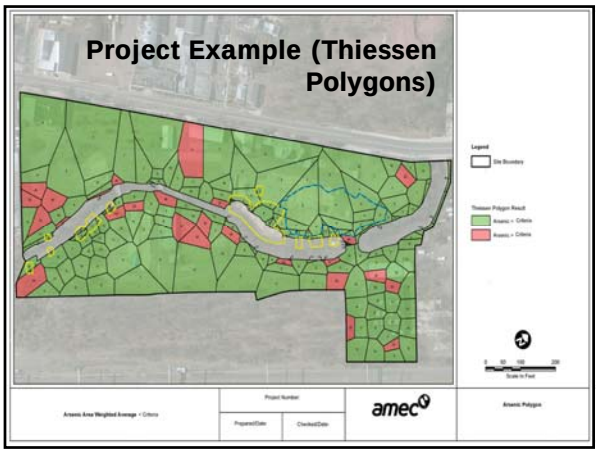
Figure 5 - Iteration 3:
Replacement of next highest concentration polygon with "background" concentration of 0.3 mg/kg. Recalculated area weighted mean concentration = 7.9 mg/kg.
Area weighted mean concentration below applicable remediation standard. Remediation complete.

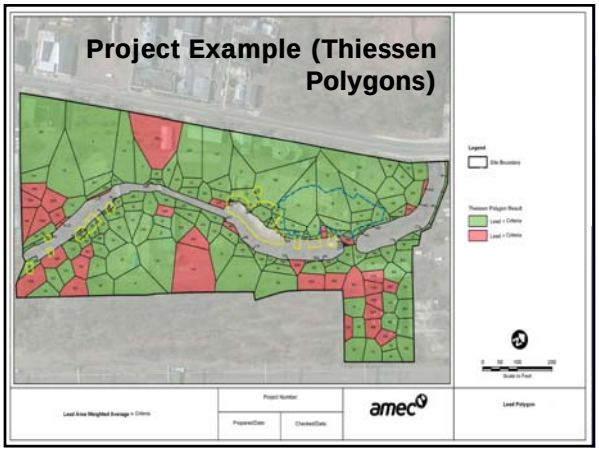
143

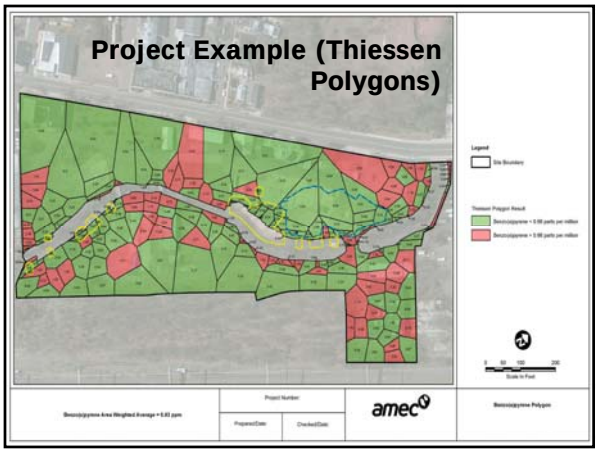
Project Example (Thiessen Polygons)

- Site ~ 10.5 ac
- All AOCs (20+) associated with prior operations/discharges previously remediated
- Remaining sporadic/low level contamination distributed across site
- All sample results in 0-2' zone above WT < criteria
- Spatially weighted averaging analysis performed on sample data in overlying zone to surface.

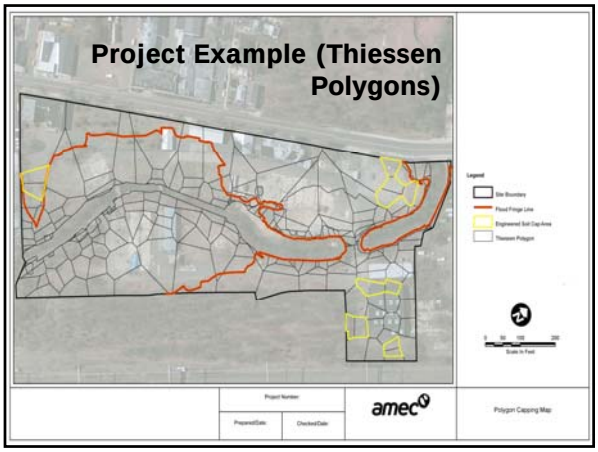
144


Project Example (Thiessen Polygons)
amec


Project Example (Thiessen Polygons)
amec


Project Example (Thiessen Polygons)
amec

Project Example (Thiessen Polygons)



Project Example (Thiessen Polygons)

BaP	Shape_Area
0.42	22965.82
0.55	20762.51
0.21	15327.67
0.46	14218.57
0.37	12958.64
0.31	11193.23
0.80	10727.63
0.07	10529.87
0.18	10519.85
0.04	9996.56
0.22	9313.69
0.04	8795.03
0.95	8763.46
0.04	7641.09
0.04	7402.09
0.04	6598.64
0.71	6124.03
0.42	6103.89
0.04	5191.24
0.37	5065.03
0.31	4607.82
1.10	4122.82
0.07	3735.74
0.04	3554.51
0.33	3469.64
0.04	3426.91
0.16	3332.84
0.04	3209.36
0.35	3144.36
0.48	3053.32
0.28	2930.78
0.53	2813.47
0.71	2748.95
0.07	2723.10
0.42	2709.60
0.04	2668.26
0.20	2650.63
0.25	2629.64
2.00	2628.69
1.00	2577.04
0.04	2537.47
0.71	2530.53
0.46	2512.90
3.60	2411.89
0.36	2369.25
0.04	2344.30
0.04	2334.69
0.04	2328.52
0.59	2318.90
0.47	2310.78
13.00	2284.89
0.25	2256.69
0.74	2178.85
1.30	2146.74
0.04	2131.17
0.44	2129.22
3.90	2128.00
1.50	2110.59
2.40	2072.63
0.04	2060.97
6.50	2032.18
0.04	2014.37
0.56	1994.59
0.33	1993.12
0.65	1985.77
0.44	1962.34
1.20	1888.72
0.46	1884.44
11.00	1879.20
0.19	1870.27
0.34	1865.75
1.10	1859.53
4.40	1824.89
4.00	1787.02
6.70	1777.91
9.20	1746.76
0.73	1724.24
1.60	1711.05
0.18	1695.74
0.36	1675.85
3.10	1652.56
0.78	1641.90
1.20	1619.79
0.44	1612.15
0.64	1583.20
1.60	1551.73
0.04	1535.85
0.40	1532.39
0.04	1500.24
0.27	1467.35
0.13	1466.70
0.44	1449.61
0.04	1447.42
0.24	1443.53
0.04	1425.88
0.42	1420.47
0.44	1418.24
1.40	1377.92
0.36	1357.68
0.04	1337.53
3.20	1331.56
0.51	1331.34
0.45	1331.04
0.38	1289.02
0.48	1285.29
0.72	1284.35
1.10	1224.08
0.47	1219.15
7.20	1214.16
3.90	1205.91
1.50	1198.36
0.04	1192.36
0.04	1187.80
1.90	1187.42
1.50	1183.92
0.42	1163.95
0.34	1154.68
0.55	1144.15
0.04	1143.28
0.04	1143.16
1.50	1132.60
0.42	1123.31
0.56	1110.67
0.30	1109.52
3.10	1098.27
1.10	1087.92
0.47	994.52
0.04	983.84
0.88	973.24
2.80	955.64
0.32	920.92
2.30	860.78
0.04	815.85
0.44	815.82
0.04	805.83
4.40	798.25
0.46	793.50
2.10	791.97
0.87	789.28
1.60	780.37
0.04	776.63
1.60	748.51
2.00	688.33
0.86	683.30
0.45	679.64
0.04	669.92
0.04	658.19
0.04	653.09
0.04	644.68
0.42	633.51
4.40	624.16
0.04	604.52
0.44	585.34
0.65	576.91
0.75	565.07
1.90	544.32
0.04	532.41
19.00	514.38
2.00	508.00
0.47	506.17
2.20	505.62
1.80	505.62
0.04	499.02
0.46	492.61
1.30	491.05
0.04	487.60
0.04	482.45
0.64	473.67
0.80	468.64
0.66	445.59
1.20	435.69
0.04	339.74
0.04	334.01
0.04	327.95
0.04	317.00
0.70	313.00
0.04	298.39
0.04	297.58
0.27	262.60
2.10	251.82
3.00	240.24
0.04	224.81
0.50	218.97
0.04	207.54
2.90	207.00
4.60	203.59
0.04	197.18
0.04	195.78
0.55	193.28
0.04	191.19
0.04	190.03
1.30	180.63
1.30	170.95
0.04	170.26
0.04	161.40
0.04	157.35
3.80	153.26
0.04	134.14
0.04	129.47
0.27	120.56
0.04	120.32
0.04	115.99
2.20	112.72
3.00	112.21
0.04	98.27
0.04	97.88
0.04	97.70
0.04	83.65
2.10	80.26
0.04	75.72
0.04	75.32
0.37	67.41
0.54	66.54
0.68	66.48
0.04	61.92
0.37	60.59
0.04	60.35
1.50	56.10
0.04	53.51
0.04	51.71
0.04	51.18
0.04	44.76
0.04	43.28
2.70	41.18
0.04	40.97
0.04	37.99
0.42	35.16
0.04	30.29
0.04	25.84
0.04	23.42
0.04	22.44
0.04	21.74
0.04	21.37
0.04	17.21
0.04	17.09
7.90	12.96
0.04	11.79
1.60	11.46
2.00	10.74
0.42	6.86
0.04	5.80
0.76	5.07
1.70	4.94
0.04	4.59
0.11	4.25
0.04	3.23
0.04	2.91
0.04	2.83
0.04	2.63
3.80	2.34
0.04	1.94
0.52	1.86
0.04	1.20
0.04	1.17
0.04	0.62
0.63	0.35
0.04	0.14
0.04	0.09
0.04	0.07
0.04	0.07

Weighted Average: 0.83

Project Example (Thiessen Polygons)

BaP	Shape_Area
0.42	22965.82
0.55	20762.51
0.21	15327.67
0.46	14218.57
0.37	12958.64
0.31	11193.23
0.80	10727.63
0.07	10529.87
0.18	10519.85
0.04	9996.56
0.22	9313.69
0.04	8795.03
0.95	8763.46
0.04	7641.09
0.04	7402.09
0.04	6598.64
0.71	6124.03
0.42	6103.89
0.04	5191.24
0.37	5065.03
0.31	4607.82
0.04	4122.82
0.07	3735.74
0.04	3554.51
0.33	3469.64
0.04	3426.91
0.16	3332.84
0.04	3209.36
0.35	3144.36
0.48	3053.32
0.28	2930.78
0.53	2813.47
0.71	2748.95
0.07	2723.10
0.42	2709.60
0.04	2668.26
0.20	2650.63
0.25	2629.64
2.00	2628.69
0.04	2577.04
0.04	2537.47
0.71	2530.53
0.46	2512.90
0.04	2411.89
0.36	2369.25
0.04	2344.30
0.04	2334.69
0.04	2328.52
0.59	2318.90
0.47	2310.78
13.00	2284.89
0.25	2256.69
0.74	2178.85
1.30	2146.74
0.04	2131.17
0.44	2129.22
3.90	2128.00
1.50	2110.59
2.40	2072.63
0.04	2060.97
6.50	2032.18
0.04	2014.37
0.56	1994.59
0.33	1993.12
0.65	1985.77
0.44	1962.34
1.20	1888.72
0.46	1884.44
11.00	1879.20
0.19	1870.27
0.34	1865.75
1.10	1859.53
0.04	1824.89
0.04	1787.02
6.70	1777.91
0.04	1746.76
0.73	1724.24
1.60	1711.05
0.18	1695.74
0.36	1675.85
3.10	1652.56
0.78	1641.90
1.20	1619.79
0.44	1612.15
0.64	1583.20
1.60	1551.73
0.04	1535.85
0.40	1532.39
0.04	1500.24
0.27	1467.35
0.13	1466.70
0.44	1449.61
0.04	1447.42
0.24	1443.53
0.04	1425.88
0.42	1420.47
0.44	1418.24
1.40	1377.92
0.36	1357.68
0.04	1337.53
3.20	1331.56
0.51	1331.34
0.45	1331.04
0.38	1289.02
0.48	1285.29
0.72	1284.35
1.10	1224.08
0.47	1219.15
0.04	1214.16
0.04	1205.91
1.50	1198.36
0.04	1192.36
0.04	1187.80
1.90	1187.42
3.50	1183.92
0.42	1163.95
0.34	1154.68
0.55	1144.15
0.04	1143.28
0.04	1143.16
1.50	1132.60
0.42	1123.31
0.56	1110.67
0.30	1109.52
3.10	1098.27
1.10	1087.92
0.47	994.52
0.04	983.84
0.04	973.24
2.80	955.64
0.32	920.92
2.30	860.78
0.04	815.85
0.44	815.82
0.04	805.83
4.40	798.25
0.46	793.50
2.10	791.97
0.87	789.28
1.60	780.37
0.04	776.63
1.60	748.51
2.00	688.33
0.86	683.30
0.45	679.64
0.04	669.92
0.04	658.19
0.04	653.09
0.04	644.68
0.42	633.51
4.40	624.16
0.04	604.52
0.44	585.34
0.65	576.91
0.75	565.07
1.90	544.32
0.04	532.41
19.00	514.38
2.00	508.00
0.47	506.17
2.20	505.62
1.80	505.62
0.04	499.02
0.46	492.61
1.30	491.05
0.04	487.60
0.04	482.45
0.64	473.67
0.80	468.64
0.66	445.59
1.20	435.69
0.04	339.74
0.04	334.01
0.04	327.95
0.04	317.00
0.70	313.00
0.04	298.39
0.04	297.58
0.27	262.60
2.10	251.82
3.00	240.24
0.04	224.81
0.50	218.97
0.04	207.54
2.90	207.00
4.60	203.59
0.04	197.18
0.04	195.78
0.55	193.28
0.04	191.19
0.04	190.03
1.30	180.63
1.30	170.95
0.04	170.26
0.04	161.40
0.04	157.35
3.80	153.26
0.04	134.14
0.04	129.47
0.27	120.56
0.04	120.32
0.04	115.99
2.20	112.72
3.00	112.21
0.04	98.27
0.04	97.88
0.04	97.70
0.04	83.65
2.10	80.26
0.04	75.72
0.04	75.32
0.37	67.41
0.54	66.54
0.68	66.48
0.04	61.92
0.37	60.59
0.04	60.35
1.50	56.10
0.04	53.51
0.04	51.71
0.04	51.18
0.04	44.76
0.04	43.28
2.70	41.18
0.04	40.97
0.04	37.99
0.42	35.16
0.04	30.29
0.04	25.84
0.04	23.42
0.04	22.44
0.04	21.74
0.04	21.37
0.04	17.21
0.04	17.09
7.90	12.96
0.04	11.79
1.60	11.46
2.00	10.74
0.42	6.86
0.04	5.80
0.76	5.07
1.70	4.94
0.04	4.59
0.11	4.25
0.04	3.23
0.04	2.91
0.04	2.83
0.04	2.63
3.80	2.34
0.04	1.94
0.52	1.86
0.04	1.20
0.04	1.17
0.04	0.62
0.63	0.35
0.04	0.14
0.04	0.09
0.04	0.07
0.04	0.07

Weighted Average: 0.65

Remediation Standards Update
Impact to Ground Water

Barry Frasco
NJDEP

151

Remediation Standards

Current Status:
Adopted June 2, 2008
Expires June 2, 2015

Goals:
- Do not let the regulation expire
- Have ample time to propose rule changes and respond to comments

152

Remediation Standards

Plan of Action:
- Readopt regulation without change prior to rule expiration
- Propose and adopt amendments to the rule
- These two activities are occurring in parallel

153

Remediation Standards

Readoption without Change:

- Recent changes in the Administrative Procedures Act (APA) allow for a streamlined process to readopt an existing regulation provided there are no proposed "substantive" changes to the regulation
- Goal - Publish rule readoption without change proposal in Spring 2015

Remediation Standards

Proposal and Adoption of Rule Amendments:

- Rule amendments proposal published in 2015
- Rule amendments adopted within one year of rule proposal (2016)

Remediation Standards

Rule amendments to include soil impact to ground water exposure pathway

Will be called "Migration to Ground Water Pathway"

Remediation Standards

Rule will include:

- Soil remediation standards based on soil – water partition equations
  - Direct soil measurement
  - Concentration of contaminant in soil that will not result in an exceedance of the ground water quality/remediation standard

157

Remediation Standards

Rule will include:

- Soil leachate remediation standards based on SPLP analysis
  - Leachate measurement
  - For a given contaminant, leachate standard is the ground water quality/remediation standard x DAF

158

Remediation Standards

Key changes from and updates to current IGWSSLs

- The GWQS, not the health based GWQC, is the proposed endpoint. This differs from current IGWSSLs.
- If MGWSRS exceeds the contaminant's Csat value, the contaminant does not pose a risk to pathway, therefore no remediation standard will be proposed
- Chemical properties will be updated

159

Remediation Standards

Rule will NOT include existing guidance documents (e.g.):

- Immobile Chemicals
- SESOIL
- SESOIL/AT123D
- Capping
- Site Soil and Ground Water Analytical Data Evaluation
- Compliance/Attainment

160

Remediation Standards

Existing guidance documents will remain as guidance and will be available for use

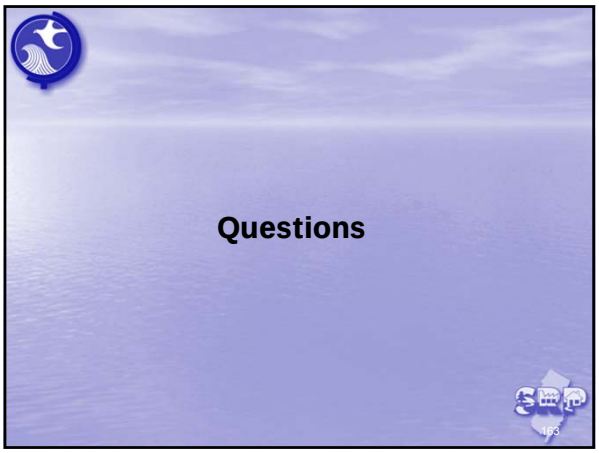
What vs. How

161

Contact Information

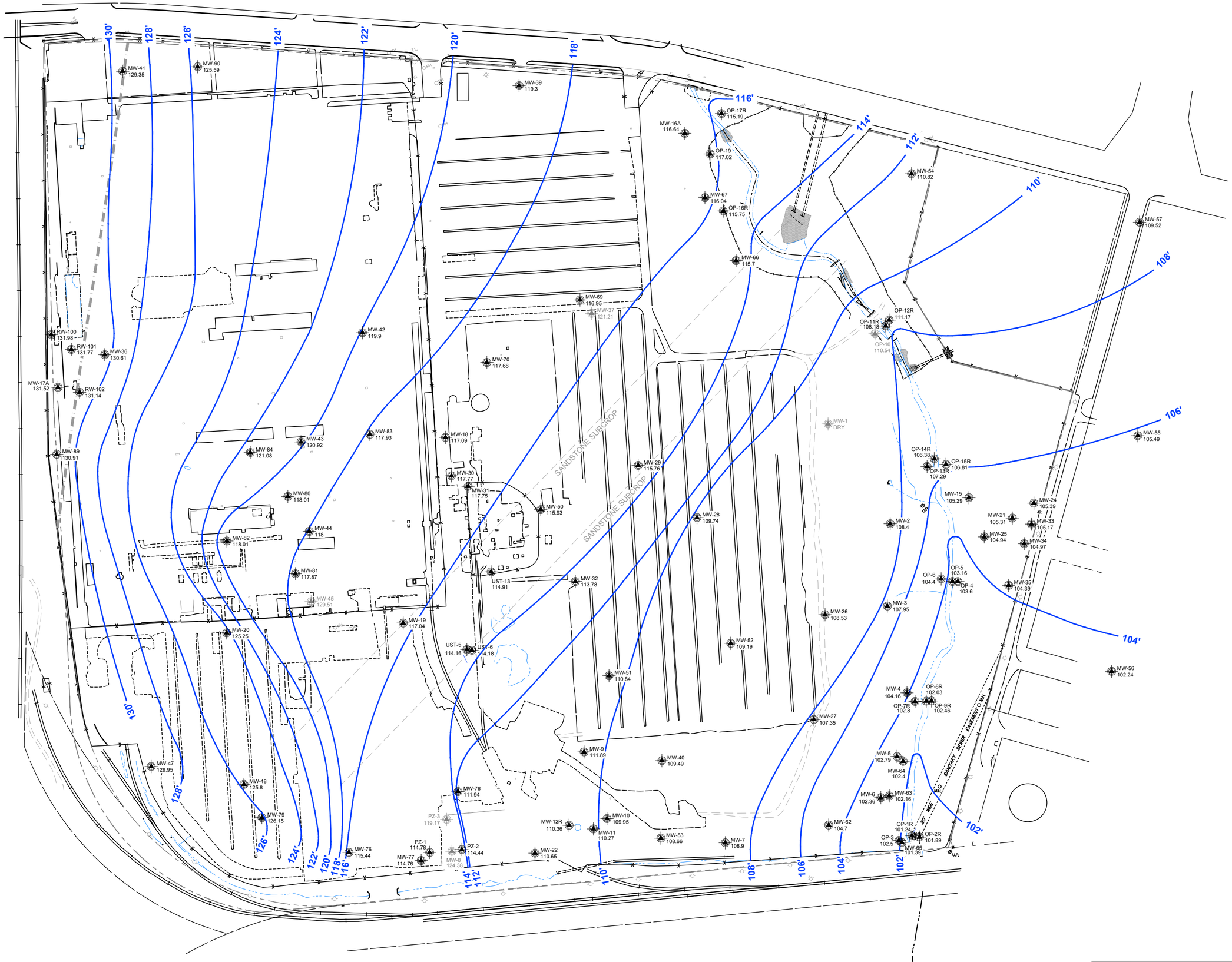
- Barry.Frasco@dep.nj.gov
- mgonshor@rouxinc.com
- MaryAnne.Kuserk@dep.nj.gov
- Stephen.Posten@amec.com
- Paul.Sanders@dep.nj.gov
- Swati.Toppin@dep.nj.gov

162


Questions

APPENDIX B

Groundwater Contours



LEGEND:

- PROPERTY LINE
- FENCE
- WATER BODY
- SUSPECTED FAULT LOCATION
- SANDSTONE SUBCROP
- MONITORING WELL LOCATION
- MONITORING WELL LOCATION NOT USED IN CONTOURING
- 130' GROUNDWATER LEVELS

HALEY ALDRICH

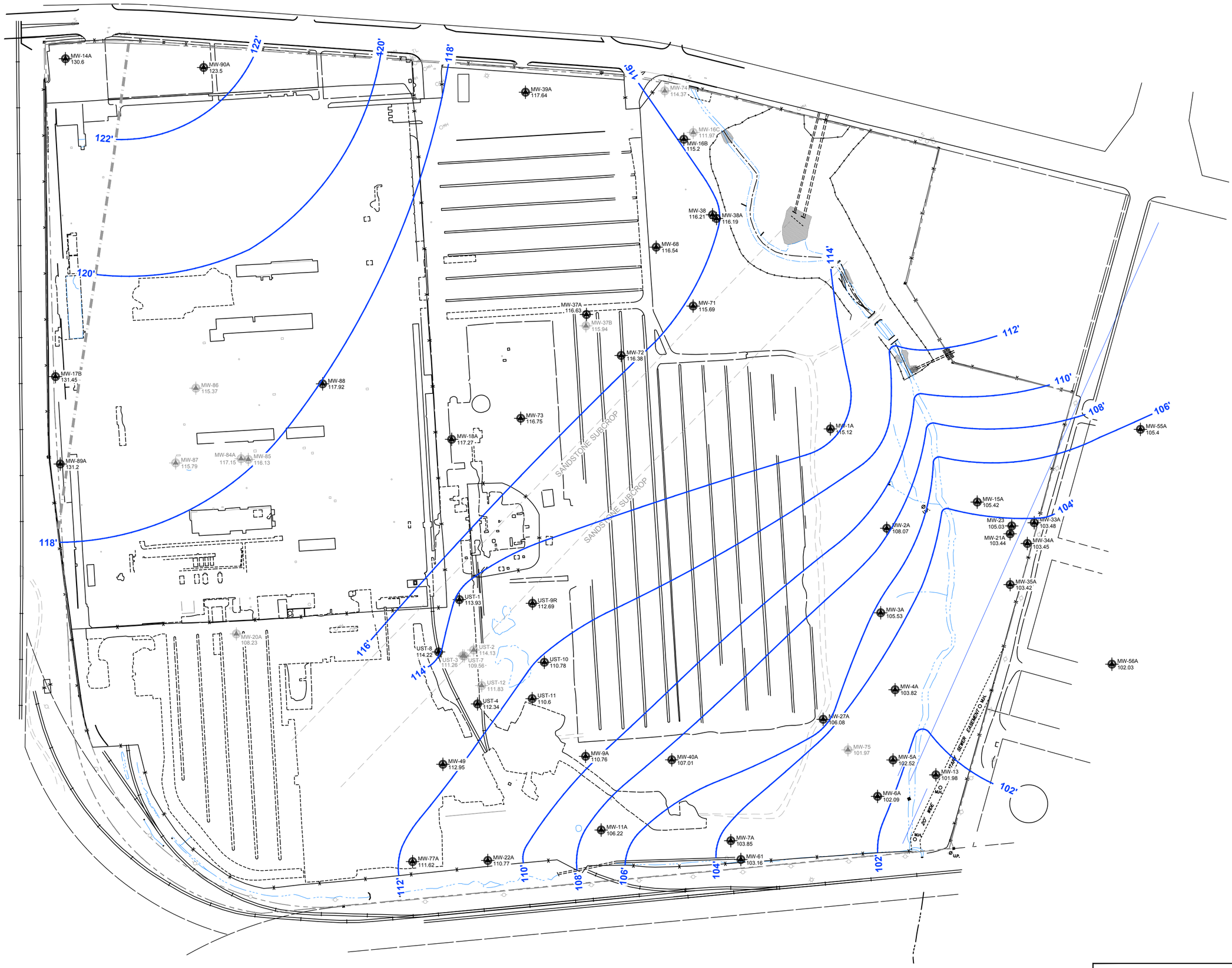
RACER TRUST - EWING TOWNSHIP INDUSTRIAL LAND
EWING TOWNSHIP, NEW JERSEY

DECEMBER 2015 OVERBURDEN/WEATHERED BEDROCK CONTOURS

SCALE: AS SHOWN
APRIL 2016

FIGURE 7

POSTOLOWSKI, KEVIN Printed: 4/14/2016 11:14 AM Layout: OVB 2016-DEC FIG 7
\\CLE\COMMON\PROJECTS\70613\421 - 2015 GROUNDWATER MONITORING\CAD\70813_428_0006 GW CNTRS 2015-DEC.DWG



LEGEND:

- PROPERTY LINE
- FENCE
- WATER BODY
- SUSPECTED FAULT LOCATION
- SANDSTONE SUBCROP
- MONITORING WELL LOCATION
- MONITORING WELL LOCATION NOT USED IN CONTOURING
- 130' GROUNDWATER LEVELS

HALEY ALDRICH

RACER TRUST - EWING TOWNSHIP INDUSTRIAL LAND
EWING TOWNSHIP, NEW JERSEY

DECEMBER 2015 BEDROCK CONTOURS

SCALE: AS SHOWN
APRIL 2016

FIGURE 8

POSTOLOWSKI, KEVIN Printed: 4/13/2016 6:14 PM Layout: BDRCK 2016 DEC FIG 8
\\CLE\COMMON\PROJECTS\70613\421 - 2015 GROUNDWATER MONITORING\CAD\70613 428 0006 GW CNTRS 2015-DEC.DWG

APPENDIX C

Case Inventory Document

Case Name: Ewing Township Industrial Land

PI #: 011336

IMPORTANT: *1) Do not delete or copy and paste across multiple columns because it can disrupt hidden equations.*

2) If pasting from a Word document, use the Paste option: ***Match Destination Formatting***

3) If the text turns ***red*** *you have exceeded the character limit for that column*

Case Inventory Document Version 1.4 02/23/17

AOC ID	AOC Type	AOC Description	Confirmed Contamination	AOC Status	Status Date	Incident #	DEP AOC Number	Contaminated Media	Contaminants of Concern	Additional Contaminants of Concern	Additional Contaminants of Concern	Applicable Remediation Standard	Exposure Route	Additional Exposure Route	RA Type	Additional RA Type	Additional RA Type	Was an Order of Magnitude Evaluation Conducted?	Activity
AOC-01A	Storage tank and appurtenance - State Regulated Under ground storage tank	Manufacturing Building (North)	Yes	RAR		08-04-08-1326-08		Mixed Media	VO + PAHs	Metals + PCBs	Other	Remediation Standards	Ingestion/Dermal	Ground Water	Excavation			Yes	Soil contamination related to former manufacturing processes and Diffuse Anthropogenic Pollution (DAP) adjacent to Parkway Avenue. A 3,300-gallon waste oil UST (E004) located on the west side of the Manufacturing Building was abandoned in place in 1988. A 1,000-gallon gasoline UST (E006) located off the northeastern corner of the Manufacturing Building was removed in April 2008. The nature and extent of contamination is known in this area.
AOC-01B	Other areas of concern - Any area suspected of containing contaminants	East Parking Lot	Yes	RAR				Mixed Media	VO + PAHs	Metals		Remediation Standards	Ingestion/Dermal	Ground Water				Yes	Manufacturing processes and support activities were never conducted in this area. Soil contamination related DAP adjacent to Parkway Avenue. The nature and extent of contamination is known in this area.
AOC-01C	Storage tank and appurtenance - State Regulated Under ground storage tank	Manufacturing Building (South)	Yes	RAR		08-04-10-1241-12		Mixed Media	VO + BN	Metals + PCBs	Other	Remediation Standards	Ingestion/Dermal	Ground Water	Excavation			Yes	Soil contamination related to former manufacturing processes. A 10,000-gallon gasoline UST (E005) located beneath the Solutions Storage Room was removed in April 2008. Targeted hot spot excavation activities were conducted in 2013 at former Plater Pit #5 for elevated levels of organic compounds and at former Plater Pit #6 for elevated levels of hexavalent chromium. The nature and extent of contamination is known in this area.
AOC-01D	Other areas of concern - Any area suspected of containing contaminants	Manufacturing Building (West)	Yes	RAR				Mixed Media	VO + PAHs	Metals		Remediation Standards	Ingestion/Dermal	Ground Water	Other			Yes	A measurable amount of LNAPL (0.13 ft) was observed in August 2012 in recovery well RW-101. Multiple lines of evidence indicate a final remedy for LNAPL has been accomplished. LNAPL has been delineated within through the combined use of recovery wells and test pits. In addition, only a small amount of LNAPL (approximately 3.0-gallons) was able to be recovered from the test pits and recovery wells using absorbent socks and booms. Groundwater analytical data indicate that LNAPL did not adversely affect groundwater quality. Finally, no measurable LNAPL was observed in either the recovery wells or test pits since November 2013. The nature and extent of contamination is known in this area.
AOC-02	Storage tank and appurtenance - Above ground storage tank	Above Ground Storage Tank Area/Primary Switch House	Yes	RAR				Mixed Media	VO + PAHs	Metals + PCBs		Remediation Standards	Ingestion/Dermal	Ground Water	Excavation			Yes	Soil contamination related to four ASTs and the primary switch house. The ASTs included a 5,000-gallon paint thinner AST, a 4,000-gallon solvent AST for the storage of Aromatic 100 solvent, a 400,000-gallon water AST, and a liquid propane AST. The primary switch house consisted of three transformers. A discharge of transformer oil occurred during facility demolition between 2000 and 2002. Approximately 300 cubic yards of PCB contaminated soil was removed as Toxic Substance Control Act (TSCA) waste in 2004/2005. The nature and extent of contamination is known in this area.
AOC-03	Storage tank and appurtenance - State Regulated Under ground storage tank	Powerhouse and Fuel Storage	Yes	RAR				Mixed Media	VO + BN	Metals		Remediation Standards	Ingestion/Dermal	Ground Water	Excavation			Yes	Soil contamination related to the former powerhouse, ASTs, and USTs. The powerhouse originally contained three coal-powered steam boilers. This AOC contained three ASTs including a 500,000-gallon No. 6 fuel oil tank and two 30,000-gallon No. 6 fuel oil tanks. Three USTs were also located in AOC-03 including a 4000-gallon leaded gasoline UST (E007) removed in 1987, a 2,000-gallon unleaded gasoline UST (E001) removed in 1989, and a 2,500-gallon paint UST (A003) removed in 1989. The nature and extent of contamination is known in this area.
AOC-04	Other areas of concern - Hazardous substance storage or handling area	Process Waste and Hazardous Waste Staging Area	Yes	RAR				Mixed Media	VO + PAHs	Metals + PCBs		Remediation Standards	Ingestion/Dermal	Ground Water				Yes	Soil contamination related to the former process waste and hazardous waste staging area. A concrete pad was originally used and a bermed concrete secondary containment system was later constructed. A catch basin located in the southeast corner of the containment discharged runoff to the wastewater treatment system. The nature and extent of contamination is known in this area.
AOC-05	Storage and staging area - Storage pad and area	Raw Materials Storage and Maintenance Area	Yes	RAR				Mixed Media	VO + PCBs	Metals		Remediation Standards	Ingestion/Dermal	Ground Water				Yes	Soil contamination related to the storage and maintenance building, originally used as a salvage and storage area and later included forklift and machine press repair, light equipment maintenance, electronics and pipe fitting shops, welding and sheet metal shops, inventory storage, a shipping/receiving area and a raw materials drum storage area. The nature and extent of contamination is known in this area.
AOC-06	Storage and staging area - Storage pad and area	South Parking Lot/Paint Storage Building and Maintenance Garage	Yes	RAR				Mixed Media	VO+ Metals			Remediation Standards	Ingestion/Dermal	Ground Water				Yes	Soil contamination related to the paint storage area and a vehicle maintenance garage. The nature and extent of contamination is known in this area.
AOC-07A	Other areas of concern - Any area suspected of containing contaminants	Die Cast Storage Area, Former Raw Materials Storage Area	Yes	RAR				Mixed Media	VO + PAHs	Metals		Remediation Standards	Ingestion/Dermal	Ground Water				Yes	Soil contamination related to the former die storage area and the former raw materials drum storage area, a concrete pad where drums were stored prior to use. The nature and extent of contamination is known in this area.
AOC-07B	Storage and staging area - Surface impoundment and lagoon	Former Sludge Drying Bed No. 5	Yes	RAR				Mixed Media	VO + PAHs	Metals + PCBs	Other	Remediation Standards	Ingestion/Dermal	Ground Water				Yes	Soil contamination related to sludge generated during the wastewater treatment process dewatered in the asphalt-lined sludge drying bed and eventually disposed of off-site. The nature and extent of contamination is known in this area.
AOC-08A	Storage tank and appurtenance - State Regulated Under ground storage tank	Wastewater Treatment Plant Area: 11,000-Gallon Waste Oil AST, Former Incinerators, Southern Drainage Swale (East)	Yes	RAR				Mixed Media	VO + BN	Metals + PCBs	Other	Remediation Standards	Ingestion/Dermal	Ground Water	Excavation			Yes	Soil contamination related to the wastewater treatment building, process sewer structures, and the former trash incinerator. Oil/water separators, waste oil AST, and a 30,000-gallon waste oil UST (E002) removed in 1997 were also present as well as a transformer substation. The nature and extent of contamination is known in this area.

Case Name: Ewing Township Industrial Land

PI #: 011336

IMPORTANT: *1) Do not delete or copy and paste across multiple columns because it can disrupt hidden equations.*

2) If pasting from a Word document, use the Paste option: ***Match Destination Formatting***

3) If the text turns ***red*** *you have exceeded the character limit for that column*

Case Inventory Document Version 1.4 02/23/17

AOC ID	AOC Type	AOC Description	Confirmed Contamination	AOC Status	Status Date	Incident #	DEP AOC Number	Contaminated Media	Contaminants of Concern	Additional Contaminants of Concern	Additional Contaminants of Concern	Applicable Remediation Standard	Exposure Route	Additional Exposure Route	RA Type	Additional RA Type	Additional RA Type	Was an Order of Magnitude Evaluation Conducted?	Activity
AOC-08B	Discharge and disposal area - Waste water treatment systems/septic/seepage pit/dry well	Wastewater Treatment Plant Area: Former Sludge Settling Tanks and Neutralization Tanks, Southern Drainage Swale (East)	Yes	RAR				Mixed Media	VO + BN	Metals + PCBs	Other	Remediation Standards	Ingestion/Dermal	Ground Water				Yes	Soil contamination related to the wastewater treatment building, neutralization tanks, and sludge settling tanks. The nature and extent of contamination is known in this area.
AOC-09	Other areas of concern - Any area suspected of containing contaminants	Powerhouse Parking Lot and Equipment Storage Area	Yes	RAR				Mixed Media	VO + BN	Metals + PCBs	Other	Remediation Standards	Ingestion/Dermal	Ground Water	Excavation			Yes	Targeted hot spot excavation activities were conducted in 2013 for elevated levels of PCBs. The nature and extent of contamination is known in this area.
AOC-10	Storage and staging area - Surface impoundment and lagoon	Former Sludge Drying Beds Nos. 1 through 4, Southern Drainage Swale (East)	Yes	RAR				Mixed Media	VO + BN	Metals + PCBs	Other	Remediation Standards	Ingestion/Dermal	Ground Water				Yes	Soil contamination related to stored and dewatered sludge from wastewater treatment operations. The nature and extent of contamination is known in this area.
AOC-11	Drainage system and area - Storm water detention pond and fire pond	Former Gold Run Pond and Undeveloped Area	Yes	RAR				Mixed Media	VO + PAHs	Metals + PCBs		Remediation Standards	Ingestion/Dermal	Sediment	Excavation			Yes	Soil contamination related DAP adjacent to Parkway Avenue. In 1996, 98 55-gallon drums of containing barium chromate waste were excavated from the undeveloped land located along eastern edge of the site. Gold Run Pond was constructed in the 1950s as a fire water retention pond. Contaminated sediment from upstream sources was removed to bedrock in 2011 and associated wetland areas were restored. The nature and extent of contamination is known in this area.
AOC-12	Drainage system and area - Drainage swale and culvert	Southern Drainage Swale (West)	Yes	RAR				Mixed Media	VO + PAHs	Metals		Remediation Standards	Ingestion/Dermal	Ground Water	Excavation			Yes	The nature and extent of contamination in sediment/wetland soil is known. The Southern Drainage Swale is a narrow storm water drainage feature created historically by the elevation of the railroad siding to the south and the filling of the site to the north. Contaminated sediment in the western portion of the Southern Drainage Swale was removed in 2011 and associated wetland areas were restored.
Off-Site	Discharge and disposal area - Historic fill material area/other fill area	Parkway Avenue, and CSX Property and Historic Fill	Yes	RAR				Soil	VO + PAHs	Metals		Remediation Standards	Ingestion/Dermal					Yes	Soil contamination related to the Parkway Avenue, and CSX property and mapped NJDEP Historic Fill. The nature and extent of contamination is known in this area.

APPENDIX D

NJDEP Forms

New Jersey Department of Environmental Protection
Site Remediation Program

COVER/CERTIFICATION FORM

(Submit with Remedial Phase Report, Receptor Evaluation, and CEA Forms)

Date Stamp
(For Department use only)

SECTION A. SITE INFORMATION

Site Name: Ewing Township Industrial Land

AKAs: Former Delphi Lighting & Systems Division, GM Trenton, Turnstead Division of GM, Fisher Body Division

Street Address: 1445 Parkway Avenue

Municipality: Ewing Township (*Township, Borough or City*)

County: Mercer Zip Code: 08628

Program Interest (PI) Number(s): 011336

Case Tracking Number(s) for this submission: E97070

Date Remediation Initiated Pursuant to N.J.A.C. 7:26C-2: 06/01/1986

State Plane Coordinates for a central location at the site: Easting: 406150.61 Northing: 521115.63

List current Municipal Block and Lot Numbers of the Site:

Block # 434	Lot #(s) 1.01	Block #	Lot #(s)
Block #	Lot #(s)	Block #	Lot #(s)
Block #	Lot #(s)	Block #	Lot #(s)
Block #	Lot #(s)	Block #	Lot #(s)

SECTION B. SUBMISSION STATUS

1. Indicate how the Electronic Data Deliverable (EDD) for this submission is being provided to the NJDEP:
   - ☒ Via Email at srpedd@dep.state.nj.us (attach NJDEP confirmation email); or
   - ☐ CD (attach to this submission)
   - ☐ Not Applicable – No EDD
2. Complete the following Submission and Permit Status Table:

Remedial Phase Documents	N/A	Included in this Submission	Previously Submitted	Date of Submission	Date of Revised Submission	Date of Previous NJDEP Approval	Date of Document Withdrawal
Preliminary Assessment Report	☐	☐	☒	05/01/1996			
Site Investigation Report	☐	☐	☒	05/01/1996			
Remedial Investigation Report	☐	☐	☒	06/19/2014	05/06/2016		
Remedial Action Work Plan	☐	☐	☒	07/01/1997	12/02/2008		
Remedial Action Report	☐	☒	☐	10/19/2016			
Response Action Outcome	☒	☐	☐				
Other Submissions							
Alternative Soil Remediation Standard and/or Screening level Application Form	☒	☐	☐				
Case Inventory Document		☒					
Classification Exception Area / Well Restriction Area (CEA/WRA)	☐	☐	☒	05/06/2016			
Discharge to Ground Water Permit by Rule Authorization Request	☒	☐	☐				

IEC Engineered System Response Action Report	☒	☐	☐				
Immediate Environmental Concern Report	☒	☐	☐				
LNAPL Interim Remedial Measure Report	☐	☐	☒	03/19/2014			
Public Notification	☐	☐	☒	08/28/2009	01/22/2013		
Receptor Evaluation	☐	☐	☒	04/28/2011	10/19/2016		
Technical Impracticability Determination	☒	☐	☐				
Vapor Concern Mitigation Report	☒	☐	☐				
Permit Application – list:	☒						
Flood Hazard Area Individual Permit		☐	☒	07/11/2011			07/10/2016
Freshwater Wetlands General Permit		☐	☒	07/11/2011			07/10/2016
Soil Remedial Action Permit RAP160001		☐	☒	10/19/2016		11/01/2016	
		☐	☐				
Radionuclide Remedial Action Report	☒	☐	☐				
Radionuclide Remedial Action Workplan	☒	☐	☐				
Radionuclide Remedial Investigation Report	☒	☐	☐				
Radionuclide Remedial Investigation Workplan	☒	☐	☐				

SECTION C. SITE USE

Current Site Use: (*check all that apply*)

- ☒ Industrial
- ☐ Residential
- ☐ Commercial
- ☐ School or child care
- ☐ Agricultural
- ☐ Park or recreational use
- ☒ Vacant
- ☐ Government
- ☐ Other: _____

Intended Future Site Use, if known: (*check all that apply*)

- ☐ Industrial
- ☒ Residential
- ☒ Commercial
- ☐ School or child care
- ☐ Park or recreational use
- ☐ Vacant
- ☐ Government
- ☐ Future site use unknown
- ☐ Other: _____

SECTION D. CASE TYPE: (*check all that apply*)

- ☐ Administrative Consent Order (ACO)
- ☐ Brownfield Development Area (BDA)
- ☐ Child Care Facility
- ☐ Chrome Site (Chromate chemical production waste)
- ☐ Coal Gas
- ☐ Due Diligence with RAO
- ☐ Hazardous Discharge Remediation Fund (HDSRF) Grant/Loan
- ☒ ISRA
- ☐ Landfill (SRP subject only)
- ☒ Regulated Underground Storage Tank (UST)
- ☐ Remediation Agreement (RA)/Remediation Certification
- ☐ School Development Authority (SDA)
- ☐ School facility
- ☐ Spill Act Defense – Government Entity
- ☐ Spill Act Discharge
- ☐ UST Grant/Loan
- ☐ Other: _____

Federal Case (*check all that apply*)

☐ RCRA GPRA 2020 ☐ CERCLA/NPL ☐ USDOD ☐ USDOE

1. Is the party conducting remediation a government entity? ..... ☐ Yes ☒ No

If "Yes," check one: ☐ Federal ☐ State ☐ Municipal ☐ County

SECTION E. PUBLIC FUNDS

Did the remediation utilize public funds? ..... ☐ Yes ☒ No

If "Yes," check applicable:

- ☐ UST Grant
- ☐ HDSRF Grant
- ☐ Spill Fund
- ☐ UST Loan
- ☐ HDSRF Loan
- ☐ Schools Development Authority
- ☐ Brownfield Reimbursement Program
- ☐ Landfill Reimbursement Program
- ☐ Environmental Infrastructure Trust

SECTION F. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: RACER Trust

Representative First Name: Robert Representative Last Name: Hare

Title: Cleanup Manager

Phone Number: (313) 486-2908 Ext: Fax: (248) 594-4829

Mailing Address: 500 Woodward Avenue, Suite 2650

City/Town: Detroit State: Michigan Zip Code: 48226

Email Address: RHare@RACERTrust.org

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: Date: 5-8-17

Name/Title: Robert W. Hare, P.E., CHMM/Cleanup Manager

For CEA Submissions:

☐ Check this box if the person above is also the property owner of the site or their representative. If this person is not the site property owner, please ensure the site property owner's name and address is in the first line of the table in Section E.2 of the Classification Exception Area / Well Restriction Area (CEA/WRA) Fact Sheet Form.

SECTION G. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT

LSRP ID Number: 586486

First Name: Amy Last Name: Murphy

Phone Number: (973) 263-3900 Ext: Fax: (973) 263-2580

Mailing Address: 299 Cherry Hill Road, Suite 303

City/Town: Parsippany State: New Jersey Zip Code: 07054

Email Address: AMurphy@HaleyAldrich.com

This statement shall be signed by the LSRP who is submitting this notification in accordance with N.J.S.A. 58:10C-14, and N.J.S.A. 58:10B-1.3b(1) and (2).

I certify that I am a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C to conduct business in New Jersey. As the Licensed Site Remediation Professional of record for this remediation, I:

[SELECT ONE OR BOTH OF THE FOLLOWING AS APPLICABLE]:

☐ *directly oversaw and supervised all of the referenced remediation, and\or*

☒ *personally reviewed and accepted all of the referenced remediation presented herein.*

I believe that the information contained herein, and including all attached documents, is true, accurate and complete.

It is my independent professional judgment and opinion that the remediation conducted at this site, as reflected in this submission to the Department, conforms to, and is consistent with, the remediation requirements in N.J.S.A. 58:10C-14.

My conduct and decisions in this matter were made upon the exercise of reasonable care and diligence, and by applying the knowledge and skill ordinarily exercised by licensed site remediation professionals practicing in good standing, in accordance with N.J.S.A. 58:10C-16, in the State of New Jersey at the time I performed these professional services.

I am aware pursuant to N.J.S.A. 58:10C-17 that for purposely, knowingly or recklessly submitting false statement, representation or certification in any document or information submitted to the board or Department, etc., that there are significant civil, administrative and criminal penalties, including license revocation or suspension, fines and being punished by imprisonment for conviction of a crime of the third degree.

LSRP Signature: Date: 5/8/2017

LSRP Name/Title: Amy K. Murphy, LSRP / Sr. Project Manager

Company Name: Haley & Aldrich, Inc.

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

New Jersey Department of Environmental Protection
Site Remediation Program

REMEDIAL ACTION REPORT FORM

Date Stamp
(For Department use only)

SECTION A. SITE

Site Name: Ewing Township Industrial Land

Program Interest (PI) Number(s): 011336

Case Tracking Number(s) for this submission: E97070

This form must be attached to the Cover/Certification Form

SECTION B. SCOPE OF REMEDIAL ACTION REPORT

1. Does the RAR address:
   - ☐ Area(s) of Concern (AOCs) Only
   - ☒ Entire Site (Based on a completed and submitted Preliminary Assessment/Site Investigation)
2. Total number of contaminated AOCs associated with the case: 17
3. Total number of contaminated AOCs addressed in this submission: 9
4. Are there any outstanding contaminated AOCs associated with the case where the remedial action has NOT been performed? ☒ Yes ☐ No
5. Does this RAR address a discharge/release from a federally regulated UST? ☐ Yes ☒ No

When answering the remaining questions on this form consider only the AOCs addressed in this submission.

SECTION C. GENERAL

1. Does this submission include Remedial Action Permit Application(s) that require Site Remediation Program approval? ☒ Yes ☐ No
2. Was a remediation initiated after May 6, 2010, for new construction / change in the use of the site proposed for the purpose of residential use, use as a licensed child care center or use as a school? ☐ Yes ☒ No
   If "Yes," was an unrestricted use or a presumptive remedy implemented? ☐ Yes ☐ No
3. Was an alternative remedy approved by the NJDEP? ☐ Yes ☒ No
   If "Yes," provide the date of the approval: _____
4. Has the remediation varied from the Technical Rules? ☐ Yes ☒ No
   If "Yes." provide the citation(s) from which the remediation has varied and the page(s) in the attached document where the rationale for the variance is provided.
   N.J.A.C. 7:26E- _____ Page _____
   N.J.A.C. 7:26E- _____ Page _____
   N.J.A.C. 7:26E- _____ Page _____
5. Were the laboratory Reporting Limits below applicable remediation standards/screening levels criteria required for the contaminants of concern for the AOCs addressed in this submission? ☒ Yes ☐ No
6. Have past NJDEP-documented deficiencies been addressed in this submission? ☒ Yes ☐ No ☐ N/A
7. Did the remediation deviate from that proposed in the Remedial Action Workplan? ☐ Yes ☒ No
   If "Yes," specify the section/page(s) in the report where the deviation(s) are discussed:
   _____
8. Did the remedial action render the property unusable for future redevelopment or for recreational use (N.J.A.C. 7:26C-6.4(b)? ☐ Yes ☒ No

SECTION D. SITE CONDITIONS

1. At any time, was there any radiological contamination detected at the AOCs addressed in this submission? ☐ Yes ☒ No
2. At any time, did any of the AOCs addressed in this submission contain Ordnance and Explosives/ Unexploded Ordnance (OE/UXO)? ☐ Yes ☒ No
3. Did the remedial action involve containment of free product? ☐ Yes ☒ No
4. Has dioxin been detected at levels above NJDEP's interim direct contact soil screening level of 50 ppt dioxin TEQ (TCDD Toxicity Equivalence Quotient) in any AOCs addressed in this submission? ☐ Yes ☒ No
5. Have any of the following contaminants *ever* been detected in sediment above the ecological screening levels at the AOCs addressed in this submission? ☒ Yes ☐ No

   If "Yes," check all that apply:

   ☒ Arsenic ☐ Dioxin ☒ Mercury ☒ PCBs ☐ Pesticides
6. Is remediation complete in all affected media at the AOCs addressed in this submission? ☒ Yes ☐ No
7. Did contaminants from the AOCs addressed in this submission discharge to surface water? ☒ Yes ☐ No
8. Did contaminants from the AOCs addressed in this submission discharge to an Environmentally Sensitive Natural Resource (ESNR)? ☒ Yes ☐ No
9. Are any of the following conditions currently present for the AOCs addressed in this submission? *(check all that apply):*

Groundwater:

- ☒ Contaminated ground water in the overburden aquifer
- ☐ Contaminated ground water in a confined aquifer
- ☒ Contaminated ground water in the bedrock aquifer
- ☒ Contaminated ground water in multiple aquifer units
- ☒ Multiple distinct ground water plumes
- ☒ Contaminated ground water migrating off-site
- ☒ Natural background ground water contamination
- ☒ Contaminated ground water discharging to surface water or Environmentally Sensitive Natural Resource (ESNR)
- ☐ Residual or free product
- ☐ Radionuclides

Soil:

- ☐ On-site discharge(s) impacting soil off-site
- ☐ Chromate Chemical Production Waste/COPR
- ☐ Munitions and explosives of concern
- ☒ Contaminated soil in the saturated zone
- ☒ Historic pesticide impacts to soil
- ☐ Residual or free product
- ☐ Radionuclides
- ☒ Historic Fill
- ☒ Natural background only above Impact to Ground Water Cleanup Criteria
- ☐ Natural background above Direct Contact Remediation Standards
- ☒ Soil contamination in an ESNR

SECTION E. APPLICABLE REMEDIATION STANDARDS

1. Were Default Remediation Standards used for all contaminants? ☒ Yes ☐ No

   If "Yes," check all that apply:

   ☒ Direct Contact
   ☒ Impact to Ground Water Soil Screening Levels
   ☒ Ecological Screening Levels
2. Has compliance averaging been utilized to determine compliance with the Soil Remediation Standards? ☒ Yes ☐ No

   If "Yes," check all that apply:

	Compliance Averaging Method Utilized			
Pathway	Arithmetic Mean	95 Percent UCL	Spatially Weighted Average	75 Percent/ 10X Procedure
☒ Ingestion-Dermal Pathway	☐	☒	☐	☐
☒ Inhalation Pathway	☐	☒	☐	☐
☐ Impact to Ground Water Pathway	☐	☐	☐	☐

3. Has a compliance option been utilized to determine compliance with the Impact to Ground Water Pathway? (If "Yes," check all that apply) ☐ Yes ☒ No

   ☐ Immobile Compounds
   ☐ Data evaluation for metals and semi-volatiles
   ☐ Data evaluation for volatile organics derived from discharges of petroleum mixtures

4. Was an interim standard used for a contaminant where a standard does not exist? ☐ Yes ☒ No
5. Were Alternate Remediation Standards used for the Ingestion/Dermal Pathway? ☐ Yes ☒ No
6. Were Alternate Remediation Standards used for the Inhalation Pathway? ☐ Yes ☒ No
7. Were Site Specific Standards used for the Impact to Ground Water Pathway? ☐ Yes ☒ No
   If "Yes," check all that apply:
   ☐ Soil-Water Partitioning Equation ☐ SPLP ☐ Sesoil ☐ Sesoil/AT123D
   ☐ DAF Modification
8. Were Site Specific Ecological Remediation Goals used? ☐ Yes ☒ No
9. What is the ground water classification for this site as per N.J.A.C. 7:9C? (check all that apply)
   ☐ Class I-A ☒ Class II-A
   ☐ Class I-PL Pinelands Protection Area ☐ Class III-A
   ☐ Class I-PL Pinelands Preservation Area ☐ Class III-B

SECTION F. ALTERNATIVE AND CLEAN FILL USE

1. Was alternative fill used? ☒ Yes ☐ No
2. Was clean fill used? ☒ Yes ☐ No
3. Was material sent off-site for use as alternative and/or clean fill? ☐ Yes ☒ No
   If "Yes," specify the section/page in the RAR where it states the SRP site receiving this alternative and/or clean fill: _____
4. Was material sent off-site for use as alternative and/or clean fill at a non-SRP site? ☐ Yes ☒ No
   If "Yes," specify the section/page in the RAR where it states the non-SRP site receiving this alternative and/or clean fill: _____
5. Was alternative fill used in excess of the amount required for the remedial action? ☐ Yes ☒ No
   If "Yes," was the NJDEP's preapproval obtained pursuant to N.J.A.C. 7:26E-5.2(b)3? ☐ Yes ☐ No

SECTION G. REMEDIAL ACTION REPORT INFORMATION

Soils

1. Did the remedy include a remedial action for soils? ☒ Yes ☐ No
   If "No," skip to **Ground Water**
2. Is a restricted use required? ☒ Yes ☐ No
   If "Yes," indicate the type of restriction being implemented. Institutional and Engineering Controls
3. If applicable, has consent from all involved property owners been obtained (i.e., for institutional or engineering controls)? ☒ Yes ☐ No
4. Was an engineering control required? ☒ Yes ☐ No
   If "Yes," indicate the receptor(s) each engineering control is intended to protect. *(check all that apply)*
   ☒ Human ☐ Ecological ☐ Offsite Impacts

Ground Water

5. Did the remedy include a remedial action for ground water? ☐ Yes ☒ No
   If "No," skip to **Ecological**
6. Is a restricted use required for ground water? ☐ Yes ☐ No

7. Is a revised CEA required? ☐ Yes ☐ No

8. Do any contaminant levels in ground water currently exceed the vapor intrusion ground water trigger? ☐ Yes ☐ No

Ecological

9. Did the remedy include a remedial action for Environmentally Sensitive Natural Resources (ESNRs)? ☒ Yes ☐ No
   If "No," skip to **Indoor Air**

10. Was post-remedial sampling performed to determine whether contaminant levels currently meet ecological screening levels or ecological remediation goals? ☐ Yes ☒ No

11. Did the remedial action require filling of State open waters or wetlands? ☒ Yes ☐ No

12. Have ecological risk-based remediation goals been developed? ☐ Yes ☒ No
    If "Yes," have the ecological risk-based remediation goals been approved by NJDEP? ☐ Yes ☐ No

13. Have Risk Management Decision (RMD) goals been developed? ☐ Yes ☒ No
    If "Yes," have the RMD goals been approved by NJDEP? ☐ Yes ☐ No

Indoor Air

14. Have any vapor intrusion engineering controls/mitigation systems been installed in order to mitigate a vapor condition in a structure? ☐ Yes ☒ No
    If "Yes," check each type of engineering control that was implemented:
    - ☐ Subsurface Depressurization System
    - ☐ Subsurface Ventilation System
    - ☐ Soil Vapor Extraction System
    - ☐ HVAC Positive Pressure
    - ☐ Other (specify): _____

SECTION H. LABORATORY DATA

1. Were all data submitted in the appropriate full and/or reduced formats according to the deliverables defined in N.J.A.C. 7:26E-2? ☒ Yes ☐ No

2. Do all data submitted meet the quality assurance/quality control (QA/QC) requirements incorporated by reference in N.J.A.C. 7:26E-2 for:
   sampling ☒ Yes ☐ No
   analysis ☒ Yes ☐ No

3. How was it determined that the data complied with the QA/QC requirements?
   - ☒ Laboratory non-conformance summary/narrative
   - ☐ Laboratory correspondence
   - ☒ LSRP review
   - ☐ Independent contractor review
   - ☐ Other: _____

4. Has any data been qualified and used? ☒ Yes ☐ No

5. Has any data been rejected and used? ☐ Yes ☒ No

6. Provide the page number for the "Reliability of Data" section of the report: 11

APPENDIX E

Receptor Evaluation

New Jersey Department of Environmental Protection
Site Remediation Program

RECEPTOR EVALUATION (RE) FORM

Date Stamp
(For Department use only)

SECTION A. SITE

Site Name: Ewing Township Industrial Land

Program Interest (PI) Number(s): 011336

Case Tracking Number(s) for this submission: E97070

This form must be attached to the Cover/Certification Form
if not submitted through a Remedial Phase Online Service

Indicate the type of submission:

☐ Initial RE Submission

☒ Updated RE Submission

Indicate the reason for submission of an updated RE form

☐ Submission of an Immediate Environmental Concern (IEC) source control report;
☐ Submission of a Remedial Investigation Report;
☒ Submission of a Remedial Action Report;

Check if included in updated RE

☐ The known concentration or extent of contamination in any medium has increased;
☐ A new AOC has been identified;
☐ A new receptor is identified;
☐ A new exposure pathway has been identified.

SECTION B. ON SITE AND SURROUNDING PROPERTY USE

1. Identify any sensitive populations/uses that are currently on-site or surrounding property usage within 200 feet of the site boundary (check all that apply):

	On-site	Off-site
None of the following	☒	☐
Residences or residential property	☐	☒
Public or Private Schools grades K-12	☐	☐
Child care centers	☐	☐
Public parks, playgrounds or other recreation areas	☐	☒
Other sensitive population use(s) Explain _____	☐	☐

If any of the above applies, attach a list of addresses, facility names, type of use, and a map depicting each location relative to the site.

2. Current site uses (check all that apply):

☒ Industrial ☐ Residential ☐ Commercial ☐ Agricultural
☐ School or child care ☐ Government ☐ Park or recreational use
☒ Vacant ☐ Other: _____

3. Planned future site uses and off-site use within 200 ft of site boundary (check all that apply):

☐ Industrial ☒ Residential ☐ Commercial ☐ Agricultural
☐ School or child care ☐ Government ☐ Park or recreational use
☐ Vacant ☐ Other: _____

Provide a map depicting the location of the proposed changes in land use.

SECTION C. DESCRIPTION OF CONTAMINATION

1. Identify if any of the following exist at the site (check all that apply):
   - ☒ Free product [N.J.A.C. 7:26E-1.8] identified is ☒ LNAPL* or ☐ DNAPL**. Date identified: _____
   - ☐ Residual product [N.J.A.C. 7:26E-1.8]
   - ☐ Other high concentration source materials not identified above (e.g., buried drums, containers, unsecured friable asbestos)

     Explain: Measurable LNAPL has not been recorded since November 2013

   * LNAPL – measured thickness of .01 feet or more

   **DNAPL – See US EPA DNAPL Overview

2. Soil Migration Pathway

   Has soil contamination been delineated to the applicable Direct Contact Soil Remediation Standard? ..... ☒ Yes ☐ No

   Are all soils either below the applicable Direct Contact Criteria or under an institutional control (i.e. deed notice)? ..... ☒ Yes ☐ No

3. If this evaluation is submitted with a technical document that includes contaminant summary information, proceed to Section D. Otherwise attach a brief summary of all currently available data and information to be included in the site investigation or remedial investigation report.

SECTION D. GROUND WATER USE

1. Has the requirement for ground water sampling been triggered? ..... ☒ Yes ☐ No ☐ Unknown
   If "No," proceed to Section F. If "Unknown," explain:

2. Is Ground water contaminated above the Ground Water Remediation Standards [N.J.A.C.7:9C]? ..... ☒ Yes ☐ No ☐ Unknown

   Or ☐ Awaiting laboratory data with the expected due date: _____

   If "Yes," provide the date that the laboratory data was available and confirmed contamination above the Ground Water Remediation Standards. Date: 06/01/1986

   If "Unknown," explain: _____

   If "No," or awaiting laboratory data proceed to Section F.

3. Has ground water contamination been delineated to the applicable Remediation Standard? ..... ☒ Yes ☐ No
4. Has a well search been completed? ..... ☒ Yes ☐ No

   Date of most recent or updated well search: 04/08/2016

   Identify if any of the following conditions exist based on the well search [N.J.A.C.7:26E-1.14(a)] (check all that apply):
   - ☐ Potable wells located within 500 feet from the downgradient edge of the currently known extent of contamination.
   - ☐ Potable well located 250 feet upgradient or 500 feet side gradient of the currently known extent of contamination.
   - ☐ Ground water contamination is located within a Tier 1 wellhead protection area (WHPA).

5. Is a completed Well Search Spreadsheet or historical well search table attached and has an electronic copy of the spreadsheet been submitted to srpgis_wrs@dep.state.nj.us. ..... ☒ Yes ☐ No

   If "No," explain: See Attachment 2

6. Are any private potable or irrigation wells located within ½ mile of the currently known extent of contamination? ..... ☒ Yes ☐ No

   If "Yes," was a door to door survey completed? ..... ☒ Yes ☐ No

   If survey was not completed explain: _____

7. Has sampling been conducted of ☐ potable well(s) and /or ☐ non-potable use well(s)? ..... ☐ Yes ☒ No

   If "No," provide justification then proceed to Section E.

   No potable wells were indentified within the 250 foot upgradient and 500 foot downgradient search radius

8 Has contamination been identified in potable well(s) above Ground Water Remediation Standards that is not suspected to be from the site? (If "Yes," provide justification) ..... ☐ Yes ☐ No

_____

9 Has contamination been identified in potable well(s) that is above the Ground Water Remediation Standards or Federal Drinking Water Standards? ..... ☐ Yes ☐ No

Provide date laboratory data was received: _____

Or ☐ awaiting laboratory data with the expected due date: _____

If "Yes" for potable well contamination **not attributable to background**, follow the IEC Guidance Document at http://www.nj.gov/dep/srp/guidance/index.html#iec for required actions and answer the following:

Has an engineered system response action been completed on all receptors? ..... ☐ Yes ☐ No

Provide a brief narrative description:

Date completed: _____ NJDEP Case Manager: _____

10. Were Non-potable use well(s) sampled and results were above Class II Ground Water Remediation Standards? ..... ☐ Yes ☐ No

Provide date laboratory data was received: _____

Or ☐ awaiting laboratory data with the expected due date: _____

11. Has the ground water use evaluation been completed? ..... ☒ Yes ☐ No

SECTION E. VAPOR INTRUSION (VI)

1. Contaminants present in ground water exceed the Vapor Intrusion Ground Water Screening Levels that trigger a VI evaluation. (see NJDEP Vapor Intrusion Technical Guidance). ... ☒ Yes ☐ No ☐ Unknown

Or ☐ Awaiting laboratory data and the expected due date: _____

Provide the date that the laboratory data was available and confirmed contamination above the Vapor Intrusion Trigger Levels. Date: _____

2. Other existing conditions that trigger a VI evaluation. (see NJDEP Vapor Intrusion Technical Guidance)

☐ Wet basement or sump containing free product or ground water containing volatile organics
☐ Methane generating conditions causing oxygen deficient or explosion concern
☐ Other human or safety concern from the VI pathway (i.e. elemental mercury, unsaturated contamination, elevated soil gas or indoor vapor (explain):

If you answered "No," or awaiting laboratory data to Question 1., *and* did not check any boxes in Question 2, proceed to Section F, "Ecological Receptors", otherwise complete the rest of this section.

3. Has ground water contamination been delineated to the applicable Ground Water Vapor Screening Level? ..... ☒ Yes ☐ No

4. Was a site specific screening level, modeling or other alternative approach employed for the VI pathway? ..... ☐ Yes ☒ No

5. Identify and locate on a scaled map any buildings/sensitive populations that exist within the following distances from ground water contamination with concentrations above the Vapor Intrusion Ground Water Screening Levels or specific threats (check all that apply):

☐ 30 feet of petroleum free product or dissolved petroleum hydrocarbon contamination in ground water
☐ 100 feet of any non-petroleum free product or any non-petroleum dissolved volatile organic ground water contamination
☒ No buildings exist within the specified distances

6. The vapor intrusion pathway is a concern at or adjacent to the site (if "No," attach justification) ..... ☐ Yes ☒ No

7. Has soil gas sampling of the building(s) been conducted? ☐ Yes ☐ No ☒ N/A
   If "No," or "N/A," proceed to #12

8. Has indoor air sampling been conducted at the identified building(s)? ☐ Yes ☐ No
   If "No," proceed to #12

9 Has indoor air contamination been identified but not suspected to be from the site?
   (if "Yes," attach justification) ☐ Yes ☐ No

10. Indoor air results were above the NJDEP's Rapid Action Levels. ☐ Yes ☐ No

   Provide the date that the laboratory data was available. Date: _____

   Or ☐ Awaiting laboratory data with the expected due date: _____

   If "Yes" to #10 above, follow the IEC Guidance Document at
   http://www.nj.gov/dep/srp/guidance/index.html#iec **for required actions.**

   The IEC engineering system response for control was implemented for all
   identified structures ☐ Yes ☐ No

   Date: _____ NJDEP Case Manager: _____

11. Indoor air sampling was conducted and results were above the NJDEP's Indoor Air Screening
   Levels but at or below the Rapid Action Levels ☐ Yes ☐ No

   Provide the date that the laboratory data was available. Date: _____

   Or ☐ Awaiting laboratory data with the expected due date: _____

   If "Yes" to #11 above, answer the following:

   Has the Vapor Concern (VC) Response Action Form notifying the NJDEP of the exceedances
   been submitted? ☐ Yes ☐ No

   Date: _____

   Has a plan to mitigate and monitor the exposure been submitted? ☐ Yes ☐ No

   Date: _____

   Has the Mitigation Response Action Report been submitted? ☐ Yes ☐ No

   Date: _____

12. Has the vapor intrusion investigation been completed? ☐ Yes ☐ No
   If "No", is the vapor intrusion investigation stepping out as part of the site
   investigation or remedial investigation. (If "No," attach justification) ☐ Yes ☐ No

SECTION F. ECOLOGICAL RECEPTORS

1. Has an Ecological Evaluation (EE) has been conducted? [N.J.A.C. 7:26E-1.16] ☒ Yes ☐ No
   Date conducted: 01/09/2007

2. Do the results of an EE trigger a remedial investigation of ecological receptors? [N.J.A.C. 7:26E-4.8] ☒ Yes ☐ No

3. Has a remedial investigation of ecological receptors been conducted? ☒ Yes ☐ No
   Date conducted: 09/11/2006

4. Provide the following information for any surface water body on or within 200 feet of the site:

Surface Water Body Name	Stream Classification	Antidegradation Designation	Trout Production	Trout Maintenance
Gold Run	FW2-NT	Category 2	☐	☐
			☐	☐
			☐	☐
			☐	☐
			☐	☐
			☐	☐

5. Does the site contain any features regulated by the Land Use Regulation Program (LURP)? (e.g. wetlands, flood hazard area, tidelands, etc.). ☒ Yes ☐ No

   If "Yes," identify the type(s) of features: Freshwater wetlands and 100-year floodplain

6. Have any formal LURP jurisdiction letters or approvals been issued for the site? ☐ Yes ☒ No

   If "Yes," what is the LURP Program Interest (PI) number(s) for the site? _____

7. Have any applications for formal LURP jurisdiction letters or approvals been submitted the NJDEP? ☐ Yes ☒ No

   If "Yes," what is the LURP Program Interest (PI) number(s) for the site? _____

8. Is free product or residual product located within 100 feet from an ecological receptor? ☐ Yes ☒ No

9. Does available data indicate an impact on Ecological receptor(s), Surface water, or Sediment? ☐ Yes ☒ No

   If "Yes,"

   a) Check all that apply:

      ☐ Ecological receptor(s) ☐ Surface water ☐ Sediment

   b) Submit with this evaluation either a technical document that includes contaminant summary information, or a description of the type of contamination, a schedule, and a description of all actions to be taken to mitigate exposure.

Completed forms should be sent to the municipal clerk, designate health department, and:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

Attachment 1
Residential Properties and Recreation Areas Within 200 feet of Site Boundary
Ewing Township Industrial Lands
1445 Parkway Avenue
Ewing Township, New Jersey
PI # 011336
ISRA Case # E97070

Block	Lot	Property Type	Site Address	Town
345	1.01	Residential[1]	1200 Silvia ST	Ewing Twp
365	9	Residential Multi-family Apartments	1460 Parkway Ave	Ewing Twp
375	19	Residental[1]	42 Decou Ave	Ewing Twp
375	20	Recreation Area - Benevolent & Protective Order of Elks #105[2]	1501 Parkway Avenue	Ewing Twp
459	49	Residential	282 Clamer Road	Ewing Twp
459	50	Residential	284 Clamer Road	Ewing Twp
459	51	Residential	286 Clamer Road	Ewing Twp
459	52	Residential	288 Clamer Road	Ewing Twp

Notes:

[1] Zoned as Residential, however upon inspection by field personnel, property is not used as residential.

[2] Benevolent & Protective Order of Elks #105 Special Children's Park, 1501 Parkway Avenue was identified through a review of local tax maps and public records. A small portion of this park is within 200 feet of the Property Boundary; however, a site visit indicated that this park is secured from public use by a locked fence. No public parks and playgrounds were

Tressler, Adam

From: Tressler, Adam
Sent: Thursday, April 28, 2016 12:45 PM
To: srpgis_wrs@dep.state.nj.us
Cc: Tressler, Adam
Subject: 011336, WRS
Attachments: 011336_042816WRS.xls

Name of GIS author Company and mailing address: Haley & Aldrich, Inc.
Name and license number of any LSRP overseeing work: Amy K. Murphy, 586486
Email for LSRP overseeing work: amurphy@haleyaldrich.com
Name of professional performing GIS work: Adam Tressler
Email for Professional performing GIS work:atressler@haleyaldrich.com
Phone Number for Professional performing GIS work:973-294-9051
Program Interest Number for Site: 001336
Name of Site as known to NJDEP: RACER TRUST-EWING INDUSTRIAL LAND
Physical address of Site:1445 Parkway Avenue, Ewing Township
Submission Type Suffix: WRS

Adam Tressler, PhD, MS, MA, CHMM
Senior Staff Scientist

Haley & Aldrich, Inc.
299 Cherry Hill Road | Suite 303
Parsippany, NJ 07054

T: (973) 658.3905
C: (973) 294.9051
F: (973) 658.3955

www.haleyaldrich.com

Attachment 2
Well Search Results
Ewing Township Industrial Land
1445 Parkway Avenue
Ewing Township, New Jersey
PI # 011336
ISRA Case # E97070

Download_Document	Permit_Number	Well_Use	Potentially_Potable	Document	Date (permitted/drilled/sealed)	Physical_Address	County	Municipality	Block	Lot	Location_Method	Easting_X	Northing_Y	Distance_(feet)	Depth (feet)	Capacity (gal/min)	COORD_METHOD	TOP_OPEN_INT	BOT_OPEN_INT	STATIC_LEVEL	STATUS	WELL_SAMPLED?
	2700000030	Domestic	Yes	Record	6/28/1948 0:00	2199 PENNINGTON ROAD	Mercer	Trenton City	259	33	Prop Loc - Hard Copy	412703	520801		196	0					Outside Canvass	
	2700000059	Domestic	Yes	Record	9/20/1948 0:00	7 HINCKLE AVENUE	Mercer	Ewing Twp	239	50	Prop Loc - Hard Copy	411700	522221		110	0					Outside Canvass	
	2700000158	Domestic	Yes	Record	4/21/1950 0:00	NURSERY LANE	Mercer	Hopewell Twp	397	76	Prop Loc - Hard Copy	403401	520833		151	0					Outside Canvass	
	2700000245	Domestic	Yes	Record	7/10/1951 0:00	AIRPORT ROAD	Mercer	Ewing Twp	506	38	Prop Loc - Hard Copy	408522	522231		130	0					Outside Canvass	
	2700000252	Domestic	Yes	Record	8/14/1951 0:00	WEST TRENTON	Mercer	Ewing Twp	423	135	Prop Loc - Hard Copy	400306	522260		25	0					Outside Canvass	
	2700000268	Domestic	Yes	Record	7/15/1951 0:00	524 1/2 HAMILTON AVE.	Mercer	Ewing Twp	365	21	Prop Loc - Hard Copy	406507	522238		85	8					Outside Canvass	
	2700000269	Domestic	Yes	Record	7/14/1952 0:00	HAMILTON AVENUE	Mercer	Ewing Twp	365	21	Prop Loc - Hard Copy	406507	522238		78	0					Outside Canvass	
	2700000270	Domestic	Yes	Record	11/20/1952 0:00	524 HAMILTON AVENUE	Mercer	Ewing Twp	365	21	Prop Loc - Hard Copy	406507	522238		72	0					Outside Canvass	
	2700000273	Domestic	Yes	Record	8/21/1951 0:00	STOUT AVENUE	Mercer	Pennington Boro	368	34	Prop Loc - Hard Copy	408535	526177		88	0					Outside Canvass	
	2700000277	Industrial	Yes	Record	8/27/1951 0:00	968 PARKWAY AVENUE	Mercer	Trenton City	487	73	Prop Loc - Hard Copy	410602	518177		203	0					Outside Canvass	
	2700000278	Domestic	Yes	Record	8/10/1951 0:00	AIRPORT ROAD	Mercer	Ewing Twp	411	27	Prop Loc - Hard Copy	403396	519517		150	0					Outside Canvass	
	2700000311	Domestic	Yes	Record	9/20/1952 0:00	MAIN BLVD.	Mercer	Ewing Twp	367	17	Prop Loc - Hard Copy	410619	523540		63	0					Outside Canvass	
	2700000433	Domestic	Yes	Record	3/10/1952 0:00	CARLTON AVE	Mercer	Ewing Twp	233	15	Prop Loc - Dig Image	411108	522897	5416	70	0					Outside Canvass	
	2700000458	Domestic	Yes	Record	3/6/1952 0:00	20 LEXINGTON AVE	Mercer	Ewing Twp	320	97	Prop Loc - Hard Copy	410597	516760		65	0					Outside Canvass	
	2700000477	Domestic	Yes	Record	5/10/1952 0:00	133 HAWORTH AVE	Mercer	Ewing Twp	367	17	Prop Loc - Hard Copy	410619	523540		71	0					Outside Canvass	
	2700000483	Domestic	Yes	Record	3/26/1952 0:00	UNKNOWN	Mercer	Pennington Boro	368	28	Prop Loc - Hard Copy	409620	526174		90	0					Outside Canvass	
	2700000498	Domestic	Yes	Record	4/24/1952 0:00	MAIN BLVD	Mercer	Ewing Twp	367	50	Prop Loc - Hard Copy	409616	524858		68	0					Outside Canvass	
	2700000519	Domestic	Yes	Record	7/3/1952 0:00	SOMERSET RD	Mercer	Ewing Twp	343	1	Prop Loc - Hard Copy	405417	520825		65	0					Outside Canvass	
	2700000520	Domestic	Yes	Record	6/5/1952 0:00	BEAR TAVERN RD	Mercer	Ewing Twp	339	1	Prop Loc - Hard Copy	406488	516774		81	0					Outside Canvass	
	2700000531	Domestic	Yes	Record	6/3/1952 0:00	LOWER FERRY RD	Mercer	Ewing Twp	423	164	Prop Loc - Hard Copy	402398	522253		80	0					Outside Canvass	
	2700000542	Domestic	Yes	Record	6/10/1952 0:00	UNKNOWN	Mercer	Ewing Twp	504	3	Prop Loc - Hard Copy	409603	520811		73	0					Outside Canvass	
	2700000559	Domestic	Yes	Record	7/7/1952 0:00	24 MAIN BLVD	Mercer	Ewing Twp	239	50	Prop Loc - Hard Copy	411700	522221		80	0					Outside Canvass	
	2700000570	Domestic	Yes	Record	7/25/1952 0:00	BEAR TAVERN RD	Mercer	Ewing Twp	414	1	Prop Loc - Hard Copy	405398	515463		80	0					Outside Canvass	
	2700000577	Domestic	Yes	Record	8/10/1952 0:00	MAIN BLVD	Mercer	Ewing Twp	231	28	Prop Loc - Hard Copy	411704	523536		70	0					Outside Canvass	
	2700000606	Domestic	Yes	Record	10/14/1952 0:00	WILDMURTHA RD	Mercer	Ewing Twp	422.01	42	Prop Loc - Hard Copy	400295	519528		95	0					Outside Canvass	
	2700000607	Domestic	Yes	Record	8/18/1952 0:00	25 LEXINGTON AVE	Mercer	Ewing Twp	320	97	Prop Loc - Hard Copy	410597	516760		60	0					Outside Canvass	
	2700000662	Domestic	Yes	Record	10/14/1952 0:00	MAIN BLVD	Mercer	Ewing Twp	231	28	Prop Loc - Hard Copy	411704	523536		60	0					Outside Canvass	
	2700000686	Domestic	Yes	Record	11/10/1952 0:00	BROAD ST	Mercer	Ewing Twp	243	1	Prop Loc - Hard Copy	412708	522218		75	0					Outside Canvass	
	2700000693	Domestic	Yes	Record	12/1/1952 0:00	LAFAYETTE AVE	Mercer	Ewing Twp	411	11	Prop Loc - Hard Copy	401303	519525		70	0					Outside Canvass	
	2700000723	Domestic	Yes	Record	3/10/1953 0:00	CARLTON AVE	Mercer	Ewing Twp	367	50	Prop Loc - Hard Copy	409616	524858		75	0					Outside Canvass	
	2700000724	Domestic	Yes	Record	1/13/1953 0:00	CARLTON AVE	Mercer	Ewing Twp	367	50	Prop Loc - Hard Copy	409616	524858		70	0					Outside Canvass	
	2700000743	Domestic	Yes	Record	7/6/1953 0:00	CHAUNCY AVE	Mercer	Ewing Twp	374	1	Prop Loc - Hard Copy	405431	524873		722	0					Outside Canvass	
	2700000748	Domestic	Yes	Record	2/27/1953 0:00	MAIN BLVD	Mercer	Ewing Twp	239	50	Prop Loc - Hard Copy	411700	522221		69	0					Outside Canvass	
	2700000749	Domestic	Yes	Record	3/2/1953 0:00	MAIN BLVD	Mercer	Ewing Twp	506	38	Prop Loc - Hard Copy	408522	522231		53	0					Outside Canvass	
	2700000750	Domestic	Yes	Record	2/10/1953 0:00	MAIN BLVD	Mercer	Ewing Twp	506	38	Prop Loc - Hard Copy	408522	522231		74	0					Outside Canvass	
	2700000808	Domestic	Yes	Record	4/30/1953 0:00	PIPER DR	Mercer	Ewing Twp	339	1	Prop Loc - Hard Copy	406488	516774		83	0					Outside Canvass	
	2700000824	Domestic	Yes	Record	5/6/1953 0:00	POLAND AVE	Mercer	Ewing Twp	364	33	Prop Loc - Hard Copy	408517	520815		60	0					Outside Canvass	
	2700000838	Domestic	Yes	Record	5/9/1953 0:00	EWING VILLERRD	Mercer	Ewing Twp	367	50	Prop Loc - Hard Copy	409616	524858		65	0					Outside Canvass	
	2700000841	Domestic	Yes	Record	6/17/1953 0:00	DELAWAR AVE	Mercer	Ewing Twp	373	7	Prop Loc - Hard Copy	404428	526192		158	0					Outside Canvass	
	2700000848	Domestic	Yes	Record	6/2/1953 0:00	RIVER RD	Mercer	Ewing Twp	381	233	Prop Loc - Hard Copy	404409	520829		130	0					Outside Canvass	
	2700000901	Domestic	Yes	Record	7/9/1953 0:00	149 5TH ST	Mercer	Ewing Twp	422.01	42	Prop Loc - Hard Copy	400295	519528		80	0					Outside Canvass	
	2700000902	Domestic	Yes	Record	7/30/1953 0:00	HAMPTON RD	Mercer	Ewing Twp	506	38	Prop Loc - Hard Copy	408522	522231		80	0					Outside Canvass	
	2700000915	Domestic	Yes	Record	7/16/1953 0:00	UNKNOWN	Mercer	Pennington Boro	367	6	Prop Loc - Hard Copy	408527	523547		100	0					Outside Canvass	
	2700000966	Domestic	Yes	Record	4/22/1953 0:00	CARLTON AVE	Mercer	Ewing Twp	367	66	Prop Loc - Hard Copy	409612	523543		55	0					Outside Canvass	
	2700000970	Domestic	Yes	Record	8/29/1953 0:00	ENGLESIDE AVE	Mercer	Pennington Boro	368	28	Prop Loc - Hard Copy	409620	526174		100	0					Outside Canvass	
	2700000998	Domestic	Yes	Record	10/16/1953 0:00	528 LAFAYETTE ST	Mercer	Ewing Twp	423	43	Prop Loc - Hard Copy	401308	520840		94	0					Outside Canvass	
	2700001003	Domestic	Yes	Record	10/3/1953 0:00	WILBURTHA ROAD	Mercer	Ewing Twp	459	4	Prop Loc - Hard Copy	407501	518187		78	0					Outside Canvass	
	2700001041	Domestic	Yes	Record	9/7/1954 0:00	21 HARNED AVENUE	Mercer	Ewing Twp	506	38	Prop Loc - Hard Copy	408522	522231		62	0					Outside Canvass	
	2700001048	Domestic	Yes	Record	11/9/1953 0:00	SUNSET AVENUE	Mercer	Ewing Twp	423	164	Prop Loc - Hard Copy	402398	522253		82	0					Outside Canvass	
	2700001071	Domestic	Yes	Record	11/30/1953 0:00	RAVEN ROAD	Mercer	Ewing Twp	341.01	5	Prop Loc - Hard Copy	405412	519510		110	0					Outside Canvass	
	2700001105	Domestic	Yes	Record	2/7/1954 0:00	455 WEST STATE STREET	Mercer	Ewing Twp	322	1	Prop Loc - Hard Copy	408508	518184		107	0					Outside Canvass	
	2700001131	Domestic	Yes	Record	4/8/1954 0:00	40 SUNSET AVENUE	Mercer	Ewing Twp	381	233	Prop Loc - Hard Copy	404409	520829		76	0					Outside Canvass	
	2700001140	Domestic	Yes	Record	2/18/1954	PENNINGTON RD	Mercer	Ewing Twp	215	32	Prop Loc - Dig Image	413175.0	522891.0	5567	80	0					Outside Canvass	
	2700001157	Domestic	Yes	Record	4/24/1954 0:00	PARKWAY AVENUE	Mercer	Trenton City	345	140.02	Prop Loc - Hard Copy	408513	519499		500	0					Outside Canvass	
	2700001158	Domestic	Yes	Record	4/24/1954 0:00	PARKWAY AVENUE	Mercer	Trenton City	345	140.02	Prop Loc - Hard Copy	408513	519499		300	0					Outside Canvass	
	2700001159	Domestic	Yes	Record	5/8/1954 0:00	PARKWAY AVENUE	Mercer	Trenton City	345	140.02	Prop Loc - Hard Copy	408513	519499		200	0					Outside Canvass	
	2700001186	Domestic	Yes	Record	7/7/1954 0:00	1632 11ST	Mercer	Ewing Twp	239	50	Prop Loc - Hard Copy	411700	522221		84	0					Outside Canvass	
	2700001188	Domestic	Yes	Record	4/16/1954 0:00	BRENWALL AVENUE	Mercer	Ewing Twp	243	1	Prop Loc - Hard Copy	412708	522218		75	0					Outside Canvass	
	2700001208	Non-Public	Yes	Record	5/24/1954 0:00	PARKWAY AVENUE	Mercer	Trenton City	345	140.02	Prop Loc - Hard Copy	408513	519499		200	0					Outside Canvass	
	2700001209	Non-Public	Yes	Permit	4/29/1954 0:00	PARKWAY AVENUE	Mercer	Trenton City	345	140.02	Prop Loc - Hard Copy	408513	519499		200	250					Outside Canvass	
	2700001210	Domestic	Yes	Permit	5/3/1954 0:00		Mercer	Pennington Boro	367	17	Prop Loc - Hard Copy	410619	523540		150	10					Outside Canvass	
	2700001213	Domestic	Yes	Record	6/10/1954 0:00	PERRY DRIVE	Mercer	Ewing Twp	413	1	Prop Loc - Hard Copy	404390	515466		80	0					Outside Canvass	
	2700001240	Domestic	Yes	Record	12/1/1954 0:00	BRENWAL AVE	Mercer	Ewing Twp	259	33	Prop Loc - Hard Copy	412703	520801		52	0					Outside Canvass	
	2700001247	Domestic	Yes	Record	6/8/1954 0:00	WALKER AVE	Mercer	Ewing Twp	411	27	Prop Loc - Hard Copy	403396	519517		70	0					Outside Canvass	
	2700001264	Domestic	Yes	Record	8/17/1954 0:00	PENNINGTON WASHINGTON RD	Mercer	Hopewell Twp	373	7	Prop Loc - Hard Copy	403420	526195		195	0					Outside Canvass	
	2700001277	Domestic	Yes	Record	7/1/1954 0:00	HILBURTH RD	Mercer	Ewing Twp	423	43	Prop Loc - Hard Copy	401308	520840		50	0					Outside Canvass	
	2700001298	Domestic	Yes	Record	8/25/1954 0:00	RAVINE RD	Mercer	Ewing Twp	343	1	Prop Loc - Hard Copy	406502	520822		85	0					Outside Canvass	
	2700001345	Domestic	Yes	Record	7/13/1955 0:00	7 WAKEFIELD	Mercer	Ewing Twp	339	1	Prop Loc - Hard Copy	406488	516774		60	0					Outside Canvass	
	2700001350	Domestic	Yes	Record	9/20/1954 0:00	BROAD AVE	Mercer	Ewing Twp	373	12	Prop Loc - Hard Copy	403406	522249		65	0					Outside Canvass	
	2700001357	Domestic	Yes	Record	11/16/1954 0:00	PENN WASH CROSS RD	Mercer	Pennington Boro	373	7	Prop Loc - Hard Copy	403420	526195		145	0					Outside Canvass	
	2700001368	Domestic	Yes	Record	9/13/1954 0:00	SOMERSET AVE	Mercer	Ewing Twp	381	233	Prop Loc - Hard Copy	404409	520829		72	0					Outside Canvass	
	2700001376	Domestic	Yes	Record	9/1/1954 0:00	78 MAIN BLVD	Mercer	Ewing Twp	367	17	Prop Loc - Hard Copy	410619	523540		63	0					Outside Canvass	
	2700001397	Domestic	Yes	Record	10/11/1954 0:00	HAWTHORNE	Mercer	Ewing Twp	341.01	5	Prop Loc - Hard Copy	405412	519510		85	0					Outside Canvass	
	2700001443	Domestic	Yes	Record	12/9/1954 0:00	SUNSET AVE	Mercer	Ewing Twp	423	164	Prop Loc - Hard Copy	402398	522253		80	0					Outside Canvass	
	2700001445	Domestic	Yes	Record	1/28/1955 0:00	ENGLESIDE AVE	Mercer	Pennington Boro	367	50	Prop Loc - Hard Copy	409616	524858		110	0					Outside Canvass	
	2700001473	Domestic	Yes	Record	12/10/1954 0:00	PENNINGTON ROAD	Mercer	Ewing Twp	341	1	Prop Loc - Hard Copy	405402	516778		125	6					Outside Canvass	
	2700001490	Domestic	Yes	Record	6/9/1955 0:00	PENNINGTON RD	Mercer	Ewing Twp	341	1	Prop Loc - Hard Copy	404394	516782		70	0					Outside Canvass	
	2700001492	Domestic	Yes	Record	1/7/1955 0:00	JACOB CREEK RD	Mercer	Ewing Twp	413	1	Prop Loc - Hard Copy	403387	516785		100	0					Outside Canvass	
	2700001513	Domestic	Yes	Record	1/27/1955 0:00	LOWER FERRY ROAD	Mercer	Ewing Twp	364.01	40	Prop Loc - Hard Copy	410075	522934		86	0					Outside Canvass	
	2700001521	Domestic	Yes	Record	2/1/1955 0:00	526 LAFAYETTE AVENUE	Mercer	Ewing Twp	411	11	Prop Loc - Hard Copy	401766	518916		72	6					Outside Canvass	
	2700001534	Domestic	Yes	Record	3/6/1955 0:00	RAVINE ROAD	Mercer	Ewing Twp	491	47	Prop Loc - Hard Copy	406960	518898		85	0					Outside Canvass	
	2700001535	Domestic	Yes	Record	2/28/1955 0:00	KING STREET	Mercer	Ewing Twp	343	26	Prop Loc - Hard Copy	406965	520213		60	0					Outside Canvass	
	2700001539	Domestic	Yes	Record	2/21/1955 0:00	JACOB CREEK ROAD	Mercer	Ewing Twp	343	26	Prop Loc - Hard Copy	406965	520213		125	7					Outside Canvass	
	2700001546	Domestic	Yes	Permit	3/3/1955 0:00		Mercer	Ewing Twp	233	24	Prop Loc - Hard Copy	412168	522928		70	10					Outside Canvass	
	2700001563	Domestic	Yes	Record	4/1/1955 0:00	RIVER ROAD	Mercer	Ewing Twp	389	24	Prop Loc - Hard Copy	403864	520224		120	0					Outside Canvass	
	2700001585	Domestic	Yes	Record	4/4/1955 0:00	BEAR TARVERN ROAD	Mercer	Ewing Twp	414.01	19	Prop Loc - Hard Copy	405943	516169		140	0					Outside Canvass	
	2700001628	Domestic	Yes	Record	5/17/1955 0:00	BEAR TAVERN ROAD	Mercer	Ewing Twp	341	1	Prop Loc - Hard Copy	404394	516782		205	0					Outside Canvass	
	2700001640	Domestic	Yes	Record	5/31/1955 0:00	BEAR TRAVERN ROAD	Mercer	Ewing Twp	414	1	Prop Loc - Hard Copy	405398	515463		200	0					Outside Canvass	
	2700001663	Domestic	Yes	Record	10/3/1955 0:00	DAWES AVENUE	Mercer	Ewing Twp	411	11	Prop Loc - Hard Copy	401303	519525		60	0					Outside Canvass	
	2700001664	Domestic	Yes	Record	6/20/1955 0:00	824 RIVER ROAD	Mercer	Ewing Twp	339	1	Prop Loc - Hard Copy	406488	516774		100	0					Outside Canvass	
	2700001678	Domestic	Yes	Record	6/1/1955 0:00	FEDERAL CITY ROAD	Mercer	Ewing Twp	414	2	Prop Loc - Hard Copy	406483	515459		72	0					Outside Canvass	
	2700001698	Domestic	Yes	Record	6/4/1955 0:00	WESTERN AVE	Mercer	Ewing Twp	481	109	Prop Loc - Hard Copy	411691	519489		87	0					Outside Canvass	
	2700001712	Domestic	Yes	Permit	6/3/1955 0:00		Mercer	Ewing Twp	262	43	Prop Loc - Hard Copy	410066	520203		75	10					Outside Canvass	
	2700001716	Domestic	Yes	Record	7/20/1955 0:00	TITUSVILLE	Mercer	Hopewell Twp	373	7	Prop Loc - Hard Copy	403888	527003		270	0					Outside Canvass	
	2700001765	Domestic	Yes	Record	7/22/1955 0:00	UNKNOWN	Mercer	Hopewell Twp	364	14	Prop Loc - Hard Copy	409058	520206		92	0					Outside Canvass	
	2700001768	Domestic	Yes	Record	8/9/1955 0:00	DIVERTY ROAD	Mercer	Hopewell Twp	233	15	Prop Loc - Hard Copy	411082	522931		65	0					Outside Canvass	
	2700001790	Domestic	Yes	Record	8/8/1955 0:00	UPPER FERRY ROAD	Mercer	Ewing Twp	367	1	Prop Loc - Hard Copy	409072	524253		105	0					Outside Canvass	
	2700001791	Domestic	Yes	Record	8/9/1955 0:00	MAIN BOULEVARD	Mercer	Ewing Twp	233	24	Prop Loc - Hard Copy	412168	522928		60	0					Outside Canvass	
	2700001799	Domestic	Yes	Permit	8/4/1955		Mercer	Ewing Twp	215	32	Prop Loc - Hard Copy	413175.0	522924.0		65	10					Outside Canvass	
	2700001820	Domestic	Yes	Permit	8/15/1955 0:00		Mercer	Ewing Twp	379	328	Prop Loc - Hard Copy	403869	521539		90	5					Outside Canvass	
	2700001827	Domestic	Yes	Record	11/30/1955 0:00	WILBURTHA ROAD	Mercer	Ewing Twp	411	11	Prop Loc - Hard Copy	401766	518916		50	0					Outside Canvass	
	2700001835	Domestic	Yes	Record	8/31/1955 0:00	BROAD AVENUE	Mercer	Ewing Twp	484	171	Prop Loc - Hard Copy	412154	518880		55	0					Outside Canvass	
	2700001880	Domestic	Yes	Permit	10/24/1955 0:00		Mercer	Ewing Twp	245	13	Prop Loc - Hard Copy	412163	521511		70	10					Outside Canvass	
	2700001918	Domestic	Yes	Record	12/6/1955 0:00	HARDING AVE.	Mercer	Trenton City	469	138	Prop Loc - Hard Copy	412159	520196		79	0					Outside Canvass	
	2700001948	Domestic	Yes	Record	1/28/1956 0:00	LAWRENCEVILLE RD.	Mercer	Pennington Boro	367	50	Prop Loc - Hard Copy	410624	524855		88	0					Outside Canvass	
	2700001952	Domestic	Yes	Record	2/17/1956 0:00	MT. VIEW RD.	Mercer	Ewing Twp	413	1	Prop Loc - Hard Copy	404390	515466		80	0					Outside Canvass	
	2700001972	Domestic	Yes	Record	3/20/1956 0:00	PERRY DRIVE	Mercer	Ewing Twp	397	76	Prop Loc - Hard Copy	403401	520833		87	500					Outside Canvass	
	2700001974	Domestic	Yes	Permit	2/24/1956 0:00		Mercer	Ewing Twp	231	28	Prop Loc - Hard Copy	411704	523536		75	10					Outside Canvass	
	2700001975	Domestic	Yes	Permit	2/24/1956 0:00		Mercer	Ewing Twp	364	33	Prop Loc - Hard Copy	408517	520815		90	10					Outside Canvass	
	2700002026	Domestic	Yes	Permit	4/16/1956 0:00		Mercer	Ewing Twp	397	76	Prop Loc - Hard Copy	403401	520833		100	10					Outside Canvass	
	2700002026	Domestic	Yes	Record	4/30/1956 0:00	CREST AVE.	Mercer	Ewing Twp	397	76	Prop Loc - Hard Copy	403401	520833		80	0					Outside Canvass	
	2700002045	Domestic	Yes	Record	5/19/1956 0:00	UPPER FERRY RD.	Mercer	Ewing Twp	423	135	Prop Loc - Hard Copy	401313	522257		95	0					Outside Canvass	
	2700002053	Domestic	Yes	Permit	5/14/1956 0:00		Mercer	Ewing Twp	506	38	Prop Loc - Hard Copy	408522	522231		70	10					Outside Canvass	
	2700002054	Domestic	Yes	Record	6/1/1956 0:00	BULL RUN RD.	Mercer	Ewing Twp	506	38	Prop Loc - Hard Copy	406488	516774		70	0					Outside Canvass	
	2700002097	Domestic	Yes	Record	6/30/1956 0:00	POLAND AVE.	Mercer	Ewing Twp	345	140.02	Prop Loc - Hard Copy	408513	519499		100	0					Outside Canvass	
	2700002118	Domestic	Yes	Record	7/25/1956 0:00	SCOTCH ROAD	Mercer	Ewing Twp	341	1	Prop Loc - Hard Copy	405407	518195		80	6					Outside Canvass	
	2700002128	Domestic	Yes	Record	7/23/1956 0:00	SUNSET AVENUE	Mercer	Ewing Twp	423	164	Prop Loc - Hard Copy	402398	522253		80	0					Outside Canvass	

	2700002156	Domestic	Yes	Record	8/18/1956 0:00	CENTRAL AVENUE	Mercer	Trenton City	256	18	Prop Loc - Hard Copy	412699	519486		80	0					Outside Canvass	
	2700002195	Domestic	Yes	Record	9/15/1956 0:00	BUTTON WOOD DRIVE	Mercer	Ewing Twp	341.01	5	Prop Loc - Hard Copy	405412	519510		60	0					Outside Canvass	
	2700002200	Domestic	Yes	Record	9/25/1956 0:00	GREEN LANE	Mercer	Ewing Twp	342	1	Prop Loc - Hard Copy	404404	519514		90	0					Outside Canvass	
	2700002209	Domestic	Yes	Record	10/9/1956 0:00	CRESTMONT AVE	Mercer	Ewing Twp	342	1	Prop Loc - Hard Copy	404404	519514		80	0					Outside Canvass	
	2700002210	Domestic	Yes	Record	10/2/1956 0:00	HILLMAN AVE	Mercer	Ewing Twp	341.01	5	Prop Loc - Hard Copy	405412	519510		90	0					Outside Canvass	
	2700002220	Domestic	Yes	Record	10/15/1956 0:00	17 GARTH AVE	Mercer	Ewing Twp	343	1	Prop Loc - Hard Copy	405417	520825		85	0					Outside Canvass	
	2700002221	Domestic	Yes	Record	10/9/1956 0:00	33 BRENWELL AVE	Mercer	Ewing Twp	342	1	Prop Loc - Hard Copy	404404	519514		70	5					Outside Canvass	
	2700002228	Domestic	Yes	Record	10/18/1956 0:00	PENNINGTON ROAD	Mercer	Ewing Twp	381	233	Prop Loc - Hard Copy	404409	520829		90	6					Outside Canvass	
	2700002229	Domestic	Yes	Record	10/16/1956 0:00	149 GREEN LANE	Mercer	Ewing Twp	341	1	Prop Loc - Hard Copy	405407	518195		80	0					Outside Canvass	
	2700002230	Domestic	Yes	Record	11/19/1956 0:00	EGGERT CROSSING ROAD	Mercer	Ewing Twp	414	2	Prop Loc - Hard Copy	406483	515459		80	0					Outside Canvass	
	2700002232	Domestic	Yes	Record	10/19/1956 0:00	ALLINSON AVE	Mercer	Ewing Twp	343	1	Prop Loc - Hard Copy	406502	520822		90	0					Outside Canvass	
	2700002236	Domestic	Yes	Record	10/23/1956 0:00	105 ALLINSON AVE	Mercer	Ewing Twp	343	1	Prop Loc - Hard Copy	406502	520822		90	0					Outside Canvass	
	2700002243	Domestic	Yes	Record	11/10/1956 0:00	5 ARDSLEY AVE	Mercer	Ewing Twp	342.01	1	Prop Loc - Hard Copy	407505	519503		91	0					Outside Canvass	
	2700002246	Domestic	Yes	Record	11/9/1956 0:00	14 SCUDDER ROAD	Mercer	Ewing Twp	341.01	5	Prop Loc - Hard Copy	405412	519510		126	0					Outside Canvass	
	2700002258	Domestic	Yes	Record	11/15/1956 0:00	PARKSIDE AVE	Mercer	Ewing Twp	422.01	42	Prop Loc - Hard Copy	400295	519528		100	5					Outside Canvass	
	2700002268	Domestic	Yes	Record	12/11/1956 0:00	BEAR TARVEN ROAD	Mercer	Ewing Twp	339	1	Prop Loc - Hard Copy	406488	516774		115	0					Outside Canvass	
	2700002269	Domestic	Yes	Record	12/21/1956 0:00	BEAR TARVEN ROAD	Mercer	Ewing Twp	341	1	Prop Loc - Hard Copy	406493	518191		110	0					Outside Canvass	
	2700002287	Domestic	Yes	Record	1/4/1956 0:00	WEST TRENTON	Mercer	Ewing Twp	423	135	Prop Loc - Hard Copy	401313	522257		80	0					Outside Canvass	
	2700002288	Domestic	Yes	Record	1/31/1957 0:00	TRENTON	Mercer	Trenton City	36302	1	Prop Loc - Hard Copy	407491	515455		402	0					Outside Canvass	
	2700002297	Domestic	Yes	Record	3/4/1957 0:00	PENNINGTON AVE	Mercer	Ewing Twp	343	1	Prop Loc - Hard Copy	405417	520825		80	0					Outside Canvass	
	2700002298	Domestic	Yes	Record	1/30/1957 0:00	MT. VIEW ROAD	Mercer	Ewing Twp	414	1	Prop Loc - Hard Copy	405398	515463		110	0					Outside Canvass	
	2700002311	Domestic	Yes	Record	1/25/1957 0:00	LOUISIANA AVE	Mercer	Ewing Twp	343	1	Prop Loc - Hard Copy	405417	520825		60	5					Outside Canvass	
	2700002333	Domestic	Yes	Record	2/25/1957 0:00	UPPER FERRY RD	Mercer	Ewing Twp	367	50	Prop Loc - Hard Copy	409616	524858		74	0					Outside Canvass	
	2700002349	Domestic	Yes	Permit	3/6/1957 0:00		Mercer	Ewing Twp	373	9	Prop Loc - Hard Copy	406520	526184		100	5					Outside Canvass	
	2700002360	Domestic	Yes	Record	3/30/1957 0:00	RIVER RD	Mercer	Ewing Twp	343	1	Prop Loc - Hard Copy	406502	520822		152	0					Outside Canvass	
	2700002373	Domestic	Yes	Record	4/29/1957 0:00	CHESNEY AVE	Mercer	Ewing Twp	343	1	Prop Loc - Hard Copy	406502	520822		89	0					Outside Canvass	
	2700002409	Domestic	Yes	Record	6/18/1957 0:00	BEAR TAVERN ROAD	Mercer	Ewing Twp	341	1	Prop Loc - Hard Copy	405407	518195		168	0					Outside Canvass	
	2700002423	Domestic	Yes	Record	5/20/1957 0:00	BROAD AVE	Mercer	Ewing Twp	411	11	Prop Loc - Hard Copy	401303	519525		70	0					Outside Canvass	
	2700002438	Domestic	Yes	Record	6/22/1957 0:00	RIVER RD	Mercer	Ewing Twp	373	5	Prop Loc - Hard Copy	403416	524880		197	0					Outside Canvass	
	2700002446	Domestic	Yes	Record	6/17/1957 0:00	BULL RUN RD.	Mercer	Ewing Twp	413	1	Prop Loc - Hard Copy	403387	516785		80	0					Outside Canvass	
	2700002456	Domestic	Yes	Record	7/3/1957 0:00	IRVIN ST	Mercer	Ewing Twp	373	12	Prop Loc - Hard Copy	403406	522249		71	5					Outside Canvass	
	2700002458	Domestic	Yes	Record	10/28/1957 0:00	UNKNOWN	Mercer	Ewing Twp	343	1	Prop Loc - Hard Copy	405417	520825		70	0					Outside Canvass	
	2700002470	Domestic	Yes	Record	7/30/1957 0:00	CLOVER HILL TERRACE	Mercer	Ewing Twp	342	1	Prop Loc - Hard Copy	404404	519514		100	8					Outside Canvass	
	2700002483	Domestic	Yes	Record	5/27/1957 0:00	UNKNOWN	Mercer	Ewing Twp	459	4	Prop Loc - Hard Copy	407501	518187		65	0					Outside Canvass	
	2700002484	Domestic	Yes	Record	9/17/1957 0:00	UNKNOWN	Mercer	Ewing Twp	341	1	Prop Loc - Hard Copy	406493	518191		75	0					Outside Canvass	
	2700002485	Domestic	Yes	Record	9/19/1957 0:00	UNKNOWN	Mercer	Ewing Twp	342.01	1	Prop Loc - Hard Copy	407505	519503		75	0					Outside Canvass	
	2700002497	Domestic	Yes	Record	8/22/1957 0:00	BEAR TAVERN RD	Mercer	Ewing Twp	414	2	Prop Loc - Hard Copy	406483	515459		63	0					Outside Canvass	
	2700002518	Domestic	Yes	Record	8/14/1957 0:00	CRESCENT AVE	Mercer	Ewing Twp	459	55	Prop Loc - Hard Copy	406497	519506		90	0					Outside Canvass	
	2700002521	Domestic	Yes	Record	8/27/1957 0:00	Unknown	Mercer	Ewing Twp	342	1	Prop Loc - Hard Copy	404404	519514		60	0					Outside Canvass	
	2700002525	Domestic	Yes	Record	8/26/1957 0:00	Bull Run Road	Mercer	Ewing Twp	413	1	Prop Loc - Hard Copy	404390	515466		80	6					Outside Canvass	
	2700002534	Domestic	Yes	Record	8/23/1957 0:00	NO DATA	Mercer	Ewing Twp	320	9	Prop Loc - Hard Copy	409594	518180		173	0					Outside Canvass	
	2700002545	Domestic	Yes	Record	9/5/1957 0:00	11 HILLMAN AVENUE	Mercer	Ewing Twp	320	97	Prop Loc - Hard Copy	410597	516760		84	0					Outside Canvass	
	2700002551	Domestic	Yes	Record	9/9/1957 0:00	CARLTON AVENUE	Mercer	Ewing Twp	367	17	Prop Loc - Hard Copy	410619	523540		56	0					Outside Canvass	
	2700002564	Domestic	Yes	Record	9/25/1957 0:00	NO DATA	Mercer	Ewing Twp	341	1	Prop Loc - Hard Copy	405407	518195		100	0					Outside Canvass	
	2700002574	Domestic	Yes	Permit	9/20/1957 0:00		Mercer	Ewing Twp	367	50	Prop Loc - Hard Copy	409616	524858		80	10					Outside Canvass	
	2700002579	Domestic	Yes	Record	9/25/1957 0:00	GARTH AVENUE	Mercer	Ewing Twp	341.01	5	Prop Loc - Hard Copy	405412	519510		102	5					Outside Canvass	
	2700002581	Industrial	Yes	Record	10/5/1957 0:00	OLDEN AVENUE EXTENSION	Mercer	Ewing Twp	463	22	Prop Loc - Hard Copy	410610	520808		200	60					Outside Canvass	
	2700002603	Domestic	Yes	Record	10/8/1957 0:00	97 GREEN LANE	Mercer	Ewing Twp	343	1	Prop Loc - Hard Copy	406502	520822		85	7					Outside Canvass	
	2700002630	Domestic	Yes	Record	10/29/1957 0:00	EWINGVILLE RD.	Mercer	Ewing Twp	423	57	Prop Loc - Hard Copy	400300	520844		75	0					Outside Canvass	
	2700002633	Domestic	Yes	Record	11/1/1957 0:00	OHIO AVE.	Mercer	Lawrence Twp	375	20	Prop Loc - Hard Copy	405422	522242		80	0					Outside Canvass	
	2700002644	Domestic	Yes	Record	11/6/1957 0:00	191 CRESCENT ST.	Mercer	Ewing Twp	341.01	5	Prop Loc - Hard Copy	405412	519510		82	6					Outside Canvass	
	2700002658	Domestic	Yes	Record	12/30/1957 0:00	FRAN AVE	Mercer	Ewing Twp	413	1	Prop Loc - Hard Copy	404390	515466		145	0					Outside Canvass	
	2700002659	Domestic	Yes	Record	2/20/1958 0:00	PENRODE AVE	Mercer	Ewing Twp	341.01	5	Prop Loc - Hard Copy	405412	519510		55	0					Outside Canvass	
	2700002707	Domestic	Yes	Record	1/20/1958 0:00	FLORENCE AVE	Mercer	Ewing Twp	341.01	5	Prop Loc - Hard Copy	405412	519510		73	0					Outside Canvass	
	2700002741	Domestic	Yes	Record	3/5/1958 0:00	UPLAND AVE	Mercer	Ewing Twp	343	1	Prop Loc - Hard Copy	405417	520825		90	0					Outside Canvass	
	2700002749	Domestic	Yes	Record	3/6/1958 0:00	NO DATA	Mercer	Ewing Twp	411	27	Prop Loc - Hard Copy	403396	519517		60	0					Outside Canvass	
	2700002751	Domestic	Yes	Record	3/7/1958 0:00	RIVER RD	Mercer	Ewing Twp	423	135	Prop Loc - Hard Copy	401313	522257		95	0					Outside Canvass	
	2700002753	Domestic	Yes	Permit	3/12/1958 0:00		Mercer	Ewing Twp	463	22	Prop Loc - Hard Copy	410610	520808		80	5					Outside Canvass	
	2700002754	Domestic	Yes	Permit	3/12/1958 0:00		Mercer	Ewing Twp	367	66	Prop Loc - Hard Copy	409612	523543		80	5					Outside Canvass	
	2700002770	Domestic	Yes	Record	5/1/1958 0:00	LOUISIANA AVE	Mercer	Ewing Twp	341.01	5	Prop Loc - Hard Copy	405412	519510		70	0					Outside Canvass	
	2700002771	Domestic	Yes	Record	4/28/1958 0:00	SCUDDERS AVE	Mercer	Ewing Twp	343	1	Prop Loc - Hard Copy	405417	520825		137	0					Outside Canvass	
	2700002790	Domestic	Yes	Record	5/16/1958 0:00	STATE POLICE RD	Mercer	Ewing Twp	422.01	42	Prop Loc - Hard Copy	400295	519528		135	0					Outside Canvass	
	2700002850	Domestic	Yes	Record	6/18/1958 0:00	BULL RUN ROAD	Mercer	Ewing Twp	341.01	3	Prop Loc - Hard Copy	404399	518198		97	0					Outside Canvass	
	2700002868	Domestic	Yes	Record	7/14/1958 0:00	BULL RUN ROAD	Mercer	Ewing Twp	342	1	Prop Loc - Hard Copy	404404	519514		97	7					Outside Canvass	
	2700002869	Domestic	Yes	Record	9/8/1958 0:00	BULL RUN ROAD	Mercer	Ewing Twp	342	1	Prop Loc - Hard Copy	404404	519514		83	7					Outside Canvass	
	2700002913	Domestic	Yes	Record	9/22/1958 0:00	FEDERAL CITY ROAD	Mercer	Ewing Twp	411	27	Prop Loc - Hard Copy	403396	519517		90	0					Outside Canvass	
	2700002923	Domestic	Yes	Record	9/27/1958 0:00	UNKNOWN	Mercer	Ewing Twp	344	11	Prop Loc - Hard Copy	407510	520818		61	0					Outside Canvass	
	2700002927	Domestic	Yes	Record	11/28/1958 0:00	KING STREET	Mercer	Ewing Twp	344	11	Prop Loc - Hard Copy	407510	520818		90	0					Outside Canvass	
	2700002928	Domestic	Yes	Record	9/23/1958 0:00	CENTRAL AVE.	Mercer	Ewing Twp	342	1	Prop Loc - Hard Copy	404404	519514		65	0					Outside Canvass	
	2700002935	Domestic	Yes	Record	12/16/1958 0:00	MALAGA AVE.	Mercer	West Windsor Twp	413	1	Prop Loc - Hard Copy	403387	516785		87	0					Outside Canvass	
	2700002956	Domestic	Yes	Permit	10/20/1958 0:00		Mercer	Ewing Twp	373	12	Prop Loc - Hard Copy	403406	522249		100	8					Outside Canvass	
	2700002957	Domestic	Yes	Record	11/13/1958 0:00	BEAR TAVERN RD.	Mercer	Ewing Twp	339	1	Prop Loc - Hard Copy	406488	516774		93	7					Outside Canvass	
	2700002958	Domestic	Yes	Record	10/20/1958 0:00	LOWER FERRY RD.	Mercer	Ewing Twp	341	1	Prop Loc - Hard Copy	406493	518191		90	0					Outside Canvass	
	2700002964	Domestic	Yes	Record	10/25/1958 0:00	FLORANCE AVE.	Mercer	Ewing Twp	381	233	Prop Loc - Hard Copy	404409	520829		65	7					Outside Canvass	
	2700002984	Domestic	Yes	Record	12/12/1958 0:00	BERNARD TERRACE	Mercer	Ewing Twp	414	1	Prop Loc - Hard Copy	405398	515463		100	0					Outside Canvass	
	2700002985	Domestic	Yes	Record	12/5/1958 0:00	W. LAND AVE	Mercer	Ewing Twp	459	55	Prop Loc - Hard Copy	406497	519506		87	0					Outside Canvass	
	2700003006	Domestic	Yes	Record	2/11/1959 0:00	ALBERMARTE AVE	Mercer	Ewing Twp	423	135	Prop Loc - Hard Copy	401313	522257		90	20					Outside Canvass	
	2700003008	Domestic	Yes	Record	2/1/1959 0:00	BULL RUN RD	Mercer	Ewing Twp	339	1	Prop Loc - Hard Copy	406488	516774		80	20					Outside Canvass	
	2700003032	Domestic	Yes	Record	4/6/1959 0:00	LOUISIANA AVE	Mercer	Ewing Twp	343	1	Prop Loc - Hard Copy	405417	520825		60	0					Outside Canvass	
	2700003034	Domestic	Yes	Record	4/8/1959 0:00	GREEN LANE	Mercer	Ewing Twp	379	375	Prop Loc - Hard Copy	404414	522246		60	0					Outside Canvass	
	2700003035	Domestic	Yes	Record	6/1/1959 0:00	MALAGA DR	Mercer	Ewing Twp	411	27	Prop Loc - Hard Copy	403396	519517		88	6					Outside Canvass	
	2700003039	Domestic	Yes	Permit	4/14/1959 0:00		Mercer	Hopewell Boro	243	1	Prop Loc - Hard Copy	412708	522218		80	5					Outside Canvass	
	2700003054	Domestic	Yes	Record	4/28/1959 0:00	STREET UNKNOWN	Mercer	Ewing Twp	411	11	Prop Loc - Hard Copy	403392	518202		64	0					Outside Canvass	
	2700003061	Domestic	Yes	Record	5/21/1959 0:00	SULLIVAN WAY	Mercer	Ewing Twp	413	1	Prop Loc - Hard Copy	404390	515466		100	0					Outside Canvass	
	2700003070	Domestic	Yes	Record	5/27/1959 0:00	BULL RUN RD	Mercer	Ewing Twp	339	1	Prop Loc - Hard Copy	406488	516774		100	0					Outside Canvass	
	2700003073	Domestic	Yes	Record	6/3/1959 0:00	BULL RUN RD	Mercer	Ewing Twp	341.01	3	Prop Loc - Hard Copy	404399	518198		95	0					Outside Canvass	
	2700003103	Domestic	Yes	Record	6/20/1959 0:00	STREET UNKNOWN	Mercer	Ewing Twp	341	1	Prop Loc - Hard Copy	405402	516778		105	0					Outside Canvass	
	2700003119	Domestic	Yes	Record	7/17/1959 0:00	STREET UNKNOWN	Mercer	Lawrence Twp	259	33	Prop Loc - Hard Copy	412703	520801		670	0					Outside Canvass	
	2700003123	Domestic	Yes	Record	7/22/1959 0:00	MALAGA DR	Mercer	Ewing Twp	341.01	3	Prop Loc - Hard Copy	404399	518198		82	0					Outside Canvass	
	2700003130	Domestic	Yes	Record	7/31/1959 0:00	INLAND AVE	Mercer	Ewing Twp	343	1	Prop Loc - Hard Copy	406502	520822		172	7					Outside Canvass	
	2700003137	Domestic	Yes	Record	8/17/1959 0:00	BEAR TAVERN RD	Mercer	Ewing Twp	423	17	Prop Loc - Hard Copy	401318	523572		90	0					Outside Canvass	
	2700003138	Domestic	Yes	Record	8/21/1959 0:00	STREET UNKNOWN	Mercer	Ewing Twp	341.01	5	Prop Loc - Hard Copy	405412	519510		75	0					Outside Canvass	
	2700003145	Domestic	Yes	Permit	8/18/1959 0:00		Mercer	Trenton City	506	38	Prop Loc - Hard Copy	408522	522231		90	8					Outside Canvass	
	2700003147	Domestic	Yes	Record	8/25/1959 0:00	STREET UNKNOWN	Mercer	Ewing Twp	341	1	Prop Loc - Hard Copy	405402	516778		80	0					Outside Canvass	
	2700003148	Domestic	Yes	Record	9/1/1959 0:00	HILLTOP RD	Mercer	Ewing Twp	413	1	Prop Loc - Hard Copy	404390	515466		85	7					Outside Canvass	
	2700003154	Domestic	Yes	Record	9/16/1959 0:00	BULL RUN RD	Mercer	Ewing Twp	341	1	Prop Loc - Hard Copy	404394	516782		75	0					Outside Canvass	
	2700003155	Domestic	Yes	Record	9/22/1959 0:00	RT 69 (31)	Mercer	Ewing Twp	413	1	Prop Loc - Hard Copy	403387	516785		70	0					Outside Canvass	
	2700003156	Domestic	Yes	Record	9/25/1959 0:00	138 CRESCENT AVE	Mercer	Ewing Twp	343	1	Prop Loc - Hard Copy	406502	520822		71	0					Outside Canvass	
	2700003159	Domestic	Yes	Record	9/4/1959 0:00	BROWNING AVE	Mercer	Ewing Twp	381	233	Prop Loc - Hard Copy	404409	520829		80	0					Outside Canvass	
	2700003171	Domestic	Yes	Record	9/16/1959 0:00	PENNSYLVANIA AVE	Mercer	Ewing Twp	341.01	5	Prop Loc - Hard Copy	405412	519510		70	0					Outside Canvass	
	2700003188	Domestic	Yes	Record	11/12/1959 0:00	MALAGA DR	Mercer	Ewing Twp	411	11	Prop Loc - Hard Copy	402379	516789		81	0					Outside Canvass	
	2700003189	Domestic	Yes	Permit	10/13/1959 0:00		Mercer	Ewing Twp	414	2	Prop Loc - Hard Copy	406483	515459		100	7					Outside Canvass	
	2700003209	Domestic	Yes	Record	11/21/1959 0:00	NURSERY ROAD	Mercer	Ewing Twp	414	1	Prop Loc - Hard Copy	405398	515463		90	0					Outside Canvass	
	2700003233	Domestic	Yes	Permit	12/9/1959 0:00		Mercer	Ewing Twp	487	86	Prop Loc - Hard Copy	411687	518173		80	5					Outside Canvass	
	2700003240	Domestic	Yes	Record	1/6/1961 0:00	FLOWER HILL ROAD	Mercer	Hopewell Twp	341.01	5	Prop Loc - Hard Copy	405412	519510		93	0					Outside Canvass	
	2700003241	Domestic	Yes	Record	1/21/1960 0:00	RIVER ROAD	Mercer	Ewing Twp	341.01	5	Prop Loc - Hard Copy	405412	519510		150	0					Outside Canvass	
	2700003242	Domestic	Yes	Record	1/3/1960 0:00	CLAFFTON AVENUE	Mercer	Ewing Twp	459	55	Prop Loc - Hard Copy	406497	519506		70	0					Outside Canvass	
	2700003248	Domestic	Yes	Record	2/20/1960 0:00	UNKNOWN	Mercer	Ewing Twp	414	2	Prop Loc - Hard Copy	406483	515459		156	0					Outside Canvass	
	2700003345	Domestic	Yes	Record	5/23/1960 0:00	PERRY DRIVE	Mercer	Ewing Twp	414	1	Prop Loc - Hard Copy	405398	515463		150	0					Outside Canvass	
	2700003362	Domestic	Yes	Permit	5/20/1960 0:00		Mercer	Ewing Twp	256	18	Prop Loc - Hard Copy	412699	519486		80	5					Outside Canvass	
	2700003372	Domestic	Yes	Record	6/3/1960 0:00	MODAGA DRIVE	Mercer	Ewing Twp	339	1	Prop Loc - Hard Copy	406488	516774		85	0					Outside Canvass	
	2700003377	Domestic	Yes	Permit	6/1/1960 0:00		Mercer	Ewing Twp	367	6	Prop Loc - Hard Copy	408527	523547		80	5					Outside Canvass	
	2700003381	Domestic	Yes	Record	7/20/1960 0:00	NURSERY RD.	Mercer	Ewing Twp	322	74	Prop Loc - Hard Copy	407496	516771		115	0					Outside Canvass	
	2700003395	Domestic	Yes	Record	6/25/1960 0:00	HILL TOP & PENNINGTON RD.	Mercer	Ewing Twp	414	1	Prop Loc - Hard Copy	405398	515463		95	0					Outside Canvass	
	2700003407	Domestic	Yes	Permit	7/6/1960 0:00		Mercer	Ewing Twp	231	28	Prop Loc - Hard Copy	411704	523536		100	10					Outside Canvass	
	2700003408	Domestic	Yes	Permit	7/6/1960 0:00		Mercer	Ewing Twp	231	28	Prop Loc - Hard Copy	411704	523536		80	5					Outside Canvass	
	2700003409	Domestic	Yes	Permit	7/6/1960 0:00		Mercer	Ewing Twp	231	28	Prop Loc - Hard Copy	411704	523536		80	5					Outside Canvass	
	2700003419	Domestic	Yes	Record	7/18/1960 0:00	BULL RUN RD	Mercer	Ewing Twp	36302	1	Prop Loc - Hard Copy	407491	515455		65	0					Outside Canvass	
	2700003430	Domestic	Yes	Record	7/28/1960 0:00	KING ST	Mercer	Ewing Twp	341.01	5	Prop Loc - Hard Copy	405412	519510		70	0					Outside Canvass	
	2700003452	Domestic	Yes	Record	8/10/1960 0:00	FLORANCE AVE AND CENTRAL AVE	Mercer	Ewing Twp	341	1	Prop Loc - Hard Copy	406493	518191		60	7					Outside Canvass	
	2700003479	Domestic	Yes	Record	9/14/1960 0:00	UNKOWN	Mercer	Ewing Twp	342	1	Prop Loc - Hard Copy	404404	519514		80	0					Outside Canvass	
	2700003488	Domestic	Yes	Record	9/29/1960 0:00	FEDERAL CITY RD	Mercer	Ewing Twp	414	2	Prop Loc - Hard Copy	406483	515459		70	0					Outside Canvass	
	2700003489	Domestic	Yes	Record	10/10/1960 0:00	SCUDDER RD	Mercer	Ewing Twp	343	1	Prop Loc - Hard Copy	405417	520825		106	0					Outside Canvass	
	2700003522	Domestic	Yes	Permit	10/31/1960 0:00		Mercer	Hopewell Twp	367	50	Prop Loc - Hard Copy	409616	524858		150	7					Outside Canvass	
	2700003529	Domestic	Yes	Record	11/25/1960 0:00	BROPHY DR.	Mercer	Ewing Twp	341	1	Prop Loc - Hard Copy	404394	516782		80	0					Outside Canvass	
	2700003530	Domestic	Yes	Record	11/23/1960 0:00	RTE 31	Mercer	Ewing Twp	341.01	3	Prop Loc - Hard Copy	404399	518198		145	0					Outside Canvass	
	2700003531	Domestic	Yes	Record	11/25/1960 0:00	RTE 31	Mercer	Ewing Twp	413	1	Prop Loc - Hard Copy	404390	515466		80	0					Outside Canvass	

	2700003532	Domestic	Yes	Record	11/29/1960 0:00	CREST AVE	Mercer	Hopewell Twp	381	233	Prop Loc - Hard Copy	404409	520829		175	0					Outside Canvass	
	2700003553	Domestic	Yes	Permit	1/9/1961 0:00		Mercer	Ewing Twp	259	33	Prop Loc - Hard Copy	412703	520801		90	5					Outside Canvass	
	2700003555	Domestic	Yes	Permit	1/9/1961 0:00		Mercer	Ewing Twp	243	1	Prop Loc - Hard Copy	412708	522218		80	5					Outside Canvass	
	2700003574	Domestic	Yes	Permit	2/21/1961 0:00		Mercer	Ewing Twp	422.01	42	Prop Loc - Hard Copy	400295	519528		100	6					Outside Canvass	
	2700003594	Domestic	Yes	Permit	4/3/1961 0:00		Mercer	Ewing Twp	259	33	Prop Loc - Hard Copy	412703	520801		80	5					Outside Canvass	
	2700003611	Domestic	Yes	Record	5/2/1961 0:00	HOPATCONG DRIVE	Mercer	Ewing Twp	341	1	Prop Loc - Hard Copy	405402	516778		96	0					Outside Canvass	
	2700003666	Domestic	Yes	Permit	7/20/1961 0:00		Mercer	Ewing Twp	239	50	Prop Loc - Hard Copy	411700	522221		80	5					Outside Canvass	
	2700003672	Domestic	Yes	Permit	7/27/1961 0:00		Mercer	Ewing Twp	367	6	Prop Loc - Hard Copy	408527	523547		150	8					Outside Canvass	
	2700003718	Domestic	Yes	Permit	9/25/1961 0:00		Mercer	Ewing Twp	469	150	Prop Loc - Hard Copy	411696	520804		80	5					Outside Canvass	
	2700003738	Domestic	Yes	Permit	10/25/1961 0:00		Mercer	Ewing Twp	241	74	Prop Loc - Hard Copy	410615	522224		80	6					Outside Canvass	
	2700003768	Domestic	Yes	Permit	11/27/1961 0:00		Mercer	Ewing Twp	367	50	Prop Loc - Hard Copy	410624	524855		80	5					Outside Canvass	
	2700003771	Domestic	Yes	Record	12/14/1961 0:00	BULL RUN ROAD	Mercer	Ewing Twp	414	2	Prop Loc - Hard Copy	406483	515459		60	0					Outside Canvass	
	2700003786	Domestic	Yes	Permit	1/4/1962 0:00		Mercer	Ewing Twp	367	66	Prop Loc - Hard Copy	409612	523543		80	5					Outside Canvass	
	2700003979	Domestic	Yes	Permit	10/26/1962 0:00		Mercer	Ewing Twp	341	1	Prop Loc - Hard Copy	405402	516778		150	5					Outside Canvass	
	2700004112	Domestic	Yes	Record	8/23/1963 0:00	FERRY RD & CARLTON AVAE	Mercer	Ewing Twp	506	21	Prop Loc - Hard Copy	409607	522228		80	0					Outside Canvass	
	2700004201	Domestic	Yes	Permit	11/20/1963 0:00		Mercer	Ewing Twp	259	33	Prop Loc - Hard Copy	412703	520801		80	5					Outside Canvass	
	2700004227	Domestic	Yes	Permit	1/8/1964 0:00		Mercer	Ewing Twp	256	18	Prop Loc - Hard Copy	412699	519486		80	5					Outside Canvass	
	2700004232	Domestic	Yes	Record	3/7/1964 0:00	HOPEWELL TWP	Mercer	Hopewell Twp	367	50	Prop Loc - Hard Copy	409616	524858		150	0					Outside Canvass	
	2700004292	Domestic	Yes	Record	6/7/1964 0:00	LIANNING AVE	Mercer	Ewing Twp	259	33	Prop Loc - Hard Copy	412703	520801		75	7					Outside Canvass	
	2700004297	Domestic	Yes	Permit	6/2/1964 0:00		Mercer	Ewing Twp	367	17	Prop Loc - Hard Copy	410619	523540		80	5					Outside Canvass	
	2700004303	Domestic	Yes	Record	6/20/1964 0:00	WASHINGTON CROSSING	Mercer	Pennington Boro	373	10	Prop Loc - Hard Copy	404423	524876		113	0					Outside Canvass	
	2700004393	Domestic	Yes	Record	10/8/1964 0:00	68 CENTRAL AVE	Mercer	Ewing Twp	256	18	Prop Loc - Hard Copy	412699	519486		25	0					Outside Canvass	
	2700004420	Domestic	Yes	Record	12/4/1964 0:00	HILLMAN AVENUE	Mercer	Ewing Twp	342.01	1	Prop Loc - Hard Copy	407505	519503		136	0					Outside Canvass	
	2700004423	Domestic	Yes	Permit	12/7/1964 0:00		Mercer	Ewing Twp	243	1	Prop Loc - Hard Copy	412708	522218		80	5					Outside Canvass	
	2700004446	Domestic	Yes	Record	4/1/1965 0:00	33 ESTER AVENUE	Mercer	Ewing Twp	414	1	Prop Loc - Hard Copy	405398	515463		90	0					Outside Canvass	
	2700004537	Domestic	Yes	Record	7/1/1965 0:00	191 WEST UPPER FERRY ROAD	Mercer	Ewing Twp	422.01	42	Prop Loc - Hard Copy	400295	519528		113	9					Outside Canvass	
	2700004538	Domestic	Yes	Record	7/19/1965 0:00	THERESA AVE-BROAD AVE	Mercer	Ewing Twp	243	1	Prop Loc - Hard Copy	412708	522218		70	0					Outside Canvass	
	2700004549	Domestic	Yes	Record	7/27/1965 0:00	UPPER FERRY RD, LOWWER FERRY ROAD	Mercer	Ewing Twp	345	140.02	Prop Loc - Hard Copy	408513	519499		70	0					Outside Canvass	
	2700004561	Domestic	Yes	Record	8/6/1965 0:00	BERNWALL AVENUE	Mercer	Ewing Twp	481	109	Prop Loc - Hard Copy	411691	519489		68	0					Outside Canvass	
	2700004594	Domestic	Yes	Record	10/1/1966 0:00	CLAFLIN AVE	Mercer	Ewing Twp	506	38	Prop Loc - Hard Copy	408522	522231		70	8					Outside Canvass	
	2700004702	Domestic	Yes	Record	6/1/1966 0:00	BROAD AVE	Mercer	Ewing Twp	469	150	Prop Loc - Hard Copy	411696	520804		60	0					Outside Canvass	
	2700004717	Domestic	Yes	Permit	5/17/1966 0:00		Mercer	Hopewell Twp	373	9	Prop Loc - Hard Copy	405435	526188		200	5					Outside Canvass	
	2700004739	Domestic	Yes	Permit	7/14/1966 0:00		Mercer	Ewing Twp	367	50	Prop Loc - Hard Copy	410624	524855		80	5					Outside Canvass	
	2700004770	Domestic	Yes	Record	9/1/1966 0:00	LOUISIANA AVE	Mercer	Ewing Twp	506	38	Prop Loc - Hard Copy	408522	522231		80	8					Outside Canvass	
	2700004878	Domestic	Yes	Record	6/23/1967 0:00	UPPER FERRY RD.	Mercer	Ewing Twp	322	1	Prop Loc - Hard Copy	408508	518184		300	0					Outside Canvass	
	2700004911	Domestic	Yes	Record	9/1/1967 0:00	31 KESWICK AVENUE	Mercer	Ewing Twp	256	18	Prop Loc - Hard Copy	412699	519486		80	7					Outside Canvass	
	2700004921	Industrial	Yes	Record	12/1/1967 0:00	ROUTE 31	Mercer	Hopewell Twp	320	9	Prop Loc - Hard Copy	409594	518180		125	10					Outside Canvass	
	2700004971	Domestic	Yes	Record	3/1/1968 0:00	210 HAZEL AVENUE	Mercer	Ewing Twp	322	6	Prop Loc - Hard Copy	409585	515448		115	8					Outside Canvass	
	2700005000	Domestic	Yes	Permit	5/31/1968 0:00		Mercer	Ewing Twp	367	1	Prop Loc - Hard Copy	408531	524862		80	5					Outside Canvass	
	2700005014	Domestic	Yes	Record	7/1/1968 0:00	16 HILLSIDE AVENUE	Mercer	Ewing Twp	241	74	Prop Loc - Hard Copy	410615	522224		80	7					Outside Canvass	
	2700005041	Domestic	Yes	Record	9/1/1968 0:00	135 ARDSLEY AVENUE	Mercer	Ewing Twp	487	86	Prop Loc - Hard Copy	411687	518173		80	0					Outside Canvass	
	2700005130	Domestic	Yes	Record	7/1/1969 0:00	BRENWAL AVE	Mercer	Ewing Twp	256	18	Prop Loc - Hard Copy	412699	519486		75	7					Outside Canvass	
	2700005175	Domestic	Yes	Record	9/1/1969 0:00	HARDING AVE	Mercer	Ewing Twp	481	109	Prop Loc - Hard Copy	411691	519489		75	0					Outside Canvass	
	2700005180	Industrial	Yes	Record	11/1/1969 0:00	LOWER FERRY RD	Mercer	Ewing Twp	368	28	Prop Loc - Hard Copy	409620	526174		300	0					Outside Canvass	
	2700005284	Domestic	Yes	Record	9/1/1970 0:00	UPPER FERRY ROAD	Mercer	Ewing Twp	368	28	Prop Loc - Hard Copy	409620	526174		70	10					Outside Canvass	
	2700005362	Domestic	Yes	Record	3/1/1971 0:00	20 LANNING AVENUE	Mercer	Ewing Twp	259	33	Prop Loc - Hard Copy	412703	520801		80	8					Outside Canvass	
	2700005466	Domestic	Yes	Record	12/1/1971 0:00	BROAD AVE	Mercer	Ewing Twp	506	38	Prop Loc - Hard Copy	408522	522231		55	50					Outside Canvass	
	2700005467	Domestic	Yes	Record	12/1/1971 0:00	BROAD AVE	Mercer	Ewing Twp	469	150	Prop Loc - Hard Copy	411696	520804		65	8					Outside Canvass	
	2700005469	Domestic	Yes	Record	1/1/1972 0:00	JOHNSON RD	Mercer	Lawrence Twp	463	22	Prop Loc - Hard Copy	410610	520808		75	8					Outside Canvass	
	2700005598	Domestic	Yes	Record	8/14/1972 0:00	SUNSET AVENUE AND NORTH TRENTON ROAD	Mercer	Ewing Twp	423	135	Prop Loc - Hard Copy	401313	522257		78	0					Outside Canvass	
	2700005789	Domestic	Yes	Record	10/17/1973 0:00	LINVALE AVENUE AND ROUTE 31	Mercer	Ewing Twp	469	150	Prop Loc - Hard Copy	411696	520804		82	0					Outside Canvass	
	2700006039	Domestic	Yes	Record	2/1/1976 0:00	BROAD AVE	Mercer	Ewing Twp	245	14	Prop Loc - Dig Image	412137	521545	5643	80	7					Outside Canvass	
	2700006053	Domestic	Yes	Record	5/1/1976 0:00	BROAD AVENUE AND STEINWAY AVENUE	Mercer	Ewing Twp	411	11	Prop Loc - Hard Copy	403392	518202		70	8					Outside Canvass	
	2700006076	Domestic	Yes	Record	6/1/1976 0:00	RIVER KNOLL DRIVE & RIVER RD (ROUTE 29)	Mercer	Hopewell Boro	411	11	Prop Loc - Hard Copy	401298	518209		225	5					Outside Canvass	
	2700006092	Domestic	Yes	Record	6/1/1976 0:00	BEAR TAVERN RD AND WASHINGTON CROSSING.	Mercer	Hopewell Boro	411	27	Prop Loc - Hard Copy	403396	519517		150	7					Outside Canvass	
	2700006241	Domestic	Yes	Record	6/1/1977 0:00	REED ROAD AND DIVIERTY ROAD	Mercer	Hopewell Boro	367	6	Prop Loc - Hard Copy	408527	523547		103	7					Outside Canvass	
	2700006386	Domestic	Yes	Record	2/21/1978 0:00	24 RAILROAD AVENUE	Mercer	Ewing Twp	399	215	Prop Loc - Hard Copy	402393	520836		150	0					Outside Canvass	
	2700006428	Domestic	Yes	Record	5/1/1978 0:00	RIDGEWOOD AVENUE AND CAROLINA AVENUE	Mercer	Ewing Twp	256	18	Prop Loc - Hard Copy	412699	519486		70	7					Outside Canvass	
	2700006461	Domestic	Yes	Record	5/16/1978 0:00	RAVINE ROAD AND UPPER FERRY ROAD	Mercer	Ewing Twp	344	11	Prop Loc - Hard Copy	407510	520818		125	12					Outside Canvass	
	2700006513	Domestic	Yes	Record	7/1/1978 0:00	137 WESTERN AVENUE AND BRENNWELL AVENUE	Mercer	Ewing Twp	256	18	Prop Loc - Hard Copy	412699	519486		70	7					Outside Canvass	
	2700006534	Domestic	Yes	Record	8/1/1978 0:00	VAN DYKE DR.	Mercer	Ewing Twp	367	50	Prop Loc - Hard Copy	410624	524855		70	7					Outside Canvass	
	2700006588	Domestic	Yes	Permit	10/24/1978 0:00		Mercer	Ewing Twp	341	1	Prop Loc - Hard Copy	404394	516782		125	10					Outside Canvass	
	2700006615	Domestic	Yes	Record	1/1/1979 0:00	16 VAN DYNE DR	Mercer	Ewing Twp	367	50	Prop Loc - Hard Copy	410624	524855		80	0					Outside Canvass	
	2700006792	Domestic	Yes	Record	1/1/1980 0:00	CARLES STREET	Mercer	Ewing Twp	256	18	Prop Loc - Hard Copy	412699	519486		63	0					Outside Canvass	
	2700006974	Domestic	Yes	Record	12/1/1980 0:00	57 BRENWAL AVENUE	Mercer	Ewing Twp	469	150	Prop Loc - Hard Copy	411696	520804		70	7					Outside Canvass	
	2700006983	Industrial	Yes	Record	2/1/1981 0:00	8251 BYBERRY ROAD	Mercer	Ewing Twp	342	1	Prop Loc - Hard Copy	404404	519514		70	7					Outside Canvass	
	2700007003	Industrial	Yes	Record	5/1/1981 0:00	SULLIVAN WAY	Mercer	Lawrence Twp	342	1	Prop Loc - Hard Copy	404404	519514		100	13					Outside Canvass	
	2700007007	Domestic	Yes	Record	5/1/1981 0:00	16 SCOTCH ROAD	Mercer	Ewing Twp	344	11	Prop Loc - Hard Copy	407510	520818		100	13					Outside Canvass	
	2700008068	Domestic	Yes	Record	8/19/1985 0:00	STATE POLICE ROAD	Mercer	Ewing Twp	341.01	5	Prop Loc - Hard Copy	406034	520115		125	0					Outside Canvass	
	2700008550	Public Non-Community	Yes	Record	9/1/1986 0:00	DECON AVE	Mercer	Ewing Twp	378	246	Prop Loc - Hard Copy	404954	521434		95	10					Outside Canvass	
	2700008701	Domestic	Yes	Record	11/13/1986 0:00	135 WESTERN AVE	Mercer	Ewing Twp	470	224	Prop Loc - Hard Copy	412232	518779		70	7					Outside Canvass	
	2700009111	Domestic	Yes	Record	7/1/1987 0:00	131 WESTERN AVE	Mercer	Ewing Twp	481	109	Prop Loc - Hard Copy	411691	519489		75	8					Outside Canvass	
	2700009704	Domestic	Yes	Record	5/28/1988 0:00	135 KESWICK AVE.	Mercer	Ewing Twp	373	5	Prop Loc - Hard Copy	403416	524880		100	0					Outside Canvass	
	2700010106	Domestic Replacement	Yes	Record	3/7/1989 0:00	72 FERRY ROAD	Mercer	Ewing Twp	374	1	Prop Loc - Hard Copy	405431	524873		257	6					Outside Canvass	
	2700010384	Irrigation	Yes	Record	8/3/1989 0:00	137 WEST UPPER FERRY RD	Mercer	Ewing Twp	423	57	Prop Loc - Hard Copy	400300	520844		195	0					Outside Canvass	
	2700011348	Public Non-Community	Yes	Record	5/18/1991 0:00	DECAU AVENUE	Mercer	Ewing Twp	379	375	Prop Loc - Hard Copy	404414	522246		140	13					Outside Canvass	
	2700012220	Irrigation	Yes	Record	11/17/1992 0:00	SULLIVAN WAY & SILVIA ST.	Mercer	Ewing Twp	342	1	Prop Loc - Hard Copy	404404	519514		200	20					Outside Canvass	
	2700014964	Domestic	Yes	Record	2/16/1999 0:00	LAKE BALDWIN DRIVE	Mercer	Hopewell Twp	367	50	Prop Loc - Hard Copy	409616	524858		160	0					Outside Canvass	
	2700014964	Domestic	Yes	Record	2/16/1999 0:00	LAKE BALDWIN DRIVE	Mercer	Hopewell Twp	367	50	Prop Loc - Hard Copy	409616	524858		160	0					Outside Canvass	
	2700014965	Domestic	Yes	Record	2/18/1999 0:00	LAKE BALDWIN DRIVE	Mercer	Hopewell Twp	368	28	Prop Loc - Hard Copy	409620	526174		240	0					Outside Canvass	
	2700015376	Public Non-Community	Yes	Record	11/27/1999 0:00	301 SULLIVAN WAY	Mercer	Ewing Twp	413	1	Prop Loc - Hard Copy	403387	516785		265	150					Outside Canvass	
	2700017635	Domestic Replacement	Yes	Record	10/17/2005 0:00	110 CARLTON AVE.	Mercer	Ewing Twp	364.01	39	Prop Loc - Hard Copy	410152	522833		110	7					Outside Canvass	
	2800002384	Domestic	Yes	Permit	12/17/1956 0:00		Mercer	Ewing Twp	397	76	Prop Loc - Hard Copy	403401	520833		100	10					Outside Canvass	
	2800003151	Domestic	Yes	Permit	6/13/1958 0:00		Mercer	Ewing Twp	423	43	Prop Loc - Hard Copy	401308	520840		100	10					Outside Canvass	
	2800004097	Domestic	Yes	Permit	4/11/1961 0:00		Mercer	Ewing Twp	341	1	Prop Loc - Hard Copy	406493	518191		100	10					Outside Canvass	
	2800005049	Domestic	Yes	Record	7/1/1964 0:00	HARDING AVE	Mercer	Ewing Twp	245	14	Prop Loc - Dig Image	412137	521545	5643	75	8					Outside Canvass	
	2800006460	Domestic	Yes	Record	10/16/1968 0:00	BROAD ST	Mercer	Ewing Twp	469	138	Prop Loc - Dig Image	412133	520196	4209	100	0					Outside Canvass	
	2800007333	Domestic	Yes	Permit	10/5/1971 0:00		Mercer	Ewing Twp	481	109	Prop Loc - Hard Copy	411691	519489		75	8					Outside Canvass	
	4700013347	Irrigation	Yes	Permit	5/9/1995 0:00	1 SUNSET AVE.	Mercer	Ewing Twp	423	135	Prop Loc - Hard Copy	401313	522257		125	7					Outside Canvass	
	4700016623	Industrial	Yes	Record	1/1/1937 0:00	LOWER FERRY ROAD	Mercer	Ewing Twp	341	1	DEP Program Database	404627	516680		156	110					Outside Canvass	
	4700016624	Industrial	Yes	Record	1/1/1937 0:00	LOWER FERRY ROAD	Mercer	Ewing Twp	341	1	DEP Program Database	404630	517691		232	165					Outside Canvass	
	270000671A	Domestic	Yes	Permit	10/10/1952 0:00		Mercer	Ewing Twp	413	1	Prop Loc - Hard Copy	404390	515466		80	8					Outside Canvass	
	270000868A	Domestic	Yes	Record	6/30/1953 0:00	505 WALKER AVE	Mercer	Ewing Twp	411	11	Prop Loc - Hard Copy	401303	519525		70	0					Outside Canvass	
	270001480A	Domestic	Yes	Permit	12/1/1954 0:00		Mercer	Ewing Twp	256	18	Prop Loc - Hard Copy	412699	519486		70	10					Outside Canvass	
	270003527A	Domestic	Yes	Record	11/21/1960 0:00	OREGON AVE	Mercer	Ewing Twp	341.01	5	Prop Loc - Hard Copy	405412	519510		70	0					Outside Canvass	
	270006076A	Domestic	Yes	Record	7/1/1976 0:00	FORREST HILL DR.	Mercer	Hopewell Boro	411	11	Prop Loc - Hard Copy	401298	518209		200	5					Outside Canvass	
	E201301941	Domestic Replacement	Yes	Record	2/27/2013 0:00	111 Carlton Ave	Mercer	Ewing Twp	364.01	48	GPS	410331	522963	4668	180	7					Outside Canvass	

NOTES:

1. IMAGE FROM GOOGLE EARTH PRO, DATED APRIL 2016.
2. SITE PLAN BASED ON A SURVEY PERFORMED BY GERALD G. DEGROAT, LS, DATED NOVEMBER 20, 2002, REVISED TO 10 JULY 2015.
3. BOUNDARY INFORMATION SHOWN IS BASED ON A SURVEY PERFORMED BY GERALD G. DEGROAT, LS, DATED JUNE 21, 2005. BEARINGS SHOWN ARE BASED ON DEED BOOK 4512, PAGE 252.
4. WETLANDS DELINEATED BY AMY S. GREENE ENVIRONMENTAL CONSULTANTS, INC., FLEMINGTON, N.J., JUNE, 2005.
5. WETLAND BOUNDARIES SHOWN BASED ON A WETLAND SURVEY PERFORMED BY GERALD G. DEGROAT, LS, DATED JUNE 21, 2005, REVISED TO JANUARY 20, 2006.
6. GROUNDWATER ELEVATIONS MEASURED IN DECEMBER 2015.

0 200 400
SCALE IN FEET

HALEY ALDRICH

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

EVALUATION OF STRUCTURES WITHIN 100 FEET OF SAMPLES EXCEEDING VAPOR INTRUSION GROUNDWATER SCREENING LEVELS

SCALE: AS SHOWN
OCTOBER 2016

ATTACHMENT 3

VARI, KATALIN Printed: 10/17/2016 6:38 PM Layout: ATTCH 3
G:\70613421 - 2015 GROUNDWATER MONITORING\CAD\70613_428_0011_GW SCREEN_AERIAL.DWG

TABLE E-1
SUMMARY OF SOIL ANALYTICAL RESULTS
AOC-11 AND AOC-12 SOIL DATA IN WETLANDS AREA
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Sample Depth (bgs)	NJDEP Wildlife PRGs Ecological Screening Criteria	NJDEP (EcoSSL) Ecological Screening Criteria	BF-S13 10/23/2000 0 - 0.5 (ft)	BF-S21 10/23/2000 0 - 0.5 (ft)	BF-S22 10/23/2000 0 - 0.5 (ft)	CSO3 10/02/2002 0 - 0.5 (ft)	MW-16C 01/06/2011 0 - 0.5 (ft)	MW-66 02/23/2011 0 - 0.5 (ft)	MW-67 02/23/2011 0 - 0.5 (ft)	SB-10-SO-8 02/11/1994 0 - 1.5 (ft)	ASO1 09/09/2002 0 - 0.5 (ft)	ASO4 09/11/2002 0 - 0.5 (ft)	ASO5 09/11/2002 0 - 0.5 (ft)	ASO6 09/11/2002 0 - 0.5 (ft)	B6-12 08/04/1998 0 - 0.5 (ft)	ISO16 06/04/2003 0 - 0.5 (ft)	ISO17 06/04/2003 0 - 0.5 (ft)	ISO18 06/04/2003 0 - 0.5 (ft)	ISO19 06/04/2003 0 - 0.5 (ft)
Inorganic Compounds (mg/kg)																			
Antimony	5		-	-	-	ND (1.6)	**0.44 J**	**0.76**	ND (0.6)	ND (0.68) J	ND (0.88)	ND (1)	ND (0.98)	ND (1.1)	ND (0.28)	-	-	-	-
Arsenic	9.9	18 - 46	**3.7**	**5**	**4.1**	**5.9 J**	**9.4**	**6.9**	**4.7**	**2.4**	**5.6**	**1.3**	**2.7**	**1.3**	**18** [A]	**16.8** [A]	**11.8** [A]	**10.6** [A]	**13.7** [A]
Barium	283		-	-	-	-	**141**	**172**	**80.8**	-	-	-	-	-	**75**	-	-	-	-
Beryllium	10		**1.9**	**0.52**	**0.9**	**2.4**	**2**	**2.4**	**1.4**	**0.88**	**0.64**	**2.2 J**	**1.8 J**	**1.3 J**	ND (0.55)	-	-	-	-
Cadmium	4		**0.21 B**	ND (0.099)	ND (0.1)	ND (0.16)	ND (0.61)	ND (0.63)	ND (0.6)	ND (1)	ND (0.09)	ND (0.092)	ND (0.088)	ND (0.094)	**2.4**	-	-	-	-
Chromium	0.4	26 - 34	**22.7** [A]	**15.6** [A]	**16.5** [A]	**57.7** [A]	**28** [A]	**26.2** [A]	**19.6** [A]	**13** [A]	**19.8** [A]	**16** [A]	**14.8** [A]	**11.5** [A]	**36** [A]	**55.9** [A]	**18.1** [A]	**20.5** [A]	**21.3** [A]
Chromium VI (Hexavalent)	-		ND (2)	ND (2)	ND (2)	-	-	-	-	-	ND (2)	ND (2)	ND (2)	ND (2)	-	ND (2)	ND (2)	ND (2)	ND (2)
Cobalt	20	13 - 230	-	-	-	-	**12.9**	**10.6**	**5.5**	-	-	-	-	-	-	-	-	-	-
Copper	5.4	28 - 70	-	-	-	**48.1** [A]	**40** [A]	**18.5** [A]	**22.2** [A]	**12** [A]	**14.2** [A]	**5.4 J**	**6.3 J** [A]	**1.3 J**	**53** [A]	**381** [A]	**72.6** [A]	**63.5** [A]	**86** [A]
Cyanide	1.33		-	-	-	-	-	-	-	ND (2)	-	-	-	-	-	-	-	-	-
Lead	40.5	11 - 1700	**92.8** [A]	**52.2** [A]	**44.5** [A]	**29.3**	**78.7** [A]	**53.3** [A]	**19.7**	**15**	**15.9**	**19.2 J**	**10.6 J**	**12.7 J**	**100** [A]	**213** [A]	**142** [A]	**107** [A]	**211** [A]
Manganese	-		-	-	-	-	**1050**	**468**	**531**	-	-	-	-	-	-	-	-	-	-
Mercury	0.1	0.3	**0.02 B**	**0.1**	**0.09**	**0.03 J**	ND (0.043)	**0.047**	**0.036**	ND (0.12)	**0.03 J**	ND (0.019)	ND (0.018)	ND (0.02)	ND (0.11)	-	-	-	-
Nickel	13.6	38 - 280	**23.4** [A]	**8.9 B**	**11.1**	**41.7** [A]	**17.5** [A]	**15.3** [A]	**9.1**	**13**	**11.8**	**22.2** [A]	**15.8** [A]	**8.7 J**	**52** [A]	**144** [A]	**16.8 B** [A]	**18.6 B** [A]	**16.1 B** [A]
Selenium	0.21	0.52 - 4.1	-	-	-	ND (1.6)	**1.8** [A]	**1.6** [A]	**2** [A]	ND (0.5) J	ND (0.88)	ND (1)	ND (0.98)	ND (1.1)	ND (11)	-	-	-	-
Silver	2		ND (0.31)	ND (0.34)	ND (0.36)	ND (0.28)	ND (1.2)	ND (1.3)	ND (1.2)	ND (1.5)	ND (0.16)	ND (0.25)	ND (0.24)	ND (0.26)	ND (2.7)	-	-	-	-
Thallium	1		-	-	-	ND (1.8)	ND (0.24)	ND (0.25)	ND (0.24)	ND (0.5)	ND (0.99)	ND (0.94)	ND (0.9)	ND (0.96)	ND (0.55)	-	-	-	-
Vanadium	2	7.8 - 280	-	-	-	-	**35.8** [A]	**32.5** [A]	**21.5** [A]	-	-	-	-	-	-	-	-	-	-
Zinc	6.62	46 - 160	**104** [A]	**45.6** [A]	**51.3** [A]	**126** [A]	**79.7** [A]	**90.9** [A]	**45.1** [A]	**37** [A]	**50.4** [A]	**146** [A]	**513** [A]	**55.5** [A]	**640** [A]	**1600** [A]	**112** [A]	**92** [A]	**85.9** [A]

Notes:
1. Results in red exceeds the following criteria:
   [A] - NJDEP Wildlife PRGs (flora and fauna) Ecological Screening Criteria
2. Results in bold were detected.
3. ND - Not detected
   J - Estimated results
4. Locations shown are not excavated. Sample depth intervals are 0 - 0.5 feet.
5. Samples obtained from locations WSO16, WSO17 and WSO18 are not shown as they were sampled for Cr(VI) and PCBs but were below the detection limit. Samples BF-S11, BF-S20, BF-S9 and SB-7-SO-2 are not shown as they were not analyzed for metals and were ND for Cr(VI).

All PCBs, SVOCs, PAHs and VOCs are not shown as they were below conservative Wildlife PRG Ecological Screening Criteria.

TABLE E-1
SUMMARY OF SOIL ANALYTICAL RESULTS
AOC-11 AND AOC-12 SOIL DATA IN WETLANDS AREA
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

Sample Depth (bgs)	NJDEP Wildlife PRGs Ecological Screening Criteria	NJDEP (EcoSSL) Ecological Screening Criteria	ISO20 06/04/2003 0 - 0.5 (ft)	ISO37 07/21/2003 0 - 0.5 (ft)
Inorganic Compounds (mg/kg)				
Antimony	5		-	-
Arsenic	9.9	18 - 46	**10.4** [A]	**18.7** [A]
Barium	283		-	-
Beryllium	10		-	-
Cadmium	4		-	-
Chromium	0.4	26 - 34	**90.7** [A]	-
Chromium VI (Hexavalent)	-		ND (2)	-
Cobalt	20	13 - 230	-	-
Copper	5.4	28 - 70	**64.6** [A]	**320** [A]
Cyanide	1.33		-	-
Lead	40.5	11 - 1700	**150** [A]	-
Manganese	-		-	-
Mercury	0.1	0.3	-	-
Nickel	13.6	38 - 280	**15.4 B** [A]	-
Selenium	0.21	0.52 - 4.1	-	-
Silver	2		-	-
Thallium	1		-	-
Vanadium	2	7.8 - 280	-	-
Zinc	6.62	46 - 160	**116** [A]	**2650** [A]

Notes:
1. Results in red exceeds the following criteria:
   [A] - NJDEP Wildlife PRGs (flora and fauna) Ecological Screening Criteria
2. Results in bold were detected.
3. ND - Not detected
   J - Estimated results
4. Locations shown are not excavated. Sample depth intervals are 0 - 0.5 feet.
5. Samples obtained from locations WSO16, WSO17 and WSO18 are not shown as they were sampled for Cr(VI) and PCBs but were below the detection limit. Samples BF-S11, BF-S20, BF-S9 and SB-7-SO-2 are not shown as they were not analyzed for metals and were ND for Cr(VI).

All PCBs, SVOCs, PAHs and VOCs are not shown as they were below conservative Wildlife PRG Ecological Screening Criteria.

TABLE E-2
SUMMARY OF ANALYTICAL RESULTS
AOC-11 AND AOC-12 SEDIMENT DATA IN WETLANDS AREA
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

	AOC	2009	AOC-11	AOC-11	AOC-11	AOC-12	AOC-12	AOC-12	AOC-12	AOC-12
	Location	NJDEP	GR-05	WSE4	WSE5	ASE8	ASE8	ISE6	ISE7	ISE8
	Sample Date	Lowest Effects	09/11/2006	10/03/2002	10/03/2002	07/21/2003	07/21/2003	07/21/2003	07/21/2003	07/21/2003
	Sample Type	Level Sediment	N	N	N	N	FD	N	N	N
	Sample Depth (bgs)	Criteria	0.5 - 1 (ft)	0 - 0.5 (ft)	0 - 0.5 (ft)	2 - 2.5 (ft)	2 - 2.5 (ft)	2 - 2.5 (ft)	2.5 - 3 (ft)	2.5 - 3 (ft)
Inorganic Compounds (mg/kg)										
Arsenic		6	-	**2.6**	**3.1**	**7.4** [A]	**10.1** [A]	-	**7.4** [A]	**10.5** [A]
Barium		-	-	**67.6 J**	**39.1 J**	-	-	-	-	-
Chromium		26	-	**52.9** [A]	**34.8** [A]	-	-	-	-	-
Chromium VI (Hexavalent)		-	-	ND (2)	ND (2)	-	-	-	-	-
Copper		31.6	-	**29.5 J**	**24.9 J**	-	-	-	-	-
Cyanide		0.0001	-	ND (0.5)	ND (0.5)	-	-	-	-	-
Lead		31	-	**22.3**	**52.2** [A]	**38.4** [A]	**32.2** [A]	**80.9** [A]	-	-
Nickel		16	-	**36.2 J** [A]	**19.5 J** [A]	**25.8** [A]	**19.2** [A]	**228** [A]	-	-
Zinc		120	-	**190 J** [A]	**162 J** [A]	**733** [A]	**655** [A]	**1750** [A]	**2260** [A]	**1160** [A]
Other (mg/kg)										
Total Organic Carbon (TOC)		-	-	**2680**	**1790**	-	-	-	-	-
PCBs (mg/kg)										
Aroclor-1016 (PCB-1016)		0.007	-	ND (0.08)	ND (0.086)	-	-	-	-	-
Aroclor-1221 (PCB-1221)		-	-	ND (0.08)	ND (0.086)	-	-	-	-	-
Aroclor-1232 (PCB-1232)		-	-	ND (0.08)	ND (0.086)	-	-	-	-	-
Aroclor-1242 (PCB-1242)		-	-	ND (0.08)	ND (0.086)	-	-	-	-	-
Aroclor-1248 (PCB-1248)		0.03	-	ND (0.08)	ND (0.086)	-	-	-	-	-
Aroclor-1254 (PCB-1254)		0.06	-	ND (0.08)	ND (0.086)	-	-	-	-	-
Aroclor-1260 (PCB-1260)		0.005	-	**0.1** [A]	ND (0.086)	-	-	-	-	-
Aroclor-1262 (PCB-1262)		-	-	ND (0.08)	ND (0.086)	-	-	-	-	-
Aroclor-1268 (PCB-1268)		-	-	ND (0.08)	ND (0.086)	-	-	-	-	-
Semi-Volatile Organic Compounds (mg/kg)										
Acenaphthene		0.00671	-	ND (0.4)	ND (0.43)	-	-	-	-	-
Acenaphthylene		0.00587	-	**0.015 J** [A]	ND (0.43)	-	-	-	-	-
Anthracene		0.0572	-	**0.026 J**	ND (0.43)	-	-	-	-	-
Benzo(a)anthracene		0.108	-	**0.13** [A]	**0.024 J**	-	-	-	-	-
Benzo(a)pyrene		0.15	-	**0.17** [A]	**0.017 J**	-	-	-	-	-
Benzo(b)fluoranthene		10.4	-	**0.24**	**0.034 J**	-	-	-	-	-
Benzo(g,h,i)perylene		0.17	-	**0.1 J**	**0.015 J**	-	-	-	-	-
Benzo(k)fluoranthene		0.24	-	**0.12**	**0.014 J**	-	-	-	-	-
Chrysene		0.166	-	**0.19 J** [A]	**0.019 J**	-	-	-	-	-
Dibenz(a,h)anthracene		0.033	-	**0.023 J**	ND (0.043)	-	-	-	-	-
Fluoranthene		0.423	-	**0.25 J**	**0.038 J**	-	-	-	-	-
Fluorene		0.0774	-	**0.0081 J**	ND (0.43)	-	-	-	-	-
Indeno(1,2,3-cd)pyrene		0.2	-	**0.098**	**0.016 J**	-	-	-	-	-
Naphthalene		0.176	-	ND (0.4)	ND (0.43)	-	-	-	-	-
Phenanthrene		0.204	-	**0.1 J**	**0.014 J**	-	-	-	-	-
Pyrene		0.195	-	**0.2 J** [A]	**0.026 J**	-	-	-	-	-
Volatile Organic Compounds (mg/kg)										
1,1,1-Trichloroethane		0.213	ND (0.64)	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane		0.85	ND (0.13)	-	-	-	-	-	-	-
1,1,2-Trichloroethane		0.518	ND (0.38)	-	-	-	-	-	-	-
1,1-Dichloroethane		-	ND (0.64)	-	-	-	-	-	-	-
1,1-Dichloroethene		0.0194	ND (0.26)	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene		5.062	ND (0.64)	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)		-	ND (0.64)	-	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene Dibromide)		-	ND (0.64)	-	-	-	-	-	-	-
1,2-Dichlorobenzene		0.294	ND (0.64)	-	-	-	-	-	-	-
1,2-Dichloroethane		0.26	ND (0.26)	-	-	-	-	-	-	-
1,2-Dichloropropane		0.333	ND (0.13)	-	-	-	-	-	-	-
1,3-Dichlorobenzene		1.315	ND (0.64)	-	-	-	-	-	-	-
1,4-Dichlorobenzene		0.318	ND (0.64)	-	-	-	-	-	-	-
2-Butanone (Methyl Ethyl Ketone)		-	ND (0.64)	-	-	-	-	-	-	-
2-Hexanone		-	ND (0.64)	-	-	-	-	-	-	-
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)		-	ND (0.64)	-	-	-	-	-	-	-
Acetone		-	ND (0.64)	-	-	-	-	-	-	-
Benzene		0.142	ND (0.13)	-	-	-	-	-	-	-
Bromodichloromethane		-	ND (0.13)	-	-	-	-	-	-	-
Bromoform		0.492	ND (0.51)	-	-	-	-	-	-	-
Bromomethane (Methyl Bromide)		0.00137	ND (0.64)	-	-	-	-	-	-	-
Carbon disulfide		-	ND (0.64)	-	-	-	-	-	-	-
Carbon tetrachloride		1.45	ND (0.26)	-	-	-	-	-	-	-
Chlorobenzene		0.291	ND (0.64)	-	-	-	-	-	-	-
Chloroethane		-	ND (0.64)	-	-	-	-	-	-	-
Chloroform (Trichloromethane)		0.121	ND (0.64)	-	-	-	-	-	-	-
Chloromethane (Methyl Chloride)		-	ND (0.64)	-	-	-	-	-	-	-
cis-1,2-Dichloroethene		-	ND (0.64)	-	-	-	-	-	-	-
cis-1,3-Dichloropropene		-	ND (0.64)	-	-	-	-	-	-	-
Cyclohexane		-	ND (0.64)	-	-	-	-	-	-	-
Dibromochloromethane		-	ND (0.64)	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)		-	ND (0.64)	-	-	-	-	-	-	-
Ethylbenzene		0.175	ND (0.51)	-	-	-	-	-	-	-
Isopropylbenzene (Cumene)		-	ND (0.64)	-	-	-	-	-	-	-
Methyl acetate		-	ND (0.64)	-	-	-	-	-	-	-
Methyl cyclohexane		-	ND (0.64)	-	-	-	-	-	-	-
Methyl Tert Butyl Ether		-	ND (0.64)	-	-	-	-	-	-	-
Methylene chloride		0.159	ND (0.38)	-	-	-	-	-	-	-
Styrene		0.254	ND (0.64)	-	-	-	-	-	-	-
Tetrachloroethene		0.99	ND (0.13)	-	-	-	-	-	-	-
Toluene		1.22	ND (0.64)	-	-	-	-	-	-	-
trans-1,2-Dichloroethene		0.654	ND (0.64)	-	-	-	-	-	-	-
trans-1,3-Dichloropropene		-	ND (0.64)	-	-	-	-	-	-	-
Trichloroethene		0.112	ND (0.13)	-	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)		-	ND (0.64)	-	-	-	-	-	-	-
Trifluorotrichloroethane (Freon 113)		-	ND (0.64)	-	-	-	-	-	-	-
Vinyl chloride		0.202	ND (0.64)	-	-	-	-	-	-	-
Xylene (total)		0.433	ND (0.64)	-	-	-	-	-	-	-

Notes:
1. Results in **bold** were detected.
2. Results in red exceed the following:
   [A] - 2009 NJDEP Lowest Effects Level (LEL) Sediment Criteria - Fresh Water
3. ND - Not detected
   J - Estimated result
4. Sample Types: N - Normal, FD - Field Duplicate

APPENDIX F

Boring Logs

HALEY & ALDRICH

TEST BORING REPORT

Boring No. B3-4-200

Project 2012 Supplemental Soil Borings-Ewing Industrial Land , Trenton NJ
Client RACER Trust
Contractor EPI

File No. 70613-702
Sheet No. 1 of 1
Start April 23, 2012
Finish April 23, 2012
Driller J. Abel
H&A Rep. D. Mukherjee
Elevation Datum NGVD
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		G		Rig Make & Model: Geoprobe 6620 DT
				Bit Type:
Inside Diameter (in.)			-	Drill Mud: None
Hammer Weight (lb)			-	Casing:
				Hoist/Hammer:
Hammer Fall (in.)			-	PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, GROUP NAME, max. particle size†, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0		G1 30	0.0 5.0	0.5		CONCRETE
					SM	Black, silty SAND with gravel (SM), no odor, moist.
				4.5		Brown, silty SAND (SM), no odor, moist.
5		G2 36	5.0 10.0			
				8.5	ML	Brown, sandy SILT (ML), no odor, moist.
10				10.0		BOTTOM OF EXPLORATION AT 10 FEET

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Split Spoon Sample

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 10
Rock Cored (ft) 0
Samples 2G

Boring No. B3-4-200

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

†**Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TEST BORING-07-1 HA-LIB07-1-CLE2.GLB HA-TB+CORE+WELL-07-1.GDT G:\PROJECTS\70613\BORING LOGS\GINT\70613-702.GPJ Nov 20, 13

HALEY & ALDRICH

TEST BORING REPORT

Boring No. B6-201

Project 2012 Supplemental Soil Borings-Ewing Industrial Land , Trenton NJ
Client RACER Trust
Contractor EPI

File No. 70613-702
Sheet No. 1 of 1
Start April 23, 2012
Finish April 23, 2012
Driller J. Abel
H&A Rep. D. Mukherjee
Elevation
Datum NGVD
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	-	G		Rig Make & Model: Geoprobe 6620 DT
Inside Diameter (in.)	-	-	-	Bit Type:
Hammer Weight (lb)	-	-	-	Drill Mud: None
Hammer Fall (in.)	-	-	-	Casing:
				Hoist/Hammer:
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, GROUP NAME, max. particle size†, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0		G1 32	0.0 5.0	0.5		CONCRETE
				1.0	SM	Black, silty SAND (SM), no odor, moist.
					SM	Yellow-brown, silty SAND (SM), no odor, moist.
				4.0		Brown, silty SAND (SM), no odor, more moist.
5		G2 40	5.0 10.0			
				8.5	ML	Brown, sandy SILT (ML), no odor, moist.
10				10.0		BOTTOM OF EXPLORATION AT 10 FEET

Notes:
VOC, TIS, SPLP at 0.5 - 1 feet
VOCS/DUP 0002 at 3.5 - 4 feet
VOC, TIS, SPLP at 9.5 - 10 feet

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Split Spoon Sample

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 10
Rock Cored (ft) 0
Samples 2G

Boring No. B6-201

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

†**Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TEST BORING-07-1 HA-LIB07-1-CLE2.GLB HA-TB+CORE+WELL-07-1.GDT G:\PROJECTS\70613\BORING LOGS\GINT\70613-702.GPJ Nov 20, 13

HALEY & ALDRICH

TEST BORING REPORT

Boring No. GS08-200

Project 2012 Supplemental Soil Borings-Ewing Industrial Land , Trenton NJ
Client RACER Trust
Contractor EPI

File No. 70613
Sheet No. 1 of 1
Start April 24, 2012
Finish April 24, 2012
Driller J. Abel
H&A Rep. D. Mukherjee
Elevation
Datum NGVD
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	-	G		Rig Make & Model: Geoprobe 6620 DT
Inside Diameter (in.)	-	-	-	Bit Type:
Hammer Weight (lb)	-	-	-	Drill Mud: None
Hammer Fall (in.)	-	-	-	Casing:
				Hoist/Hammer:
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	PID	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, GROUP NAME, max. particle size†, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0						GRASS / GRAVEL										
	0.0	G1 36	0.0 5.0	0.5 1.0	SM	Brown, silty SAND (SM), no odor, moist. Red-brown, silty SAND with gravel (SM), root fragments, moist.										
5		G2 38	5.0 10.0													
				8.0		Yellow-brown, silty SAND (SM), no odor, moist, wet at 8 feet.										
10		G3 46	10.0 15.0													
				11.5	ML	Dark brown, sandy SILT with clay (ML), no odor, moist.										
15				15.0		BOTTOM OF EXPLORATION AT 15 FEET Notes: VOC, TIS, SPLP at 0.5 - 1.0 feet VOC at 8.5 - 9.0 feet VOC, TIS, SPLP at 11.5 - 12.0 feet Refusal at 5.5 feet. Tried 2-3 borings. Moved location.										

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Split Spoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 15
Rock Cored (ft) 0
Samples 3G

Boring No. GS08-200

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

†**Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A TEST BORING WITH PID COLUMN HA-LIB07-1-CLE2.GLB HA-TB+CORE+WELL-07-1.GDT G:\PROJECTS\70613\BORING LOGS\GINT\70613-702.GPJ Nov 11, 13

HALEY & ALDRICH

TEST BORING REPORT

Boring No. GS08-200
File No. 70613
Sheet No. 2 of 1

Depth (ft)	PID	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, GROUP NAME, max. particle size†, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
						New coordinates.										

NOTE: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

Boring No. GS08-200

H&A TEST BORING WITH PID COLUMN HA-LIB07-1-CLE2.GLB HA-TB+CORE+WELL-07-1.GDT G:\PROJECTS\70613\BORING LOGS\GINT\70613-702.GPJ Nov 11, 13

HALEY & ALDRICH

TEST BORING REPORT

Boring No. B9-16-200

Project 2012 Supplemental Soil Borings-Ewing Industrial Land , Trenton NJ
Client RACER Trust
Contractor EPI

File No. 70613
Sheet No. 1 of 1
Start April 25, 2012
Finish April 25, 2012
Driller J. Abel
H&A Rep. D. Mukherjee
Elevation
Datum NGVD
Location

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		G		Rig Make & Model: Geoprobe 6620 DT
				Bit Type:
Inside Diameter (in.)			-	Drill Mud: None
Hammer Weight (lb)			-	Casing:
				Hoist/Hammer:
Hammer Fall (in.)			-	PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, GROUP NAME, max. particle size†, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0		G1 50	0.0 5.0	0.5	SM	(SM), Dark brown, silty SAND (SM), no odor, moist. Presence of plant roots.
					SM	(SM), Tan-brown, silty SAND (SM), with gravel, no odor, moist.
				2.0	SM	(SM), Brown to dark brown, silty SAND with gravel (SM), mps=1-2 inches, no odor, moist.
5		G2 49	5.0 10.0			
				7.5	ML	(ML), Gray, sandy SILT (ML), no odor, wet from 7.5 feet.
10				10.0		BOTTOM OF EXPLORATION AT 10 FEET

Notes:
VOC, SVOC, TIS, SPLP at 0.5 - 1.0 feet
VOC, SVOC at 1.5 - 3.0 feet
VOC, SVOC, TIS, (SPLP) at 5.0 - 5.5 feet (DUP/ MS/MSD)
Included SPLP in DUP
and VOC in MS/MS

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Split Spoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 10
Rock Cored (ft) 0
Samples 3G

Boring No. B9-16-200

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

†**Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TEST BORING-IPAC-07-1 HA-LIB07-1-CLE2.GLB HA-TB+CORE+WELL-IPAC-07-1.GDT G:\PROJECTS\70613\BORING LOGS\GINT\70613-702.GPJ Nov 11, 13

HALEY& ALDRICH

GEOPROBE REPORT

Boring No. PL05-200

Project Additional Soil Investigations, Trenton, New Jersey
Client RACER Trust
Contractor

File No. 70613
Sheet No. 1 of 1
Start April 25, 2012
Finish April 25, 2012
Driller J. Abel
H&A Rep. D. Mukherjee
Elevation
Datum NGVD
Location

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		G		Rig Make & Model: Geoprobe 6620 DT
				Bit Type:
Inside Diameter (in.)			-	Drill Mud: None
Hammer Weight (lb)			-	Casing:
				Hoist/Hammer:
Hammer Fall (in.)			-	PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS* Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, natural grain size and artificial component percentage estimates, manual test properties, structure, odors, moisture, other descriptions and observations GEOLOGIC INTERPRETATION)	PID Readings (ppm) (sample/bkgd)
0		G1 46	0.0 5.0	0.5		CONCRETE / GRAVEL SUB-BASE	
				1.0	SM	Brown, silty SAND (SM), no odor, moist.	
					SM	Yellow-brown, silty SAND (SM), no odor.	
						Becomes saturated at 4 feet.	
5				5.0		BOTTOM OF EXPLORATION AT 5 FEET	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Component Percentage Estimates	
Term	Range
adjective modifier	20% - 50%
and	20% - 50%
some	20% - 33%
little	10% - 20%
trace	5% - 10%
with	present

Well Diagram: Riser Pipe; Screen; Filter Sand; Cuttings; Grout; Concrete; Bentonite Seal

Summary

Overburden (ft) 5
Rock Cored (ft) 0
Samples 1G

Boring No. PL05-200

Sampler Type: S - Split Spoon Sampler U - Undisturbed Tube Sampler T - Thin Wall Tube Sampler

***NOTE: USCS Group Symbols based on visual-manual methods of the USCS system as practiced by Haley & Aldrich, Inc.**

NOTE: Visual-Manual Identification and Description based upon Haley & Aldrich OP2001A - Field Practice for Soil Identification and Description.

GEOPROBE REPORT HA-LIB08-BETA.GLB HA-TB+CORE+WELL-08.GDT L:\OHIO OFFICES\CLEVELAND\70613-702.GPJ Dec 6, 13

HALEY& ALDRICH

GEOPROBE REPORT

Boring No. PL05-201

Project Additional Soil Investigations, Trenton, New Jersey
Client RACER Trust
Contractor

File No. 70613
Sheet No. 1 of 1
Start April 25, 2012
Finish April 25, 2012
Driller J. Abel
H&A Rep. D. Mukherjee
Elevation
Datum NGVD
Location

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		G		Rig Make & Model: Geoprobe 6620 DT
				Bit Type:
Inside Diameter (in.)			-	Drill Mud: None
Hammer Weight (lb)			-	Casing:
				Hoist/Hammer:
Hammer Fall (in.)			-	PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS* Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, natural grain size and artificial component percentage estimates, manual test properties, structure, odors, moisture, other descriptions and observations GEOLOGIC INTERPRETATION)	PID Readings (ppm) (sample/bkgd)
0		G1 49	0.0 5.0	0.5		CONCRETE / GRAVEL SUB-BASE	
				1.0	SM	Brown, silty SAND (SM), no odor, moist.	
					SM	Yellow-brown, silty SAND (SM), no odor	
						Becomes saturated at 4 feet.	
5				5.0		BOTTOM OF EXPLORATION AT 5 FEET	

Notes:
VOC, SVOC, TIS, SPLP at 0.5 - 1.0 feet
VOC, SVOC, TIS, SPLP at 2.5 - 3.0 feet

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Component Percentage Estimates	
Term	Range
adjective modifier	20% - 50%
and	20% - 50%
some	20% - 33%
little	10% - 20%
trace	5% - 10%
with	present

Well Diagram: Riser Pipe, Screen, Filter Sand, Cuttings, Grout, Concrete, Bentonite Seal

Summary

Overburden (ft)	5
Rock Cored (ft)	0
Samples	1G

Boring No. PL05-201

Sampler Type: S - Split Spoon Sampler U - Undisturbed Tube Sampler T - Thin Wall Tube Sampler

***NOTE: USCS Group Symbols based on visual-manual methods of the USCS system as practiced by Haley & Aldrich, Inc.**

NOTE: Visual-Manual Identification and Description based upon Haley & Aldrich OP2001A - Field Practice for Soil Identification and Description.

GEOPROBE REPORT HA-LIB08-BETA.GLB HA-TB+CORE+WELL-08.GDT L:\OHIO OFFICES\CLEVELAND\70613-702.GPJ Dec 6, 13

HALEY& ALDRICH

GEOPROBE REPORT

Boring No. PL05-202

Project Additional Soil Investigations, Trenton, New Jersey
Client RACER Trust
Contractor

File No. 70613
Sheet No. 1 of 1
Start April 25, 2012
Finish April 25, 2012
Driller J. Abel
H&A Rep. D. Mukherjee
Elevation
Datum NGVD
Location

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		G		Rig Make & Model: Geoprobe 6620 DT
				Bit Type:
Inside Diameter (in.)			-	Drill Mud: None
Hammer Weight (lb)			-	Casing:
				Hoist/Hammer:
Hammer Fall (in.)			-	PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS* Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, natural grain size and artificial component percentage estimates, manual test properties, structure, odors, moisture, other descriptions and observations GEOLOGIC INTERPRETATION)	PID Readings (ppm) (sample/bkgd)
0		G1 50	0.0 5.0	0.5		GRAVEL, PLANT ROOTS	
				1.0	SM	Brown, silty SAND with gravel (SM), no odor, moist.	
				2.0	SM	Gray-brown, sandy SILT (SM), no odor, moist.	
					ML SM	Brown, silty SAND (SM), no odor, wet at 3-5 feet.	
				4.5			
5				5.0		Red-brown, silty SAND with gravel (SM), no odor, wet.	
						BOTTOM OF EXPLORATION AT 5 FEET	

Notes:
VOC, SVOC, TIS, SPLP at 0.5 - 1.0 feet
VOC, SVOC, TIS, SPLP at 2.5 - 3.0 feet

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Component Percentage Estimates

Term	Range
adjective modifier	20% - 50%
and	20% - 50%
some	20% - 33%
little	10% - 20%
trace	5% - 10%
with	present

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft) 5
Rock Cored (ft) 0
Samples 1G

Boring No. PL05-202

Sampler Type: S - Split Spoon Sampler U - Undisturbed Tube Sampler T - Thin Wall Tube Sampler

***NOTE: USCS Group Symbols based on visual-manual methods of the USCS system as practiced by Haley & Aldrich, Inc.**

NOTE: Visual-Manual Identification and Description based upon Haley & Aldrich OP2001A - Field Practice for Soil Identification and Description.

GEOPROBE REPORT HA-LIB08-BETA.GLB HA-TB+CORE+WELL-08.GDT \\CLEVCOMMONPROJECTS\70613\BORING LOGS\GINT\70613-702.GPJ Dec 9, 13

HALEY& ALDRICH

TEST BORING REPORT

Boring No. SB-11-S0-200

Project 2012 Supplemental Soil Borings-Ewing Industrial Land , Trenton NJ
Client RACER Trust
Contractor EPI

File No. 70613
Sheet No. 1 of 1
Start April 25, 2012
Finish April 25, 2012
Driller J. Abel
H&A Rep. D. Mukherjee
Elevation
Datum NGVD
Location

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		G		Rig Make & Model: Geoprobe 6620 DT
Inside Diameter (in.)			-	Bit Type:
Hammer Weight (lb)			-	Drill Mud: None
Hammer Fall (in.)			-	Casing:
				Hoist/Hammer:
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, GROUP NAME, max. particle size†, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0		G1 41	0.0 5.0	0.5	SM	(SM), Dark brown, silty SAND with gravel (SM), no odor, moist, plant roots.
					ML	(ML), Yellow-brown, sandy SILT (ML), no odor, moist.
				4.0	SM	(SM), Red-brown, silty SAND with gravel (SM), crushed rock fragments, no odor, moist.
5				5.0		BOTTOM OF EXPLORATION AT 5 FEET.

Notes:
SVOC, TIS, PCBs, SPLP at 0.5 - 1.0 feet
SVOC, TIS, PCBs, SPLP at 3.5 - 4.0 feet

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Split Spoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	5
Rock Cored (ft)	0
Samples	1G

Boring No. SB-11-S0-200

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

†**Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TEST BORING-IPAC-07-1 HA-LIB07-1-CLE2.GLB HA-TB+CORE+WELL-IPAC-07-1.GDT G:\PROJECTS\70613\BORING LOGS\GINT\70613-702.GPJ Nov 11, 13

HALEY & ALDRICH

TEST BORING REPORT

Boring No. SB-11-S0-201

Project 2012 Supplemental Soil Borings-Ewing Industrial Land , Trenton NJ
Client RACER Trust
Contractor EPI

File No. 70613
Sheet No. 1 of 1
Start April 25, 2012
Finish April 25, 2012
Driller J. Abel
H&A Rep. D. Mukherjee
Elevation
Datum NGVD
Location

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type		G		Rig Make & Model: Geoprobe 6620 DT
				Bit Type:
Inside Diameter (in.)			-	Drill Mud: None
Hammer Weight (lb)			-	Casing:
				Hoist/Hammer:
Hammer Fall (in.)			-	PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, GROUP NAME, max. particle size†, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0		G1 53	0.0 5.0		SM	(SM), Dark brown, silty SAND with gravel (SM), no odor, moist. Presence of plant roots.
				1.5		Red-brown, silty SAND with gravel (SM), no odor, moist.
5				5.0		BOTTOM OF EXPLORATION AT 5 FEET

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Split Spoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 5
Rock Cored (ft) 0
Samples 1G

Boring No. SB-11-S0-201

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

†**Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TEST BORING-IPAC-07-1 HA-LIB07-1-CLE2.GLB HA-TB+CORE+WELL-IPAC-07-1.GDT G:\PROJECTS\70613\BORING LOGS\GINT\70613-702.GPJ Nov 11, 13

HALEY& ALDRICH

GEOPROBE REPORT

Boring No. TP 9-2-202

Project Additional Soil Investigations, Trenton, New Jersey
Client RACER Trust
Contractor

File No. 70613
Sheet No. 1 of 1
Start April 26, 2012
Finish April 26, 2012
Driller J. Abel
H&A Rep. D. Mukherjee
Elevation
Datum NGVD
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	-	G		Rig Make & Model: Geoprobe 6620 DT
Inside Diameter (in.)	-	-	-	Bit Type:
Hammer Weight (lb)	-	-	-	Drill Mud: None
Hammer Fall (in.)	-	-	-	Casing:
				Hoist/Hammer:
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS* Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, natural grain size and artificial component percentage estimates, manual test properties, structure, odors, moisture, other descriptions and observations GEOLOGIC INTERPRETATION)	PID Readings (ppm) (sample/bkgd)
0		G1 45	0.0 5.0	0.5		GRAVEL	1.2
					SM	Black, silty SAND with gravel (SM), strong paint-like chemical odor, moist.	6.8 209 143
				2.0		Gray-brown, silty SAND with gravel (SM), chemical odor, moist.	112 98 73 26 20 28
5		G2 47	5.0 10.0				3.1 2.9
				6.0		Unknown white material, pasty in texture.	0.8
				6.5	SM	Gray, silty SAND (SM), no odor, moist.	2.1 4.6 4.7 4.8 2.7 2.5
10				10.0		BOTTOM OF EXPLORATION AT 10 FEET	3.1

Notes:
Took two cores to get sample volume.

VOC, SVOC, PCBs at 0.5 -1 feet
VOC, SVOC, PCBs, TIS, SPLP at 2.5 - 3.0 feet
VOC, SVOC, PCBs, TIS, SPLP at 9.0 - 9.5 feet

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Component Percentage Estimates

Term	Range
adjective modifier	20% - 50%
and	20% - 50%
some	20% - 33%
little	10% - 20%
trace	5% - 10%
with	present

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft) 10
Rock Cored (ft) 0
Samples 2G

Boring No. TP 9-2-202

Sampler Type: S - Split Spoon Sampler U - Undisturbed Tube Sampler T - Thin Wall Tube Sampler

***NOTE: USCS Group Symbols based on visual-manual methods of the USCS system as practiced by Haley & Aldrich, Inc.**

NOTE: Visual-Manual Identification and Description based upon Haley & Aldrich OP2001A - Field Practice for Soil Identification and Description.

GEOPROBE REPORT HA-LIB08-BETA.GLB HA-TB+CORE+WELL-08.GDT L:\OHIO OFFICES\CLEVELAND\70613-702.GPJ Dec 6, 13

HALEY& ALDRICH

GEOPROBE REPORT

Boring No. TP 9-3-203

Project Additional Soil Investigations, Trenton, New Jersey
Client RACER Trust
Contractor

File No. 70613
Sheet No. 1 of 1
Start April 27, 2012
Finish April 27, 2012
Driller J. Abel
H&A Rep. D. Mukherjee
Elevation
Datum NGVD
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	-	G		Rig Make & Model: Geoprobe 6620 DT
Inside Diameter (in.)	-	-	-	Bit Type:
Hammer Weight (lb)	-	-	-	Drill Mud: None
Hammer Fall (in.)	-	-	-	Casing:
				Hoist/Hammer:
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	Stratum Change Elev/Depth (ft)	USCS* Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, natural grain size and artificial component percentage estimates, manual test properties, structure, odors, moisture, other descriptions and observations GEOLOGIC INTERPRETATION)	PID Readings (ppm) (sample/bkgd)
0		G1 37	0.0 5.0	0.5		GRAVEL.	0.0
					SM	Brown, silty SAND with gravel (SM), chemical-like odor, moist.	5.9
							12.7
							23.1
							18.2
							15.1
							3.2
							1.7
							0.0
5							0.0
		G2 48	5.0 10.0	5.5			0.0
						Similar to above except black in color.	
				7.0	SM	Gray-brown, silty SAND (SM), no odor, moist.	
10				10.0		BOTTOM OF EXPLORATION AT 10 FEET	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Component Percentage Estimates	
Term	Range
adjective modifier	20% - 50%
and	20% - 50%
some	20% - 33%
little	10% - 20%
trace	5% - 10%
with	present

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft) 10
Rock Cored (ft) 0
Samples 2G

Boring No. TP 9-3-203

Sampler Type: S - Split Spoon Sampler U - Undisturbed Tube Sampler T - Thin Wall Tube Sampler

***NOTE: USCS Group Symbols based on visual-manual methods of the USCS system as practiced by Haley & Aldrich, Inc.**

NOTE: Visual-Manual Identification and Description based upon Haley & Aldrich OP2001A - Field Practice for Soil Identification and Description.

GEOPROBE REPORT HA-LIB08-BETA.GLB HA-TB+CORE+WELL-08.GDT L:\OHIO OFFICES\CLEVELAND\70613-702.GPJ Dec 6, 13

TEST BORING REPORT

Boring No. 268-2R

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 12 September 2016
Finish 12 September 2016
Driller
H&A Rep. T. Dennison
Elevation Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 29/60	0.0 5.0	0.6	0.5		CONCRETE Brown silty SAND with fine gravel, no odor, dry, gravel throughout
			6.3	4.5		Red-brown silty CLAY with gravel
5	G2 51/60	5.0 10.0	1.9			
			1.7			
			1.7			Similar to above
10			0.7	10.0		BOTTOM OF EXPLORATION 10.0 FT

Notes:

Samples:
4479-0912-16-1530 7.5-8.0 ft; grain-size and TOC
4479-091216-1520 3.25-3.75 ft
4479-091216-1522 6.5-7.0 ft
4479-091216-1524 7.0-7.5 ft

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 10.0
Rock Cored (ft) --
Samples 2G

Boring No. 268-2R

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. B7-3R

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 13 September 2016
Finish 13 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 22/60	0.0 5.0	0.0	0.5		CONCRETE
			3.9			Red-brown silty CLAY with sand and gravel
				3.0		Gray-brown silty CLAY, brown mottling, gravel and sand present, strong odor, wet
			0.0			
5	G2 25/60	5.0 10.0	3.4			Similar to above at 0.5 ft
			13.9			
			0.5			At 7.0 ft, gravel
			0.2			At 8.0 ft, similar to above at 3.0 ft, moist
			0.6			
10	G3 34/60	10.0 15.0	0.0			Brown silty CLAY, mps <5 mm, black at 10.5 ft
			0.0			
			0.0			Similar to above
			0.0			At 13.0 ft, color change to red-brown
			0.0			
15			0.0	15.0		BOTTOM OF EXPLORATION 15.0 ft

Notes:

Samples:
4479-091316-1115 3.5-4.0 ft; nickel
4479-091316-1120 10.0-10.5 ft; nickel

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 15.0
Rock Cored (ft) --
Samples 3G

Boring No. B7-3R

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. B7-5R

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 13 September 2016
Finish 13 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 34/60	0.0 5.0	115.2	0.5		CONCRETE
						GRAVEL
			15.9	1.5		Red-brown silty CLAY with gravel, strong fuel-like odor, moist
			6.8			At 3.0 ft, black sand-slag-like material
			5.5			Similar to above at 1.5 ft, slight odor
5			4.0	5.0		BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
4479-091316-1525 2.5-3.0 ft; TCE

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 5.0
Rock Cored (ft) --
Samples 1G

Boring No. B7-5R

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. B7-9

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 15 September 2016
Finish 15 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0			3.6	0.5		TOPSOIL/ORGANICS
				0.5		Dark brown sandy SILT with gravel, slight odor, dry
						BOTTOM OF EXPLORATION 0.5 ft
5						

Notes:

Samples:
4479-091516-1440 0.0-0.5 ft; arsenic

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID

O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft) 0.5
Rock Cored (ft) --
Samples --

Boring No. B7-9

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. B8-4-100

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 15 September 2016
Finish 15 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 26/60	0.0 5.0	5.6	0.5		TOPSOIL/ORGANICS
			6.3			Brown sandy SILT with gravel, no odor, dry, increasing sand content with depth
			0.8			
5	G2	5.0 10.0	15.0			
			66.1	6.5		
			28.1			Gray CLAY with fill material (fabric, fibrous material, wood, gravel, grass), strong odor, wet
			53.1			
			27			
10				10.0		BOTTOM OF EXPLORATION 10.0 FT

Notes:

Samples:
4479-091516-0840 8.0-8.5 ft; benzene and chlorobenzene

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 10.0
Rock Cored (ft) --
Samples 2G

Boring No. B8-4-100

Field Tests:
Dilatancy: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. B8-4-102

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 15 September 2016
Finish 15 September 2016
Driller
H&A Rep. T. Dennison
Elevation Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 40/60	0.0 5.0	1.1	0.5		TOPSOIL/ORGANICS
			2.5			Brown silty SAND, dry, gravel and sand
						- FILL-
			6.1	3.5		Gray CLAY with sand, moist, 3 in. red gravel
			237.1	4.5		Plastic paper layering with gray fine grained material (rubbery), strong odor, 2 in. thick
5	G2 28/60	5.0 10.0	165			Gray CLAY with fill material (thick glass, fabrics, gravel)
						Gray CLAY, similar to above, fibrous, orange material, wood, glass
10				10.0		BOTTOM OF EXPLORATION 10.0 FT

Notes:

Samples:
4479-0915-16-0855 8.0-8.5 ft; benzene and chlorobenzene

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 10.0
Rock Cored (ft) --
Samples 2G

Boring No. B8-4-102

Field Tests:
Dilatancy: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. B8-4R

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 15 September 2016
Finish 15 September 2016
Driller
H&A Rep. T. Dennison
Elevation Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 45/60	0.0 5.0	0.5	0.5		TOPSOIL/ORGANICS
			1.2			Brown silty SAND, no odor, dry, abundant gravel, trace brick, coarse sand, concrete
				3.0		Brown fine silty SAND, mps fine sand, slight odor, moist
			1.6			
5	G2 35/60	5.0 10.0	20	5.0		Fill material - fabrics, gravel, sand, trace brick
			1.6			
			121.4	6.5		Gray CLAY with fill material, strong odor, wet
			117.6			
			91.2			
10				10.0		BOTTOM OF EXPLORATION 10.0 FT

Notes:

Samples:
4479-091516-0810 6.0-8.0 ft, nickel and grain-size

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 10.0
Rock Cored (ft) --
Samples 2G

Boring No. B8-4R

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. B8-8-1

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 14 September 2016
Finish 14 September 2016
Driller
H&A Rep. T. Dennison
Elevation Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 46/60	0.0 5.0	0.0	0.5		TOPSOIL/ORGANICS
			0.0			Brown sandy SILT with gravel, no odor, dry
			0.8	4.0		Dark gray/brown silty SAND, strong odor, moist
5	G2 27/60	5.0 10.0	21.4			Color change to brown
			4.6			
			2.1			At 8.0 ft, wet
			2.1	9.5		Fill material, strong odor, moist (wood and fibrous material)
10	G3 32/60	10.0 15.0	201.2			Dark gray-brown silty SAND with gravel, saturated at 10.5 to 14.0 ft
			29.9			
			8.8			At 12.0 ft, dark gray CLAY
			4.0			
			4.2			Gray CLAY, mps <5 mm, slight odor, moist
15				15.0		BOTTOM OF EXPLORATION 15.0 FT

Notes:

Samples:
4479-091416-1410 7.75-8.25 ft; chlorobenzene and nickel
4479-091416-1420 12.0-12.5 ft; chlorobenzene and nickel

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 15.0
Rock Cored (ft) --
Samples 3G

Boring No. B8-8-1

Field Tests:
Dilatancy: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. B8-8-2-100

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 14 September 2016
Finish 14 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 58/60	0.0 5.0	0.0			Brown SILT, trace gravel and sand, dry
			0.0			At 2.0 ft, color change to yellow-brown
			5.8			At 4.0 ft, color change to brown, bright blue (turquoise) starting at 4.0 ft, slight odor
5	G2	5.0 10.0	86.6	5.0		Brown silty SAND, dry
			6.2			
			11.7	7.0		Fill material - gray clayey fibrous material, strong odor, wet
			204.1			
			344.5			
10			358.1	9.8		WOOD
				10.0		BOTTOM OF EXPLORATION 10.0 FT

Notes:

Samples:
4479-091416-1210 7.75-8.25 ft; chlorobenzene
4479-091416-1215 9.5-10.0 ft; chlorobenzene

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 10.0
Rock Cored (ft) --
Samples 2G

Boring No. B8-8-2-100

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

*Note: Maximum particle size is determined by direct observation within the limitations of sampler size.

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\706139814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\706139-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. B8-8-2-101

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 14 September 2016
Finish 14 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 52/60	0.0 5.0	1.1	0.5		TOPSOIL/ORGANICS
			1.5			Brown sandy SILT, some gravel, slight odor, blue staining, increasing sand with depth
			2.5			
			24.6			
			30.8			
5	G2 41/60	5.0 10.0	101.2			
			96.2			
			326	7.0		Fill material - gray fibrous, paint thinner-like odor, wood, gravel, wet
			215.1			
			96.3			
10				10.0		BOTTOM OF EXPLORATION 10.0 FT

Notes:

Samples:
4479-091416-1340 7.75-8.25 ft; chlorobenzene

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 6.0
Rock Cored (ft) --
Samples 2G

Boring No. B8-8-2-101

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. B8-8-2-102

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 14 September 2016
Finish 14 September 2016
Driller
H&A Rep. T. Dennison
Elevation Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 58/60	0.0 5.0	0.9			Light brown silty SAND with gravel, mps coarse sand, no odor, dry
			0.1			
			0.0			
			1.6	3.0		Brown SILT with gravel, slight odor, moist, glass, gray staining
			15.4			
5	G2 33/60	5.0 10.0	2.8			Similar to above
			2.4			At 6.0 ft, silty sand
			166	7.0		Fill material - gray with orange and gray fibrous material, glass, wood, strong odor, moist
			330			At 8.0 ft, wet
			46.5			
10				10.0		BOTTOM OF EXPLORATION 10.0 FT

Notes:

Samples:
4479-091416-1130 7.75-8.25; chlorobenzene
4479-091416-1145 9.5-10.0 ft; chlorobenzene and TCE

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 10.0
Rock Cored (ft) --
Samples 2G

Boring No. B8-8-2-102

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. B9-16

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 15 September 2016
Finish 15 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0			2.0	0.5		TOPSOIL/ORGANICS
				0.5		Brown silty SAND with gravel, no odor, dry
						BOTTOM OF EXPLORATION 0.5 FT
						Notes:
						Samples: 4479-091516-1300 0.0-0.5 ft; arsenic
5						

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 0.5
Rock Cored (ft) --
Samples --
Boring No. B9-16

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. B9-16-100

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 15 September 2016
Finish 15 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0			6.7	0.5		TOPSOIL/ORGANICS
				0.5		Brown silty SAND with gravel, no odor, dry
						BOTTOM OF EXPLORATION 0.5 ft
						Notes:
						Samples: 4479-091516-1305 0.0-0.5 ft; arsenic
5						

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 0.5
Rock Cored (ft) --
Samples --

Boring No. B9-16-100

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. B9-2

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 16 September 2016
Finish 16 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 55/60	0.0 5.0	0.0	0.5		TOPSOIL/ORGANICS
			0.0			Yellow-brown SILT with sand, trace gravel, no odor, dry
			0.0			
5				5.0		BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
4479-091616-1140 0.0-0.5 ft; arsenic
4479-091616-1147 2.5-3.0 ft; grain-size and TOC

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 5.0
Rock Cored (ft) --
Samples 1G

Boring No. B9-2

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. B9-2-100

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 16 September 2016
Finish 16 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 55	0.0 5.0	0.0	0.5		TOPSOIL/ORGANICS
			0.0			Yellow-brown SILT with sand, trace gravel, no odor, dry
			0.0			
5				5.0		BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
4479-091616-1142 0.0-0.5 ft; arsenic
4479-091616-1145 2.5-3.0 ft; arsenic

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 5.0
Rock Cored (ft) --
Samples 1G

Boring No. B9-2-100

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. B9-2-101

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 16 September 2016
Finish 16 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 50/60	0.0 5.0	0.0	0.5		TOPSOIL/ORGANICS
			0.0			Yellow-brown SILT with sand, trace gravel, no odor, dry
			0.0			
5				5.0		BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
4479-091616-1135 0.0-0.5 ft; arsenic
4479-091616-1138 2.5-3.0 ft; arsenic

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 5.0
Rock Cored (ft) --
Samples 1G

Boring No. B9-2-101

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. B9-2-103

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 16 September 2016
Finish 16 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 50/60	0.0 5.0	0.0	0.5		TOPSOIL/ORGANICS
			0.0			Yellow-brown SILT with sand, trace gravel, no odor, dry
			0.0			
5				5.0		BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
4479-091616-1130 0.0-0.5 ft; arsenic
4479-091616-1132 2.5-3.0 ft; arsenic

Note: Located in front of gate in low area.

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 5.0
Rock Cored (ft) --
Samples 1G

Boring No. B9-2-103

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. IS05/I305-100R

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 13 September 2016
Finish 13 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 32/60	0.0 5.0	10.5	0.5		CONCRETE
			19.3	1.0		Brown silty SAND, mps coarse sand, trace gravel, no odor
				1.5		Black coarse SAND with silt, slight odor
			36.3	2.0		Color change to red-brown
				2.5		Silty CLAY with sand
			38.8	3.0		Color change to black with slag-like material
5				5.0		Red-brown sandy CLAY with gravel, no odor, moist
						BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
4479-091316-0915 1.0-1.5 ft; nickel and vinyl chloride
4479-091316-0930 2.5-3.0 ft; vinyl chloride

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 5.0
Rock Cored (ft) --
Samples 1G

Boring No. IS05/I305-100R

Field Tests:
Dilatancy: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. IS05-102R

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 13 September 2016
Finish 13 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 29/60	0.0 5.0	0.9	0.5		CONCRETE
			1.7			Brown silty SAND, mps coarse sand, gravel throughout
			3.4			Black coarse silty SAND, slight odor, moist
			0.9			Red-brown sandy SILT with gravel, mps coarse sand, no odor, moist
5				5.0		BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
4479-091316-0940 1.0-1.5 ft; arsenic and vinyl chloride

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 5.0
Rock Cored (ft) --
Samples 1G

Boring No. IS05-102R

Field Tests:
Dilatancy: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. IS05-103R

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 13 September 2016
Finish 13 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 31/60	0.0 5.0	4.0	0.5		CONCRETE
						Black SAND, mps coarse sand, slight odor, moist
			20.1			At 2.5 ft, red-brown silty SAND, strong odor
			6.6			Red-brown silty CLAY, mps <5 mm, weathered rock throughout, no odor, moist
5				5.0		BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
4479-091316-0850 2.5-3.0; vinyl chloride

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID

O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft) 5.0
Rock Cored (ft) --
Samples 1G

Boring No. IS05-103R

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. IS06-103R

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 13 September 2016
Finish 13 September 2016
Driller
H&A Rep. T. Dennison
Elevation Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 28/60	0.0 5.0	0.0	0.5		CONCRETE
						Black silty SAND, no odor, moist Brown, trace gravel, slag-like material
			0.0	2.0		Brown SILT with gravel and sand
				2.5		Similar to 0.5 ft
			0.0	3.0		Red-brown silty CLAY with gravel
			0.0			
5				5.0		BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
4479-091316-1010 1.0-1.5 ft; arsenic and vinyl chloride

Note: Approximate location, GPS-here, slight evidence of past boring.

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 5.0
Rock Cored (ft) --
Samples 1G

Boring No. IS06-103R

Field Tests:
Dilatancy: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. IS06R

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 13 September 2016
Finish 13 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 31/60	0.0 5.0	0.8	0.8		CONCRETE
				1.0		Black silty SAND with gravel, mps coarse sand, no odor, moist
			0.2			Brown silty CLAY
				3.5		Red-brown weathered ROCK and SAND
			0.3	4.0		Brown silty SAND, fine grained, wet
5				5.0		BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
4479-091316-1225 1.0-1.5 ft; arsenic, nickel and vinyl chloride

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 5.0
Rock Cored (ft) --
Samples 1G

Boring No. IS06R

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. IS07-103R

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 13 September 2016
Finish 13 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 17/60	0.0 5.0	0.0			CONCRETE
			1.9	0.8		Brown silty SAND, gravel throughout, no odor, moist
			10.5			
			11	4.0		Gray-brown CLAY with gray mottling, pink staining at 4.5 ft, wet at 5 ft
5				5.0		BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
4479-091316-1200 2.5-3.0 ft; arsenic

Note: Low recovery, stepped off two more times to get enough sample.

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID

O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft) 5.0
Rock Cored (ft) --
Samples 1G

Boring No. IS07-103R

Field Tests:

Dilatancy: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. PL07-01R

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start
Finish
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 33/60	0.0 5.0	0.0	0.5		CONCRETE
						Red-brown CLAY with gravel, no odor, moist
			0.0			
			0.0			
			0.0			At 3.5 ft, 2 in. seam of red-brown silty sand
						Color change to brown with gray mottling
5				5.0		BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
SPO7-01R 1425 4.5-5.0 ft; metals (nickel)

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID

O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft) 5.0
Rock Cored (ft) --
Samples 1G

Boring No. PL07-01R

Field Tests:

Dilatancy: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. PL07-107R

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start
Finish
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 36/36	0.0 5.0	0.4	0.5		CONCRETE
			0.0			Black silty SAND with gravel, slight odor (0.5 ft thick), wet
			0.0			Red-brown medium dense CLAY with gravel throughout, gray mottling, slight odor
			0.0	3.0		BOTTOM OF EXPLORATION 3.0 FT
5						

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 5.0
Rock Cored (ft) --
Samples 1G

Boring No. PL07-107R

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-10-SO-10

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 15 September 2016
Finish 15 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 30/60	0.0 5.0	0.0	0.5		TOPSOIL/ORGANICS/WOOD
			0.0			Brown sandy SILT with gravel, no odor, dry
			0.9			
			99.8	3.0		Similar to above, brick, gravel, moist, more fill
			89.1	3.5		Gray-brown silty CLAY with fill, strong odor, moist
5	G2 34/60	5.0 10.0	94.1	5.0		Fill material - gray clayey, plastic, strong odor, moist/wet
			80.3			At 5.5 ft, wood
			29.7			
			9.5			At 9.0 ft, gray CLAY
			6.2			
10				10.0		BOTTOM OF EXPLORATION 10.0 FT

Notes:

Samples:
4479-091516-0945 3.0-4.0 ft; chlorobenzene and nickel
4479-091516-1000 4.0-6.0 ft; chlorobenzene and nickel

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 10.0
Rock Cored (ft) --
Samples 2G

Boring No. SB-10-SO-10

Field Tests:
Dilatancy: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-10-SO-10-100

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 15 September 2016
Finish 15 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 29/60	0.0 5.0	4.7	0.5		TOPSOIL/ORGANICS/WOOD
			1.1			Brown silty SAND and ORGANICS, some gravel, no odor, dry
			86.3	3.0		GRAVEL
				3.5		Brown silty CLAY with fill and wood, strong odor, moist
			74.6	4.7		
5	G2 38/60	5.0 10.0	28.7			Similar to above at 3.5 ft, blue staining, moist At 5.5 ft, 2-in. layer of sand
			92.8			
			29.1			
			8.5			
			5.8			
10				10.0		BOTTOM OF EXPLORATION 10.0 FT

Notes:

Samples:
4479-091516-1020 6.0-6.5 ft; chlorobenzene and TCE

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 10.0
Rock Cored (ft) --
Samples 2G

Boring No. SB-10-SO-10-100

Field Tests:
Dilatancy: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-10-SO-10-103

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 15 September 2016
Finish 15 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1	0.0 5.0	0.5 0.4	0.5		TOPSOIL/ORGANICS/WOOD Brown silty SAND, some gravel and brick fragments, slight odor, dry
			79.0	4.0		Dark gray silty CLAY, trace gravel, strong odor, moist
5	G2	5.0 10.0	65.8 10.1	6.0		At 5.75 ft, 2-in. layer of sand with organics Gray silty CLAY, trace gravel, strong odor, moist, blue staining
			3.8			
10				10.0		BOTTOM OF EXPLORATION 10.0 FT

Notes:

Samples:
4479-091516-1045 4.5-5.0 ft; chlorobenzene
4479-091516-1055 6.5-7.0 ft; benzene and chlorobenzene

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 10.0
Rock Cored (ft) --
Samples 2G

Boring No. SB-10-SO-10-103

Field Tests:
Dilatancy: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-10-SO-5A

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 15 September 2016
Finish 15 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0				0.2		TOPSOIL/ORGANICS Brown silty SAND, abundant gravel, no odor, dry
				2.0		Similar to above, gravel from 2.0 to 4.0 ft
5				5.0		BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
4479-091516-1435 2.0-4.0 ft; nickel

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) --
Rock Cored (ft) --
Samples --

Boring No. SB-10-SO-5A

Field Tests:
Dilatancy: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-10-SO-7

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 15 September 2016
Finish 15 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 60/60	0.0 5.0	0.0	0.5		TOPSOIL/ORGANICS
			0.0			Rusty-brown silty SAND with gravel, no odor, dry
			0.0			
5	G2	5.0 10.0	0.1			
			0.2	7.0		Gray/red CLAY with gravel, slight odor, moist
				7.5		Red-brown weathered ROCK and SAND, no odor, dry
			0.1			
				9.5		Similar to above, moist, more clay
10				10.0		BOTTOM OF EXPLORATION 10.0 FT

Notes:

Samples:
4479-091516-1340 4.0-5.0 ft; nickel
4479-091516-1345 8.0-10.0 ft; chlorobenzene and nickel

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 10.0
Rock Cored (ft) --
Samples 2G

Boring No. SB-10-SO-7

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-10-SO-7-103

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 15 September 2016
Finish 15 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 45/60	0.0 5.0	0.0	0.5		TOPSOIL/ORGANICS
						Rusty-brown silty SAND, medium grained sand, organic odor, gravel throughout, dry
			0.0			
						At 3.0 ft, wood (2 in.)
			0.0			
5	G2	5.0 10.0	1.5	5.5		Similar to above
						Gray-brown CLAY, no odor, moist
			0.0	7.0		Red-brown silty SAND, no odor, dry
			1.9			At 9.0 ft, wet
				9.5		Gray-black silty CLAY, wet
10				10.0		BOTTOM OF EXPLORATION 10.0 FT

Notes:

Samples:
4479-091516-1330 5.5-6.0 ft; nickel

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 10.0
Rock Cored (ft) --
Samples 2G

Boring No. SB-10-SO-7-103

Field Tests:
Dilatancy: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-7-SO-3-101R

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 13 September 2016
Finish 13 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 45/60	0.0 5.0	0.0	0.5		TOPSOIL/ORGANICS
			16.2	1.5		Light brown silty SAND with gravel, no odor, dry
			10.1	2.3		Black coarse SAND, no odor, dry
			14.6	2.5		GRAVEL
				3.0		WOOD, slight odor
			2.1	3.5		Red CLAY with gravel
				4.0		CONCRETE/GRAVEL
5				4.5		Similar to above at 3.0 ft
				5.0		GRAVEL/CONCRETE
						BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
4479-091316-1410 3.5-4.0 ft; vinyl chloride

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 5.0
Rock Cored (ft) --
Samples 1G

Boring No. SB-7-SO-3-101R

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-7-SO-3R

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 13 September 2016
Finish 13 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 38/60	0.0 5.0	0.0			TOPSOIL/ORGANICS
			18.2	0.5		Light brown silty SAND with gravel, no odor, dry
			7.6	1.5		Black coarse SAND, no odor, dry
				2.3		GRAVEL
				2.5		WOOD, slight odor
				3.0		Red CLAY with gravel
			11.1	3.5		CONCRETE/GRAVEL
				4.0		Similar to above at 3.0 ft
5	G2 60/60	5.0 10.0	6.4	4.5		GRAVEL/CONCRETE
			0.6	5.0		
			0.0			At 8.5 ft, blue staining
			0.0			Light brown silty SAND, gravel throughout, slight odor, moist, light blue/teal staining throughout
				9.5		Dark brown/black SILT, trace sand, slight odor, moist
10				10.0		BOTTOM OF EXPLORATION 10.0 FT

Notes:

Samples:
4479-091316-1435 8.0-10.0 ft; TCE
Total metals - all metals on hold - not rush

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 10.0
Rock Cored (ft) --
Samples 2G

Boring No. SB-7-SO-3R

Field Tests:
Dilatancy: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-7-SO-6R

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 13 September 2016
Finish 13 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1	0.0 5.0	0.0	0.5		TOPSOIL/ORGANICS
			0.0			Brown/gray silty SAND with fine gravel, no odor, dry, increasing moisture content with depth
			0.0			
			0.0			
			1.3			At 4.0 ft, red-brown weathered rock, blue staining
						At 4.5 ft, gravel
5				5.0		At 4.75 ft, brown silty CLAY, moist
						BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
4479-091316-1500 2.0-4.0 ft; nickel and TCE

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 5.0
Rock Cored (ft) --
Samples 1G

Boring No. SB-7-SO-6R

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

*Note: Maximum particle size is determined by direct observation within the limitations of sampler size.

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-8-SO-11-100

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 14 September 2016
Finish 14 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 33/60	0.0 5.0	1.8	0.5		TOPSOIL/ORGANICS
			4.5			Brown silty SAND with gravel, mps coarse sand, slight odor, dry
			37.6			At 3.0 ft, strong odor, moist
			52.6			
5				5.0		BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
4479-091416-0920 3.5-4.0 ft; vinyl chloride

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 5.0
Rock Cored (ft) --
Samples 1G

Boring No. SB-8-SO-11-100

Field Tests:
Dilatancy: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-8-SO-14R

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 14 September 2016
Finish 14 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 42/60	0.0 5.0	0.1	0.5		TOPSOIL/ORGANICS
			0.3			Silty SAND with gravel, no odor, dry
				2.0		Brown SILT, some gravel, slight odor, moist
			4.4			
			2.8			
5	G2 27/60	5.0 10.0	1.6	5.0		Brown SILT, trace gravel, no odor, dry
			5.2			
			6.7	8.0		Dark brown/red-brown SILT with fill material, wood, strong odor, moist
			431.1			At 9.0 ft, fill material
10				10.0		BOTTOM OF EXPLORATION 10.0 FT

Notes:

Samples:
4479-091416-1500 9.0-10.0 ft; chlorobenzene

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 10.0
Rock Cored (ft) --
Samples 2G

Boring No. SB-8-SO-14R

Field Tests:
Dilatancy: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-AOC010-2013-100

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 15 September 2016
Finish 15 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 36/60	0.0 5.0	4.7	0.5		TOPSOIL/ORGANICS/WOOD and GRAVEL
			23.3			Brown silty SAND, abundant gravel, no odor, dry
				3.5		Gray-brown silty CLAY with sand and gravel and fill material (cardboard), strong odor, moist
			14.2			
5	G2 26/60	5.0 10.0	23.2			At 4.9 ft, black wood
			36.7			Wood throughout
			44.9			
			5.9			
				9.5		Gray CLAY, no fill, slight odor, wet
10				10.0		BOTTOM OF EXPLORATION 10.0 FT

Notes:

Samples:
4479-091516-1110 5.0-5.5 ft; benzene, nickel, TCE and grain-size

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 10.0
Rock Cored (ft) --
Samples 2G

Boring No. SB-AOC010-2013-100

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-AOC010-2013-117

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 15 September 2016
Finish 15 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 26/60	0.0 5.0	7.7	0.5		TOPSOIL/ORGANICS
			13.2			Brown sandy SILT, organic odor, moist, gravel present throughout
			64.2	3.0		GRAVEL/SAND layer, dry
			36.1	4.0		Gray CLAY fill material, brick fragments, glass, strong odor, moist
5				5.0		BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
4479-091516-1415 4.0-4.5 ft; benzene

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 5.0
Rock Cored (ft) --
Samples 1G

Boring No. SB-AOC010-2013-117

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-AOC010-2013-129

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 15 September 2016
Finish 15 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 36/60	0.0 5.0	1.7	0.5		TOPSOIL/ORGANICS
			0.9	1.0		Brown silty SAND, fine gravel, no odor, dry
						Gray GRAVEL and SAND, no odor, dry
			0.8			Similar to above from 0.0 to 1.0 ft, red-brown, black shiny fill material
5				5.0		BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
4479-091516-1500 3.5-4.0 ft; nickel, TCE, grain-size and FOC

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 5.0
Rock Cored (ft) --
Samples 1G

Boring No. SB-AOC010-2013-129

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Plasticity**: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-AOC1C-2013-107

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 12 September 2016
Finish 15 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 36/36	0.0 3.0				CONCRETE
				1.0		Red-brown CLAY, trace gravel, soft, mps <5 mm, no odor, moist Color change to gray at 1.0 ft
				3.0		BOTTOM OF EXPLORATION 3.0 FT
5						Notes: Samples: SB-AOC1C-2013-107R 1100 0.5-1.0 ft; TCE

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 3.0
Rock Cored (ft) --
Samples 1G

Boring No. SB-AOC1C-2013-107

Field Tests:
Dilatancy: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-AOC8B-2013-104

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 14 September 2016
Finish 14 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 32/60	0.0 5.0	0.0	0.5		TOPSOIL/ORGANICS
			0.0	2.0		Brown silty SAND, abundant gravel, no odor, dry
			21.5			Darker brown sandy SILT, strong odor, moist
			4.2			
5	G2 30/60	5.0 10.0	16.9			
			34.3			At 5.5 to 6.0 ft, gravel
			154.4	7.0		Black poorly graded medium grained SAND, strong odor, wet
			444.1			
			901.7	9.0		Gray-brown CLAYEY SAND, fibrous-like roots or fabric, wood, very strong paint thinner-like odor, glass throughout
10				10.0		BOTTOM OF EXPLORATION 10.0 FT

Notes:

Samples:
4479-091416-1000 9.5-10.0 ft; chlorobenzene and nickel

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 10.0
Rock Cored (ft) --
Samples 2G

Boring No. SB-AOC8B-2013-104

Field Tests:
Dilatancy: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-AOC8B-2013-105

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 14 September 2016
Finish 14 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 34/60	0.0 5.0	1.4	0.5		TOPSOIL/ORGANICS
			2.0			Light brown silty SAND with gravel, slight odor, dry
			7.3	3.0		Dark brown SILT, fill material - glass, fabric, plastic, gravel, strong odor, moist
			104.2			
5	G2 37/60	5.0 10.0	402	5.2		Orange fibrous material, very strong odor
			13.2	5.5		GRAVEL Similar to above at 3.0 ft
			127.2			
			291.2			At 8.0 ft, wood
			58.6	9.0		Dark brown SILT, slight odor, moist, wet at 9.0 ft, carbon black material at 10.0 ft
10				10.0		BOTTOM OF EXPLORATION 10.0 FT

Notes:

Samples:
4479-091416-1055 9.5-10.0 ft; nickel and TCE

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 10.0
Rock Cored (ft) --
Samples 2G

Boring No. SB-AOC8B-2013-105

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-C8R

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start
Finish
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 39/60	0.0 5.0	6.4	0.5		CONCRETE
			13.9			Red-brown soft CLAY with sand and gravel, no odor, moist
			17.2			Similar to above, less gravel, black staining
			4.5			
			1.2			
5			0.0	5.0		BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
SB-C8R 1115 2.0-2.5 ft;

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 5.0
Rock Cored (ft) --
Samples 1G

Boring No. SB-C8R

Field Tests:
Dilatancy: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-F10R

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 12 September 2016
Finish 12 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 40/60	0.0 5.0	0.3	0.5		CONCRETE
						Red-brown medium dense CLAY, trace gravel, no odor, moist
			1.3			
			3.2			
			0.0			At 4.0 ft, wet
5				5.0		BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
SB-F10R 1400 1.5-2.0 ft;

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 5.0
Rock Cored (ft) --
Samples 1G

Boring No. SB-F10R

Field Tests:
Dilatancy: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

*Note: Maximum particle size is determined by direct observation within the limitations of sampler size.

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-F9R

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 12 September 2016
Finish 12 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 40/60	0.0 5.0	0.0	0.5		CONCRETE
						Red-brown hard CLAY with gravel
			0.0	3.0		Red-brown silty SAND with gravel, no odor, dry
				4.0		Red-brown CLAY, mps <5 mm, no odor, moist
5	G2 35/60	5.0 10.0	0.0			At 5.0 ft, color change to tan brown
			0.0			
10	G3 32/36	10.0 13.0	0.0			Color grades back to red-brown
			0.0	11.0		Red-brown weathered ROCK CLAY similar to above
				13.0		BOTTOM OF EXPLORATION 13.0 FT
15						Notes: Samples: SB-F9R 9.5-10.0 1200; TCE, grain-size and FOC

Water Level Data						Sample ID	Well Diagram	Summary
Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water	O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Splitspoon Sample G - Geoprobe	Riser Pipe Screen Filter Sand Cuttings Grout Concrete Bentonite Seal	Overburden (ft) 13.0 Rock Cored (ft) -- Samples 3G **Boring No. SB-F9R**

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. TP-9-2-201

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 16 September 2016
Finish 16 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 45/60	0.0 5.0	0.5	0.5		TOPSOIL/ORGANICS
						Brown silty SAND with gravel, dry
			1.7			Brown SILT, some sand and gravel
			2.2			At 4.5 ft, slightly moist
5				5.0		BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
4479-091616-0910 2.5-3.0 ft; benzene and TCE

Note: Approximate location - located in weeds.

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft)	5.0
Rock Cored (ft)	--
Samples	1G

Boring No. TP-9-2-201

Field Tests:
Dilatancy: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. TP-9-2-202

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 16 September 2016
Finish 16 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 27/60	0.0 5.0	2.3	0.5		ASPHALT
				1.0		Brown silty SAND with gravel, no odor, dry
			5.82			GRAVEL
				2.5		Gray-brown CLAY with sand, orange mottling
			556.7	4.0		Fill material - orange fibrous material, paint-like material, wood, glass
5				5.0		BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
4479-091616-0925 2.5-3.0 ft; arsenic, benzene and nickel

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 5.0
Rock Cored (ft) --
Samples 1G

Boring No. TP-9-2-202

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. TP-9-2-204

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 16 September 2016
Finish 16 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 33/60	0.0 5.0	7.9	0.2		ASPHALT
			31.7			Gray CLAY with black staining, strong odor, moist
			10.0	2.0		Fill material - black coarse SAND, dry
				2.5		Red-brown CLAY, odor, moist
			4.3			Fill material as above with white, angular, hard, rock, fine grained, streaks white
			1.7			
5				5.0		BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
4479-091616-0945 2.5-3.0 ft; benzene and TCE

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 5.0
Rock Cored (ft) --
Samples 1G

Boring No. TP-9-2-204

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. TP-9-2-206

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 16 September 2016
Finish 16 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 36/60	0.0 5.0	0.3			Light brown silty SAND, some gravel, no odor, dry
				1.5		GRAVEL and WOOd and brown sandy SILT, slight odor, moist
			30.0			
				3.5		GRAVEL
			76.2	4.0		Gray silty CLAY with fill material, strong odor, moist
5				5.0		BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
4479-091616-0955 2.5-3.0 ft; TCE

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 5.0
Rock Cored (ft) --
Samples 1G

Boring No. TP-9-2-206

Field Tests:
Dilatancy: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. TP-9-2-300R

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 16 September 2016
Finish 16 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 38/60	0.0 5.0	3.0			Brown/black silty SAND, trace gravel, no odor, dry
			32.1	1.0		Red-brown GRAVEL
			140.8	2.0		Gray-brown CLAY with black staining
			37.4	3.5		Similar to above, moist to wet
			139.3			
5				5.0		At 4.5 ft, fill material - purple/blue paint
						BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
4479-091616-0850 3.0-3.5 ft; benzene
4479-091616-0855 4.5-5.0 ft; arsenic and benzene

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 5.0
Rock Cored (ft) --
Samples 1G

Boring No. TP-9-2-300R

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

*Note: Maximum particle size is determined by direct observation within the limitations of sampler size.

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. TP-9-3-304

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 16 September 2016
Finish 16 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 31/60	0.0 5.0	0.0	0.5		CONCRETE
			0.0			Brown sandy SILT/silty SAND with gravel, no odor, damp
			0.0	3.5		GRAVEL
				4.0		Similar to above at 0.5 ft, silty SAND
5				5.0		BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
4479-091616-1040 3.0-3.5 ft; benzene, TCE and nickel
4479-091616-1045 4.5-5.0 ft; benzene, TCE, nickel, grain-size and TOC

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 5.0
Rock Cored (ft) --
Samples 1G

Boring No. TP-9-3-304

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. TP-9-3-305

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 16 September 2016
Finish 16 September 2016
Driller
H&A Rep. T. Dennison
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)
0	G1 34/60	0.0 5.0	0.0	0.5		ASPHALT
			2.6	1.0		Black coarse SAND, fill material, slight odor, dry
						Red silty CLAY with gravel, slight odor, moist
			0.9			
			1.8			
5				5.0		BOTTOM OF EXPLORATION 5.0 FT

Notes:

Samples:
4479-091616-1000 0.0-0.5 ft; arsenic, benzene and nickel
4479-091616-1010 3.0-3.5 ft; benzene

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 5.0
Rock Cored (ft) --
Samples 1G

Boring No. TP-9-3-305

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None **Toughness**: L - Low M - Medium H - High **Plasticity**: N - Nonplastic L - Low M - Medium H - High **Dry Strength**: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_TEST BORINGS.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. AOC09-2013-104-EX1C

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 26 October 2016
Finish 26 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	G1	0.0 0.5	4.5	0.5		Dark brown silty CLAY, moist										
			3.8	1.0		Gray firm fat CLAY, with yellow mottles, moist										
			5.6	1.5		Brown fine GRAVEL, with black nodules, SAND, dry										
	G2	1.5 2.0	7	2.0		Gray large GRAVEL, with yellow mottles, SAND										
			2.9	2.5		Reddish-brown gravelly SAND	50									
5						BOTTOM OF EXPLORATION 2.5 FT										

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 2.5
Rock Cored (ft) --
Samples 2G

Boring No. AOC09-2013-104-EX1C

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. AOC09-2013-104-EX1E

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 26 October 2016
Finish 26 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	G1	0.0 0.5	3.9			Brown fat CLAY, dry										
			3.9	0.5		Light brown fat CLAY, with gray mottles, moist										
	G2	1.5 2.0	5.8	1.5		Gray fat CLAY, moist										
			3.9	2.5		Dark reddish-brown fat CLAY, moist										
			4.2	3.0		BOTTOM OF EXPLORATION 3.0 FT										
5																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 3.0
Rock Cored (ft) --
Samples 2G

Boring No. AOC09-2013-104-EX1E

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. B7-2-EX1A

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 27 October 2016
Finish 27 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	G1	0.0 0.5	8 2.1	0.3		Dark brown granular TOPSOIL, dry										
			1.6			Gray coarse to medium SAND, dry										
	G2	1.5 2.0	0.8	2.0												
			0.7	2.5		Very dark brown lean CLAY, dry										
			1.1	3.0		Light brown fat CLAY, with yellow mottles, very firm										
			0.9			BOTTOM OF EXPLORATION 3.0 FT										
5																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 3.0
Rock Cored (ft) --
Samples 2G

Boring No. B7-2-EX1A

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. B7-2-EX1B

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 27 October 2016
Finish 27 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	G1	0.0 0.5	0.1	0.5		TOPSOIL										
			5.5	1.0		Gray well graded SAND, dry										
			2.5	1.6		Reddish-brown lean CLAY										
	G2	1.5 2.0	3.3	3.0		Gray fat CLAY, with orange mottles, moist										
5			2.3			BOTTOM OF EXPLORATION 3.0 FT										

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 3.0
Rock Cored (ft) --
Samples 2G

Boring No. B7-2-EX1B

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. B7-2-EX1C

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 27 October 2016
Finish 27 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	G1	0.0 0.5	4.3	0.5		Dark brown clay LOAM, moist										
						Grayish clay LOAM, moist										
	G2	1.5 2.0	1.3													
			1.6	2.0		BOTTOM OF EXPLORATION 2.0 FT										
5																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 2.0
Rock Cored (ft) --
Samples 2G

Boring No. B7-2-EX1C

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. CE1-102-EX1A

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 27 October 2016
Finish 27 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0			1.3	0.2		TOPSOIL	50									
				0.6		Brown clay LOAM, fine and coarse gravel	30	20								
			15.4			Brown sticky fat CLAY, 10% fine gravel, CLAY		10								
			3.2	3.0		BOTTOM OF EXPLORATION 3.0 FT										
5																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 3.0
Rock Cored (ft) --
Samples --

Boring No. CE1-102-EX1A

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-09-S0-8-A-EX1A

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 26 October 2016
Finish 26 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	G1	0.0 0.5	2.1	0.5		Light brown LOAM with fine sand, dry		10								
			5.6	1.5		Light brown/yellow LOAM with fine sand, dry		10								
	G2	1.5 2.0	3.1 2.7 1.6	1.7 2.0		Brick fragments and dust, dry Dark brown LOAM with fine sand, dry	10	15								
5						BOTTOM OF EXPLORATION 2.0 FT										

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 2.0
Rock Cored (ft) --
Samples 2G

Boring No. SB-09-S0-8-A-EX1A

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-09-S0-8-A-EX1B

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 26 October 2016
Finish 26 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0						CONCRETE										
				0.5												
	G1	0.5 1.0	2.5			Orange/yellow mixed with asphalt										
				1.0												
			4.1	1.2		Brown fat CLAY, dry										
			3.6			Coarse GRAVEL layer	100									
			5.1	1.3		Brown fat CLAY, with slight yellow mottling, dry										
	G2	1.5 2.0		1.5		Coarse GRAVEL	95									
				2.0												
			4.0			BOTTOM OF EXPLORATION 2.0 FT										
5																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID

O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft) 2.0
Rock Cored (ft) --
Samples 2G

Boring No. SB-09-S0-8-A-EX1B

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-09-S0-8-A-EX1C

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 26 October 2016
Finish 26 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	G1	0.0 0.5		0.3		Light brown TOPSOIL										
				1.3		Light brown fat CLAY										
	G2	1.5 2.0		2.0		Reddish/dark brown fat CLAY, fine gravel		10								
5						BOTTOM OF EXPLORATION 2.0 FT										

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 2.0
Rock Cored (ft) --
Samples 2G

Boring No. SB-09-S0-8-A-EX1C

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-09-S0-8-A-EX1D

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 27 October 2016
Finish 27 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0			2.6													
			12.4	0.3		Brown granular lean CLAY, dry										
				1.0		Brown granular fat CLAY, some fine gravel										
			1.6			Light brown fat CLAY, dry										
	G1	1.5 2.0														
			1.1													
			1.0	3.0		BOTTOM OF EXPLORATION 3.0 FT										
5																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 3.0
Rock Cored (ft) --
Samples 1G

Boring No. SB-09-S0-8-A-EX1D

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

*Note: Maximum particle size is determined by direct observation within the limitations of sampler size.

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-09-S0-8-A-EX1E

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 26 October 2016
Finish 26 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0			4.7			ASPHALT										
			3.6	0.7		CEMENT										
			.5	1.3		Reddish-brown lean silty CLAY, dry										
	G1	1.5 2.0		2.0		BOTTOM OF EXPLORATION 2.0 FT										
5																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 2.0
Rock Cored (ft) --
Samples 1G

Boring No. SB-09-S0-8-A-EX1E

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-09-S0-8-A-EX1F

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 26 October 2016
Finish 26 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0			1.1	0.3		Coarse CONCRETE chunks (1 to 2 in.)										
	G1	0.3 - 0.6	2.6			Bright yellow lean CLAY, with brown mottles, black granules		10								
				1.0												
				1.2		Layer of ASPHALT chunks										
			4.1			Gray lean CLAY, with yellow and brown mottles, dry	15	10								
	G2	1.5 - 2.0		2.0												
						BOTTOM OF EXPLORATION 2.0 FT										
5																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 2.0
Rock Cored (ft) --
Samples 2G

Boring No. SB-09-S0-8-A-EX1F

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-09-S0-8-A-EX1G

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 26 October 2016
Finish 26 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0			15.6			ASPHALT										
			5.8	1.5												
	G1	1.5 2.0	3.7			GRAVEL, APSHALT and fine SAND mixture	30	10								
			2.1	2.0		BOTTOM OF EXPLORATION 2.0 FT										
5																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 2.0
Rock Cored (ft) --
Samples 1G

Boring No. SB-09-S0-8-A-EX1G

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-09-S0-8-A-EX1H

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 26 October 2016
Finish 26 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0				0.3		ASPHALT										
			2.1			Brown fat CLAY, with yellow mottles, dry		15								
				0.9												
			3.5			CONCRETE, coarse (1 to 2 in.) pieces										
			2.7	1.0		Light brown fat CLAY with 20% gravel										
	G1	1.5 2.0														
				2.0												
			4.1			BOTTOM OF EXPLORATION 2.0 FT										
5																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID

O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (ft) 2.0
Rock Cored (ft) --
Samples 1G

Boring No. SB-09-S0-8-A-EX1H

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-09-S0-8-A-EX1I

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 26 October 2016
Finish 26 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0			3.6			ASPHALT										
				0.5												
			4.9			Brown sandy CLAY with coarse and fine gravel, dry	20	10								
			1.4													
			5.6													
				2.0		BOTTOM OF EXPLORATION 2.0 FT										
5																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 2.0
Rock Cored (ft) --
Samples --

Boring No. SB-09-S0-8-A-EX1I

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-09-S0-8-A-EX1J

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 26 October 2016
Finish 26 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0			2.8			ASPHALT chunks										
			3.1	0.5		Brown fat CLAY, with slight yellow mottling, moist										
			5.6	1.0		Brown fat CLAY, with considerable yellow mottling and concrete chunks, moist		20								
			3.5	2.0		BOTTOM OF EXPLORATION 2.0 FT										
5																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 2.0
Rock Cored (ft) --
Samples --
Boring No. SB-09-S0-8-A-EX1J

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-09-S0-8-A-EX1K

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 26 October 2016
Finish 26 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0				0.7		ASPHALT										
			2.6	1.0		Brown fat CLAY, moist	50	50								
				1.5		Crushed CEMENT										
			4.1	2.0		Light brown fat CLAY, with gray mottling, moist										
				2.5		Brown LOAM mixed with cement dust and gravel	30	10								
			3.9			BOTTOM OF EXPLORATION 2.5 FT										
5																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 2.5
Rock Cored (ft) --
Samples --

Boring No. SB-09-S0-8-A-EX1K

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-AOC09-2013-104-EX1A

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 27 October 2016
Finish 27 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	G1	0.0 0.5	6.2	0.6		Dark brown LOAM, medium gravel -TOPSOIL-	10	10								
				1.0		Light brown/gray silty LOAM with fine gravel		10								
			3.1			Light brown silty LOAM, dry										
	G2	1.5 2.0		2.0												
			4.5			BOTTOM OF EXPLORATION 2.0 FT										
5																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 2.0
Rock Cored (ft) --
Samples 2G

Boring No. SB-AOC09-2013-104-EX1A

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-AOC09-2013-104-EX1B

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 27 October 2016
Finish 27 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	G1	0.0 0.5	5.1	0.3		Brown TOPSOIL, dry						>50				
			4.2			Brown silty lean CLAY, dry										
				1.3												
			3.6			Brown fat CLAY with some fine gravel, dry										
	G2	1.5 2.0		2.0												
			3.6			Light brown fat CLAY, firm, dry										
				2.5												
			3.3			Dark brown fat CLAY, firm, moist										
				3.0												
						BOTTOM OF EXPLORATION 3.0 FT										
5																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 3.0
Rock Cored (ft) --
Samples 2G

Boring No. SB-AOC09-2013-104-EX1B

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-AOC09-2013-104-EX1E

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 26 October 2016
Finish 26 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	G1	0.0 0.5	3.1	0.5		Brown silty lean CLAY, soft, dry										
			4.5	1.0		Gray fat CLAY, with reddish-brown mottles										
			5.0	1.5		Reddish-brown silty CLAY, moderately soft										
	G2	1.5 2.0	4.6	1.8		Gray fat CLAY layer, wet										
			3.2	2.0		Very hard GRAVEL with gray mottles, consolidated gravelly material										
						BOTTOM OF EXPLORATION 2.0 FT										
5																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 2.0
Rock Cored (ft) --
Samples 2G

Boring No. SB-AOC09-2013-104-EX1E

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-AOC09-2013-EX1D

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 26 October 2016
Finish 26 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	G1	0.0 0.5	5.9	0.5		Dark brown lean CLAY, soft, dry										
			5.1	1.0		Dark brown fat CLAY, stiff, dry										
			13.4	1.5		Brown fat CLAY, soft, moist										
	G2	1.5 2.0	2.5	2.0		Reddish-brown fat CLAY, with gray mottles, soft, moist										
			6.1			BOTTOM OF EXPLORATION 2.0 FT										
5																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 2.0
Rock Cored (ft) --
Samples 2G

Boring No. SB-AOC09-2013-EX1D

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-C8-EX1A

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 27 October 2016
Finish 27 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	G1	0.0 0.5	0.9 4.1	0.3		Brown/yellow clay LOAM										
						Orange/gray lean CLAY										
			2.6													
				2.5		Brown fine sandy LOAM, moist										
				3.0		Brown fat CLAY, moist										
				4.0		BOTTOM OF EXPLORATION 4.0 FT										
5																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 4.0
Rock Cored (ft) --
Samples 1G

Boring No. SB-C8-EX1A

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-C8-EX1B

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 27 October 2016
Finish 27 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0			3.1			SAND/CONCRETE										
				0.4												
			2.6			Light brown/orange lean CLAY										
				3.0												
			4.1			GRAVEL										
			5.1	3.2		Dark brown fat CLAY										
				4.0												
						BOTTOM OF EXPLORATION 4.0 FT										
5																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 4.0
Rock Cored (ft) --
Samples --

Boring No. SB-C8-EX1B

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-C8-EX1C

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 27 October 2016
Finish 27 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0			1.3	0.3		GRAVEL/TOPSOIL/CEMENT										
			7.9	0.5		SAND Light brown lean CLAY										
			9.6	2.0		Dark brown fat CLAY										
			3.1	3.5		BOTTOM OF EXPLORATION 3.5 FT										
5																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 3.5
Rock Cored (ft) --
Samples --

Boring No. SB-C8-EX1C

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-C8-EX1D

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 27 October 2016
Finish 27 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0			2.1			CEMENT										
				0.4												
			3			Light brown lean CLAY										
			6													
				1.3												
			4.1			GRAVEL layer										
				2.0												
			0.7			Dark brown fat CLAY										
				4.0		BOTTOM OF EXPLORATION 4.0 FT										
5																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 4.0
Rock Cored (ft) --
Samples --

Boring No. SB-C8-EX1D

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-F10-EX1A

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 27 October 2016
Finish 27 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0				0.5		GRAVEL/TOPSOIL/CEMENT										
				1.3		SAND										
				1.5		GRAVEL										
	G1	1.5 2.0		2.0		Light brown fat CLAY										
5						BOTTOM OF EXPLORATION 2.0 FT										

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 2.0
Rock Cored (ft) --
Samples 1G
Boring No. SB-F10-EX1A

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-F10-EX1B

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 27 October 2016
Finish 27 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0						CONCRETE										
			3.1	0.5		Light brown lean CLAY										
			2.6	1.0		Sandy GRAVEL										
			4.0	2.0		Dark brown fat CLAY										
				3.5		BOTTOM OF EXPLORATION 3.5 FT										
5																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 3.5
Rock Cored (ft) --
Samples --

Boring No. SB-F10-EX1B

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-F10-EX1C

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 27 October 2016
Finish 27 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0						CONCRETE and COBBLES										
				0.5		Light orange-brown lean CLAY										
				1.5												
				1.7		GRAVEL										
						Brown fat CLAY, moist	50	50								
				4.0		BOTTOM OF EXPLORATION 4.0 FT										
5																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 4.0
Rock Cored (ft) --
Samples --
Boring No. SB-F10-EX1C

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

TEST BORING REPORT

Boring No. SB-F10-EX1D

Project Ewing Township Industrial Land, 1445 Parkway Avenue, Ewing, NJ
Client RACER
Contractor Summit Drilling

File No. 70613-814
Sheet No. 1 of 1
Start 27 October 2016
Finish 27 October 2016
Driller
H&A Rep. D. Goettel
Elevation
Datum
Location See Plan

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	--	--	--	Rig Make & Model: Geoprobe
Inside Diameter (in.)	--	--	--	Bit Type:
Hammer Weight (lb)	--	--	-	Drill Mud:
Hammer Fall (in.)	--	--	-	Casing: --
				Hoist/Hammer: -- --
				PID Make & Model: MiniRAE 2000 10.6 eV

Depth (ft)	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	Stratum Change Elev/Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Color, GROUP NAME, max. particle size*, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0						CONCRETE										
				0.5		Light brown lean CLAY										
				2.0		GRAVEL/SAND										
				2.5		Dark brown fat CLAY										
				4.0		BOTTOM OF EXPLORATION 4.0 FT										
5																

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Splitspoon Sample
G - Geoprobe

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) 4.0
Rock Cored (ft) --
Samples --
Boring No. SB-F10-EX1D

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

***Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

H&A-TESTBORING-09 W/PID-3 HA-LIB07-1-CLE-RACER-70613.GLB HA-TB+CORE+WELL-07-1.GDT \\CLE\COMMON\PROJECTS\70613\814 - SPLP SOIL SAMPLING AND DELINEATION BORINGS\GINT DATABASES\70613-814_GEOPROBES.GPJ 25 Apr 17

APPENDIX G

Laboratory Reports

Murphy, Amy

From: Murphy, Amy
Sent: Tuesday, May 09, 2017 5:21 PM
To: 'srpedd@dep.nj.gov'
Subject: 011336, E97070
Attachments: DTST.txt; HZSAMPLE.txt; HZRESULT.txt

Case Name: Ewing Township Industrial Land
Directory: 2016-SO
Submit Date: 5/8/2017
Description: FORMER DELPHI SOIL RAR ADDENDUM (2016)

Amy K. Murphy, LSRP
Associate | Senior Project Manager

Haley & Aldrich, Inc.
299 Cherry Hill Road | Suite 303
Parsippany, New Jersey 07054

T: (973) 658.3938
C: (201) 841.7921

www.haleyaldrich.com

ALPHA ANALYTICAL

World Class Chemistry

www.alphalab.com

Lab Number: L1628635

Client: Haley & Aldrich, Inc.

ATTN: Dimitri Quafisi

Project Name: EWING TOWNSHIP INDUSTRIAL

Project Number: 70614-814

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

ANALYTICAL DATA PACKAGE FOR THE
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
TRENTON NEW JERSEY 08625

Agency/Division:	**Bureau/Office:**
Project No: 70614-814	**Contract No:**
Laboratory: Alpha Analytical	**Laboratory Location:** Westborough, Ma.
	Laboratory Phone Number: (508) 898-9220
SDG No: L1628635	**NJDEP Certification #:** MA015/MA935
Date of First Sample Receipt: 09/12/2016	**Date of Last Sample Receipt:** 09/12/2016

Agency Sample Number	Laboratory Sample Number	Sample Location	Date/Time of Collection
SB-AOC1C-2013-107	L1628635-01	EWING TOWNSHIP INDUS	09/12/2016 11:00
SB-C8R	L1628635-02	EWING TOWNSHIP INDUS	09/12/2016 11:15
SB-F9R	L1628635-03	EWING TOWNSHIP INDUS	09/12/2016 12:00
SB-F10R	L1628635-04	EWING TOWNSHIP INDUS	09/12/2016 14:00
PL07-01R	L1628635-05	EWING TOWNSHIP INDUS	09/12/2016 14:25
PL07-107R	L1628635-06	EWING TOWNSHIP INDUS	09/12/2016 14:35
4479-091216-1520	L1628635-07	EWING TOWNSHIP INDUS	09/12/2016 15:20
4479-091216-1522	L1628635-08	EWING TOWNSHIP INDUS	09/12/2016 15:22
4479-091216-1524	L1628635-09	EWING TOWNSHIP INDUS	09/12/2016 15:24
4479-091216-1530	L1628635-10	EWING TOWNSHIP INDUS	09/12/2016 15:30

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on disk or electronically has been authorized by the laboratory director or his/her designee, as verified by the following signature.

Technical Director/Representative (Typed)	Lura Troy	10/03/16
Technical Director/Representative (Signature)		

Table of Contents

New Jersey Reduced Data Deliverable Package 1
- Title Page 2
- Table of Contents 3
- Chain of Custody 6
  - External Chain of Custody 7
  - Lims COC (LN01) 11
  - Sample Receipt Tracking Report 13
- Methodology Review 25
  - Method References 26
- Laboratory Chronicle 27
  - Sample Receipt and Container Information 28
- NJ DEP DKQP Summary Questionnaire 31
  - DKQP Summary Questionnaire 32
- Conformance/Non-Conformance (Reliability) Summary 33
  - Conformance/Non-Conformance (Reliability) Report 34
- Glossary 37
  - Glossary Report 38
- SPLP Extraction Data 40
  - SPLP ZHE Extraction Data 41
    - Form 1 - Organics 42
  - SPLP Extraction Data - NonCLP 44
    - Form 1 - Organics 45
- Organics Analysis 51
  - GCMS 8260 Analysis 52
    - Sample Results Summary 53
      - Form 1 - Organics 54
    - Tune Results Summary 62
      - Form 5 - Organics 63
    - Blank Results Summary 67
      - Form 4 - Organics 68
    - Standards Data Summary 70
      - Form 6 - Organics 71
      - Form 7 - Organics 77
    - Surrogate Summary 82
      - Form 2 - Organics 83
    - Batch QC Summary 84
      - Form 3 - Organics 85
    - Internal Standard Summary 95
      - Form 8 - Organics 96
    - Chromatograms 98
      - Sample Raw Data 99
        - SB-AOC1C-2013-107R (L1628635-01) Analyzed: 09/13/16 13:16 100
        - SB-F9R (L1628635-03) Analyzed: 09/13/16 13:41 104
        - SB-C8R (L1628635-02) Analyzed: 09/13/16 13:44 108
        - SB-F10R (L1628635-04) Analyzed: 09/13/16 14:32 112
      - Method Blank Raw Data 116
        - Laboratory Method Bl (WG931439-5) Analyzed: 09/13/16 10:43 117
        - Laboratory Method Bl (WG931449-5) Analyzed: 09/13/16 11:57 120
- Metals Analysis 122
  - Inorganic Data (ICP Analysis) 123

Table of Contents

Sample Results Summary 124
Form 1 - Inorganics 125
Blank Results Summary 131
Form 3 - Inorganics 132
Calibration Summary 134
Form 2A - Inorganics 135
Form 2B - Inorganics 137
ICP Interference Check Sample Results Summary 138
Form 4A - Inorganics 139
LCS Sample Results Summary 140
Form 7 - Inorganics 141
Sample Run Logs 142
Form 13 - Inorganics 143
ICP Digestion 144
Form 12 - Inorganics 145
Inorganic Data (ICPMS Analysis) 146
Sample Results Summary 147
Form 1 - Inorganics 148
Blank Results Summary 155
Form 3 - Inorganics 156
Calibration Summary 159
Form 2A - Inorganics 160
ICP Interference Check Sample Results Summary 163
Form 4A - Inorganics 164
Spike Sample Results 165
Form 5A - Inorganics 166
Duplicate Sample Results Summary 167
Form 6 - Inorganics 168
LCS Sample Results Summary 169
Form 7 - Inorganics 170
Internal Standard Summary 171
Form 15 - Inorganics 172
Sample Run Logs 173
Form 13 - Inorganics 174
ICPMS Digestion 176
Form 12 - Inorganics 177
Wet Chemistry Analysis 178
Total Solids Analysis 179
Results Summary 180
Form 1 - Inorganics 181
Duplicate Sample Results Summary 192
Form 6 - Inorganics 193
Organic Carbon Analysis 194
Results Summary 195
Form 1 - Inorganics 196
Calibration Summary 200
Form 2A - Inorganics 201
Blank Results Summary 203
Form 3 - Inorganics 204
Grainsize Analysis 206

Table of Contents

Results Summary 207
Form 1 - Inorganics 208
Duplicate Sample Results Summary 211
Form 6 - Inorganics 212
Sample Raw Data 213
Grainsize Raw Data 214

Chain of Custody

-revised 9/13/16 ks

ALPHA ANALYTICAL — Westborough, MA 01581, 8 Walkup Dr., TEL: 508-898-9220, FAX: 508-898-9193; Mansfield, MA 02048, 320 Forbes Blvd, TEL: 508-822-9300, FAX: 508-822-3288

CHAIN OF CUSTODY

Service Centers: Brewer, ME 04412; Portsmouth, NH 03801 Mahwah, NJ 07430; Albany, NY 12205; Tonawanda, NY 14150; Holmes, PA 19043

Page of

Date Rec'd in Lab: 9/12/16

ALPHA Job #: L1628635

H&A Information
- H&A Client: RALER
- H&A Address: 6500 Rockside Rd Ste 200 Cleveland, OH 44131
- H&A Phone: 216-706-1314
- H&A Fax:
- H&A Email: dputz@haleyaldrich.com

Project Information
- Project Name: Ewing Township Industrial Land
- Project Location: Ewing, NJ
- Project #: 70614-84
- (Use Project name as Project #)
- Project Manager: Dan Putz
- ALPHAQuote #:

Turn-Around Time
- Standard
- Rush (only if pre approved)
- Due Date:
- # of Days:

Deliverables
- [x] Email
- [ ] Fax
- [ ] EQuIS (1 File)
- [ ] EQuIS (4 File)
- [ ] Other:

Billing Information
- [ ] Same as Client Info
- PO #

Regulatory Requirements (Program/Criteria)

Note: Select State from menu & identify criteria

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
- [ ] NJ
- [ ] NY
- [ ] Other:

These samples have been previously analyzed by Alpha

Other project specific requirements/comments:

SPLP samples on hold pending totals analysis

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
- [ ] Done
- [ ] Lab to do

Preservation
- [ ] Lab to do

(Please Specify below)

Sample Specific Comments

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Arsenic-SPLP	Nickel-SPLP	Benzene-SPLP	Chlorobenzene-SPLP	Trichloroethene-SPLP	Vinyl Chloride-SPLP	Total Fractionated Organic carbon	Grain size	Total Bottles
28635 -01	SB-AOC1C-2013-107R	9/12/16	11:00	Soil	TMD					X				
-02	SB-C8R	9/12/16	11:15	Soil	TMD					X				
-03	SB-F9R	9/12/16	1200	Soil	TMD					X		X	X	
-04	SB-F10R	9/12/16	1400	Soil	TMD					X				
-05	~~SB~~ PL SP07-01R	9/12/16	1425	Soil	TMD		X							
-06	PL SP07-107R	9/12/16	1435	Soil	TMD		X							
-07	4479-091216-1520	9/12/16	1520	Soil	TMD		X							
-08	4479-091216-1522	9/12/16	1522	Soil	TMD		X							
-09	4479-091216-1524	9/12/16	1524	Soil	TMD		X							
-10	4479-091216-1530	9/12/16	1530	Soil	TMD							X	X	
	Container Type						A			E		A	P	
	Preservative						A			A		A	A	

Preservative Code: A = None; B = HCl; C = HNO_3; D = H_2SO_4; E = NaOH; F = MeOH; G = $NaHSO_4$; H = $Na_2S_2O_3$; K/E = Zn Ac/NaOH; O = Other

Container Code: P = Plastic; A = Amber Glass; V = Vial; G = Glass; B = Bacteria Cup; C = Cube; O = Other; E = Encore; D = BOD Bottle

Westboro: Certification No: MA935

Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	9/12/16 1706		9/12/16 1706
	9-12-16 1940		9-12-16 1940
	9-12-16 2345		9/12/16 2345

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. Alpha Analytical's services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement# 2015-18-Alpha Analytical by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Alpha Analytical.

Document ID: 20455 Rev 1 (1/28/2016)

CHAIN OF CUSTODY

ALPHA ANALYTICAL — World Class Chemistry

Westborough, MA 01581 — 8 Walkup Dr. — TEL: 508-898-9220 — FAX: 508-898-9193

Mansfield, MA 02048 — 320 Forbes Blvd — TEL: 508-822-9300 — FAX: 508-822-3288

Service Centers
Brewer, ME 04412 — Portsmouth, NH 03801 — Mahwah, NJ 07430
Albany, NY 12205
Tonawanda, NY 14150 — Holmes, PA 19043

Page of

Date Rec'd in Lab: 9/12/16

ALPHA Job #: L1628635

H&A Information
- H&A Client: RALER
- H&A Address: 6500 Rockside Rd Ste 200 Cleveland, OH 44131
- H&A Phone: 216-706-1314
- H&A Fax:
- H&A Email: dputz@haleyaldrich.com

Project Information
- Project Name: Ewing Township Industrial Land
- Project Location: Ewing, NJ
- Project #: 70614-84
- (Use Project name as Project #): ☐
- Project Manager: Dan Putz
- ALPHAQuote #:

Turn-Around Time
- Standard ☐ — Due Date:
- Rush (only if pre approved) ☐ — # of Days:

Deliverables
- ☒ Email ☐ Fax
- ☐ EQuIS (1 File) ☐ EQuIS (4 File)
- ☐ Other:

Billing Information
- ☐ Same as Client Info
- PO #

Regulatory Requirements (Program/Criteria)
Note: Select State from menu & identify criteria

Disposal Site Information
Please identify below location of applicable disposal facilities.
- Disposal Facility:
- ☐ NJ ☐ NY
- ☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

SPLP samples on hold pending totals analysis

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
- ☐ Done
- ☐ Lab to do

Preservation
- ☐ Lab to do

(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Arsenic-SPLP	Nickel-SPLP	Benzene-SPLP	Chlorobenzene-SPLP	Trichloroethene-SPLP	Vinyl Chloride-SPLP	Total Fractionated Organic carbon	Grain size	Sample Specific Comments	Total Bottles
28635 -01	SB-AOC1C-2013-107R	9/12/16	11:00	Soil	TMD					X					
-02	SB-C8R	9/12/16	11:15	Soil	TMD					X					
-03	SB-F9R	9/12/16	1200	Soil	TMD					X		X	X		
-04	SB-F10R	9/12/16	1400	Soil	TMD					X					
-05	~~SB-0~~ SP07-01R	9/12/16	1425	Soil	TMD		X								
-06	SP07-107R	9/12/16	1435	Soil	TMD		X								
-07	4479-091216-1520	9/12/16	1520	Soil	TMD		X								
-08	4479-091216-1522	9/12/16	1522	Soil	TMD		X								
-09	4479-091216-1524	9/12/16	1524	Soil	TMD		X								
-10	4479-091216-1530	9/12/16	1530	Soil	TMD							X	X		
	Container Type						A			E		A	P		
	Preservative						A			A		A	A		

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	9/12/16 1706		9/12/16 1706
	9-12-16 1940		9-12-16 1940
	9-12-16 2345		9/12/16 2345

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. Alpha Analytical's services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement# 2015-18-Alpha Analytical by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Alpha Analytical.

Document ID: 20455 Rev 1 (1/28/2016)

CHAIN OF CUSTODY

ALPHA ANALYTICAL — Westborough, MA 01581, 8 Walkup Dr., TEL: 508-898-9220, FAX: 508-898-9193 | Mansfield, MA 02048, 320 Forbes Blvd, TEL: 508-822-9300, FAX: 508-822-3288

Service Centers: Brewer, ME 04412; Portsmouth, NH 03801 Mahwah, NJ 07430; Albany, NY 12205; Tonawanda, NY 14150; Holmes, PA 19043

Page of

Date Rec'd in Lab: 9/12/16

ALPHA Job #: L1628635

H&A Information
- H&A Client: Racer
- H&A Address: 6500 Rockside Rd Cleveland, OH 44131
- H&A Phone: 216-706-1314
- H&A Fax:
- H&A Email: dputz@haleyaldrich.com

Project Information
- Project Name: Ewing Township Industrial Land
- Project Location: Ewing, NJ
- Project #: 70614-814
- (Use Project name as Project #): ☐
- Project Manager: Dan Putz
- ALPHAQuote #:

Turn-Around Time
- Standard ☐ Due Date:
- Rush (only if pre approved) ☒ # of Days:

Deliverables
- ☒ Email ☐ Fax
- ☐ EQuIS (1 File) ☐ EQuIS (4 File)
- ☐ Other:

Billing Information
- ☐ Same as Client Info
- PO #

Regulatory Requirements (Program/Criteria)

Note: Select State from menu & identify criteria.

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
- ☐ NJ ☐ NY
- ☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Rush Totals

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
- ☐ Done
- ☐ Lab to do

Preservation
- ☐ Lab to do

(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Nickel - Total	Trichloroethene - Total	Sample Specific Comments	Total Bottles
28635-01	SB-AOC1C-2013-107R	9/12/16	1100	Soil	TMD		X		
-02	SB-C8R	9/12/16	1115	Soil	TMD		X		
-03	SB-F9R	9/12/16	1200	Soil	TMD		X		
-05	~~SB~~ PL SP07-01R	9/12/16	1425	Soil	TMD	X			
-06	PL SP07-107R	9/12/16	1435	Soil	TMD	X			
-07	4479-091216-1520	9/12/16	1520	Soil	TMD	X			
-08	4479-091216-1522	9/12/16	1522	Soil	TMD	X			
-09	4479-091216-1524	9/12/16	1524	Soil	TMD	X			
-01	SB-F10R	9/12/16	1400	Soil	TMD		X		

Container Type	A	E
Preservative	A	A

Preservative Code: A = None; B = HCl; C = HNO_3; D = H_2SO_4; E = NaOH; F = MeOH; G = $NaHSO_4$; H = $Na_2S_2O_3$; K/E = Zn Ac/NaOH; O = Other

Container Code: P = Plastic; A = Amber Glass; V = Vial; G = Glass; B = Bacteria Cup; C = Cube; O = Other; E = Encore; D = BOD Bottle

Westboro: Certification No: MA935

Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	9/12/16 1706	[illegible]	9/12/16 1706
Dave Hutchins	9-12-16 1940	Tom Tobin	9-12-16 1940
Tom Tobin	9-12-16 2345	[illegible]	9/12/16 2345

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. Alpha Analytical's services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement# 2015-18-Alpha Analytical by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Alpha Analytical.

Document ID: 20455 Rev 1 (1/28/2016)

CHAIN OF CUSTODY

ALPHA ANALYTICAL — World Class Chemistry

Westborough, MA 01581 — 8 Walkup Dr. — TEL: 508-898-9220 — FAX: 508-898-9193

Mansfield, MA 02048 — 320 Forbes Blvd — TEL: 508-822-9300 — FAX: 508-822-3288

Service Centers
Brewer, ME 04412 — Portsmouth, NH 03801 — Mahwah, NJ 07430
Albany, NY 12205
Tonawanda, NY 14150 — Holmes, PA 19043

Page of

Date Rec'd in Lab: 9/12/16

ALPHA Job #: L1628635

H&A Information
- H&A Client: Racer
- H&A Address: 6500 Rockside Rd Cleveland, OH 44131
- H&A Phone: 216-706-1314
- H&A Fax:
- H&A Email: dputz@haleyaldrich.com

Project Information
- Project Name: Ewing Township Industrial Land
- Project Location: Ewing, NJ
- Project # 70614-814
- (Use Project name as Project #) ☐
- Project Manager: Dan Putz
- ALPHAQuote #:

Turn-Around Time
- Standard ☐ — Due Date:
- Rush (only if pre approved) ☒ — # of Days:

Deliverables
- ☒ Email ☐ Fax
- ☐ EQuIS (1 File) ☐ EQuIS (4 File)
- ☐ Other:

Billing Information
- ☐ Same as Client Info
- PO #

Regulatory Requirements (Program/Criteria)
Note: Select State from menu & identify criteria.

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
- ☐ NJ ☐ NY
- ☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Rush Totals

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
- ☐ Done
- ☐ Lab to do

Preservation
- ☐ Lab to do

(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Nickel - Total	Trichloroethene - Total	Sample Specific Comments	Total Bottles
28635-01	SB-AOC1C-2013-107R	9/12/16	1100	Soil	TMD		X		
-02	SB-C8R	9/12/16	1115	Soil	TMD		X		
-03	SB-F9R	9/12/16	1200	Soil	TMD		X		
-05	~~SB~~ SP07-01R	9/12/16	1425	Soil	TMD	X			
-06	SP07-107R	9/12/16	1435	Soil	TMD	X			
-07	4479-091216-1520	9/12/16	1520	Soil	TMD	X			
-08	4479-091216-1522	9/12/16	1522	Soil	TMD	X			
-09	4479-091216-1524	9/12/16	1524	Soil	TMD	X			
-01	SB-F10R	9/12/16	1400	Soil	TMD		X		

Container Type	A	E
Preservative	A	A

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	9/12/16 1706	[illegible]	9/12/16 1706
[illegible]	9-12-16 1940	[illegible]	9-12-16 1940
[illegible]	9-12-16 2345	[illegible]	9/12/14 2345

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. Alpha Analytical's services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement# 2015-18-Alpha Analytical by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Alpha Analytical.

Document ID: 20455 Rev 1 (1/28/2016)

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Oct 03 2016, 01:50 pm

Login Number: L1628635
Account: HALEY-OH2 Haley & Aldrich, Inc.Project: 70614-814
Received: 12SEP16 Due Date: 03OCT16

Sample #	Client ID	Mat	PR	Collected	Container
L1628635-01	SB-AOC1C-2013-107R	3	S0	12SEP16 11:00	2-Encore-25,3-Encore-5,1-Plastic-A-TS,1-SVial-F,4-SVial-W

8260: report trichloroethene only All jobs comment - Report data to the MDL Prelim A2-TOC due 9/19, SPLP-VO & SPLP-Metals due 9/21; Prelim A2-SIEV due 9/26, final 10/3 NJ-RED Package Due Date: 09/13/16

ENCORE,HOLD-CONTINGENCY,NJ-8260HLW,NJ-RED,NJDEP,SPECFEE,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1628635-02	SB-C8R	3	S0	12SEP16 11:15	2-EVial-A,2-Encore-25,3-Encore-5,1-Plastic-A-TS,1-SVial-F,4-SVial-W

8260total/SPLP: report trichloroethene only All jobs comment - Report data to the MDL Prelim A2-TOC due 9/19, SPLP-VO & SPLP-Metals due 9/21; Prelim A2-SIEV due 9/26, final 10/3 Package Due Date: 09/13/16

ENCORE,NJ-8260HLW,NJ-SPLP-8260,NJ-SPLP-VOA,NJ-SPLPZHEEXT-DATA,SPLP-EXT-ZHE,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1628635-03	SB-F9R	3	S0	12SEP16 12:00	2-Encore-25,3-Encore-5,1-Glass-A.06,1-Plastic-A-GS,1-Plastic-A-TS,1-SVial-F,4-SV

8260: report trichloroethene only All jobs comment - Report data to the MDL Prelim A2-TOC due 9/19, SPLP-VO & SPLP-Metals due 9/21; Prelim A2-SIEV due 9/26, final 10/3 Package Due Date: 09/13/16

A2-SIEVE-HYDRO-NJ,A2-HYDRO-CFINE,A2-HYDRO-CGRAVEL,A2-HYDRO-COBBLES,A2-HYDRO-CSAND,A2-HYDRO-FGRAVEL, A2-HYDRO-FSAND,A2-HYDRO-MSAND,A2-HYDRO-SFINE,A2-HYDRO-TFINE,A2-TOC-LK-2REPS-PPM,ENCORE,HOLD-CONTINGENCY,NJ-8260HLW,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1628635-04	SB-F10R	3	S0	12SEP16 14:00	2-EVial-A,2-Encore-25,3-Encore-5,1-Plastic-A-TS,1-SVial-F,4-SVial-W

8260total/SPLP: report trichloroethene only All jobs comment - Report data to the MDL Prelim A2-TOC due 9/19, SPLP-VO & SPLP-Metals due 9/21; Prelim A2-SIEV due 9/26, final 10/3 Package Due Date: 09/13/16

ENCORE,NJ-8260HLW,NJ-SPLP-8260,NJ-SPLP-VOA,NJ-SPLPZHEEXT-DATA,SPLP-EXT-ZHE,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1628635-05	PL07-01R	3	S0	12SEP16 14:25	1-EPlastic-C.120,1-Glass-A.25,1-SGlass-A.06,1-Tumble Vessel

All jobs comment - Report data to the MDL PREPP: Metals only Prelim A2-TOC due 9/19, SPLP-VO & SPLP-Metals due 9/21; Prelim A2-SIEV due 9/26, final 10/3 Package Due Date: 09/13/16

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Oct 03 2016, 01:50 pm

Login Number: L1628635
Account: HALEY-OH2 Haley & Aldrich, Inc.Project: 70614-814
Received: 12SEP16 Due Date: 03OCT16

Sample #	Client ID	Mat	PR	Collected	Container

NI-TI,NJ-SPLPEXT-DATA,PREPP,PREPT,SPLP-NI-6020T-PPB,TS

L1628635-06 PL07-107R 3 S0 12SEP16 14:35 1-EPlastic-C.120,1-Glass-A.25,1-SGlass-A.06,1-Tumble Vessel

All jobs comment - Report data to the MDL PREPP: Metals only Prelim A2-TOC due 9/19, SPLP-VO & SPLP-Metals due 9/21; Prelim A2-SIEV due 9/26, final 10/3 Package Due Date: 09/13/16

NI-TI,NJ-SPLPEXT-DATA,PREPP,PREPT,SPLP-NI-6020T-PPB,TS

L1628635-07 4479-091216-1520 3 S0 12SEP16 15:20 1-EPlastic-C.120,1-Glass-A.25,1-SGlass-A.06,1-Tumble Vessel

All jobs comment - Report data to the MDL PREPP: Metals only Prelim A2-TOC due 9/19, SPLP-VO & SPLP-Metals due 9/21; Prelim A2-SIEV due 9/26, final 10/3 Package Due Date: 09/13/16

NI-TI,NJ-SPLPEXT-DATA,PREPP,PREPT,SPLP-NI-6020T-PPB,TS

L1628635-08 4479-091216-1522 3 S0 12SEP16 15:22 1-EPlastic-C.120,1-Glass-A.25,1-SGlass-A.06,1-Tumble Vessel

All jobs comment - Report data to the MDL PREPP: Metals only Prelim A2-TOC due 9/19, SPLP-VO & SPLP-Metals due 9/21; Prelim A2-SIEV due 9/26, final 10/3 Package Due Date: 09/13/16

NI-TI,NJ-SPLPEXT-DATA,PREPP,PREPT,SPLP-NI-6020T-PPB,TS

L1628635-09 4479-091216-1524 3 S0 12SEP16 15:24 1-EPlastic-C.120,1-Glass-A.25,1-SGlass-A.06,1-Tumble Vessel

All jobs comment - Report data to the MDL PREPP: Metals only Prelim A2-TOC due 9/19, SPLP-VO & SPLP-Metals due 9/21; Prelim A2-SIEV due 9/26, final 10/3 Package Due Date: 09/13/16

NI-TI,NJ-SPLPEXT-DATA,PREPP,PREPT,SPLP-NI-6020T-PPB,TS

L1628635-10 4479-091216-1530 3 S0 12SEP16 15:30 1-Glass-A.06,1-Plastic-A-GS,1-SGlass-A.06

All jobs comment - Report data to the MDL A2-SIEVE-HYDRO-NJ Prelim A2-TOC due 9/19, SPLP-VO & SPLP-Metals due 9/21; Prelim A2-SIEV due 9/26, final 10/3 Package Due Date: 09/13/16

A2-SIEVE-HYDRO-NJ,A2-HYDRO-CFINE,A2-HYDRO-CGRAVEL,A2-HYDRO-COBBLES,A2-HYDRO-CSAND,A2-HYDRO-FGRAVEL,
A2-HYDRO-FSAND,A2-HYDRO-MSAND,A2-HYDRO-SFINE,A2-HYDRO-TFINE,A2-TOC-LK-2REPS-PPM,TS

Logged By: Kelly Stenstrom

ALPHA ANALYTICAL LABORATORIES
Container Tracking Report

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1628635-01A	Encore-5	EMPTY	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628635-01A	Encore-5	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-01A	Encore-5	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-01B	Encore-5	EMPTY	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628635-01B	Encore-5	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-01B	Encore-5	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-01C	Encore-5	EMPTY	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628635-01C	Encore-5	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-01C	Encore-5	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-01D	Encore-25	EMPTY	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628635-01D	Encore-25	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-01D	Encore-25	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-01E	Encore-25	EMPTY	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628635-01E	Encore-25	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-01E	Encore-25	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-01F	Plastic-A-TS	INTACT	22-SEP-16	LOGIN	RETURN WALK-IN CUSTODY	Fred Ababio	W20-S1-A CUSTODY	W20-S1-A CUSTODY	Fred Ababio
L1628635-01F	Plastic-A-TS	INTACT	13-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Fred Ababio
L1628635-01F	Plastic-A-TS	INTACT	13-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628635-01F	Plastic-A-TS	INTACT	13-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1628635-01F	Plastic-A-TS	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-01U	SVial-W	INTACT	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628635-01U	SVial-W	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-01U	SVial-W	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-01V	SVial-W	INTACT	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628635-01V	SVial-W	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628635-01V	SVial-W	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-01X	SVial-F	INTACT	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628635-01X	SVial-F	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-01X	SVial-F	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-01Y	SVial-W	INTACT	26-SEP-16	CUSTODY	VOA DEAD FRIDGE	CUSTODY Emily Keith	VOA DEAD	FRIDGE CUSTODY	VOA DEAD FRIDGE CUSTODY Emily Keith
L1628635-01Y	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA DEAD FRIDGE	CUSTODY Kevin Deppel
L1628635-01Y	SVial-W	INTACT	13-SEP-16	CUSTODY	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1628635-01Y	SVial-W	INTACT	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628635-01Y	SVial-W	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-01Y	SVial-W	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-01Z	SVial-W	INTACT	29-SEP-16		F-VOA CUSTODY	Sam Bardsley	F-VOA CUSTODY	F-VOA CUSTODY	Sam Bardsley
L1628635-01Z	SVial-W	INTACT	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628635-01Z	SVial-W	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-01Z	SVial-W	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-02A	Encore-5	EMPTY	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628635-02A	Encore-5	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-02A	Encore-5	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-02B	Encore-5	EMPTY	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628635-02B	Encore-5	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-02B	Encore-5	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-02C	Encore-5	EMPTY	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628635-02C	Encore-5	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-02C	Encore-5	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-02D	Encore-25	EMPTY	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628635-02D	Encore-25	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628635-02D	Encore-25	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-02E	Encore-25	EMPTY	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628635-02E	Encore-25	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-02E	Encore-25	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-02F	Plastic-A-TS	INTACT	22-SEP-16	LOGIN	RETURN WALK-IN CUSTODY	Fred Ababio	W20-S1-A CUSTODY	W20-S1-A CUSTODY	Fred Ababio
L1628635-02F	Plastic-A-TS	INTACT	13-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Fred Ababio
L1628635-02F	Plastic-A-TS	INTACT	13-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628635-02F	Plastic-A-TS	INTACT	13-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1628635-02F	Plastic-A-TS	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-02S	EVial-A	INTACT	20-SEP-16	GC/MS	GC/MS	Mike May	CUSTODY	VOA CUSTODY	Mike May
L1628635-02S	EVial-A	INTACT	19-SEP-16		CUSTODY	Przemyslaw Kaczorows	GC/MS	GC/MS	Przemyslaw Kaczorows
L1628635-02S	EVial-A	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628635-02T	EVial-A	INTACT	16-SEP-16	GC/MS	GC/MS	Mike May	CUSTODY	VOA DEAD FRIDGE	CUSTODY Mike May
L1628635-02T	EVial-A	INTACT	16-SEP-16	CUSTODY	CUSTODY	Mike May	GC/MS	GC/MS	Mike May
L1628635-02T	EVial-A	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628635-02U	SVial-W	INTACT	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628635-02U	SVial-W	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-02U	SVial-W	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-02V	SVial-W	EMPTY	15-SEP-16	GC/MS	GC/MS	Matilda Owusuaa	CUSTODY	VOA CUSTODY	Matilda Owusuaa
L1628635-02V	SVial-W	INTACT	15-SEP-16		F-VOA CUSTODY	Matilda Owusuaa	GC/MS	GC/MS	Matilda Owusuaa
L1628635-02V	SVial-W	INTACT	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628635-02V	SVial-W	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-02V	SVial-W	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-02X	SVial-F	INTACT	13-SEP-16	GC/MS	GC/MS	Mike Vickery	CUSTODY	VOA CUSTODY	Mike Vickery
L1628635-02X	SVial-F	INTACT	13-SEP-16	CUSTODY	VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628635-02X	SVial-F	INTACT	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628635-02X	SVial-F	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-02X	SVial-F	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-02Y	SVial-W	INTACT	29-SEP-16		F-VOA CUSTODY	Sam Bardsley	F-VOA CUSTODY	F-VOA CUSTODY	Sam Bardsley
L1628635-02Y	SVial-W	INTACT	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628635-02Y	SVial-W	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-02Y	SVial-W	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-02Z	SVial-W	INTACT	29-SEP-16		F-VOA CUSTODY	Sam Bardsley	F-VOA CUSTODY	F-VOA CUSTODY	Sam Bardsley
L1628635-02Z	SVial-W	INTACT	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628635-02Z	SVial-W	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-02Z	SVial-W	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-03A	Encore-5	EMPTY	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628635-03A	Encore-5	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-03A	Encore-5	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-03B	Encore-5	EMPTY	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628635-03B	Encore-5	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-03B	Encore-5	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-03C	Encore-5	EMPTY	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628635-03C	Encore-5	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-03C	Encore-5	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-03D	Encore-25	EMPTY	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628635-03D	Encore-25	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-03D	Encore-25	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-03E	Encore-25	EMPTY	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628635-03E	Encore-25	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628635-03E	Encore-25	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-03F	Plastic-A-TS	INTACT	22-SEP-16	LOGIN	RETURN WALK-IN CUSTODY	Fred Ababio	W20-S1-A CUSTODY	W20-S1-A CUSTODY	Fred Ababio
L1628635-03F	Plastic-A-TS	INTACT	13-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Fred Ababio
L1628635-03F	Plastic-A-TS	INTACT	13-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628635-03F	Plastic-A-TS	INTACT	13-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1628635-03F	Plastic-A-TS	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-03G	Glass-A.06	INTACT	14-SEP-16	CUSTODY	A2-WET CHEMISTRY	Ashley Roulx	A2-CUSTODY-FRZ1-X2	A2-CUSTODY-FRZ1-X2	Ashley Roulx
L1628635-03G	Glass-A.06	INTACT	14-SEP-16	CUSTODY	A2-CUSTODY-FRZ1-X2	Ashley Roulx	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Ashley Roulx
L1628635-03G	Glass-A.06	INTACT	13-SEP-16	CUSTODY	A2-CUSTODY	Kim L. Bailey	A2-CUSTODY-FRZ1-X2	A2-CUSTODY-FRZ1-X2	Kim L. Bailey
L1628635-03G	Glass-A.06	INTACT	13-SEP-16	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	Sharon Hoffman	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628635-03G	Glass-A.06	INTACT	13-SEP-16	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Sharon Hoffman	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	
L1628635-03G	Glass-A.06	INTACT	13-SEP-16		CUSTODY	Sharon Hoffman	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Sharon Hoffma
L1628635-03G	Glass-A.06	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-03H	Plastic-A-GS	INTACT	14-SEP-16	CUSTODY	A2-CUSTODY-GRAINSIZE1	Sonal Patel	A2-CUSTODY-GRAINSIZE1	A2-CUSTODY-GRAINSIZE1	Sonal Patel
L1628635-03H	Plastic-A-GS	INTACT	13-SEP-16	CUSTODY	A2-CUSTODY	Kim L. Bailey	A2-CUSTODY-GRAINSIZE1	A2-CUSTODY-GRAINSIZE1	Kim L. Bailey
L1628635-03H	Plastic-A-GS	INTACT	13-SEP-16	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	Sharon Hoffman	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628635-03H	Plastic-A-GS	INTACT	13-SEP-16	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Sharon Hoffman	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	
L1628635-03H	Plastic-A-GS	INTACT	13-SEP-16		CUSTODY	Sharon Hoffman	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Sharon Hoffma
L1628635-03H	Plastic-A-GS	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-03U	SVial-W	INTACT	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628635-03U	SVial-W	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-03U	SVial-W	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-03V	SVial-W	INTACT	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628635-03V	SVial-W	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-03V	SVial-W	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628635-03X	SVial-F	INTACT	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628635-03X	SVial-F	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-03X	SVial-F	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-03Y	SVial-W	INTACT	26-SEP-16	CUSTODY	VOA DEAD FRIDGE	CUSTODY Emily Keith	VOA DEAD	FRIDGE CUSTODY	VOA DEAD FRIDGE CUSTODY Emily Keith
L1628635-03Y	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA DEAD FRIDGE	CUSTODY Kevin Deppel
L1628635-03Y	SVial-W	INTACT	13-SEP-16	CUSTODY	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1628635-03Y	SVial-W	INTACT	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628635-03Y	SVial-W	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-03Y	SVial-W	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-03Z	SVial-W	INTACT	26-SEP-16	CUSTODY	VOA DEAD FRIDGE	CUSTODY Emily Keith	VOA DEAD	FRIDGE CUSTODY	VOA DEAD FRIDGE CUSTODY Emily Keith
L1628635-03Z	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA DEAD FRIDGE	CUSTODY Kevin Deppel
L1628635-03Z	SVial-W	INTACT	13-SEP-16	CUSTODY	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1628635-03Z	SVial-W	INTACT	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628635-03Z	SVial-W	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-03Z	SVial-W	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-04A	Encore-5	EMPTY	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628635-04A	Encore-5	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-04A	Encore-5	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-04B	Encore-5	EMPTY	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628635-04B	Encore-5	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-04B	Encore-5	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-04C	Encore-5	EMPTY	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628635-04C	Encore-5	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-04C	Encore-5	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-04D	Encore-25	EMPTY	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628635-04D	Encore-25	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-04D	Encore-25	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-04E	Encore-25	EMPTY	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628635-04E	Encore-25	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-04E	Encore-25	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-04F	Plastic-A-TS	INTACT	22-SEP-16	LOGIN	RETURN WALK-IN CUSTODY	Fred Ababio	W20-S1-A CUSTODY	W20-S1-A CUSTODY	Fred Ababio
L1628635-04F	Plastic-A-TS	INTACT	13-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Fred Ababio
L1628635-04F	Plastic-A-TS	INTACT	13-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628635-04F	Plastic-A-TS	INTACT	13-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1628635-04F	Plastic-A-TS	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-04U	SVial-W	INTACT	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628635-04U	SVial-W	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-04U	SVial-W	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-04V	SVial-W	EMPTY	15-SEP-16	GC/MS	GC/MS	Matilda Owusuaa	CUSTODY	VOA CUSTODY	Matilda Owusuaa
L1628635-04V	SVial-W	INTACT	15-SEP-16		F-VOA CUSTODY	Matilda Owusuaa	GC/MS	GC/MS	Matilda Owusuaa
L1628635-04V	SVial-W	INTACT	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628635-04V	SVial-W	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-04V	SVial-W	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-04X	SVial-F	INTACT	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628635-04X	SVial-F	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-04X	SVial-F	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-04Y	SVial-W	INTACT	26-SEP-16	CUSTODY	VOA DEAD FRIDGE CUSTODY	Emily Keith	VOA DEAD FRIDGE CUSTODY	VOA DEAD FRIDGE CUSTODY	Emily Keith
L1628635-04Y	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA DEAD FRIDGE CUSTODY	Kevin Deppel
L1628635-04Y	SVial-W	INTACT	13-SEP-16	CUSTODY	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1628635-04Y	SVial-W	INTACT	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628635-04Y	SVial-W	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-04Y	SVial-W	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-04Z	SVial-W	INTACT	26-SEP-16	CUSTODY	VOA DEAD FRIDGE	CUSTODY Emily Keith	VOA DEAD FRIDGE	CUSTODY	VOA DEAD FRIDGE CUSTODY Emily Keith
L1628635-04Z	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA DEAD FRIDGE	CUSTODY Kevin Deppel
L1628635-04Z	SVial-W	INTACT	13-SEP-16	CUSTODY	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1628635-04Z	SVial-W	INTACT	13-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628635-04Z	SVial-W	INTACT	13-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628635-04Z	SVial-W	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-05A	SGlass-A.06	INTACT	13-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET2-S8	A2-CUSTODY-MET2-S8	Rexford Bempong
L1628635-05A	SGlass-A.06	INTACT	13-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Rexford Bempong	A2-METALS PREP	A2-METALS PREP	Rexford Bempong
L1628635-05A	SGlass-A.06	INTACT	13-SEP-16	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFIELD	Sharon Hoffman	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628635-05A	SGlass-A.06	INTACT	13-SEP-16	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Sharon Hoffman	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFI	
L1628635-05A	Glass-A.25	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-05A	SGlass-A.06	INTACT	13-SEP-16		CUSTODY	Sharon Hoffman	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Sharon Hoffm
L1628635-05B	Glass-A.25	INTACT	15-SEP-16	W2-S4-C CUSTODY	RETURN WALK-IN	CUSTODY Emily Keith	W21-S3-A CUSTODY	W21-S3-A CUSTODY	Emily Keith
L1628635-05B	Glass-A.25	INTACT	15-SEP-16		ORGPREP	Tarcisio Nascimento	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Tarcisio Nascimento
L1628635-05B	Glass-A.25	INTACT	14-SEP-16		W21-S3-A CUSTODY	Tarcisio Nascimento	ORGPREP	ORGPREP	Tarcisio Nascimento
L1628635-05B	Glass-A.25	INTACT	13-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	W21-S3-A CUSTODY	W21-S3-A CUSTODY	Fred Ababio
L1628635-05B	Glass-A.25	INTACT	13-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628635-05B	Glass-A.25	INTACT	13-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1628635-05B	Glass-A.25	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-05W	EPlastic-C.120	INTACT	19-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1628635-05W	EPlastic-C.120	INTACT	16-SEP-16	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628635-05W	EPlastic-C.120	INTACT	16-SEP-16	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSF	
L1628635-05W	EPlastic-C.120	INTACT	16-SEP-16	ORGPREP	CUSTODY	Lily Boateng	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boate

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1628635-05W	EPlastic-C.120	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628635-06A	SGlass-A.06	INTACT	13-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET2-S8	A2-CUSTODY-MET2-S8	Rexford Bempong
L1628635-06A	SGlass-A.06	INTACT	13-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Rexford Bempong	A2-METALS PREP	A2-METALS PREP	Rexford Bempong
L1628635-06A	SGlass-A.06	INTACT	13-SEP-16	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFIELD	Sharon Hoffman	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628635-06A	SGlass-A.06	INTACT	13-SEP-16	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Sharon Hoffman	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFI	
L1628635-06A	Glass-A.25	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-06A	SGlass-A.06	INTACT	13-SEP-16		CUSTODY	Sharon Hoffman	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Sharon Hoffm
L1628635-06B	Glass-A.25	INTACT	15-SEP-16	W2-S4-C CUSTODY	RETURN WALK-IN CUSTODY	Emily Keith	W21-S3-A CUSTODY	W21-S3-A CUSTODY	Emily Keith
L1628635-06B	Glass-A.25	INTACT	15-SEP-16		ORGPREP	Tarcisio Nascimento	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Tarcisio Nascimento
L1628635-06B	Glass-A.25	INTACT	14-SEP-16		W21-S3-A CUSTODY	Tarcisio Nascimento	ORGPREP	ORGPREP	Tarcisio Nascimento
L1628635-06B	Glass-A.25	INTACT	13-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	W21-S3-A CUSTODY	W21-S3-A CUSTODY	Fred Ababio
L1628635-06B	Glass-A.25	INTACT	13-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628635-06B	Glass-A.25	INTACT	13-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1628635-06B	Glass-A.25	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-06W	EPlastic-C.120	INTACT	19-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1628635-06W	EPlastic-C.120	INTACT	16-SEP-16	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628635-06W	EPlastic-C.120	INTACT	16-SEP-16	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSF	
L1628635-06W	EPlastic-C.120	INTACT	16-SEP-16	ORGPREP	CUSTODY	Lily Boateng	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boate
L1628635-06W	EPlastic-C.120	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628635-07A	SGlass-A.06	INTACT	13-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET2-S8	A2-CUSTODY-MET2-S8	Rexford Bempong
L1628635-07A	SGlass-A.06	INTACT	13-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Rexford Bempong	A2-METALS PREP	A2-METALS PREP	Rexford Bempong
L1628635-07A	SGlass-A.06	INTACT	13-SEP-16	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFIELD	Sharon Hoffman	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628635-07A	SGlass-A.06	INTACT	13-SEP-16	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Sharon Hoffman	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFI	
L1628635-07A	Glass-A.25	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-07A	SGlass-A.06	INTACT	13-SEP-16		CUSTODY	Sharon Hoffman	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Sharon Hoffm

Container ID	Type	Status	Transaction Date	From Response	Location	Operator	To Response	Location	Operator
L1628635-07B	Glass-A.25	INTACT	15-SEP-16	W2-S4-C CUSTODY	RETURN WALK-IN	CUSTODY Emily Keith	W21-S3-A CUSTODY	W21-S3-A CUSTODY	Emily Keith
L1628635-07B	Glass-A.25	INTACT	15-SEP-16		ORGPREP	Tarcisio Nascimento	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Tarcisio Nascimento
L1628635-07B	Glass-A.25	INTACT	14-SEP-16		W21-S3-A CUSTODY	Tarcisio Nascimento	ORGPREP	ORGPREP	Tarcisio Nascimento
L1628635-07B	Glass-A.25	INTACT	13-SEP-16		RETURN WALK-IN	CUSTODY Fred Ababio	W21-S3-A CUSTODY	W21-S3-A CUSTODY	Fred Ababio
L1628635-07B	Glass-A.25	INTACT	13-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628635-07B	Glass-A.25	INTACT	13-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1628635-07B	Glass-A.25	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-07W	EPlastic-C.120	INTACT	19-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1628635-07W	EPlastic-C.120	INTACT	16-SEP-16	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628635-07W	EPlastic-C.120	INTACT	16-SEP-16	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSF	
L1628635-07W	EPlastic-C.120	INTACT	16-SEP-16	ORGPREP	CUSTODY	Lily Boateng	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boater
L1628635-07W	EPlastic-C.120	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628635-08A	SGlass-A.06	INTACT	13-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET2-S8	A2-CUSTODY-MET2-S8	Rexford Bempong
L1628635-08A	SGlass-A.06	INTACT	13-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Rexford Bempong	A2-METALS PREP	A2-METALS PREP	Rexford Bempong
L1628635-08A	SGlass-A.06	INTACT	13-SEP-16	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFIELD	Sharon Hoffman	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628635-08A	SGlass-A.06	INTACT	13-SEP-16	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Sharon Hoffman	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFI	
L1628635-08A	Glass-A.25	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-08A	SGlass-A.06	INTACT	13-SEP-16		CUSTODY	Sharon Hoffman	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Sharon Hoffr
L1628635-08B	Glass-A.25	INTACT	15-SEP-16	W2-S4-C CUSTODY	RETURN WALK-IN	CUSTODY Emily Keith	W21-S3-A CUSTODY	W21-S3-A CUSTODY	Emily Keith
L1628635-08B	Glass-A.25	INTACT	15-SEP-16		ORGPREP	Tarcisio Nascimento	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Tarcisio Nascimento
L1628635-08B	Glass-A.25	INTACT	14-SEP-16		W21-S3-A CUSTODY	Tarcisio Nascimento	ORGPREP	ORGPREP	Tarcisio Nascimento
L1628635-08B	Glass-A.25	INTACT	13-SEP-16		RETURN WALK-IN	CUSTODY Fred Ababio	W21-S3-A CUSTODY	W21-S3-A CUSTODY	Fred Ababio
L1628635-08B	Glass-A.25	INTACT	13-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628635-08B	Glass-A.25	INTACT	13-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1628635-08B	Glass-A.25	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1628635-08W	EPlastic-C.120	INTACT	19-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1628635-08W	EPlastic-C.120	INTACT	16-SEP-16	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628635-08W	EPlastic-C.120	INTACT	16-SEP-16	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSF	
L1628635-08W	EPlastic-C.120	INTACT	16-SEP-16	ORGPREP	CUSTODY	Lily Boateng	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boate
L1628635-08W	EPlastic-C.120	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628635-09A	SGlass-A.06	INTACT	13-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET2-S8	A2-CUSTODY-MET2-S8	Rexford Bempong
L1628635-09A	SGlass-A.06	INTACT	13-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Rexford Bempong	A2-METALS PREP	A2-METALS PREP	Rexford Bempong
L1628635-09A	SGlass-A.06	INTACT	13-SEP-16	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFIELD	Sharon Hoffman	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628635-09A	SGlass-A.06	INTACT	13-SEP-16	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Sharon Hoffman	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFI	
L1628635-09A	Glass-A.25	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-09A	SGlass-A.06	INTACT	13-SEP-16		CUSTODY	Sharon Hoffman	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Sharon Hoff
L1628635-09B	Glass-A.25	INTACT	15-SEP-16	W2-S4-C CUSTODY	RETURN WALK-IN CUSTODY	Emily Keith	W21-S3-A CUSTODY	W21-S3-A CUSTODY	Emily Keith
L1628635-09B	Glass-A.25	INTACT	15-SEP-16		ORGPREP	Tarcisio Nascimento	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Tarcisio Nascimento
L1628635-09B	Glass-A.25	INTACT	14-SEP-16		W21-S3-A CUSTODY	Tarcisio Nascimento	ORGPREP	ORGPREP	Tarcisio Nascimento
L1628635-09B	Glass-A.25	INTACT	13-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	W21-S3-A CUSTODY	W21-S3-A CUSTODY	Fred Ababio
L1628635-09B	Glass-A.25	INTACT	13-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628635-09B	Glass-A.25	INTACT	13-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1628635-09B	Glass-A.25	INTACT	13-SEP-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1628635-09W	EPlastic-C.120	INTACT	19-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1628635-09W	EPlastic-C.120	INTACT	16-SEP-16	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628635-09W	EPlastic-C.120	INTACT	16-SEP-16	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSF	
L1628635-09W	EPlastic-C.120	INTACT	16-SEP-16	ORGPREP	CUSTODY	Lily Boateng	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boate
L1628635-09W	EPlastic-C.120	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628635-10A	Plastic-A-GS	INTACT	14-SEP-16	CUSTODY	A2-CUSTODY-GRAINSIZE1	Sonal Patel	A2-CUSTODY-GRAINSIZE1	A2-CUSTODY-GRAINSIZE1	Sonal Patel
L1628635-10A	Plastic-A-GS	INTACT	13-SEP-16	CUSTODY	A2-CUSTODY	Kim L. Bailey	A2-CUSTODY-GRAINSIZE1	A2-CUSTODY-GRAINSIZE1	Kim L. Bailey

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628635-10A	Plastic-A-GS	INTACT	13-SEP-16	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	Sharon Hoffman	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628635-10A	Plastic-A-GS	INTACT	13-SEP-16	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Sharon Hoffman	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	
L1628635-10A	Plastic-A-GS	INTACT	13-SEP-16		CUSTODY	Sharon Hoffman	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Sharon Hoffman
L1628635-10A	Plastic-A-GS	INTACT	13-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628635-10B	Glass-A.06	INTACT	14-SEP-16	CUSTODY	A2-WET CHEMISTRY	Ashley Roulx	A2-CUSTODY-FRZ1-X2	A2-CUSTODY-FRZ1-X2	Ashley Roulx
L1628635-10B	Glass-A.06	INTACT	14-SEP-16	CUSTODY	A2-CUSTODY-FRZ1-X2	Ashley Roulx	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Ashley Roulx
L1628635-10B	Glass-A.06	INTACT	13-SEP-16	CUSTODY	A2-CUSTODY	Kim L. Bailey	A2-CUSTODY-FRZ1-X2	A2-CUSTODY-FRZ1-X2	Kim L. Bailey
L1628635-10B	Glass-A.06	INTACT	13-SEP-16	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	Sharon Hoffman	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628635-10B	Glass-A.06	INTACT	13-SEP-16	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Sharon Hoffman	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	
L1628635-10B	Glass-A.06	INTACT	13-SEP-16		CUSTODY	Sharon Hoffman	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Sharon Hoffman
L1628635-10B	Glass-A.120	INTACT	13-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628635-10C	SGlass-A.06	INTACT	13-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	W21-S2-D CUSTODY	W21-S2-D CUSTODY	Fred Ababio
L1628635-10C	SGlass-A.06	INTACT	13-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628635-10C	SGlass-A.06	INTACT	13-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1628635-10C	SGlass-A.06	INTACT	13-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis

Methodology Review

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

12 Annual Book of ASTM Standards. (American Society for Testing and Materials) ASTM International.

13 Determination of Total Organic Carbon in Sediment. U.S. EPA, Region II. July 27, 1988.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Laboratory Chronicle

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: 29-SEP-16 21:58

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1628635-01A	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NJ-8260HLW(2)
L1628635-01B	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NJ-8260HLW(2)
L1628635-01C	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NJ-8260HLW(2)
L1628635-01D	25 gram Encore Sampler	A	N/A	2.0	Y	Absent	HOLD-CONTINGENCY(14)
L1628635-01E	25 gram Encore Sampler	A	N/A	2.0	Y	Absent	HOLD-CONTINGENCY(14)
L1628635-01F	Plastic 2oz unpreserved for TS	A	N/A	2.0	Y	Absent	TS(7)
L1628635-01U	Vial Water preserved split	A	N/A	2.0	Y	Absent	HOLD-CONTINGENCY(14)
L1628635-01V	Vial Water preserved split	A	N/A	2.0	Y	Absent	HOLD-CONTINGENCY(14)
L1628635-01X	Vial MeOH preserved split	A	N/A	2.0	Y	Absent	NJ-8260HLW(14)
L1628635-01Y	Vial Water preserved split	A	N/A	2.0	Y	Absent	NJ-8260HLW(14)
L1628635-01Z	Vial Water preserved split	A	N/A	2.0	Y	Absent	NJ-8260HLW(14)
L1628635-02A	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NJ-8260HLW(2)
L1628635-02B	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NJ-8260HLW(2)
L1628635-02C	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NJ-8260HLW(2)
L1628635-02D	25 gram Encore Sampler	A	N/A	2.0	Y	Absent	SPLP-EXT-ZHE(14)
L1628635-02E	25 gram Encore Sampler	A	N/A	2.0	Y	Absent	SPLP-EXT-ZHE(14)
L1628635-02F	Plastic 2oz unpreserved for TS	A	N/A	2.0	Y	Absent	TS(7)
L1628635-02S	Vial unpreserved Extracts	A	N/A	2.0	Y	Absent	NJ-SPLP-VOA(14)
L1628635-02T	Vial unpreserved Extracts	A	N/A	2.0	Y	Absent	NJ-SPLP-VOA(14)
L1628635-02U	Vial Water preserved split	A	N/A	2.0	Y	Absent	SPLP-EXT-ZHE(14)
L1628635-02V	Vial Water preserved split	A	N/A	2.0	Y	Absent	SPLP-EXT-ZHE(14)
L1628635-02X	Vial MeOH preserved split	A	N/A	2.0	Y	Absent	NJ-8260HLW(14)
L1628635-02Y	Vial Water preserved split	A	N/A	2.0	Y	Absent	NJ-8260HLW(14)
L1628635-02Z	Vial Water preserved split	A	N/A	2.0	Y	Absent	NJ-8260HLW(14)
L1628635-03A	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NJ-8260HLW(2)
L1628635-03B	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NJ-8260HLW(2)
L1628635-03C	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NJ-8260HLW(2)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1628635-03D	25 gram Encore Sampler	A	N/A	2.0	Y	Absent	HOLD-CONTINGENCY(14)
L1628635-03E	25 gram Encore Sampler	A	N/A	2.0	Y	Absent	HOLD-CONTINGENCY(14)
L1628635-03F	Plastic 2oz unpreserved for TS	A	N/A	2.0	Y	Absent	TS(7)
L1628635-03G	Glass 60mL/2oz unpreserved	A	N/A	2.0	Y	Absent	A2-TOC-LK-2REPS-PPM(14)
L1628635-03H	Plastic 8oz unpreserved for Grai	A	N/A	2.0	Y	Absent	A2-HYDRO-TFINE(),A2-HYDRO-CFINE(),A2-HYDRO-CGRAVEL(),A2-HYDRO-FSAND(),A2-HYDRO-MSAND(),A2-HYDRO-CSAND(),A2-HYDRO-SFINE(),A2-HYDRO-COBBLES(),A2-HYDRO-FGRAVEL()
L1628635-03U	Vial Water preserved split	A	N/A	2.0	Y	Absent	HOLD-CONTINGENCY(14)
L1628635-03V	Vial Water preserved split	A	N/A	2.0	Y	Absent	HOLD-CONTINGENCY(14)
L1628635-03X	Vial MeOH preserved split	A	N/A	2.0	Y	Absent	NJ-8260HLW(14)
L1628635-03Y	Vial Water preserved split	A	N/A	2.0	Y	Absent	NJ-8260HLW(14)
L1628635-03Z	Vial Water preserved split	A	N/A	2.0	Y	Absent	NJ-8260HLW(14)
L1628635-04A	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NJ-8260HLW(2)
L1628635-04B	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NJ-8260HLW(2)
L1628635-04C	5 gram Encore Sampler	A	N/A	2.0	Y	Absent	NJ-8260HLW(2)
L1628635-04D	25 gram Encore Sampler	A	N/A	2.0	Y	Absent	SPLP-EXT-ZHE(14)
L1628635-04E	25 gram Encore Sampler	A	N/A	2.0	Y	Absent	SPLP-EXT-ZHE(14)
L1628635-04F	Plastic 2oz unpreserved for TS	A	N/A	2.0	Y	Absent	TS(7)
L1628635-04S	Vial unpreserved Extracts	A	N/A	2.0	Y	Absent	NJ-SPLP-VOA(14)
L1628635-04T	Vial unpreserved Extracts	A	N/A	2.0	Y	Absent	NJ-SPLP-VOA(14)
L1628635-04U	Vial Water preserved split	A	N/A	2.0	Y	Absent	SPLP-EXT-ZHE(14)
L1628635-04V	Vial Water preserved split	A	N/A	2.0	Y	Absent	SPLP-EXT-ZHE(14)
L1628635-04X	Vial MeOH preserved split	A	N/A	2.0	Y	Absent	NJ-8260HLW(14)
L1628635-04Y	Vial Water preserved split	A	N/A	2.0	Y	Absent	NJ-8260HLW(14)
L1628635-04Z	Vial Water preserved split	A	N/A	2.0	Y	Absent	NJ-8260HLW(14)
L1628635-05A	Glass 60ml unpreserved split	A	N/A	2.0	Y	Absent	NI-TI(180)
L1628635-05B	Glass 250ml/8oz unpreserved	A	N/A	2.0	Y	Absent	TS(7)
L1628635-05W	Plastic 120ml HNO3 preserved Ext	A	<2	2.0	Y	Absent	SPLP-NI-6020T-PPB(180)
L1628635-05W9	Tumble Vessel	A	N/A	2.0	Y	Absent	-
L1628635-06A	Glass 60ml unpreserved split	A	N/A	2.0	Y	Absent	NI-TI(180)
L1628635-06B	Glass 250ml/8oz unpreserved	A	N/A	2.0	Y	Absent	TS(7)
L1628635-06W	Plastic 120ml HNO3 preserved Ext	A	<2	2.0	Y	Absent	SPLP-NI-6020T-PPB(180)
L1628635-06W9	Tumble Vessel	A	N/A	2.0	Y	Absent	-

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1628635-07A	Glass 60ml unpreserved split	A	N/A	2.0	Y	Absent	NI-TI(180)
L1628635-07B	Glass 250ml/8oz unpreserved	A	N/A	2.0	Y	Absent	TS(7)
L1628635-07W	Plastic 120ml HNO3 preserved Ext	A	<2	2.0	Y	Absent	SPLP-NI-6020T-PPB(180)
L1628635-07W9	Tumble Vessel	A	N/A	2.0	Y	Absent	-
L1628635-08A	Glass 60ml unpreserved split	A	N/A	2.0	Y	Absent	NI-TI(180)
L1628635-08B	Glass 250ml/8oz unpreserved	A	N/A	2.0	Y	Absent	TS(7)
L1628635-08W	Plastic 120ml HNO3 preserved Ext	A	<2	2.0	Y	Absent	SPLP-NI-6020T-PPB(180)
L1628635-08W9	Tumble Vessel	A	N/A	2.0	Y	Absent	-
L1628635-09A	Glass 60ml unpreserved split	A	N/A	2.0	Y	Absent	NI-TI(180)
L1628635-09B	Glass 250ml/8oz unpreserved	A	N/A	2.0	Y	Absent	TS(7)
L1628635-09W	Plastic 120ml HNO3 preserved Ext	A	<2	2.0	Y	Absent	SPLP-NI-6020T-PPB(180)
L1628635-09W9	Tumble Vessel	A	N/A	2.0	Y	Absent	-
L1628635-10A	Plastic 8oz unpreserved for Grai	A	N/A	2.0	Y	Absent	A2-HYDRO-TFINE(),A2-HYDRO-CFINE(),A2-HYDRO-CGRAVEL(),A2-HYDRO-FSAND(),A2-HYDRO-MSAND(),A2-HYDRO-CSAND(),A2-HYDRO-SFINE(),A2-HYDRO-COBBLES(),A2-HYDRO-FGRAVEL()
L1628635-10B	Glass 60mL/2oz unpreserved	A	N/A	2.0	Y	Absent	A2-TOC-LK-2REPS-PPM(14)
L1628635-10C	Glass 60ml unpreserved split	A	N/A	2.0	Y	Absent	TS(7)

*Values in parentheses indicate holding time in days

NJ DEP
Data of Known Quality Protocols
Conformance/Non-Conformance
Summary Questionnaire

NJ DEP Data of Known Quality Protocols
Conformance/Non-Conformance
Summary Questionnaire

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	YES
1a	Were the method specified handling, preservation, and holding time requirements met?	YES
1b	EPH Method: Was the EPH Method conducted without significant modifications (see Section 11.3 of respective DKQ methods)?	N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	YES
3	Were all samples received at an appropriate temperature (4 ± 2° C)?	YES
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	NO
5a	Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	YES
5b	Were these reporting limits met?	NO
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	NO
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	YES

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1a or #1b is "No", the data package does not meet the requirements for "Data of Known Quality".

Conformance/Non-Conformance Summary

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Case Narrative (continued)

Report Submission

This final report replaces the partial report issued Semptember 27, 2016, and includes the results of all requested analyses.

A previously-issued partial report replaced the partial report issued September 21, 2016, and includes the results of the Grain Size analysis.

A previously-issued partial report replaces the partial report issued September 19, 2016, and included the results of the SPLP Metals analysis.

A previously-issued partial report replaced the partial report issued September 14, 2016. At the client's request, the analysis of SPLP Volatiles was performed on L1628635-02 (SB-C8R) and -04 (SB-F10R).

A previously-issued partial report replaced the partial report issued September 13, 2016. The client address was corrected.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

DKQP Related Narratives

Volatile Organics

In reference to question 4:

WG931439-7, WG931439-6: One or more compounds failed to meet the DKQP recovery and/or RPD limits. Please refer to the QC section of the report for specific details.

In reference to question 6:

At the client's request, all submitted samples were not analyzed for the full DKQP list of constituents identified in the method specific analyte list presented in the DKQP documents.

SPLP Volatiles

In reference to question 5b:

L1628635-04 (SB-F10R): One or more of the target analytes did not achieve the requested regulatory limits.

In reference to question 6:

Case Narrative (continued)

At the client's request, all submitted samples were not analyzed for the full DKQP list of constituents identified in the method specific analyte list presented in the DKQP documents.

Total Metals

In reference to question 6:

At the client's request, all submitted samples were not analyzed for the full DKQP list of constituents identified in the method specific analyte list presented in the DKQP documents.

SPLP Metals

In reference to question 6:

At the client's request, all submitted samples were not analyzed for the full DKQP list of constituents identified in the method specific analyte list presented in the DKQP documents.

Non-DKQP Related Narratives

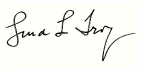
Total Organic Carbon

WG933490: A Matrix Spike and Laboratory Duplicate were prepared with the sample batch, however, the native sample required a different reporting method; therefore, the matrix spike and laboratory duplicate results could not be reported.

Grain Size Analysis

The WG936157-1 Laboratory Duplicate RPDs, performed on L1628635-10, are outside the acceptance criteria for % coarse sand (120%), % medium sand (66%), % clay fine (38%), and % total fines (23%). The elevated RPDs have been attributed to the non-homogeneous nature of the native sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: 

Report Date: 10/03/16

Title: Technical Director/Representative

Glossary

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the

Data Qualifiers

reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

SPLP Extraction Data

SPLP Extraction Data
Volatile Organics

Form 1
Volatile Organics

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: L1628635-02	Date Collected	: 09/12/16 11:15
Client ID	: SB-C8R	Date Received	: 09/12/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/21/16 13:19
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,1312	Analyst	: MO
Lab File ID	:	Instrument ID	:
Sample Amount	: 0.0	GC Column	:
Level	: LOW	%Solids	: 85
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		SU			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Sample Weight	0.025	-	NA	
NONE	Leachate Volume	0.500	-	NA	
NONE	pH, Extraction Post-Filtration	10.4	-	NA	

Form 1
Volatile Organics

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628635-04	**Date Collected**	: 09/12/16 14:00
Client ID	: SB-F10R	**Date Received**	: 09/12/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/21/16 13:19
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: MO
Lab File ID	:	**Instrument ID**	:
Sample Amount	: 0.0	**GC Column**	:
Level	: LOW	**%Solids**	: 83
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Sample Weight	0.025	-	NA	
NONE	Leachate Volume	0.500	-	NA	
NONE	pH, Extraction Post-Filtration	6.62	-	NA	

SPLP Extraction Data
Non- Volatiles

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628635-05	**Date Collected**	: 09/12/16 14:25
Client ID	: PL07-01R	**Date Received**	: 09/12/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 16:20
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: LB
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 82

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	9.08	-	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628635-06	**Date Collected**	: 09/12/16 14:35
Client ID	: PL07-107R	**Date Received**	: 09/12/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 16:20
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: LB
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 85

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	7.21	-	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628635-07	**Date Collected**	: 09/12/16 15:20
Client ID	: 4479-091216-1520	**Date Received**	: 09/12/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 16:20
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: LB
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 76

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	10.1	-	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628635-08	**Date Collected**	: 09/12/16 15:22
Client ID	: 4479-091216-1522	**Date Received**	: 09/12/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 16:20
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: LB
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 79

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	10.1	-	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628635-09	**Date Collected**	: 09/12/16 15:24
Client ID	: 4479-091216-1524	**Date Received**	: 09/12/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 16:20
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: LB
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 78

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	10.2	-	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: WG933294-1	**Date Collected**	: NA
Client ID	: WG933294-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/15/16 16:20
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: LB
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0kg	**%Solids**	: NA

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	ND	-	NA	U
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	3.69	-	NA	

Organics

GC/MS 8260
Analysis

Sample Results Summary

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628635-01	**Date Collected**	: 09/12/16 11:00
Client ID	: SB-AOC1C-2013-107R	**Date Received**	: 09/12/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/13/16 13:16
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: JC
Lab File ID	: V11160913A12	**Instrument ID**	: VOA111
Sample Amount	: 5.6 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 78
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
79-01-6	Trichloroethene	0.0012	0.0011	0.00014	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628635-02D	**Date Collected**	: 09/12/16 11:15
Client ID	: SB-C8R	**Date Received**	: 09/12/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/13/16 13:44
Sample Matrix	: SOIL	**Dilution Factor**	: 2
Analytical Method	: 1,8260C	**Analyst**	: JC
Lab File ID	: V00160913A09	**Instrument ID**	: VOA100
Sample Amount	:	**GC Column**	: RTX-VMS
Level	: HIGH	**%Solids**	: 85
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.05 ml

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
79-01-6	Trichloroethene	35.	0.13	0.016	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628635-03	**Date Collected**	: 09/12/16 12:00
Client ID	: SB-F9R	**Date Received**	: 09/12/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/13/16 13:41
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: JC
Lab File ID	: V11160913A13	**Instrument ID**	: VOA111
Sample Amount	: 5.8 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 84
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
79-01-6	Trichloroethene	0.0037	0.0010	0.00013	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628635-04	**Date Collected**	: 09/12/16 14:00
Client ID	: SB-F10R	**Date Received**	: 09/12/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/13/16 14:32
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: JC
Lab File ID	: V11160913A15	**Instrument ID**	: VOA111
Sample Amount	: 5.9 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 83
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
79-01-6	Trichloroethene	0.064	0.0010	0.00013	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: WG931439-5	Date Collected	: NA
Client ID	: WG931439-5BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 09/13/16 10:43
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MV
Lab File ID	: V11160913A06	Instrument ID	: VOA111
Sample Amount	: 5.0 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: NA
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
79-01-6	Trichloroethene	ND	0.0010	0.00012	U

Form 1
VOA

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: WG931439-6	Date Collected	: 09/12/16 12:00
Client ID	: SB-F9RDUP	Date Received	: 09/12/16
Sample Location	:	Date Analyzed	: 09/13/16 14:06
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: JC
Lab File ID	: V11160913A14	Instrument ID	: VOA111
Sample Amount	: 5.8 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: 84
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
79-01-6	Trichloroethene	0.0022	0.0010	0.0001	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: WG931449-5	Date Collected	: NA
Client ID	: WG931449-5BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 09/13/16 11:57
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MV
Lab File ID	: V00160913A05	Instrument ID	: VOA100
Sample Amount	:	GC Column	: RTX-VMS
Level	: HIGH	%Solids	: NA
Extract Volume (MeOH)	: NA	Injection Volume	: 0.1 ml

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
79-01-6	Trichloroethene	ND	0.050	0.0062	U

Tentatively Identified Compounds
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: WG931449-5	**Date Collected**	: NA
Client ID	: WG931449-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/13/16 11:57
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MV
Lab File ID	: V00160913A05	**Instrument ID**	: VOA100
Sample Amount	:	**GC Column**	:
Level	:	**%Solids**	: NA
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.1 g

Number TICS found: 2 **Concentration Units: mg/kg**

CAS Number	Compound Name	RT	EST. CONC.	Qualifier
000107-83-5	Pentane, 2-methyl-	3.66	.122	NJ
	Total TIC Compounds		0.122J	J

Tuning Results Summary

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: VOA100	**Analysis Date**	: 08/29/16 19:02
Tune Standard	: WG927151-1	**Tune File ID**	: V00160829NBF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	19.6
75	30.0 - 60.0% of mass 95	49
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	1.1 (1.1)1
174	Greater than 50.0 of mass 95	99.6
175	5.0 - 9.0% of mass 174	7.3 (7.3)1
176	95.0 - 101% of mass 174	95.9 (96.3)1
177	5.0 - 9.0% of mass 176	6.4 (6.7)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STDL1	R895883-1	V00160829N03	08/29/16 20:22
STDL2	R895883-2	V00160829N04	08/29/16 20:48
STDL3	R895883-3	V00160829N05	08/29/16 21:15
STDL4	R895883-4	V00160829N06	08/29/16 21:42
STDL5	R895883-5	V00160829N07	08/29/16 22:09
STDL6	R895883-6	V00160829N08	08/29/16 22:35
STDL7	R895883-7	V00160829N09	08/29/16 23:02
STDL8	R895883-8	V00160829N10	08/29/16 23:29
ICV Quant Report	R895883-9	V00160829N13	08/30/16 00:49

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Instrument ID	: VOA100	Analysis Date	: 09/13/16 09:46
Tune Standard	: WG931449-1	Tune File ID	: V00160913BFB_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	20.1
75	30.0 - 60.0% of mass 95	48.6
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	1.2 (1.5)1
174	Greater than 50.0 of mass 95	80.8
175	5.0 - 9.0% of mass 174	6.6 (8.2)1
176	95.0 - 101% of mass 174	78.1 (96.7)1
177	5.0 - 9.0% of mass 176	5.3 (6.7)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG931449-2CCAL	WG931449-2	V00160913A01	09/13/16 10:11
WG931449-3LCS	WG931449-3	V00160913A01	09/13/16 10:11
WG931449-4LCSD	WG931449-4	V00160913A02	09/13/16 10:38
WG931449-5BLANK	WG931449-5	V00160913A05	09/13/16 11:57
SB-C8R	L1628635-02D	V00160913A09	09/13/16 13:44

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: VOA111	**Analysis Date**	: 08/19/16 09:11
Tune Standard	: WG924340-1	**Tune File ID**	: V11160819BF2_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	28.4
75	30.0 - 60.0% of mass 95	56.9
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7
173	Less than 2.0% of mass 174	0 (0)1
174	Greater than 50.0 of mass 95	60.2
175	5.0 - 9.0% of mass 174	5.2 (8.6)1
176	95.0 - 101% of mass 174	59.1 (98.2)1
177	5.0 - 9.0% of mass 176	4.2 (7)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STDL1	R893416-1	V11160819B01	08/19/16 10:01
STDL2	R893416-2	V11160819B02	08/19/16 10:27
STDL3	R893416-3	V11160819B03	08/19/16 10:52
STDL4	R893416-4	V11160819B04	08/19/16 11:17
STDL5	R893416-5	V11160819B05	08/19/16 11:43
STDL6	R893416-6	V11160819B06	08/19/16 12:08
STDL7	R893416-7	V11160819B07	08/19/16 12:34
STDL8	R893416-8	V11160819B08	08/19/16 13:00
ICV Quant Report	R893416-9	V11160819B12	08/19/16 14:42

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: VOA111	**Analysis Date**	: 09/13/16 08:10
Tune Standard	: WG931439-1	**Tune File ID**	: V11160913BF2_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	16.9
75	30.0 - 60.0% of mass 95	52.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.8 (1.2)1
174	Greater than 50.0 of mass 95	70
175	5.0 - 9.0% of mass 174	5.5 (7.9)1
176	95.0 - 101% of mass 174	69.5 (99.3)1
177	5.0 - 9.0% of mass 176	4.5 (6.5)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG931439-2CCAL	WG931439-2	V11160913A03	09/13/16 09:27
WG931439-3LCS	WG931439-3	V11160913A03	09/13/16 09:27
WG931439-4LCSD	WG931439-4	V11160913A04	09/13/16 09:52
WG931439-5BLANK	WG931439-5	V11160913A06	09/13/16 10:43
SB-AOC1C-2013-107R	L1628635-01	V11160913A12	09/13/16 13:16
SB-F9R	L1628635-03	V11160913A13	09/13/16 13:41
WG931439-6DUP	WG931439-6	V11160913A14	09/13/16 14:06
SB-F10R	L1628635-04	V11160913A15	09/13/16 14:32
WG931439-7MS	WG931439-7	V11160913A16	09/13/16 14:57

Blank Results Summary

Method Blank Summary
Form 4

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab Sample ID	: WG931439-5	**Lab File ID**	: V11160913A06
Instrument ID	: VOA111		
Matrix	: SOIL	**Analysis Date**	: 09/13/16 10:43

Client Sample No.	Lab Sample ID	Analysis Date
WG931439-3LCS	WG931439-3	09/13/16 09:27
WG931439-4LCSD	WG931439-4	09/13/16 09:52
SB-AOC1C-2013-107R	L1628635-01	09/13/16 13:16
SB-F9R	L1628635-03	09/13/16 13:41
SB-F9RDUP	WG931439-6	09/13/16 14:06
SB-F10R	L1628635-04	09/13/16 14:32
SB-F10RMS	WG931439-7	09/13/16 14:57

Method Blank Summary
Form 4

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab Sample ID	: WG931449-5	**Lab File ID**	: V00160913A05
Instrument ID	: VOA100		
Matrix	: SOIL	**Analysis Date**	: 09/13/16 11:57

Client Sample No.	Lab Sample ID	Analysis Date
WG931449-3LCS	WG931449-3	09/13/16 10:11
WG931449-4LCSD	WG931449-4	09/13/16 10:38
SB-C8R	L1628635-02D	09/13/16 13:44

Standards Data Summary

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1628635**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70614-814**
Instrument ID	**: VOA111**	**Ical Ref**	**: ICAL12787**
Calibration dates	**: 08/19/16 10:01 08/19/16 13:00**		

Calibration Files

L1 =V11160819B01.D L2 =V11160819B02.D L3 =V11160819B03.D L4 =V11160819B04.D L5 =V11160819B05.D

L6 =V11160819B06.D L7 =V11160819B07.D L8 =V11160819B08.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------									
2)	T	Dichlorodifluoromethane	0.183	0.155	0.138	0.140	0.162	0.158	0.159	0.184	0.160	10.73
3)	T	Chloromethane	0.612	0.391	0.341	0.331	0.368	0.353	0.338	0.378	*L	0.9970
4)	C	Vinyl chloride	0.283	0.284	0.244	0.244	0.287	0.273	0.275	0.324	0.277	9.30
5)	T	Bromomethane	0.123	0.107	0.093	0.090	0.097	0.097	0.101	0.117	0.103	11.52
6)	T	Chloroethane	0.146	0.128	0.112	0.109	0.123	0.115	0.096	0.112	0.118	12.58
7)	T	Trichlorofluoromethane	0.343	0.303	0.273	0.267	0.316	0.308	0.307	0.295	0.301	7.99
8)	T	Ethyl ether	0.120	0.097	0.115	0.104	0.103	0.107	0.109	0.114	0.108	6.88
10)	T	1,1-Dichloroethene	0.157	0.149	0.150	0.147	0.168	0.163	0.164	0.182	0.160	7.33
11)	T	Carbon disulfide	1.705	0.890	0.613	0.562	0.634	0.608	0.600	0.660	*L	0.9965
12)	T	Freon-113	0.163	0.165	0.146	0.142	0.159	0.160	0.155	0.173	0.158	6.37
14)	T	Acrolein	0.042	0.043	0.045	0.044	0.043	0.047	0.047	0.047	0.045	4.71
15)	T	Methylene chloride	0.384	0.235	0.207	0.203	0.215	0.216	0.210	0.224	*L	0.9986
17)	T	Acetone	0.201	0.070	0.062	0.054	0.057	0.055	0.056	0.054	*L	0.9987
18)	T	trans-1,2-Dichloroethene	0.199	0.195	0.183	0.176	0.199	0.193	0.190	0.207	0.193	5.00
19)	T	Methyl acetate	0.177	0.159	0.174	0.166	0.155	0.161	0.157	0.152	0.163	5.51
20)	T	Methyl tert-butyl ether	0.656	0.585	0.613	0.591	0.586	0.603	0.611	0.627	0.609	3.94
21)	T	tert-Butyl alcohol	0.054	0.036	0.035	0.033	0.032	0.033	0.033	0.034	*L	0.9994
22)	T	Diisopropyl ether	1.167	1.068	1.052	1.041	1.054	1.048	1.020	1.014	1.058	4.50
23)	C	1,1-Dichloroethane	0.585	0.564	0.530	0.515	0.567	0.560	0.546	0.582	0.556	4.39
24)	T	Halothane	0.137	0.131	0.128	0.124	0.143	0.134	0.135	0.147	0.135	5.68
25)	T	Acrylonitrile	0.115	0.105	0.118	0.115	0.115	0.115	0.116	0.113	0.114	3.30
26)	T	Ethyl tert-butyl ether	1.365	1.191	1.187	1.171	1.171	1.186	1.173	1.200	1.206	5.42
27)	T	Vinyl acetate	0.488	0.536	0.589	0.585	0.580	0.583	0.563	0.547	0.559	6.20
28)	T	cis-1,2-Dichloroethene	0.211	0.232	0.214	0.208	0.226	0.227	0.219	0.236	0.222	4.59
29)	T	2,2-Dichloropropane	0.368	0.313	0.304	0.301	0.342	0.337	0.329	0.357	0.331	7.42
30)	T	Bromochloromethane	0.117	0.090	0.091	0.090	0.090	0.090	0.089	0.091	0.094	10.15
31)	T	Cyclohexane	0.724	0.631	0.578	0.575	0.652	0.629	0.604	0.650	0.631	7.61
32)	C	Chloroform	0.465	0.412	0.387	0.382	0.399	0.393	0.389	0.412	0.405	6.57
33)	T	Ethyl acetate		0.598	0.303	0.299	0.250	0.238	0.231	0.222	*L	0.9978
34)	T	Carbon tetrachloride	0.259	0.255	0.247	0.246	0.292	0.280	0.276	0.304	0.270	7.95
35)	T	Tetrahydrofuran	0.142	0.099	0.094	0.089	0.083	0.079	0.079	0.075	*L	0.9973
36)	S	Dibromofluoromethane	0.221	0.224	0.235	0.233	0.227	0.228	0.224	0.219	0.226	2.44
37)	T	1,1,1-Trichloroethane	0.418	0.349	0.309	0.316	0.360	0.343	0.338	0.362	0.349	9.69
39)	T	2-Butanone	0.147	0.114	0.105	0.105	0.109	0.108	0.104	0.093	0.111	14.39
40)	T	1,1-Dichloropropene	0.328	0.270	0.249	0.242	0.275	0.270	0.258	0.281	0.272	9.71
41)	T	Benzene	0.947	0.854	0.792	0.773	0.831	0.815	0.793	0.848	0.832	6.55
42)	T	tert-Amyl methyl ether	0.736	0.617	0.623	0.623	0.614	0.623	0.621	0.638	0.637	6.39
43)	S	1,2-Dichloroethane-d4	0.322	0.325	0.329	0.333	0.335	0.326	0.331	0.334	0.329	1.48
44)	T	1,2-Dichloroethane	0.432	0.417	0.435	0.420	0.418	0.417	0.406	0.415	0.420	2.24

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1628635**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70614-814**
Instrument ID	**: VOA111**	**Ical Ref**	**: ICAL12787**
Calibration dates	**: 08/19/16 10:01 08/19/16 13:00**		

Calibration Files

L1 =V11160819B01.D L2 =V11160819B02.D L3 =V11160819B03.D L4 =V11160819B04.D L5 =V11160819B05.D

L6 =V11160819B06.D L7 =V11160819B07.D L8 =V11160819B08.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
47)	T	Methyl cyclohexane	0.364	0.306	0.289	0.295	0.331	0.325	0.320	0.349	0.323	8.01
48)	T	Trichloroethene	0.254	0.243	0.209	0.204	0.226	0.224	0.216	0.233	0.226	7.44
50)	T	Dibromomethane	0.137	0.135	0.134	0.136	0.132	0.137	0.137	0.144	0.137	2.42
51)	C	1,2-Dichloropropane	0.410	0.359	0.350	0.338	0.352	0.348	0.342	0.358	0.357	6.27
53)	T	2-Chloroethyl vinyl ether	0.213	0.168	0.187	0.197	0.185	0.196	0.197	0.198	0.193	6.80
54)	T	Bromodichloromethane	0.352	0.299	0.307	0.309	0.319	0.316	0.320	0.337	0.320	5.39
57)	T	1,4-Dioxane	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	11.23
58)	T	cis-1,3-Dichloropropene	0.368	0.330	0.354	0.349	0.366	0.370	0.370	0.389	0.362	4.89
59)	I	Chlorobenzene-d5	----------ISTD----------									
60)	S	Toluene-d8	1.353	1.329	1.350	1.397	1.368	1.373	1.371	1.361	1.363	1.47
61)	C	Toluene	0.975	0.807	0.709	0.727	0.783	0.762	0.740	0.764	0.784	10.65
62)	T	4-Methyl-2-pentanone	0.234	0.163	0.189	0.196	0.181	0.184	0.184	0.180	0.189	10.83
63)	T	Tetrachloroethene	0.358	0.280	0.260	0.267	0.298	0.283	0.279	0.293	0.290	10.45
65)	T	trans-1,3-Dichloropropene	0.525	0.439	0.471	0.492	0.481	0.496	0.497	0.498	0.487	5.13
67)	T	Ethyl methacrylate	0.405	0.329	0.376	0.390	0.382	0.395	0.395	0.389	0.383	6.13
68)	T	1,1,2-Trichloroethane	0.313	0.241	0.242	0.242	0.237	0.239	0.237	0.237	0.248	10.62
69)	T	Chlorodibromomethane	0.351	0.279	0.281	0.299	0.302	0.306	0.305	0.309	0.304	7.23
70)	T	1,3-Dichloropropane	0.601	0.463	0.447	0.464	0.450	0.460	0.447	0.446	0.472	11.17
71)	T	1,2-Dibromoethane	0.293	0.260	0.258	0.270	0.262	0.266	0.266	0.269	0.268	4.07
72)	T	2-Hexanone	0.264	0.201	0.237	0.250	0.250	0.247	0.247	0.230	0.241	7.89
73)	T	Chlorobenzene	1.102	0.837	0.777	0.794	0.823	0.826	0.805	0.825	0.849	12.30
74)	C	Ethylbenzene	1.798	1.562	1.395	1.422	1.535	1.509	1.472	1.516	1.526	8.10
75)	T	1,1,1,2-Tetrachloroethane	0.379	0.311	0.255	0.271	0.279	0.273	0.273	0.274	0.289	13.62
76)	T	p/m Xylene	0.700	0.575	0.519	0.537	0.568	0.550	0.523	0.525	0.562	10.60
77)	T	o Xylene	0.683	0.552	0.518	0.533	0.548	0.548	0.523	0.529	0.554	9.70
78)	T	Styrene	1.153	0.876	0.883	0.904	0.922	0.914	0.873	0.872	0.925	10.20
79)	I	1,4-Dichlorobenzene-d4	----------ISTD----------									
80)	T	Bromoform	0.493	0.372	0.414	0.404	0.402	0.422	0.438	0.417	0.420	8.38
82)	T	Isopropylbenzene	3.642	2.877	2.691	2.666	2.980	2.965	3.017	3.046	2.986	10.10
83)	S	4-Bromofluorobenzene	1.047	1.051	1.075	1.083	1.062	1.107	1.139	1.127	1.086	3.19
84)	T	Bromobenzene	0.888	0.687	0.661	0.677	0.682	0.700	0.729	0.724	0.719	10.06
85)	T	n-Propylbenzene	4.607	3.668	3.430	3.405	3.767	3.766	3.817	3.866	3.791	9.81
86)	T	1,4-Dichlorobutane	2.558	1.830	1.968	1.897	1.857	1.903	1.920	1.804	1.967	12.41
87)	T	1,1,2,2-Tetrachloroethane	1.015	0.742	0.729	0.719	0.710	0.735	0.752	0.735	0.767	13.19
88)	T	4-Ethyltoluene	3.851	3.133	2.910	2.839	3.155	3.130	3.142	3.165	3.166	9.58
89)	T	2-Chlorotoluene	3.348	2.730	2.513	2.446	2.634	2.654	2.685	2.682	2.712	10.11
90)	T	1,3,5-Trimethylbenzene	3.205	2.706	2.409	2.351	2.553	2.565	2.539	2.553	2.610	10.08
91)	T	1,2,3-Trichloropropane	0.806	0.583	0.593	0.564	0.555	0.568	0.577	0.552	0.600	14.11
92)	T	trans-1,4-Dichloro-2-b...	0.286	0.277	0.314	0.316	0.311	0.322	0.325	0.309	0.308	5.54
93)	T	4-Chlorotoluene	3.114	2.230	2.255	2.175	2.340	2.362	2.389	2.383	2.406	12.32

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1628635**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70614-814**
Instrument ID	**: VOA111**	**Ical Ref**	**: ICAL12787**
Calibration dates	**: 08/19/16 10:01 08/19/16 13:00**		

Calibration Files
L1 =V11160819B01.D L2 =V11160819B02.D L3 =V11160819B03.D L4 =V11160819B04.D L5 =V11160819B05.D
L6 =V11160819B06.D L7 =V11160819B07.D L8 =V11160819B08.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
94)	T	tert-Butylbenzene	2.541	1.985	1.797	1.751	1.962	1.942	1.942	1.979	1.987	12.08
97)	T	1,2,4-Trimethylbenzene	3.344	2.550	2.446	2.431	2.615	2.627	2.655	2.671	2.667	10.80
98)	T	sec-Butylbenzene	4.116	3.127	2.933	2.857	3.225	3.188	3.204	3.267	3.240	11.82
99)	T	p-Isopropyltoluene	3.043	2.417	2.273	2.214	2.461	2.476	2.501	2.525	2.489	10.04
100)	T	1,3-Dichlorobenzene	1.775	1.286	1.256	1.212	1.297	1.319	1.319	1.304	1.346	13.15
101)	T	1,4-Dichlorobenzene	1.682	1.317	1.263	1.229	1.292	1.303	1.307	1.288	1.335	10.71
102)	T	p-Diethylbenzene	2.025	1.548	1.487	1.431	1.620	1.605	1.624	1.650	1.624	11.00
103)	T	n-Butylbenzene	3.211	2.613	2.574	2.458	2.801	2.780	2.817	2.839	2.762	8.25
104)	T	1,2-Dichlorobenzene	1.644	1.259	1.205	1.186	1.203	1.226	1.252	1.236	1.276	11.81
105)	T	1,2,4,5-Tetramethylben...	3.212	2.548	2.565	2.529	2.698	2.758	2.814	2.814	2.742	8.13
106)	T	1,2-Dibromo-3-chloropr...	0.049	0.091	0.091	0.092	0.092	0.098	0.106	0.102	*L	0.9981
107)	T	1,3,5-Trichlorobenzene	1.360	1.095	1.072	1.015	1.111	1.112	1.128	1.099	1.124	9.03
108)	T	Hexachlorobutadiene	0.601	0.506	0.482	0.464	0.534	0.532	0.532	0.541	0.524	7.96
109)	T	1,2,4-Trichlorobenzene	1.065	0.936	0.916	0.872	0.920	0.938	0.928	0.896	0.934	6.14
110)	T	Naphthalene	2.608	1.993	1.988	1.946	1.918	1.983	2.070	1.997	2.063	10.88
111)	T	1,2,3-Trichlorobenzene	1.167	0.889	0.833	0.816	0.847	0.866	0.882	0.847	0.893	12.69

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1628635**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70614-814**
Instrument ID	**: VOA100**	**Ical Ref**	**: ICAL12815**
Calibration dates	**: 08/29/16 20:22 08/29/16 23:29**		

Calibration Files

L1 =V00160829N03.D L2 =V00160829N04.D L3 =V00160829N05.D L4 =V00160829N06.D L5 =V00160829N07.D

L6 =V00160829N08.D L7 =V00160829N09.D L8 =V00160829N10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------									
2)	T	Dichlorodifluoromethane		0.162	0.169	0.190	0.219	0.212	0.208	0.198	0.194	11.24
3)	T	Chloromethane	0.473	0.325	0.254	0.247	0.262	0.255	0.261	0.247	*L	0.9993
4)	C	Vinyl chloride	0.258	0.266	0.269	0.286	0.302	0.299	0.303	0.283	0.283	6.20
5)	T	Bromomethane	0.487	0.386	0.320	0.306	0.311	0.295	0.282		*L	0.9985
6)	T	Chloroethane	0.233	0.251	0.245	0.265	0.290	0.283	0.215	0.192	0.247	13.43
7)	T	Trichlorofluoromethane	0.347	0.441	0.443	0.512	0.586	0.612	0.633	0.567	*L	0.9951
8)	T	Ethyl ether	0.204	0.206	0.207	0.209	0.214	0.213	0.234	0.240	0.216	6.32
10)	C	1,1-Dichloroethene	0.178	0.196	0.196	0.211	0.231	0.230	0.239	0.233	0.214	10.42
11)	T	Carbon disulfide	2.375	1.228	0.737	0.743	0.807	0.808	0.809	0.785	*L	0.9985
12)	T	Freon-113	0.106	0.168	0.177	0.200	0.229	0.224	0.231	0.224	*L	0.9981
14)	T	Acrolein	0.028	0.044	0.049	0.049	0.052	0.052	0.058	0.057	*L	0.9974
15)	T	Methylene chloride	0.252	0.236	0.246	0.247	0.254	0.250	0.267	0.257	0.251	3.60
17)	T	Acetone	0.275	0.153	0.098	0.095	0.099	0.096	0.105	0.103	*L	0.9976
18)	T	trans-1,2-Dichloroethene	0.244	0.233	0.236	0.246	0.260	0.260	0.275	0.271	0.253	6.20
19)	T	Methyl acetate	0.264	0.249	0.228	0.226	0.236	0.230	0.256	0.254	0.243	5.99
20)	T	Methyl tert-butyl ether	0.722	0.731	0.760	0.773	0.815	0.806	0.890	0.883	0.798	7.96
21)	T	tert-Butyl alcohol	0.053	0.052	0.053	0.053	0.057	0.055	0.063	0.063	0.056	7.95
22)	T	Diisopropyl ether	0.715	0.717	0.760	0.774	0.813	0.804	0.878	0.869	0.791	7.83
23)	T	1,1-Dichloroethane	0.421	0.416	0.419	0.432	0.453	0.446	0.476	0.466	0.441	5.14
24)	T	Halothane	0.151	0.164	0.162	0.174	0.189	0.190	0.198	0.193	0.178	9.67
25)	T	Acrylonitrile	0.102	0.115	0.121	0.120	0.128	0.125	0.138	0.135	0.123	9.25
26)	T	Ethyl tert-butyl ether	0.675	0.712	0.782	0.797	0.841	0.838	0.936	0.942	0.815	11.66
27)	T	Vinyl acetate	0.475	0.536	0.625	0.649	0.693	0.701	0.792	0.803	*L	0.9950
28)	T	cis-1,2-Dichloroethene	0.257	0.260	0.270	0.276	0.292	0.289	0.309	0.301	0.282	6.75
29)	T	2,2-Dichloropropane	0.316	0.318	0.326	0.346	0.377	0.375	0.392	0.382	0.354	8.76
30)	T	Bromochloromethane	0.146	0.144	0.149	0.151	0.160	0.157	0.165	0.160	0.154	4.98
31)	T	Cyclohexane	0.199	0.268	0.293	0.340	0.395	0.393	0.404	0.391	*L	0.9973
32)	C	Chloroform	0.420	0.437	0.449	0.457	0.477	0.474	0.500	0.488	0.463	5.84
33)	T	Ethyl acetate	0.964	0.592	0.361	0.354	0.374	0.360	0.398	0.367	*L	0.9973
34)	T	Carbon tetrachloride	0.257	0.303	0.328	0.361	0.402	0.400	0.410	0.399	*L	0.9986
35)	T	Tetrahydrofuran	0.110	0.109	0.115	0.112	0.118	0.116	0.127	0.123	0.116	5.29
36)	S	Dibromofluoromethane	0.276	0.276	0.283	0.280	0.282	0.285	0.289	0.295	0.283	2.30
37)	T	1,1,1-Trichloroethane	0.340	0.351	0.356	0.380	0.412	0.409	0.424	0.411	0.385	8.51
39)	T	2-Butanone	0.161	0.164	0.158	0.158	0.168	0.165	0.183	0.180	0.167	5.77
40)	T	1,1-Dichloropropene	0.247	0.260	0.272	0.293	0.327	0.323	0.333	0.323	0.297	11.46
41)	T	Benzene	0.946	0.916	0.937	0.961	1.017	1.002	1.067	1.045	0.986	5.53
42)	T	tert-Amyl methyl ether	0.629	0.659	0.722	0.746	0.792	0.788	0.867	0.858	0.758	11.36
43)	S	1,2-Dichloroethane-d4	0.277	0.281	0.284	0.278	0.284	0.290	0.298	0.312	0.288	4.11
44)	T	1,2-Dichloroethane	0.339	0.339	0.350	0.350	0.366	0.360	0.386	0.377	0.358	4.76

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1628635**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70614-814**
Instrument ID	**: VOA100**	**Ical Ref**	**: ICAL12815**
Calibration dates	**: 08/29/16 20:22 08/29/16 23:29**		

Calibration Files

L1 =V00160829N03.D L2 =V00160829N04.D L3 =V00160829N05.D L4 =V00160829N06.D L5 =V00160829N07.D

L6 =V00160829N08.D L7 =V00160829N09.D L8 =V00160829N10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
47)	T	Methyl cyclohexane	0.184	0.274	0.295	0.347	0.412	0.407	0.421	0.411	*L	0.9968
48)	T	Trichloroethene	0.251	0.240	0.249	0.259	0.278	0.276	0.292	0.287	0.267	7.17
50)	T	Dibromomethane	0.163	0.175	0.182	0.182	0.190	0.189	0.204	0.198	0.185	6.97
51)	C	1,2-Dichloropropane	0.236	0.231	0.243	0.247	0.258	0.257	0.275	0.269	0.252	6.14
53)	T	2-Chloroethyl vinyl ether	0.023	0.044	0.053	0.046	0.056	0.046	0.043	0.039	*Q	0.9972
54)	T	Bromodichloromethane	0.318	0.333	0.351	0.355	0.371	0.366	0.395	0.385	0.359	7.09
57)	T	1,4-Dioxane	0.004	0.004	0.005	0.005	0.005	0.005	0.005	0.005	0.005	10.24
58)	T	cis-1,3-Dichloropropene	0.331	0.364	0.397	0.412	0.436	0.432	0.470	0.459	0.413	11.48
59)	I	Chlorobenzene-d5	----------ISTD----------									
60)	S	Toluene-d8	1.142	1.150	1.131	1.122	1.122	1.107	1.089	1.086	1.119	2.07
61)	C	Toluene	0.718	0.704	0.692	0.710	0.749	0.730	0.775	0.747	0.728	3.79
62)	T	4-Methyl-2-pentanone		0.131	0.149	0.153	0.167	0.164	0.182	0.178	0.161	11.02
63)	T	Tetrachloroethene	0.297	0.308	0.319	0.344	0.377	0.376	0.391	0.377	0.349	10.52
65)	T	trans-1,3-Dichloropropene	0.369	0.395	0.433	0.446	0.468	0.463	0.502	0.485	0.445	10.11
67)	T	Ethyl methacrylate	0.308	0.366	0.419	0.442	0.475	0.477	0.537	0.528	*L	0.9963
68)	T	1,1,2-Trichloroethane	0.209	0.232	0.234	0.236	0.245	0.240	0.262	0.256	0.239	6.71
69)	T	Chlorodibromomethane	0.304	0.347	0.361	0.365	0.386	0.376	0.404	0.386	0.366	8.33
70)	T	1,3-Dichloropropane	0.426	0.439	0.460	0.462	0.479	0.465	0.499	0.475	0.463	4.91
71)	T	1,2-Dibromoethane	0.259	0.282	0.298	0.307	0.317	0.311	0.333	0.317	0.303	7.75
72)	T	2-Hexanone	0.226	0.250	0.273	0.283	0.304	0.304	0.335	0.324	0.287	12.86
73)	T	Chlorobenzene	0.855	0.834	0.859	0.868	0.914	0.894	0.951	0.912	0.886	4.39
74)	C	Ethylbenzene	1.270	1.224	1.287	1.356	1.452	1.434	1.528	1.473	1.378	7.96
75)	T	1,1,1,2-Tetrachloroethane	0.305	0.322	0.330	0.340	0.354	0.345	0.367	0.347	0.339	5.69
76)	T	p/m Xylene	0.476	0.498	0.531	0.557	0.593	0.589	0.635	0.623	0.563	10.21
77)	T	o Xylene	0.455	0.480	0.529	0.552	0.585	0.582	0.640	0.630	0.557	11.88
78)	T	Styrene	0.716	0.825	0.928	0.972	1.043	1.057	1.181	1.155	*L	0.9965
79)	I	1,4-Dichlorobenzene-d4	----------ISTD----------									
80)	T	Bromoform	0.486	0.479	0.508	0.528	0.557	0.560	0.621	0.596	0.542	9.43
82)	T	Isopropylbenzene	1.873	1.990	2.098	2.238	2.433	2.446	2.609	2.495	2.273	11.64
83)	S	4-Bromofluorobenzene	0.791	0.782	0.771	0.761	0.753	0.758	0.756	0.743	0.764	2.07
84)	T	Bromobenzene	0.644	0.636	0.659	0.669	0.700	0.687	0.735	0.707	0.680	4.97
85)	T	n-Propylbenzene	2.350	2.342	2.455	2.601	2.831	2.846	3.063	2.983	2.684	10.62
86)	T	1,4-Dichlorobutane	0.784	0.825	0.825	0.840	0.883	0.893	0.987	0.949	0.873	7.84
87)	T	1,1,2,2-Tetrachloroethane	0.780	0.731	0.700	0.708	0.733	0.725	0.776	0.737	0.736	3.88
88)	T	4-Ethyltoluene	2.107	2.114	2.223	2.314	2.484	2.480	2.611	2.512	2.356	8.20
89)	T	2-Chlorotoluene	1.709	1.626	1.693	1.683	1.651	1.677	1.776	1.746	1.695	2.88
90)	T	1,3,5-Trimethylbenzene	1.730	1.778	1.870	1.927	2.066	2.062	2.230	2.190	1.981	9.32
91)	T	1,2,3-Trichloropropane	0.610	0.603	0.566	0.569	0.605	0.595	0.688	0.665	0.613	7.05
92)	T	trans-1,4-Dichloro-2-b...	0.179	0.213	0.222	0.230	0.245	0.246	0.267	0.254	0.232	11.95
93)	T	4-Chlorotoluene	1.479	1.493	1.548	1.588	1.670	1.659	1.753	1.702	1.612	6.20

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1628635**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70614-814**
Instrument ID	**: VOA100**	**Ical Ref**	**: ICAL12815**
Calibration dates	**: 08/29/16 20:22 08/29/16 23:29**		

Calibration Files
L1 =V00160829N03.D L2 =V00160829N04.D L3 =V00160829N05.D L4 =V00160829N06.D L5 =V00160829N07.D
L6 =V00160829N08.D L7 =V00160829N09.D L8 =V00160829N10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
94)	T	tert-Butylbenzene	1.401	1.471	1.557	1.657	1.794	1.775	1.889	1.812	1.670	10.60
97)	T	1,2,4-Trimethylbenzene	1.670	1.705	1.894	1.943	2.082	2.064	2.225	2.167	1.969	10.37
98)	T	sec-Butylbenzene	1.958	2.126	2.247	2.423	2.670	2.656	2.819	2.722	2.453	12.80
99)	T	p-Isopropyltoluene	1.652	1.762	1.991	2.117	2.321	2.303	2.467	2.409	2.128	14.23
100)	T	1,3-Dichlorobenzene	1.193	1.174	1.237	1.260	1.328	1.302	1.393	1.352	1.280	6.03
101)	T	1,4-Dichlorobenzene	1.386	1.232	1.263	1.265	1.333	1.297	1.383	1.345	1.313	4.39
102)	T	p-Diethylbenzene	1.061	1.087	1.225	1.298	1.414	1.401	1.513	1.495	1.312	13.31
103)	T	n-Butylbenzene	1.498	1.529	1.700	1.810	2.017	2.013	2.139	2.108	1.852	13.77
104)	T	1,2-Dichlorobenzene	1.117	1.138	1.191	1.200	1.256	1.238	1.340	1.303	1.223	6.29
105)	T	1,2,4,5-Tetramethylben...	1.500	1.644	1.973	2.032	2.202	2.211	2.491	2.424	*L	0.9964
106)	T	1,2-Dibromo-3-chloropr...	0.146	0.151	0.165	0.166	0.176	0.177	0.198	0.189	0.171	10.32
107)	T	1,3,5-Trichlorobenzene	0.863	0.931	0.973	0.972	1.052	1.028	1.109	1.076	1.000	8.13
108)	T	Hexachlorobutadiene	0.367	0.350	0.397	0.415	0.476	0.456	0.508	0.489	0.432	13.52
109)	T	1,2,4-Trichlorobenzene	0.788	0.777	0.851	0.858	0.920	0.913	0.990	0.962	0.882	8.75
110)	T	Naphthalene	1.933	1.993	2.220	2.251	2.377	2.413	2.701	2.638	2.316	11.87
111)	T	1,2,3-Trichlorobenzene	0.783	0.767	0.833	0.835	0.892	0.885	0.967	0.944	0.863	8.32

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814	
Instrument ID	: VOA111	Calibration Date	: 09/13/16 09:27	
Lab File ID	: V11160913A03	Init. Calib. Date(s)	: 08/19/16	08/19/16
Sample No	: WG931439-2	Init. Calib. Times	: 10:01	13:00
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	81	0
Dichlorodifluoromethane	0.16	0.196	-	-22.5*	20	115	0
Chloromethane	20	15.543	-	22.3*	20	68	0
Vinyl chloride	0.277	0.298	-	-7.6	20	99	0
Bromomethane	0.103	0.155	-	-50.5*	20	134	0
Chloroethane	0.118	0.145	-	-22.9*	20	104	0
Trichlorofluoromethane	0.301	0.389	-	-29.2*	20	115	0
1,1-Dichloroethene	0.16	0.182	-	-13.7	20	98	0
Carbon disulfide	20	22.817	-	-14.1	20	99	0
Freon-113	0.158	0.182	-	-15.2	20	100	0
Methylene chloride	20	22.701	-	-13.5	20	98	0
Acetone	20	12.269	-	38.7*	20	52	0
trans-1,2-Dichloroethene	0.193	0.217	-	-12.4	20	96	0
Methyl acetate	0.163	0.108	-	33.7*	20	50	0
Methyl tert-butyl ether	0.609	0.669	-	-9.9	20	88	0
1,1-Dichloroethane	0.556	0.593	-	-6.7	20	90	0
cis-1,2-Dichloroethene	0.222	0.261	-	-17.6	20	98	0
Bromochloromethane	0.094	0.108	-	-14.9	20	95	0
Cyclohexane	0.631	0.572	-	9.4	20	80	0
Chloroform	0.405	0.477	-	-17.8	20	99	0
Carbon tetrachloride	0.27	0.354	-	-31.1*	20	116	0
Dibromofluoromethane	0.226	0.255	-	-12.8	20	88	0
1,1,1-Trichloroethane	0.349	0.445	-	-27.5*	20	116	0
2-Butanone	0.111	0.075	-	32.4*	20	58	0
Benzene	0.832	0.886	-	-6.5	20	90	0
1,2-Dichloroethane-d4	0.329	0.33	-	-0.3	20	81	0
1,2-Dichloroethane	0.42	0.456	-	-8.6	20	84	0
Methyl cyclohexane	0.323	0.34	-	-5.3	20	95	0
Trichloroethene	0.226	0.267	-	-18.1	20	103	0
1,2-Dichloropropane	0.357	0.336	-	5.9	20	78	0
Bromodichloromethane	0.32	0.382	-	-19.4	20	100	0
1,4-Dioxane	0.00224	0.00216	-	3.6	20	79	0
cis-1,3-Dichloropropene	0.362	0.407	-	-12.4	20	93	0
Chlorobenzene-d5	1	1	-	0	20	87	0
Toluene-d8	1.363	1.337	-	1.9	20	86	0
Toluene	0.784	0.787	-	-0.4	20	96	0
4-Methyl-2-pentanone	0.189	0.147	-	22.2*	20	67	0
Tetrachloroethene	0.29	0.319	-	-10	20	106	0
trans-1,3-Dichloropropene	0.487	0.498	-	-2.3	20	92	0
1,1,2-Trichloroethane	0.248	0.23	-	7.3	20	82	0
Chlorodibromomethane	0.304	0.327	-	-7.6	20	101	0
1,2-Dibromoethane	0.268	0.265	-	1.1	20	89	0
2-Hexanone	0.241	0.161	-	33.2*	20	59	0
Chlorobenzene	0.849	0.841	-	0.9	20	94	0
Ethylbenzene	1.526	1.567	-	-2.7	20	97	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814	
Instrument ID	: VOA111	Calibration Date	: 09/13/16 09:27	
Lab File ID	: V11160913A03	Init. Calib. Date(s)	: 08/19/16	08/19/16
Sample No	: WG931439-2	Init. Calib. Times	: 10:01	13:00
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
p/m Xylene	0.562	0.577	-	-2.7	20	96	0
o Xylene	0.554	0.584	-	-5.4	20	98	0
Styrene	0.925	0.95	-	-2.7	20	93	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	92	0
Bromoform	0.42	0.423	-	-0.7	20	94	0
Isopropylbenzene	2.986	2.998	-	-0.4	20	102	0
4-Bromofluorobenzene	1.086	1.106	-	-1.8	20	94	0
1,1,2,2-Tetrachloroethane	0.767	0.635	-	17.2	20	80	0
1,3-Dichlorobenzene	1.346	1.346	-	0	20	98	0
1,4-Dichlorobenzene	1.335	1.361	-	-1.9	20	99	0
1,2-Dichlorobenzene	1.276	1.227	-	3.8	20	93	0
1,2-Dibromo-3-chloropropan	20	18.123	-	9.4	20	89	0
1,2,4-Trichlorobenzene	0.934	0.986	-	-5.6	20	99	0
1,2,3-Trichlorobenzene	0.893	0.893	-	0	20	98	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814	
Instrument ID	: VOA100	Calibration Date	: 09/13/16 10:11	
Lab File ID	: V00160913A01	Init. Calib. Date(s)	: 08/29/16	08/29/16
Sample No	: WG931449-2	Init. Calib. Times	: 20:22	23:29
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	149	0
Dichlorodifluoromethane	0.194	0.189	-	2.6	20	167	0
Chloromethane	20	18.419	-	7.9	20	142	0
Vinyl chloride	0.283	0.296	-	-4.6	20	164	0
Bromomethane	20	18.707	-	6.5	20	132	0
Chloroethane	0.247	0.235	-	4.9	20	143	0
Trichlorofluoromethane	20	15.918	-	20.4*	20	150	0
Ethyl ether	0.216	0.178	-	17.6	20	128	0
1,1-Dichloroethene	0.214	0.236	-	-10.3	20	179	0
Carbon disulfide	20	19.101	-	4.5	20	166	0
Freon-113	20	19.056	-	4.7	20	173	0
Acrolein	20	17.222	-	13.9	20	140	0
Methylene chloride	0.251	0.253	-	-0.8	20	153	0
Acetone	20	15.906	-	20.5*	20	133	0
trans-1,2-Dichloroethene	0.253	0.236	-	6.7	20	149	0
Methyl acetate	0.243	0.201	-	17.3	20	131	0
Methyl tert-butyl ether	0.798	0.71	-	11	20	139	0
tert-Butyl alcohol	0.056	0.047	-	16.1	20	132	0
Diisopropyl ether	0.791	0.723	-	8.6	20	142	0
1,1-Dichloroethane	0.441	0.443	-	-0.5	20	157	0
Halothane	0.178	0.162	-	9	20	149	0
Acrylonitrile	0.123	0.113	-	8.1	20	139	0
Ethyl tert-butyl ether	0.815	0.776	-	4.8	20	148	0
Vinyl acetate	20	16.305	-	18.5	20	142	0
cis-1,2-Dichloroethene	0.282	0.261	-	7.4	20	144	0
2,2-Dichloropropane	0.354	0.346	-	2.3	20	158	0
Bromochloromethane	0.154	0.134	-	13	20	134	0
Cyclohexane	20	19.81	-	1	20	189	0
Chloroform	0.463	0.447	-	3.5	20	148	0
Ethyl acetate	20	14.887	-	25.6*	20	126	0
Carbon tetrachloride	20	17.686	-	11.6	20	155	0
Tetrahydrofuran	0.116	0.097	-	16.4	20	126	0
Dibromofluoromethane	0.283	0.271	-	4.2	20	143	0
1,1,1-Trichloroethane	0.385	0.371	-	3.6	20	155	0
2-Butanone	0.167	0.135	-	19.2	20	127	0
1,1-Dichloropropene	0.297	0.292	-	1.7	20	160	0
Benzene	0.986	0.902	-	8.5	20	143	0
tert-Amyl methyl ether	0.758	0.673	-	11.2	20	139	0
1,2-Dichloroethane-d4	0.288	0.301	-	-4.5	20	158	0
1,2-Dichloroethane	0.358	0.349	-	2.5	20	149	0
Methyl cyclohexane	20	17.974	-	10.1	20	176	0
Trichloroethene	0.267	0.247	-	7.5	20	148	0
Dibromomethane	0.185	0.16	-	13.5	20	131	0
1,2-Dichloropropane	0.252	0.246	-	2.4	20	151	0
2-Chloroethyl vinyl ether	20	19.057	-	4.7	20	135	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814	
Instrument ID	: VOA100	Calibration Date	: 09/13/16 10:11	
Lab File ID	: V00160913A01	Init. Calib. Date(s)	: 08/29/16	08/29/16
Sample No	: WG931449-2	Init. Calib. Times	: 20:22	23:29
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Bromodichloromethane	0.359	0.338	-	5.8	20	144	0
1,4-Dioxane	0.00474	0.00407	-	14.1	20	132	0
cis-1,3-Dichloropropene	0.413	0.381	-	7.7	20	143	0
Chlorobenzene-d5	1	1	-	0	20	136	0
Toluene-d8	1.119	1.22	-	-9	20	146	0
Toluene	0.728	0.72	-	1.1	20	141	0
4-Methyl-2-pentanone	0.161	0.15	-	6.8	20	136	0
Tetrachloroethene	0.349	0.314	-	10	20	133	0
trans-1,3-Dichloropropene	0.445	0.455	-	-2.2	20	143	0
Ethyl methacrylate	20	16.895	-	15.5	20	134	0
1,1,2-Trichloroethane	0.239	0.243	-	-1.7	20	141	0
Chlorodibromomethane	0.366	0.346	-	5.5	20	130	0
1,3-Dichloropropane	0.463	0.465	-	-0.4	20	137	0
1,2-Dibromoethane	0.303	0.298	-	1.7	20	135	0
2-Hexanone	0.287	0.258	-	10.1	20	128	0
Chlorobenzene	0.886	0.847	-	4.4	20	134	0
Ethylbenzene	1.378	1.37	-	0.6	20	144	0
1,1,1,2-Tetrachloroethane	0.339	0.327	-	3.5	20	134	0
p/m Xylene	0.563	0.552	-	2	20	141	0
o Xylene	0.557	0.531	-	4.7	20	136	0
Styrene	40	33.625	-	15.9	20	133	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	120	0
Bromoform	0.542	0.487	-	10.1	20	115	0
Isopropylbenzene	2.273	2.448	-	-7.7	20	139	0
4-Bromofluorobenzene	0.764	0.893	-	-16.9	20	138	0
Bromobenzene	0.68	0.684	-	-0.6	20	124	0
n-Propylbenzene	2.684	3.005	-	-12	20	146	0
1,4-Dichlorobutane	0.873	1.032	-	-18.2	20	150	0
1,1,2,2-Tetrachloroethane	0.736	0.797	-	-8.3	20	136	0
4-Ethyltoluene	2.356	2.586	-	-9.8	20	139	0
2-Chlorotoluene	1.695	1.932	-	-14	20	136	0
1,3,5-Trimethylbenzene	1.981	2.128	-	-7.4	20	136	0
1,2,3-Trichloropropane	0.613	0.636	-	-3.8	20	134	0
trans-1,4-Dichloro-2-buten	0.232	0.264	-	-13.8	20	142	0
4-Chlorotoluene	1.612	1.78	-	-10.4	20	137	0
tert-Butylbenzene	1.67	1.815	-	-8.7	20	139	0
1,2,4-Trimethylbenzene	1.969	2.127	-	-8	20	134	0
sec-Butylbenzene	2.453	2.704	-	-10.2	20	144	0
p-Isopropyltoluene	2.128	2.333	-	-9.6	20	140	0
1,3-Dichlorobenzene	1.28	1.274	-	0.5	20	123	0
1,4-Dichlorobenzene	1.313	1.296	-	1.3	20	123	0
p-Diethylbenzene	1.312	1.423	-	-8.5	20	139	0
n-Butylbenzene	1.852	2.118	-	-14.4	20	149	0
1,2-Dichlorobenzene	1.223	1.2	-	1.9	20	120	0
1,2,4,5-Tetramethylbenzene	20	18.934	-	5.3	20	131	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814	
Instrument ID	: VOA100	Calibration Date	: 09/13/16 10:11	
Lab File ID	: V00160913A01	Init. Calib. Date(s)	: 08/29/16	08/29/16
Sample No	: WG931449-2	Init. Calib. Times	: 20:22	23:29
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dibromo-3-chloropropan	0.171	0.155	-	9.4	20	112	0
1,3,5-Trichlorobenzene	1	0.958	-	4.2	20	118	0
Hexachlorobutadiene	0.432	0.394	-	8.8	20	119	0
1,2,4-Trichlorobenzene	0.882	0.821	-	6.9	20	115	0
Naphthalene	2.316	2.252	-	2.8	20	121	0
1,2,3-Trichlorobenzene	0.863	0.793	-	8.1	20	114	0

* Value outside of QC limits.

Surrogate Summary

Form 2
Surrogate Recovery
VOLATILES

Client: Haley & Aldrich, Inc.
Project Name: EWING TOWNSHIP INDUSTRIAL LAND

Lab Number: L1628635
Project Number: 70614-814
Matrix:

CLIENT ID (LAB SAMPLE NO.)	SMC1 TOL	SMC2 BFB	SMC3 DCA	SMC4 DBFM	TOT OUT
WG931449-4LCSD	109	118	106	97	0
WG931449-3LCS	109	117	104	96	0
WG931449-5BLANK	110	120	104	91	0
SB-C8R (L1628635-02D)	110	119	104	93	0
SB-F9RDUP	99	101	111	112	0
WG931439-4LCSD	96	101	105	116	0
WG931439-3LCS	98	102	100	113	0
WG931439-5BLANK	95	101	104	108	0
SB-F10RMS	97	104	116	115	0
SB-AOC1C-2013-107R (L1628635-01)	99	103	109	106	0
SB-F10R (L1628635-04)	98	101	110	115	0
SB-F9R (L1628635-03)	98	101	108	115	0

	QC LIMITS
TOL = TOLUENE-D8	(70-130)
BFB = 4-BROMOFLUOROBENZENE	(70-130)
DCA = 1,2-DICHLOROETHANE-D4	(70-130)
DBFM = DIBROMOFLUOROMETHANE)	(70-130)

* Values outside of QC limits

Batch QC Summary

Lab Duplicates
Form 3

Client	:	Haley & Aldrich, Inc.	**Lab Number**	:	L1628635
Project Name	:	EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	:	70614-814
Client Sample ID	:	SB-F9R	**Matrix**	:	SOIL
Lab Sample ID	:	L1628635-03	**Analysis Date**	:	09/13/16 13:41
Lab File ID	:	V11160913A13	**DUP File ID**	:	V11160913A14
Dup Sample ID	:	WG931439-6	**DUP Analysis Date**	:	09/13/16 14:06

Parameter	Sample Concentration (mg/kg)	Duplicate Concentration (mg/kg)	RPD	RPD Limit
Trichloroethene	0.0037	0.0022	51 Q	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1628635	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70614-814	
Matrix	: SOIL				
LCS Sample ID	: WG931439-3	**Analysis Date :** 09/13/16 09:27	**File ID**	: V11160913A03	
LCSD Sample ID	: WG931439-4	**Analysis Date :** 09/13/16 09:52	**File ID**	: V11160913A04	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,2-Dibromo-3-chloropropane	0.02	0.018	91	0.02	0.018	91	0	40-160	30
1,4-Dioxane	1	0.96	96	1	0.94	94	2	40-160	30
1,2-Dibromoethane	0.02	0.020	99	0.02	0.020	98	1	70-130	30
Methylene chloride	0.02	0.023	114	0.02	0.023	117	3	70-130	30
1,1-Dichloroethane	0.02	0.021	107	0.02	0.021	105	2	70-130	30
Chloroform	0.02	0.024	118	0.02	0.024	119	1	70-130	30
Carbon tetrachloride	0.02	0.026	131 Q	0.02	0.025	126	4	70-130	30
1,2-Dichloropropane	0.02	0.019	94	0.02	0.020	99	5	70-130	30
Dibromochloromethane	0.02	0.022	107	0.02	0.021	103	4	70-130	30
1,1,2-Trichloroethane	0.02	0.018	93	0.02	0.018	90	3	70-130	30
Tetrachloroethene	0.02	0.022	110	0.02	0.021	103	7	70-130	30
Chlorobenzene	0.02	0.020	99	0.02	0.019	97	2	70-130	30
Trichlorofluoromethane	0.02	0.026	129	0.02	0.025	124	4	40-160	30
1,2-Dichloroethane	0.02	0.022	108	0.02	0.022	111	3	70-130	30
1,1,1-Trichloroethane	0.02	0.026	127	0.02	0.025	126	1	70-130	30
Bromodichloromethane	0.02	0.024	119	0.02	0.024	120	1	70-130	30
trans-1,3-Dichloropropene	0.02	0.020	102	0.02	0.020	98	4	70-130	30
cis-1,3-Dichloropropene	0.02	0.022	112	0.02	0.022	112	0	40-160	30
Bromoform	0.02	0.020	101	0.02	0.020	100	1	40-160	30
1,1,2,2-Tetrachloroethane	0.02	0.016	83	0.02	0.016	80	4	40-160	30
Benzene	0.02	0.021	106	0.02	0.022	108	2	70-130	30
Toluene	0.02	0.020	100	0.02	0.019	95	5	70-130	30
Ethylbenzene	0.02	0.020	103	0.02	0.020	98	5	70-130	30
Chloromethane	0.02	0.016	78	0.02	0.015	74	5	40-160	30
Bromomethane	0.02	0.030	150	0.02	0.029	145	3	40-160	30
Vinyl chloride	0.02	0.022	108	0.02	0.021	104	4	70-130	30
Chloroethane	0.02	0.025	123	0.02	0.024	120	2	40-160	30
1,1-Dichloroethene	0.02	0.023	114	0.02	0.023	114	0	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1628635	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70614-814	
Matrix	: SOIL				
LCS Sample ID	: WG931439-3	**Analysis Date :** 09/13/16 09:27	**File ID**	: V11160913A03	
LCSD Sample ID	: WG931439-4	**Analysis Date :** 09/13/16 09:52	**File ID**	: V11160913A04	

	Laboratory Control Sample				Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R		True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
trans-1,2-Dichloroethene	0.02	0.023	113		0.02	0.022	111	2	70-130	30
Trichloroethene	0.02	0.024	118		0.02	0.022	112	5	70-130	30
1,2-Dichlorobenzene	0.02	0.019	96		0.02	0.019	94	2	70-130	30
1,3-Dichlorobenzene	0.02	0.020	100		0.02	0.019	97	3	70-130	30
1,4-Dichlorobenzene	0.02	0.020	102		0.02	0.019	97	5	70-130	30
Methyl tert butyl ether	0.02	0.022	110		0.02	0.022	112	2	70-130	30
p/m-Xylene	0.04	0.041	103		0.04	0.039	97	6	70-130	30
o-Xylene	0.04	0.042	105		0.04	0.040	100	5	70-130	30
cis-1,2-Dichloroethene	0.02	0.024	118		0.02	0.023	115	3	70-130	30
Styrene	0.04	0.041	103		0.04	0.039	98	5	40-160	30
Dichlorodifluoromethane	0.02	0.025	123		0.02	0.024	120	2	40-160	30
Acetone	0.02	0.012	61		0.02	0.011	56	9	40-160	30
Carbon disulfide	0.02	0.023	114		0.02	0.020	102	11	40-160	30
2-Butanone	0.02	0.014	68		0.02	0.013	64	6	40-160	30
4-Methyl-2-pentanone	0.02	0.016	78		0.02	0.015	75	4	40-160	30
2-Hexanone	0.02	0.013	67		0.02	0.013	64	5	40-160	30
Bromochloromethane	0.02	0.023	115		0.02	0.023	114	1	70-130	30
Isopropylbenzene	0.02	0.020	100		0.02	0.019	93	7	70-130	30
1,2,3-Trichlorobenzene	0.02	0.020	100		0.02	0.020	100	0	70-130	30
1,2,4-Trichlorobenzene	0.02	0.021	106		0.02	0.020	100	6	70-130	30
Methyl Acetate	0.02	0.013	67	Q	0.02	0.014	69	Q 3	70-130	30
Cyclohexane	0.02	0.018	91		0.02	0.017	85	7	70-130	30
Methyl cyclohexane	0.02	0.021	105		0.02	0.020	101	4	70-130	30
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.02	0.023	116		0.02	0.023	114	2	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		Lab Number	: L1628635	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		Project Number	: 70614-814	
Matrix	: SOIL				
LCS Sample ID	: WG931449-3	Analysis Date : 09/13/16 10:11	File ID	: V00160913A01	
LCSD Sample ID	: WG931449-4	Analysis Date : 09/13/16 10:38	File ID	: V00160913A02	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,2-Dibromo-3-chloropropane	1	0.90	90	1	0.87	87	3	40-160	30
1,4-Dioxane	50	43.	86	50	43.	85	1	40-160	30
1,2-Dibromoethane	1	0.98	98	1	0.96	96	2	70-130	30
Methylene chloride	1	1.0	101	1	0.97	97	4	70-130	30
1,1-Dichloroethane	1	1.0	100	1	0.96	96	4	70-130	30
Chloroform	1	0.97	97	1	0.93	93	4	70-130	30
Carbon tetrachloride	1	0.88	88	1	0.86	86	2	70-130	30
1,2-Dichloropropane	1	0.98	98	1	0.95	95	3	70-130	30
Dibromochloromethane	1	0.95	95	1	0.92	92	3	70-130	30
1,1,2-Trichloroethane	1	1.0	101	1	0.97	97	4	70-130	30
2-Chloroethylvinyl ether	1	0.95	95	1	0.92	92	3	40-160	30
Tetrachloroethene	1	0.90	90	1	0.86	86	5	70-130	30
Chlorobenzene	1	0.96	96	1	0.93	93	3	70-130	30
Trichlorofluoromethane	1	0.80	80	1	0.77	77	4	40-160	30
1,2-Dichloroethane	1	0.98	98	1	0.94	94	4	70-130	30
1,1,1-Trichloroethane	1	0.96	96	1	0.93	93	3	70-130	30
Bromodichloromethane	1	0.94	94	1	0.90	90	4	70-130	30
trans-1,3-Dichloropropene	1	1.0	102	1	0.99	99	3	70-130	30
cis-1,3-Dichloropropene	1	0.92	92	1	0.89	89	3	40-160	30
1,1-Dichloropropene	1	0.98	98	1	0.95	95	3	70-130	30
Bromoform	1	0.90	90	1	0.86	86	5	40-160	30
1,1,2,2-Tetrachloroethane	1	1.1	108	1	1.0	105	3	40-160	30
Benzene	1	0.91	91	1	0.88	88	3	70-130	30
Toluene	1	0.99	99	1	0.97	97	2	70-130	30
Ethylbenzene	1	0.99	99	1	0.96	96	3	70-130	30
Chloromethane	1	0.92	92	1	0.91	91	1	40-160	30
Bromomethane	1	0.94	94	1	0.88	88	7	40-160	30
Vinyl chloride	1	1.0	104	1	1.0	101	3	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1628635	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70614-814	
Matrix	: SOIL				
LCS Sample ID	: WG931449-3	**Analysis Date :** 09/13/16 10:11	**File ID**	: V00160913A01	
LCSD Sample ID	: WG931449-4	**Analysis Date :** 09/13/16 10:38	**File ID**	: V00160913A02	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
Chloroethane	1	0.95	95	1	0.92	92	3	40-160	30
1,1-Dichloroethene	1	1.1	110	1	0.96	96	14	70-130	30
trans-1,2-Dichloroethene	1	0.93	93	1	0.89	89	4	70-130	30
Trichloroethene	1	0.93	93	1	0.90	90	3	70-130	30
1,2-Dichlorobenzene	1	0.98	98	1	0.96	96	2	70-130	30
1,3-Dichlorobenzene	1	1.0	100	1	0.98	98	2	70-130	30
1,4-Dichlorobenzene	1	0.99	99	1	0.96	96	3	70-130	30
Methyl tert butyl ether	1	0.89	89	1	0.87	87	2	70-130	30
p/m-Xylene	2	2.0	98	2	1.9	93	5	70-130	30
o-Xylene	2	1.9	95	2	1.8	92	3	70-130	30
cis-1,2-Dichloroethene	1	0.93	93	1	0.89	89	4	70-130	30
Dibromomethane	1	0.86	86	1	0.84	84	2	70-130	30
1,4-Dichlorobutane	1	1.2	118	1	1.1	114	3	70-130	30
1,2,3-Trichloropropane	1	1.0	104	1	1.0	104	0	70-130	30
Styrene	2	1.7	84	2	1.6	81	4	40-160	30
Dichlorodifluoromethane	1	0.98	98	1	0.94	94	4	40-160	30
Acetone	1	0.80	80	1	0.82	82	2	40-160	30
Carbon disulfide	1	0.96	96	1	0.96	96	0	40-160	30
2-Butanone	1	0.80	80	1	0.81	81	1	40-160	30
Vinyl acetate	1	0.82	82	1	0.79	79	4	70-130	30
4-Methyl-2-pentanone	1	0.93	93	1	0.93	93	0	40-160	30
2-Hexanone	1	0.90	90	1	0.89	89	1	40-160	30
Ethyl methacrylate	1	0.84	84	1	0.83	83	1	70-130	30
Acrolein	1	0.86	86	1	0.96	96	11	40-160	30
Acrylonitrile	1	0.92	92	1	0.92	92	0	70-130	30
Bromochloromethane	1	0.87	87	1	0.83	83	5	70-130	30
Tetrahydrofuran	1	0.83	83	1	0.81	81	2	70-130	30
2,2-Dichloropropane	1	0.98	98	1	0.94	94	4	40-160	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1628635	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70614-814	
Matrix	: SOIL				
LCS Sample ID	: WG931449-3	**Analysis Date :** 09/13/16 10:11	**File ID**	: V00160913A01	
LCSD Sample ID	: WG931449-4	**Analysis Date :** 09/13/16 10:38	**File ID**	: V00160913A02	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,3-Dichloropropane	1	1.0	100	1	0.98	98	2	70-130	30
1,1,1,2-Tetrachloroethane	1	0.96	96	1	0.92	92	4	70-130	30
Bromobenzene	1	1.0	101	1	0.97	97	4	70-130	30
n-Butylbenzene	1	1.1	114	1	1.1	109	4	70-130	30
sec-Butylbenzene	1	1.1	110	1	1.1	106	4	70-130	30
tert-Butylbenzene	1	1.1	109	1	1.0	105	4	70-130	30
o-Chlorotoluene	1	1.1	114	1	1.1	111	3	70-130	30
p-Chlorotoluene	1	1.1	110	1	1.1	107	3	70-130	30
Hexachlorobutadiene	1	0.91	91	1	0.88	88	3	70-130	30
Isopropylbenzene	1	1.1	108	1	1.0	104	4	70-130	30
p-Isopropyltoluene	1	1.1	110	1	1.0	105	5	70-130	30
Naphthalene	1	0.97	97	1	0.96	96	1	40-160	30
n-Propylbenzene	1	1.1	112	1	1.1	109	3	70-130	30
1,2,3-Trichlorobenzene	1	0.92	92	1	0.90	90	2	70-130	30
1,2,4-Trichlorobenzene	1	0.93	93	1	0.91	91	2	70-130	30
1,3,5-Trimethylbenzene	1	1.1	107	1	1.0	104	3	70-130	30
1,2,4-Trimethylbenzene	1	1.1	108	1	1.0	105	3	70-130	30
trans-1,4-Dichloro-2-butene	1	1.1	114	1	1.1	113	1	70-130	30
Ethyl ether	1	0.82	82	1	0.81	81	1	70-130	30
Methyl Acetate	1	0.83	83	1	0.81	81	2	70-130	30
Ethyl Acetate	1	0.74	74	1	0.73	73	1	70-130	30
Isopropyl Ether	1	0.91	91	1	0.88	88	3	70-130	30
Cyclohexane	1	0.99	99	1	0.95	95	4	70-130	30
tert-Butyl Alcohol	5	4.2	84	5	4.4	87	4	40-160	30
Ethyl-Tert-Butyl-Ether	1	0.95	95	1	0.93	93	2	70-130	30
Tertiary-Amyl Methyl Ether	1	0.89	89	1	0.87	87	2	70-130	30
Methyl cyclohexane	1	0.90	90	1	0.87	87	3	70-130	30
1,1,2-Trichloro-1,2,2-Trifluoroethane	1	0.95	95	1	0.90	90	5	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1628635	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70614-814	
Matrix	: SOIL				
LCS Sample ID	: WG931449-3	**Analysis Date :** 09/13/16 10:11	**File ID**	: V00160913A01	
LCSD Sample ID	: WG931449-4	**Analysis Date :** 09/13/16 10:38	**File ID**	: V00160913A02	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,2,4,5-Tetramethylbenzene	1	0.95	95	1	0.91	91	4	70-130	30
1,4-Diethylbenzene	1	1.1	108	1	1.0	104	4	70-130	30
4-Ethyltoluene	1	1.1	110	1	1.1	106	4	70-130	30

Matrix Spike
Form 3

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Client Sample ID	: SB-F10R	Matrix	: SOIL
Lab Sample ID	: L1628635-04	Analysis Date	: 09/13/16 14:32
Matrix Spike	: WG931439-7	MS Analysis Date	: 09/13/16 14:57
Matrix Spike Dup	:	MSD Analysis Date	:

		Matrix Spike Sample				Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/kg)	Spike Added (mg/kg)	Spike Conc. (mg/kg)	%R		Spike Added (mg/kg)	Spike Conc. (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,2-Dibromo-3-chloropropane	ND	0.0227	0.020	88						40-160	30
1,4-Dioxane	ND	1.13	1.5	132						40-160	30
1,2-Dibromoethane	ND	0.0227	0.014	62	Q					70-130	30
Methylene chloride	0.0018J	0.0227	0.019	84						70-130	30
1,1-Dichloroethane	ND	0.0227	0.019	84						70-130	30
Chloroform	0.0012J	0.0227	0.021	93						70-130	30
Carbon tetrachloride	ND	0.0227	0.023	101						70-130	30
1,2-Dichloropropane	ND	0.0227	0.016	71						70-130	30
Dibromochloromethane	ND	0.0227	0.016	71						70-130	30
1,1,2-Trichloroethane	ND	0.0227	0.014	62	Q					70-130	30
Tetrachloroethene	ND	0.0227	0.016	71						70-130	30
Chlorobenzene	ND	0.0227	0.013	57	Q					70-130	30
Trichlorofluoromethane	ND	0.0227	0.025	110						40-160	30
1,2-Dichloroethane	ND	0.0227	0.018	79						70-130	30
1,1,1-Trichloroethane	ND	0.0227	0.023	101						70-130	30
Bromodichloromethane	ND	0.0227	0.019	84						70-130	30
trans-1,3-Dichloropropene	ND	0.0227	0.014	62	Q					70-130	30
cis-1,3-Dichloropropene	ND	0.0227	0.016	71						40-160	30
Bromoform	ND	0.0227	0.018	79						40-160	30
1,1,2,2-Tetrachloroethane	ND	0.0227	0.016	71						40-160	30
Benzene	ND	0.0227	0.017	75						70-130	30
Toluene	ND	0.0227	0.015	66	Q					70-130	30
Ethylbenzene	ND	0.0227	0.015	66	Q					70-130	30
Chloromethane	ND	0.0227	0.015	66						40-160	30

Matrix Spike
Form 3

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Client Sample ID	: SB-F10R	Matrix	: SOIL
Lab Sample ID	: L1628635-04	Analysis Date	: 09/13/16 14:32
Matrix Spike	: WG931439-7	MS Analysis Date	: 09/13/16 14:57
Matrix Spike Dup	:	MSD Analysis Date	:

		Matrix Spike Sample				Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/kg)	Spike Added (mg/kg)	Spike Conc. (mg/kg)	%R		Spike Added (mg/kg)	Spike Conc. (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
Bromomethane	ND	0.0227	0.025	110						40-160	30
Vinyl chloride	ND	0.0227	0.020	88						70-130	30
Chloroethane	ND	0.0227	0.022	97						40-160	30
1,1-Dichloroethene	ND	0.0227	0.020	88						70-130	30
trans-1,2-Dichloroethene	ND	0.0227	0.017	75						70-130	30
Trichloroethene	0.064	0.0227	0.12	247	Q					70-130	30
1,2-Dichlorobenzene	ND	0.0227	0.013	57	Q					70-130	30
1,3-Dichlorobenzene	ND	0.0227	0.012	53	Q					70-130	30
1,4-Dichlorobenzene	ND	0.0227	0.012	53	Q					70-130	30
Methyl tert butyl ether	ND	0.0227	0.017	75						70-130	30
p/m-Xylene	ND	0.0454	0.029	64	Q					70-130	30
o-Xylene	ND	0.0454	0.030	66	Q					70-130	30
cis-1,2-Dichloroethene	0.0029	0.0227	0.022	84						70-130	30
Styrene	ND	0.0454	0.026	57						40-160	30
Dichlorodifluoromethane	ND	0.0227	0.023	101						40-160	30
Acetone	ND	0.0227	0.011J	48						40-160	30
Carbon disulfide	ND	0.0227	0.014	62						40-160	30
2-Butanone	ND	0.0227	0.013	57						40-160	30
4-Methyl-2-pentanone	ND	0.0227	0.015	66						40-160	30
2-Hexanone	ND	0.0227	0.014	62						40-160	30
Bromochloromethane	ND	0.0227	0.017	75						70-130	30
Isopropylbenzene	ND	0.0227	0.014	62	Q					70-130	30
1,2,3-Trichlorobenzene	ND	0.0227	0.013	57	Q					70-130	30
1,2,4-Trichlorobenzene	ND	0.0227	0.012	53	Q					70-130	30

Matrix Spike
Form 3

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Client Sample ID	: SB-F10R	**Matrix**	: SOIL
Lab Sample ID	: L1628635-04	**Analysis Date**	: 09/13/16 14:32
Matrix Spike	: WG931439-7	**MS Analysis Date**	: 09/13/16 14:57
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample				Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/kg)	Spike Added (mg/kg)	Spike Conc. (mg/kg)	%R		Spike Added (mg/kg)	Spike Conc. (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
Methyl Acetate	ND	0.0227	0.014	62	Q					70-130	30
Cyclohexane	ND	0.0227	0.016J	71						70-130	30
Methyl cyclohexane	0.00051J	0.0227	0.014	62	Q					70-130	30
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.0227	0.017J	75						70-130	30

Internal Standard Summary

Internal Standard Area and RT Summary
Form 8

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: VOA111	**Analysis Date**	: 09/13/16 09:27
Sample No	: WG931439-2	**Lab File ID**	: V11160913A03

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG931439-2	184175	5.79	138744	9.28	70077	12.05
Upper Limit	368350	6.29	277488	9.78	140154	12.55
Lower Limit	92088	5.29	69372	8.78	35039	11.55
Sample ID						
WG931439-3 LCS	184175	5.79	138744	9.28	70077	12.05
WG931439-4 LCSD	176473	5.79	139258	9.28	70510	12.05
WG931439-5 BLANK	173142	5.78	134367	9.28	66225	12.05
SB-AOC1C-2013-107R	162741	5.79	120265	9.28	59358	12.05
SB-F9R	162025	5.79	122142	9.28	59196	12.05
SB-F9R DUP	160765	5.79	120095	9.28	60685	12.05
SB-F10R	155078	5.79	118242	9.28	57870	12.05
SB-F10R MS	155470	5.79	120066	9.28	60984	12.05

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: VOA100	**Analysis Date**	: 09/13/16 10:11
Sample No	: WG931449-2	**Lab File ID**	: V00160913A01

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG931449-2	369234	6.56	300357	10.14	162607	12.73
Upper Limit	738468	7.06	600714	10.64	325214	13.23
Lower Limit	184617	6.06	150179	9.64	81304	12.23
Sample ID						
WG931449-3 LCS	369234	6.56	300357	10.14	162607	12.73
WG931449-4 LCSD	372636	6.56	301534	10.14	162960	12.73
WG931449-5 BLANK	339429	6.55	270488	10.14	140361	12.72
SB-C8R	386552	6.55	309152	10.14	163283	12.72

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Chromatograms

Sample Raw Data

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160913A\
Data File : V11160913A12.D
Acq On : 13 Sep 2016 01:16 pm
Operator : VOA111:JC
Sample : l1628635-01,31,5.6,5,,y
Misc : WG931439,ICAL12787
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 13 14:32:09 2016
Quant Method : I:\VOLATILES\VOA111\2016\160913A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA111\2016\160913A\V11160913A03.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.787	96	162741	20.000	ug/L	0.00
Standard Area 1 = 184175			Recovery = 88.36%			
59) Chlorobenzene-d5	9.284	117	120265	20.000	ug/L	0.00
Standard Area 1 = 138744			Recovery = 86.68%			
79) 1,4-Dichlorobenzene-d4	12.052	152	59358	20.000	ug/L	0.00
Standard Area 1 = 70077			Recovery = 84.70%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.995	113	39043	21.199	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 106.00%			
43) 1,2-Dichloroethane-d4	5.509	65	58496	21.829	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 109.15%			
60) Toluene-d8	7.459	98	162941	19.885	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 99.43%			
83) 4-Bromofluorobenzene	10.809	95	66127	20.510	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 102.55%			
Target Compounds						Qvalue
48) Trichloroethene	5.954	95	1899	1.032	ug/L	# 62

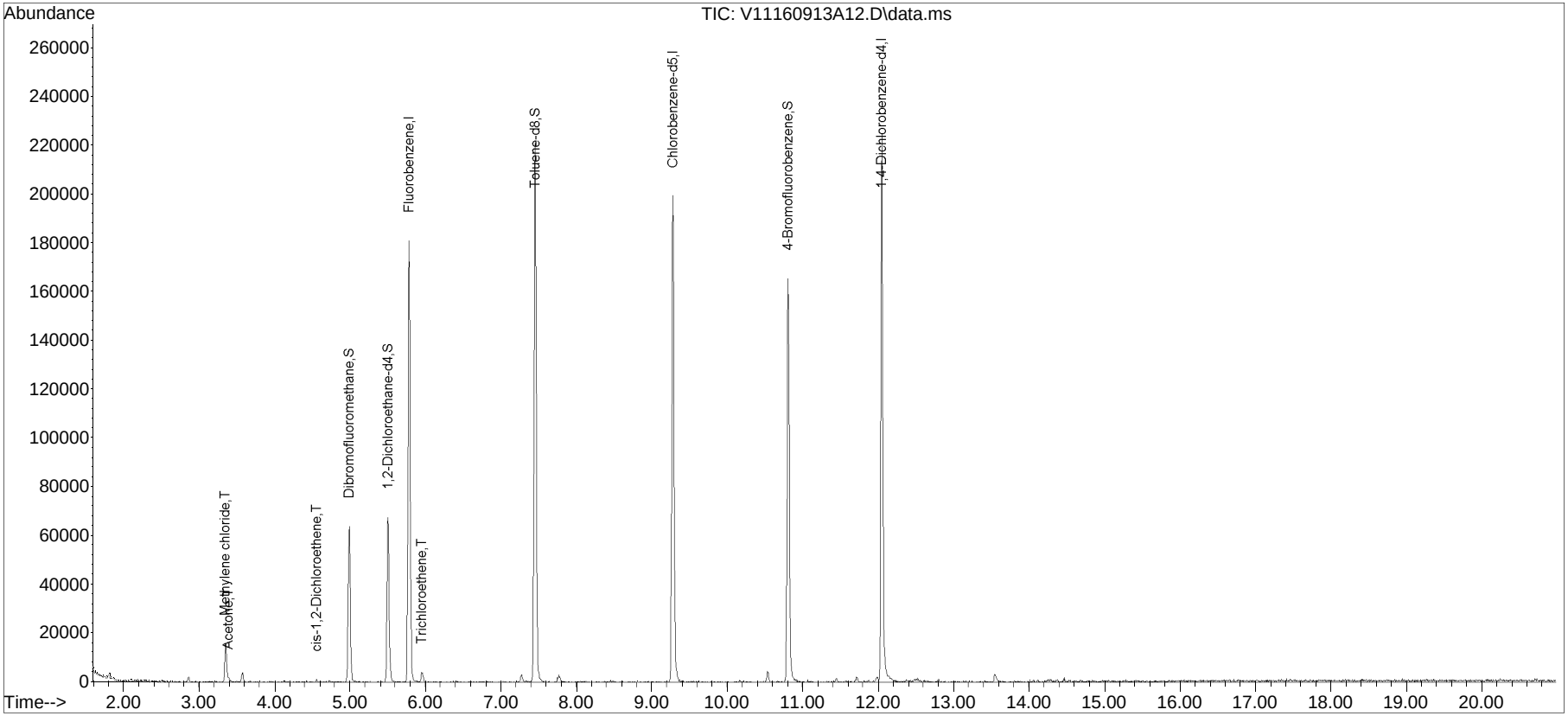
(#) = qualifier out of range (m) = manual integration (+) = signals summed

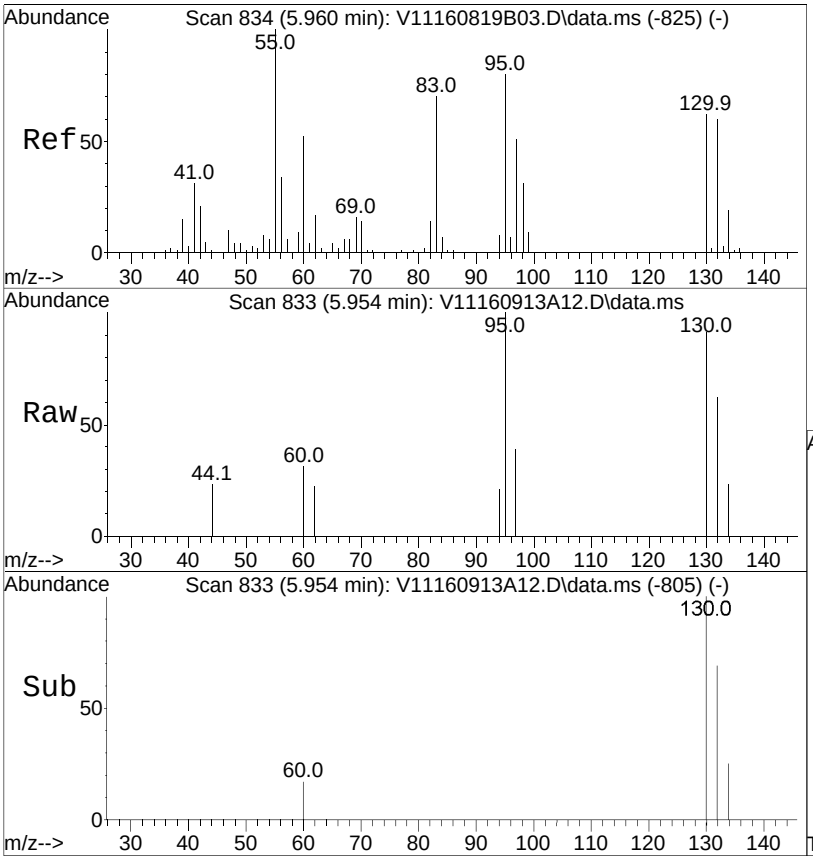
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160913A\
Data File : V11160913A12.D
Acq On : 13 Sep 2016 01:16 pm
Operator : VOA111:JC
Sample : l1628635-01,31,5.6,5,,y
Misc : WG931439,ICAL12787
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 13 14:32:09 2016
Quant Method : I:\VOLATILES\VOA111\2016\160913A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist913A\V11160913A03.D•

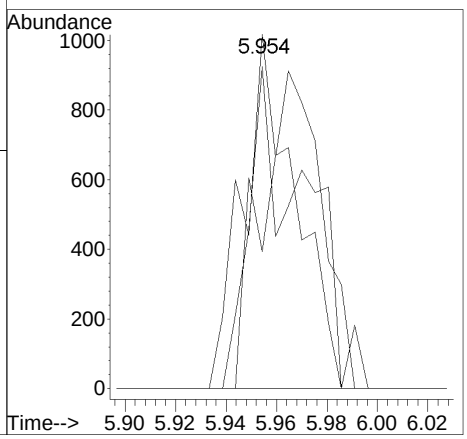




#48
Trichloroethene
Concen: 1.03 ug/L
RT: 5.954 min Scan# 833
Delta R.T. -0.006 min
Lab File: V11160913A12.D
Acq: 13 Sep 2016 01:16 pm

Tgt Ion: 95 Resp: 1899

Ion	Ratio	Lower	Upper
95	100		
97	59.8	54.6	82.0
130	42.3	78.4	117.6#



Manual Integration Report

Data Path	: I:\VOLATILES\VOA111\2016\1	QMethod	: V111_160819_8260.m
Data File	: V11160913A12.D	Operator	: VOA111:JC
Date Inj'd	: 9/13/2016 1:16 pm	Instrument	: VOA111
Sample	: l1628635-01,31,5.6,5,,y	Quant Date	: 9/13/2016 2:31 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160913A\
Data File : V11160913A13.D
Acq On : 13 Sep 2016 01:41 pm
Operator : VOA111:JC
Sample : l1628635-03,31,5.8,5,,y
Misc : WG931439,ICAL12787
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 13 14:33:22 2016
Quant Method : I:\VOLATILES\VOA111\2016\160913A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA111\2016\160913A\V11160913A03.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.786	96	162025	20.000	ug/L	0.00
Standard Area 1 = 184175			Recovery = 87.97%			
59) Chlorobenzene-d5	9.284	117	122142	20.000	ug/L	0.00
Standard Area 1 = 138744			Recovery = 88.03%			
79) 1,4-Dichlorobenzene-d4	12.052	152	59196	20.000	ug/L	0.00
Standard Area 1 = 70077			Recovery = 84.47%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.995	113	42268	23.052	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 115.26%			
43) 1,2-Dichloroethane-d4	5.509	65	57455	21.535	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 107.68%			
60) Toluene-d8	7.459	98	162379	19.512	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 97.56%			
83) 4-Bromofluorobenzene	10.809	95	64884	20.180	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 100.90%			
Target Compounds						Qvalue
48) Trichloroethene	5.959	95	6583	3.593	ug/L	95

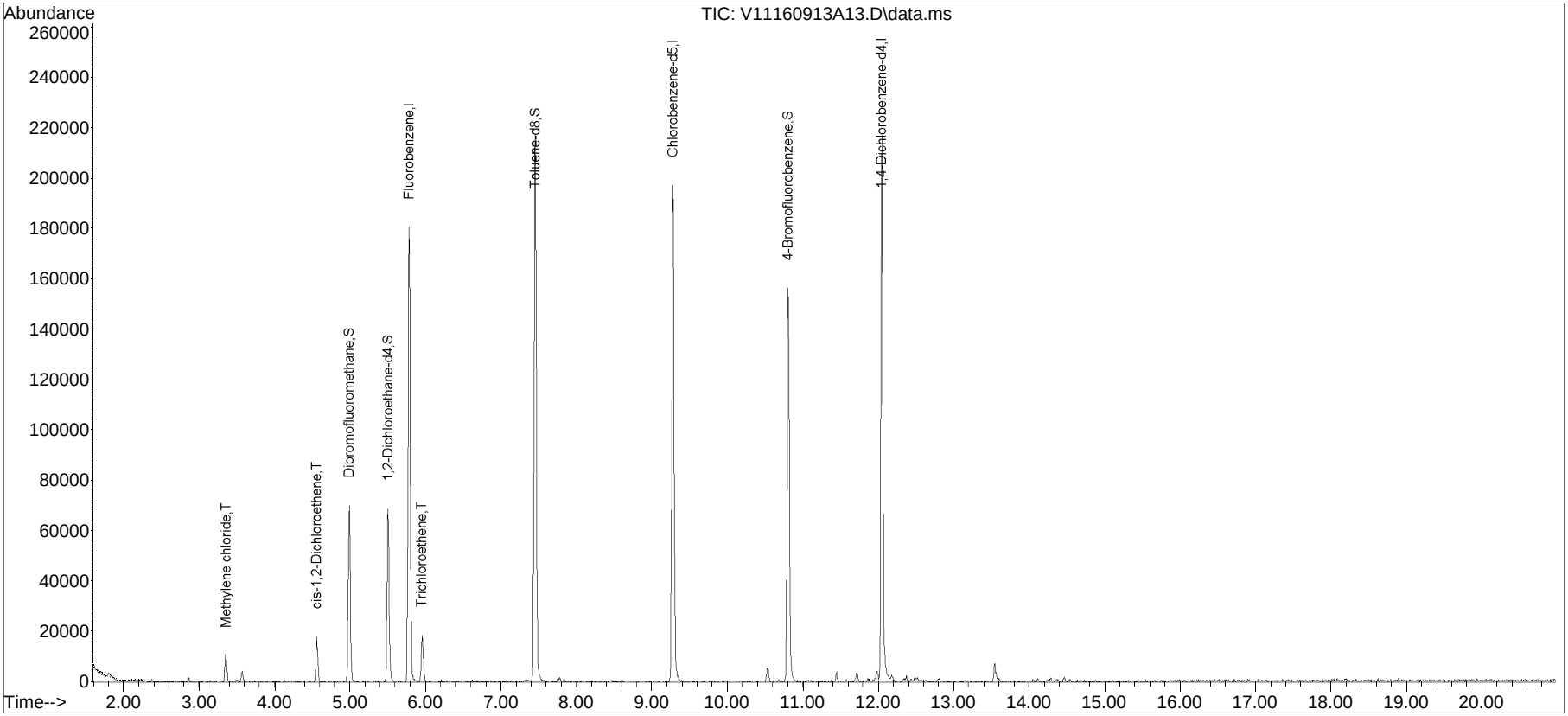
(#) = qualifier out of range (m) = manual integration (+) = signals summed

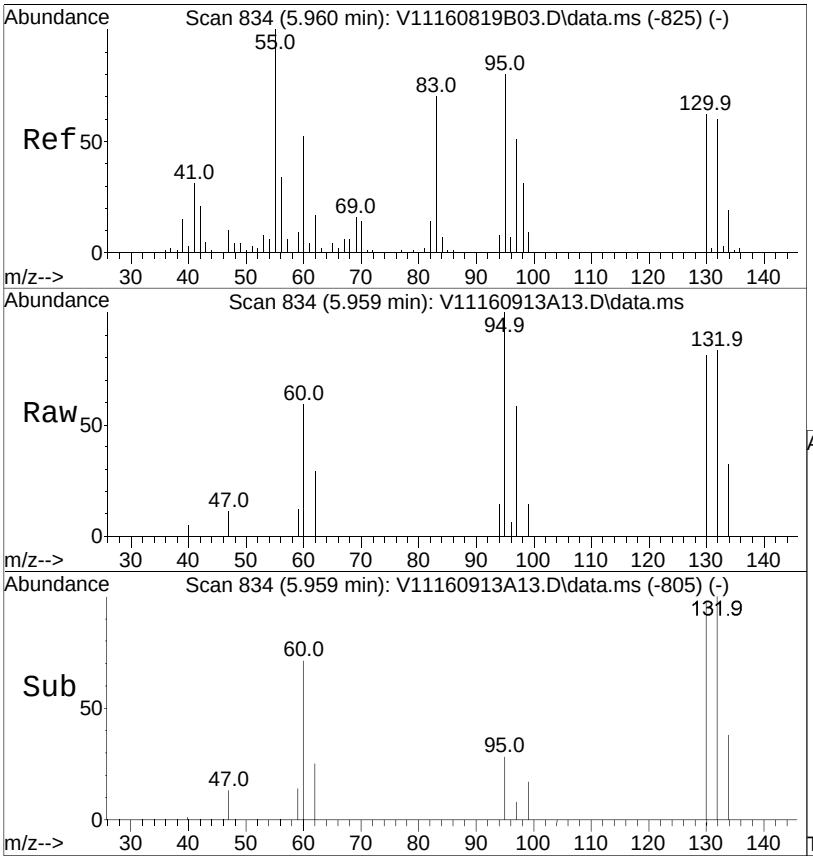
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160913A\
Data File : V11160913A13.D
Acq On : 13 Sep 2016 01:41 pm
Operator : VOA111:JC
Sample : l1628635-03,31,5.8,5,,y
Misc : WG931439,ICAL12787
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 13 14:33:22 2016
Quant Method : I:\VOLATILES\VOA111\2016\160913A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist913A\V11160913A03.D•

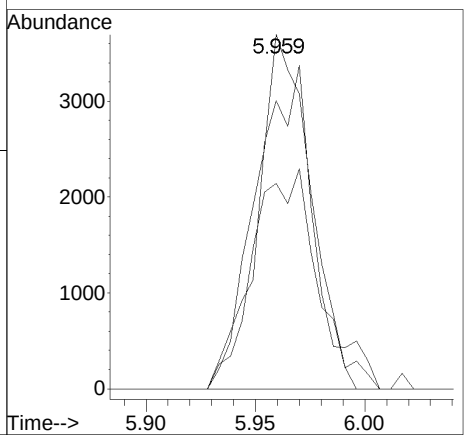




#48
Trichloroethene
Concen: 3.59 ug/L
RT: 5.959 min Scan# 834
Delta R.T. -0.001 min
Lab File: V11160913A13.D
Acq: 13 Sep 2016 01:41 pm

Tgt Ion: 95 Resp: 6583

Ion	Ratio	Lower	Upper
95	100		
97	71.0	54.6	82.0
130	91.7	78.4	117.6



Manual Integration Report

Data Path	: I:\VOLATILES\VOA111\2016\1	QMethod	: V111_160819_8260.m
Data File	: V11160913A13.D	Operator	: VOA111:JC
Date Inj'd	: 9/13/2016 1:41 pm	Instrument	: VOA111
Sample	: l1628635-03,31,5.8,5,,y	Quant Date	: 9/13/2016 2:29 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA100\2016\160913A\
Data File : V00160913A09.D
Acq On : 13 Sep 2016 1:44 pm
Operator : VOA100:JC
Sample : l1628635-02D,31H,5.2,5,0.050,,x
Misc : WG931449,ICAL12815
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 13 14:46:47 2016
Quant Method : I:\VOLATILES\VOA100\2016\160913A\V100_160829N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 06:21:02 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA100\2016\160913A\V00160913A01.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.553	96	386552	20.000	ug/L	0.00
Standard Area 1 = 369234			Recovery = 104.69%			
59) Chlorobenzene-d5	10.144	117	309152	20.000	ug/L	0.00
Standard Area 1 = 300357			Recovery = 102.93%			
79) 1,4-Dichlorobenzene-d4	12.724	152	163283	20.000	ug/L	0.00
Standard Area 1 = 162607			Recovery = 100.42%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.714	113	102017	18.638	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 93.19%			
43) 1,2-Dichloroethane-d4	6.259	65	115090	20.672	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 103.36%			
60) Toluene-d8	8.272	98	380199	21.989	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 109.95%			
83) 4-Bromofluorobenzene	11.555	95	148385	23.779	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 118.90%			
Target Compounds						Qvalue
48) Trichloroethene	6.731	95	1377162	267.258	ug/L	97

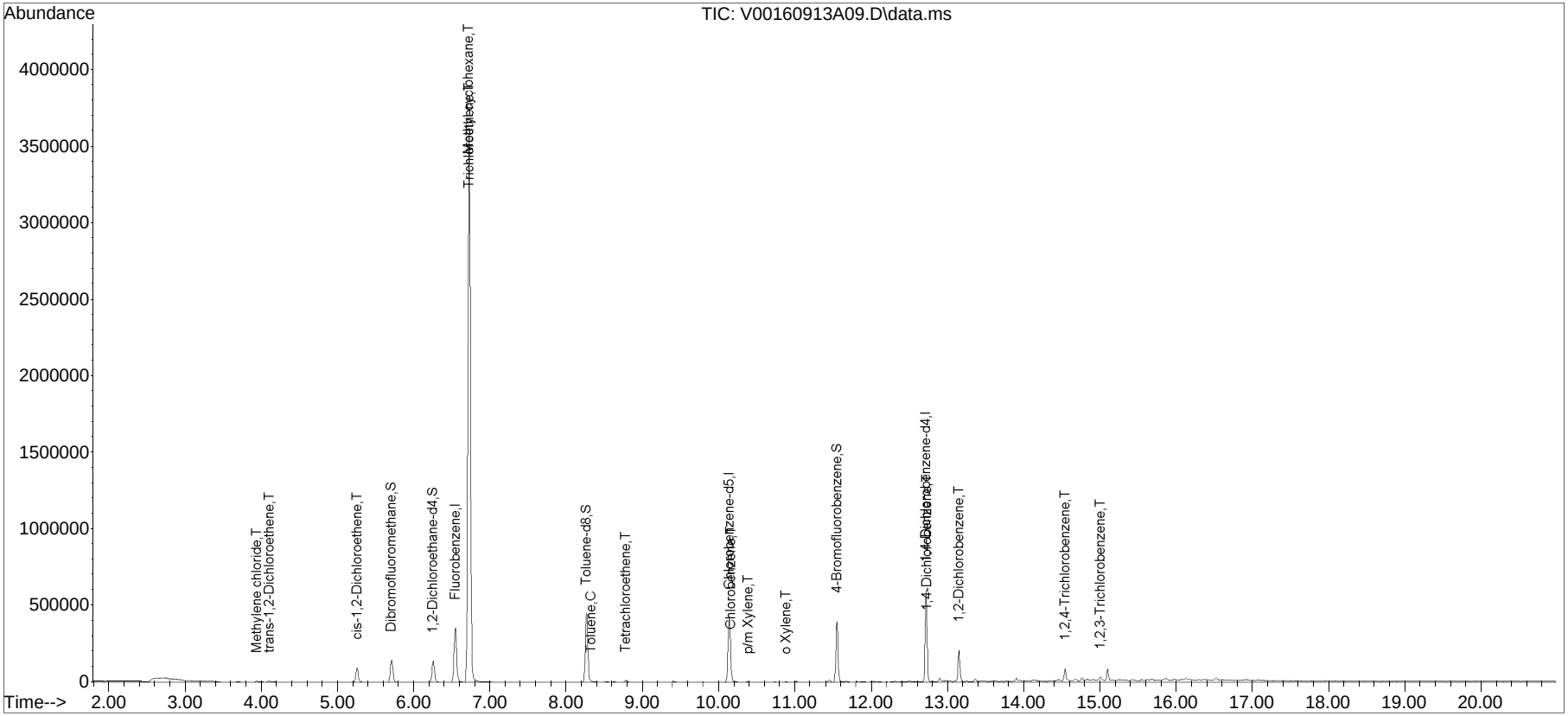
(#) = qualifier out of range (m) = manual integration (+) = signals summed

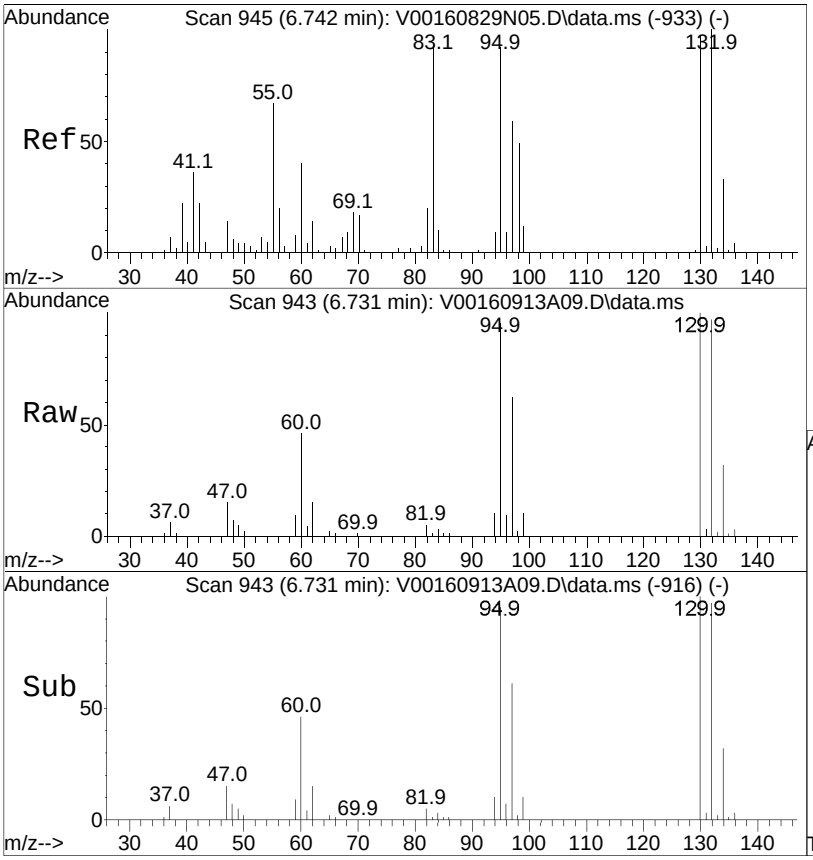
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA100\2016\160913A\
Data File : V00160913A09.D
Acq On : 13 Sep 2016 1:44 pm
Operator : VOA100:JC
Sample : l1628635-02D,31H,5.2,5,0.050,,x
Misc : WG931449,ICAL12815
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 13 14:46:47 2016
Quant Method : I:\VOLATILES\VOA100\2016\160913A\V100_160829N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 06:21:02 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist913A\V00160913A01.D•

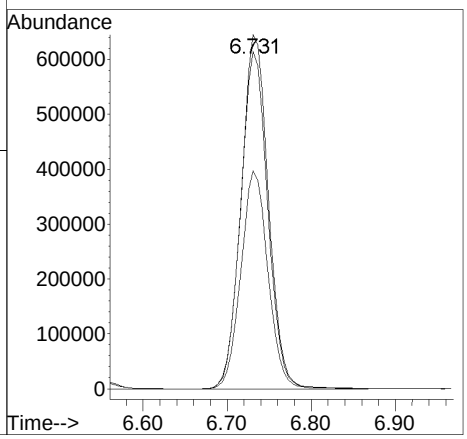




#48
Trichloroethene
Concen: 267.26 ug/L
RT: 6.731 min Scan# 943
Delta R.T. -0.011 min
Lab File: V00160913A09.D
Acq: 13 Sep 2016 1:44 pm

Tgt Ion: 95 Resp: 1377162

Ion	Ratio	Lower	Upper
95	100		
97	64.7	54.6	81.8
130	105.9	83.3	124.9



Manual Integration Report

Data Path	: I:\VOLATILES\VOA100\2016\1Q	Method	: V100_160829N_8260.m
Data File	: V00160913A09.D	Operator	: VOA100:JC
Date Inj'd	: 9/13/2016 1:44 pm	Instrument	: VOA 100
Sample	: l1628635-02D,31H,5.2,5,0.0	Quant Date	: 9/13/2016 2:44 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160913A\
Data File : V11160913A15.D
Acq On : 13 Sep 2016 02:32 pm
Operator : VOA111:JC
Sample : l1628635-04,31,5.9,5,,y
Misc : WG931439,ICAL12787
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 13 15:05:43 2016
Quant Method : I:\VOLATILES\VOA111\2016\160913A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA111\2016\160913A\V11160913A03.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.792	96	155078	20.000	ug/L	0.00
Standard Area 1 = 184175			Recovery = 84.20%			
59) Chlorobenzene-d5	9.284	117	118242	20.000	ug/L	0.00
Standard Area 1 = 138744			Recovery = 85.22%			
79) 1,4-Dichlorobenzene-d4	12.052	152	57870	20.000	ug/L	0.00
Standard Area 1 = 70077			Recovery = 82.58%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.995	113	40331	22.981	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 114.91%			
43) 1,2-Dichloroethane-d4	5.509	65	56256	22.031	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 110.16%			
60) Toluene-d8	7.459	98	157099	19.500	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 97.50%			
83) 4-Bromofluorobenzene	10.815	95	63704	20.266	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 101.33%			
Target Compounds						Qvalue
48) Trichloroethene	5.959	95	110114	62.799	ug/L	90

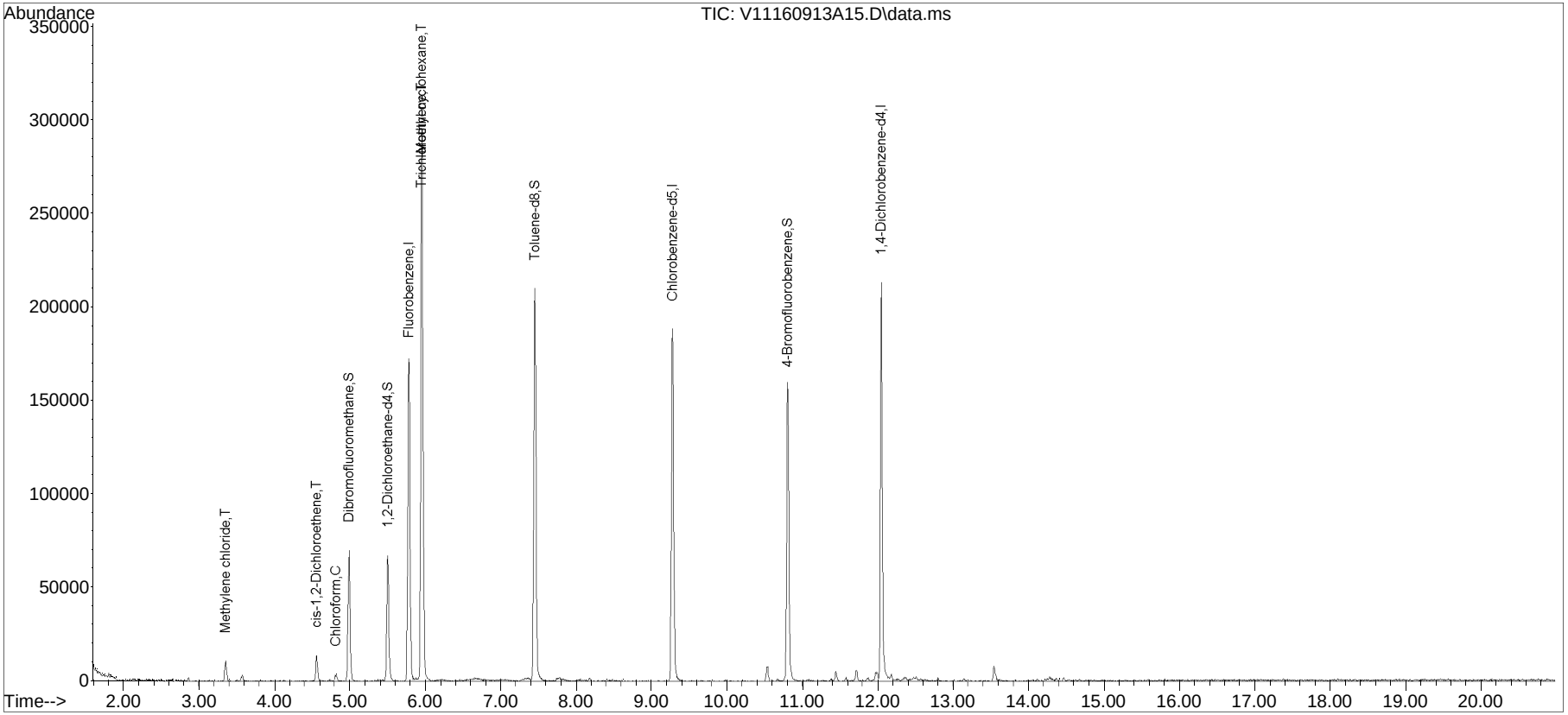
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

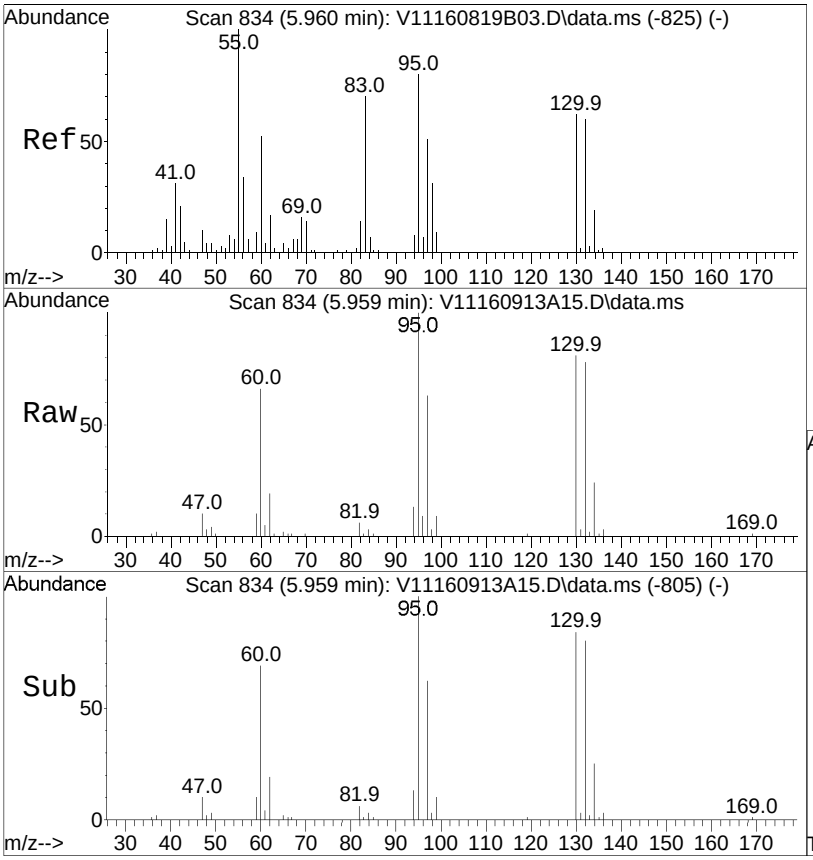
Data Path : I:\VOLATILES\VOA111\2016\160913A\
Data File : V11160913A15.D
Acq On : 13 Sep 2016 02:32 pm
Operator : VOA111:JC
Sample : l1628635-04,31,5.9,5,,y
Misc : WG931439,ICAL12787
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 13 15:05:43 2016
Quant Method : I:\VOLATILES\VOA111\2016\160913A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist913A\V11160913A03.D•



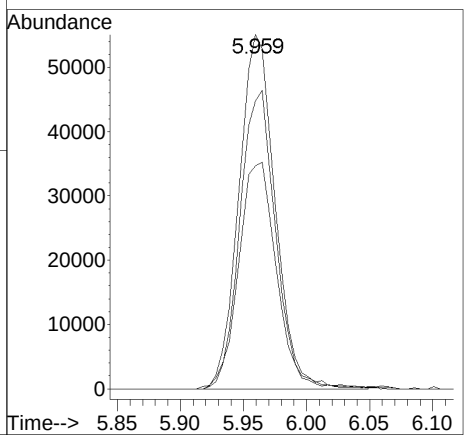
V111_160819_8260.m Tue Sep 13 15:06:24 2016 Page 2 : 3



#48
Trichloroethene
Concen: 62.80 ug/L
RT: 5.959 min Scan# 834
Delta R.T. -0.001 min
Lab File: V11160913A15.D
Acq: 13 Sep 2016 02:32 pm

Tgt Ion: 95 Resp: 110114

Ion	Ratio	Lower	Upper
95	100		
97	66.2	54.6	82.0
130	82.6	78.4	117.6



Manual Integration Report

Data Path	: I:\VOLATILES\VOA111\2016\1	QMethod	: V111_160819_8260.m
Data File	: V11160913A15.D	Operator	: VOA111:JC
Date Inj'd	: 9/13/2016 2:32 pm	Instrument	: VOA111
Sample	: l1628635-04,31,5.9,5,,y	Quant Date	: 9/13/2016 3:04 pm

There are no manual integrations or false positives in this file.

Method Blank
Raw Data

Quantitation Report (QT/LSC Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160913A\
Data File : V11160913A06.D
Acq On : 13 Sep 2016 10:43 am
Operator : VOA111:MV
Sample : WG931439-5,31,5,5
Misc : WG931439,ICAL12787
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 13 13:38:39 2016
Quant Method : I:\VOLATILES\VOA111\2016\160913A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA111\2016\160913A\V11160913A03.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.781	96	173142	20.000	ug/L	0.00
Standard Area 1 = 184175			Recovery = 94.01%			
59) Chlorobenzene-d5	9.284	117	134367	20.000	ug/L	0.00
Standard Area 1 = 138744			Recovery = 96.85%			
79) 1,4-Dichlorobenzene-d4	12.052	152	66225	20.000	ug/L	0.00
Standard Area 1 = 70077			Recovery = 94.50%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.990	113	42288	21.582	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 107.91%			
43) 1,2-Dichloroethane-d4	5.503	65	59467	20.858	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 104.29%			
60) Toluene-d8	7.454	98	173394	18.940	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 94.70%			
83) 4-Bromofluorobenzene	10.809	95	72806	20.240	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 101.20%			
Target Compounds						Qvalue
48) Trichloroethene	0.000		0	N.D.		

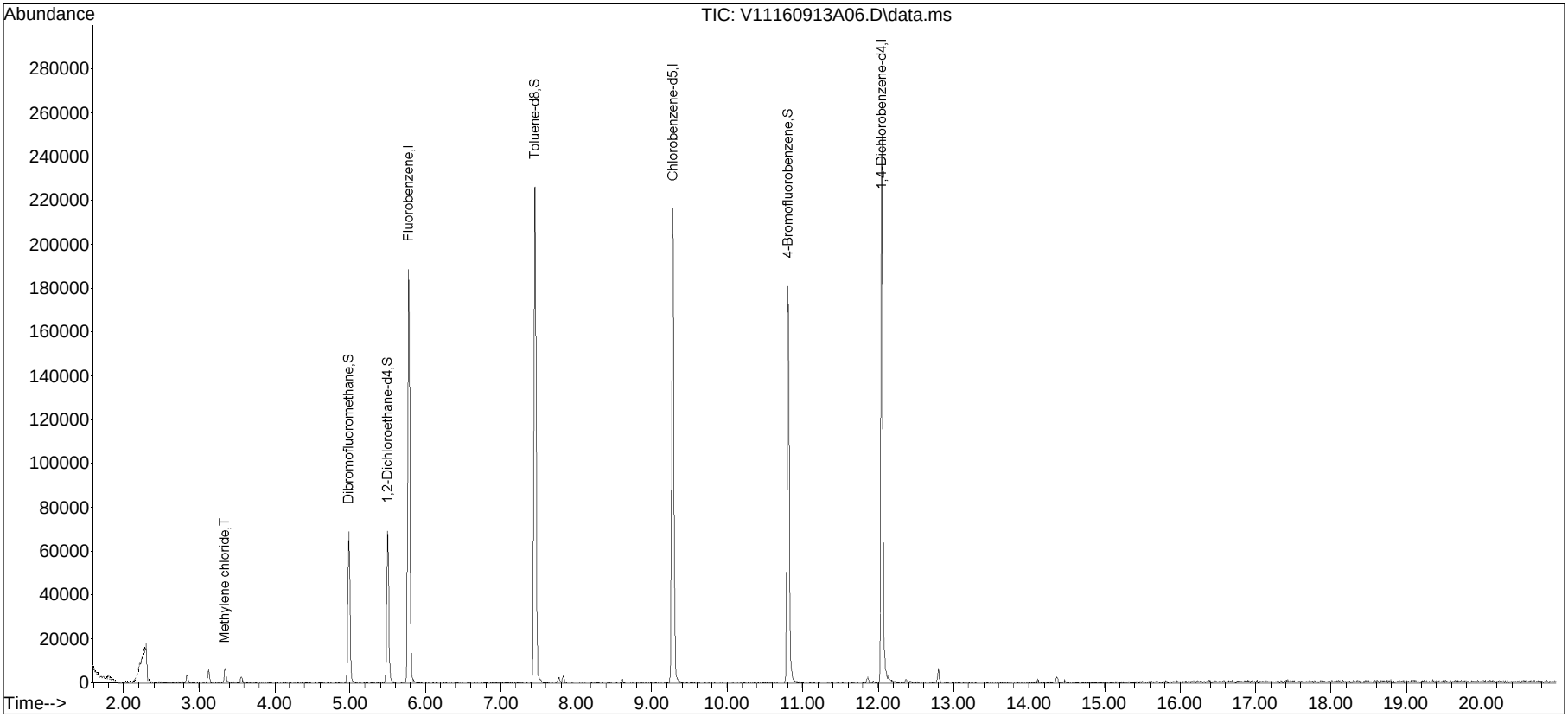
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160913A\
Data File : V11160913A06.D
Acq On : 13 Sep 2016 10:43 am
Operator : VOA111:MV
Sample : WG931439-5,31,5,5
Misc : WG931439,ICAL12787
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 13 13:38:39 2016
Quant Method : I:\VOLATILES\VOA111\2016\160913A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist913A\V11160913A03.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA111\2016\1	QMethod	: V111_160819_8260.m
Data File	: V11160913A06.D	Operator	: VOA111:MV
Date Inj'd	: 9/13/2016 10:43 am	Instrument	: VOA111
Sample	: WG931439-5,31,5,5	Quant Date	: 9/13/2016 1:36 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT/LSC Reviewed)

Data Path : I:\VOLATILES\VOA100\2016\160913A\
Data File : V00160913A05.D
Acq On : 13 Sep 2016 11:57 am
Operator : VOA100:MV
Sample : WG931449-5,31h,15,15,0.1
Misc : WG931449,ICAL12815
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 13 13:32:10 2016
Quant Method : I:\VOLATILES\VOA100\2016\160913A\V100_160829N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 06:21:02 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA100\2016\160913A\V00160913A01.D
Sub List : 8260-CurveSoil - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.548	96	339429	20.000	ug/L	-0.01
Standard Area 1 = 369234			Recovery = 91.93%			
59) Chlorobenzene-d5	10.144	117	270488	20.000	ug/L	0.00
Standard Area 1 = 300357			Recovery = 90.06%			
79) 1,4-Dichlorobenzene-d4	12.724	152	140361	20.000	ug/L	0.00
Standard Area 1 = 162607			Recovery = 86.32%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.709	113	87337	18.171	ug/L	-0.01
Spiked Amount 20.000	Range 70 - 130		Recovery = 90.85%			
43) 1,2-Dichloroethane-d4	6.259	65	101345	20.731	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 103.66%			
60) Toluene-d8	8.273	98	332472	21.978	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 109.89%			
83) 4-Bromofluorobenzene	11.555	95	128849	24.020	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 120.10%			
Target Compounds						Qvalue
48) Trichloroethene	0.000		0	N.D.		

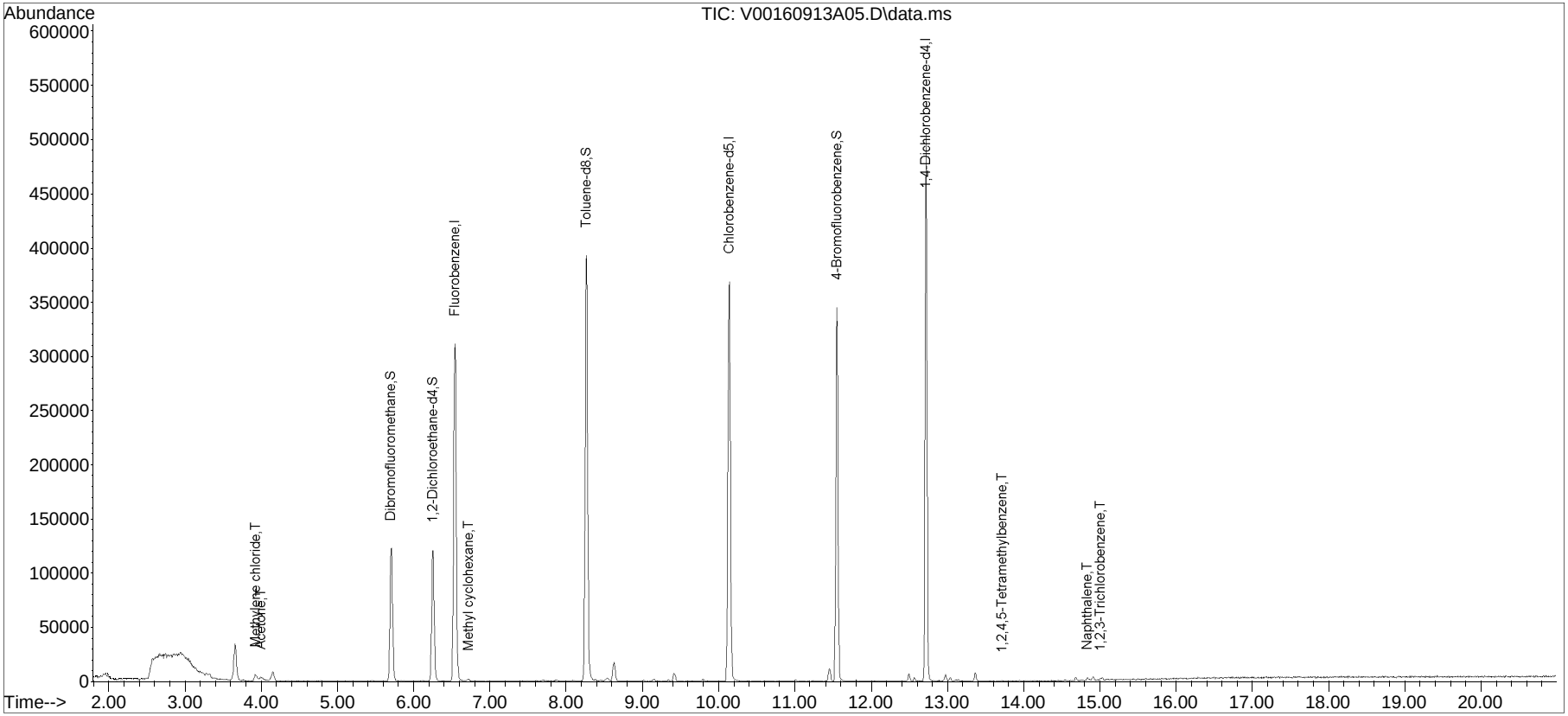
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : I:\VOLATILES\VOA100\2016\160913A\
Data File : V00160913A05.D
Acq On : 13 Sep 2016 11:57 am
Operator : VOA100:MV
Sample : WG931449-5,31h,15,15,0.1
Misc : WG931449,ICAL12815
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 13 13:32:10 2016
Quant Method : I:\VOLATILES\VOA100\2016\160913A\V100_160829N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 06:21:02 2016
Response via : Initial Calibration

Sub List : 8260-CurveSoil - Megamix plus Diox3A\V00160913A01.D•



Metals

Inorganic Data
(ICP Analysis)

Sample Results Summary

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628635-05	**Date Collected**	: 09/12/16 14:25
Client ID	: PL07-01R	**Date Received**	: 09/12/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/13/16 10:24
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG931253.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.26g	**%Solids**	: 82
Digestion Method	: EPA 3050B	**Date Digested**	: 09/13/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, Total	930	1.2	0.19	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628635-06	**Date Collected**	: 09/12/16 14:35
Client ID	: PL07-107R	**Date Received**	: 09/12/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/13/16 12:13
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG931253.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.26g	**%Solids**	: 85
Digestion Method	: EPA 3050B	**Date Digested**	: 09/13/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, Total	5300	12	1.9	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628635-07	**Date Collected**	: 09/12/16 15:20
Client ID	: 4479-091216-1520	**Date Received**	: 09/12/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/13/16 12:29
Sample Matrix	: SOIL	**Dilution Factor**	: 50
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG931253.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.275g	**%Solids**	: 76
Digestion Method	: EPA 3050B	**Date Digested**	: 09/13/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, Total	9200	64	10.	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628635-08	**Date Collected**	: 09/12/16 15:22
Client ID	: 4479-091216-1522	**Date Received**	: 09/12/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/13/16 12:21
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG931253.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.27g	**%Solids**	: 79
Digestion Method	: EPA 3050B	**Date Digested**	: 09/13/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, Total	3000	12	2.0	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: L1628635-09	Date Collected	: 09/12/16 15:24
Client ID	: 4479-091216-1524	Date Received	: 09/12/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/13/16 12:25
Sample Matrix	: SOIL	Dilution Factor	: 10
Analytical Method	: 1,6010C	Analyst	: PS
Lab File ID	: WG931253.pdf	Instrument ID	: TRACE7
Sample Amount	: 1.275g	%Solids	: 78
Digestion Method	: EPA 3050B	Date Digested	: 09/13/16

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-02-0	Nickel, Total	2500	12	2.0	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: WG931230-1	**Date Collected**	: NA
Client ID	: WG931230-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/13/16 09:56
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG931253.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.25g	**%Solids**	: NA
Digestion Method	: EPA 3050B	**Date Digested**	: 09/13/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, Total	ND	1.0	0.16	U

Blank Results Summary

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: TRACE7		

		Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID	:	R899725-2		R899725-7		R899725-9		R899725-11		WG931230-1	
Date Analyzed	:	09/13/16 08:51		09/13/16 09:34		09/13/16 10:48		09/13/16 11:12		09/13/16 09:56	
Parameter		mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q	mg/kg	Q
Nickel		0.00400	U	0.00400	U	0.00400	U	0.00400	U	0.16	U

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: TRACE7		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R899725-13		R899725-15		R899725-17			
Date Analyzed :			09/13/16 12:01		09/13/16 12:09		09/13/16 12:52			
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Nickel			0.00400	U	0.00400	U	0.00400	U		

Calibration Summary

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: TRACE7	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R899725-1			R899725-6			R899725-8		R899725-10	
Date Analyzed :	09/13/16 08:47			09/13/16 09:30			09/13/16 10:44		09/13/16 11:08	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Nickel	0.5000	0.5040	101.	0.5000	0.4850	97.	0.4930	99.	0.4900	98.

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: TRACE7	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R899725-12			R899725-14		R899725-16	
Date Analyzed :				09/13/16 11:57			09/13/16 12:05		09/13/16 12:48	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Nickel				0.5000	0.4930	99.	0.5060	101.	0.5050	101.

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 2B
CRI Check Standard

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: TRACE7	**Units**	: mg/L

		Initial	Final
Lab ID	:	R899725-5	
Date Analyzed	:	09/13/16 09:26	

Parameter	True	Found	%R	Found	%R
Nickel	0.080	0.083	104		

Acceptance Criteria: Methods 200.7, 6010

CRI: 70-130%

ICP Interference Check Sample Results Summary

Form 4a
Interference Check Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: TRACE7	**Concentration Units**	: mg/L

	True		Initial Found				Final Found			
Lab ID :			R899725-3		R899725-4					
Analysis Date :			09/13/16 09:18		09/13/16 09:22					
	Sol.	Sol.	Sol.		Sol.		Sol.		Sol.	
Analyte	A	AB	A	%R	AB	%R	A	%R	AB	%R
Nickel		0.3	-0.00150		0.293	98				

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

LCS Sample Results Summary

Form 7
Laboratory Control Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Client Sample ID	: NA	**Matrix**	: SOIL
Lab Sample ID	: WG931230-2	**LCS Analysis Date**	: 09/13/16 10:01
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
	True	Found	%R	True	Found	%R	RPD	Recovery	RPD
Parameter	(mg/kg)	(mg/kg)		(mg/kg)	(mg/kg)			Limits	Limit
Nickel, Total	129.	130.	101.					83-117	20

Run Logs

Form 13
Analysis Run Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: TRACE7	**Analysis Method**	: 1,6010C
Start Date	: 09/13/16 08:47	**End Date**	: 09/13/16 12:52

Sample Number	Dilution Factor	Analysis Time	Nickel, Total
R899725-1 ICV	1	08:47:00	X
R899725-2 ICB	1	08:51:00	X
R899725-3 ICSA	1	09:18:00	X
R899725-4 ICSAB	1	09:22:00	X
R899725-5 CRI	1	09:26:00	X
R899725-6 CCV	1	09:30:00	X
R899725-7 CCB	1	09:34:00	X
WG931230-1 BLANK	1	09:56:00	X
WG931230-2 LCS	8	10:01:00	X
L1628635-05	1	10:24:00	X
R899725-8 CCV	1	10:44:00	X
R899725-9 CCB	1	10:48:00	X
R899725-10 CCV	1	11:08:00	X
R899725-11 CCB	1	11:12:00	X
R899725-12 CCV	1	11:57:00	X
R899725-13 CCB	1	12:01:00	X
R899725-14 CCV	1	12:05:00	X
R899725-15 CCB	1	12:09:00	X
L1628635-06	10	12:13:00	X
L1628635-08	10	12:21:00	X
L1628635-09	10	12:25:00	X
L1628635-07	50	12:29:00	X
R899725-16 CCV	1	12:48:00	X
R899725-17 CCB	1	12:52:00	X

Digestion Logs
ICP

Form 12
Preparation Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Matrix	: SOIL	**Prep Method**	: EPA 3050B

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L1628635-05	09/13/16 07:00	1.26	-
L1628635-06	09/13/16 07:00	1.26	-
L1628635-07	09/13/16 07:00	1.28	-
L1628635-08	09/13/16 07:00	1.27	-
L1628635-09	09/13/16 07:00	1.28	-
WG931230-1	09/13/16 07:00	1.25	-
WG931230-2	09/13/16 07:00	0.39	-

Inorganic Data
(ICPMS Analysis)

Sample Results Summary

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: L1628635-05	Date Collected	: 09/12/16 14:25
Client ID	: PL07-01R	Date Received	: 09/12/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/19/16 15:30
Sample Matrix	: SOIL	Dilution Factor	: 10
Analytical Method	: 1,6020A	Analyst	: TT
Lab File ID	: WG933375.pdf	Instrument ID	: ICPMSQ
Sample Amount	: 50ml	%Solids	: 82
Digestion Method	: EPA 3005A	Date Digested	: 09/17/16

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-02-0	Nickel, SPLP	103.	5.00	0.865	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: L1628635-06	Date Collected	: 09/12/16 14:35
Client ID	: PL07-107R	Date Received	: 09/12/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/19/16 15:42
Sample Matrix	: SOIL	Dilution Factor	: 10
Analytical Method	: 1,6020A	Analyst	: TT
Lab File ID	: WG933375.pdf	Instrument ID	: ICPMSQ
Sample Amount	: 50ml	%Solids	: 85
Digestion Method	: EPA 3005A	Date Digested	: 09/17/16

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-02-0	Nickel, SPLP	70.3	5.00	0.865	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: L1628635-07	Date Collected	: 09/12/16 15:20
Client ID	: 4479-091216-1520	Date Received	: 09/12/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/19/16 15:45
Sample Matrix	: SOIL	Dilution Factor	: 10
Analytical Method	: 1,6020A	Analyst	: TT
Lab File ID	: WG933375.pdf	Instrument ID	: ICPMSQ
Sample Amount	: 50ml	%Solids	: 76
Digestion Method	: EPA 3005A	Date Digested	: 09/17/16

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-02-0	Nickel, SPLP	1850	5.00	0.865	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628635-08	**Date Collected**	: 09/12/16 15:22
Client ID	: 4479-091216-1522	**Date Received**	: 09/12/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/19/16 15:48
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,6020A	**Analyst**	: TT
Lab File ID	: WG933375.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: 79
Digestion Method	: EPA 3005A	**Date Digested**	: 09/17/16

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, SPLP	1640	5.00	0.865	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: L1628635-09	Date Collected	: 09/12/16 15:24
Client ID	: 4479-091216-1524	Date Received	: 09/12/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/19/16 15:51
Sample Matrix	: SOIL	Dilution Factor	: 10
Analytical Method	: 1,6020A	Analyst	: TT
Lab File ID	: WG933375.pdf	Instrument ID	: ICPMSQ
Sample Amount	: 50ml	%Solids	: 78
Digestion Method	: EPA 3005A	Date Digested	: 09/17/16

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-02-0	Nickel, SPLP	2570	5.00	0.865	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: WG933062-1	Date Collected	: NA
Client ID	: WG933062-1BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 09/19/16 15:14
Sample Matrix	: SOIL	Dilution Factor	: 10
Analytical Method	: 1,6020A	Analyst	: TT
Lab File ID	: WG933375.pdf	Instrument ID	: ICPMSQ
Sample Amount	:	%Solids	: NA
Digestion Method	:	Date Digested	: 09/17/16

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-02-0	Nickel, SPLP	ND	5.00	0.865	U

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: WG933062-3	Date Collected	: 09/12/16 14:25
Client ID	: PL07-01RDUP	Date Received	: 09/12/16
Sample Location	:	Date Analyzed	: 09/19/16 15:33
Sample Matrix	: SOIL	Dilution Factor	: 10
Analytical Method	: 1,6020A	Analyst	: TT
Lab File ID	: WG933375.pdf	Instrument ID	: ICPMSQ
Sample Amount	: 50ml	%Solids	: 82
Digestion Method	: EPA 3005A	Date Digested	: 09/17/16

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-02-0	Nickel, SPLP	99.4	5.00	0.865	

Blank Results Summary

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: ICPMSQ		

		Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID	:	R901619-4		R901619-8		R901619-10		R901619-12		WG933062-1	
Date Analyzed	:	09/19/16 12:12		09/19/16 12:38		09/19/16 13:15		09/19/16 13:53		09/19/16 15:14	
Parameter		ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q
Nickel		0.0865	U	0.0865	U	0.0865	U	0.0865	U	0.865	U

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: ICPMSQ		

		Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID	:			R901619-14		R901619-16		R901619-19			
Date Analyzed	:			09/19/16 14:10		09/19/16 14:23		09/19/16 15:23			
Parameter		ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Nickel				0.0865	U	0.0865	U	0.0865	U		

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: ICPMSQ		

		Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID	:			R901619-21							
Date Analyzed	:			09/19/16 16:10							
Parameter		ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Nickel				0.0865	U						

Calibration Summary

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R901619-3			R901619-7			R901619-9		R901619-11	
Date Analyzed :	09/19/16 12:09			09/19/16 12:35			09/19/16 13:12		09/19/16 13:49	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Nickel	100.0000	98.9000	99	100.0000	99.0000	99	99.8000	100	97.9000	98

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R901619-13			R901619-15		R901619-18	
Date Analyzed :				09/19/16 14:06			09/19/16 14:20		09/19/16 15:20	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Nickel				100.0000	92.0000	92	98.0000	98	103.0000	103

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R901619-20						
Date Analyzed :				09/19/16 16:07						
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Nickel				100.0000	98.3000	98				

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

ICP Interference Check Sample Results Summary

Form 4a
Interference Check Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: ICPMSQ	**Concentration Units**	: ug/l

	True		Initial Found				Final Found			
Lab ID :			R901619-5		R901619-6					
Analysis Date :			09/19/16 12:18		09/19/16 12:21					
Analyte	**Sol. A**	**Sol. AB**	**Sol. A**	**%R**	**Sol. AB**	**%R**	**Sol. A**	**%R**	**Sol. AB**	**%R**
Nickel		**40**	**1.33**		**38.0**	**95**				

Acceptance Criteria: **Methods 200.7, 200.8, 6010, 6020**

ICSA: **80-120%**

ICSAB: **80-120%**

Spike Sample Results

Form 5a
Matrix Spike

Client	:	Haley & Aldrich, Inc.	**Lab Number**	:	L1628635
Project Name	:	EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	:	70614-814
Client Sample ID	:	PL07-01R	**Matrix**	:	SOIL
Lab Sample ID	:	L1628635-05			
Matrix Spike	:	WG933062-4	**MS Analysis Date**	:	09/19/16 15:36
Matrix Spike Dup	:		**MSD Analysis Date**	:	

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	**Sample Conc. (ug/l)**	**Spike Added (ug/l)**	**Spike Conc. (ug/l)**	**%R**	**Spike Added (ug/l)**	**Spike Conc. (ug/l)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Nickel, SPLP	103.	500	573.	94					80-120	20

Duplicate Sample Results Summary

Form 6
Lab Duplicates

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Client Sample ID	: PL07-01R	**Matrix**	: SOIL
Lab Sample ID	: L1628635-05	**Analysis Date**	: 09/19/16 15:30
Dup Sample ID	: WG933062-3	**DUP Analysis Date**	: 09/19/16 15:33

Parameter	Sample Concentration (ug/l)	Duplicate Concentration (ug/l)	RPD	RPD Limit
Nickel, SPLP	103.	99.4	4	20

LCS Sample Results Summary

Form 7
Laboratory Control Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Client Sample ID	: NA	**Matrix**	: SOIL
Lab Sample ID	: WG933062-2	**LCS Analysis Date**	: 09/19/16 15:27
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
	True	Found	%R	True	Found	%R	RPD	Recovery	RPD
Parameter	(ug/l)	(ug/l)		(ug/l)	(ug/l)			Limits	Limit
Nickel, SPLP	500.	490.	98.					80-120	20

Internal Standard Summary

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020A
Start Date	: 09/19/16	**End Date**	: 09/19/16

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R901619-3 ICV	12:09:34	111	110	107	104	105
R901619-4 ICB	12:12:40	116	112	110	104	102
R901619-5 ICSA	12:18:53	121	119	112	103	102
R901619-6 ICSAB	12:21:59	122	124	118	106	104
R901619-7 CCV	12:35:53	126	124	119	112	108
R901619-8 CCB	12:38:59	125	119	113	108	105
R901619-9 CCV	13:12:28	101	104	102	100	103
R901619-10 CCB	13:15:35	110	108	109	103	105
R901619-11 CCV	13:49:59	124	126	116	110	104
R901619-12 CCB	13:53:05	126	126	117	112	108
R901619-13 CCV	14:06:57	131	125	119	109	105
R901619-14 CCB	14:10:03	134	128	114	108	105
R901619-15 CCV	14:20:12	128	123	116	106	106
R901619-16 CCB	14:23:18	128	124	118	110	107
WG933062-1 BLANK	15:14:13	125	125	119	109	110
R901619-18 CCV	15:20:21	124	120	116	110	106
R901619-19 CCB	15:23:27	123	128	118	113	112
WG933062-2 LCS	15:27:33	120	125	118	112	115
L1628635-05	15:30:37	109	114	112	108	108
WG933062-3 DUP	15:33:42	103	117	107	106	110
WG933062-4 MS	15:36:44	101	113	107	108	109
L1628635-06	15:42:49	97	108	106	105	107
L1628635-07	15:45:51	92	101	103	101	104
L1628635-08	15:48:54	90	102	102	103	106
L1628635-09	15:51:57	90	101	103	102	107
R901619-20 CCV	16:07:24	112	115	110	109	106
R901619-21 CCB	16:10:30	115	114	110	107	107

Run Logs

Form 13
Analysis Run Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020A
Start Date	: 09/19/16 11:14	**End Date**	: 09/19/16 16:10

Sample Number	Dilution Factor	Analysis Time	Nickel, SPLP
R901619-17 TUNE		11:14:00	
R901619-3 ICV	1	12:09:34	X
R901619-4 ICB	1	12:12:40	X
R901619-5 ICSA	1	12:18:53	X
R901619-6 ICSAB	1	12:21:59	X
R901619-7 CCV	1	12:35:53	X
R901619-8 CCB	1	12:38:59	X
R901619-9 CCV	1	13:12:28	X
R901619-10 CCB	1	13:15:35	X
R901619-11 CCV	1	13:49:59	X
R901619-12 CCB	1	13:53:05	X
R901619-13 CCV	1	14:06:57	X
R901619-14 CCB	1	14:10:03	X
R901619-15 CCV	1	14:20:12	X
R901619-16 CCB	1	14:23:18	X
WG933062-1 BLANK	10	15:14:13	X
R901619-18 CCV	1	15:20:21	X
R901619-19 CCB	1	15:23:27	X
WG933062-2 LCS	10	15:27:33	X
L1628635-05	10	15:30:37	X
WG933062-3 DUP	10	15:33:42	X
WG933062-4 MS	10	15:36:44	X
L1628635-06	10	15:42:49	X
L1628635-07	10	15:45:51	X
L1628635-08	10	15:48:54	X
L1628635-09	10	15:51:57	X
R901619-20 CCV	1	16:07:24	X

Form 13
Analysis Run Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020A
Start Date	: 09/19/16 11:14	**End Date**	: 09/19/16 16:10

Sample Number	Dilution Factor	Analysis Time	Nickel, SPLP
R901619-21 CCB	1	16:10:30	X

Digestion Logs
ICPMS

Form 12
Preparation Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Matrix	: SOIL	**Prep Method**	: EPA 3005A

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L1628635-05	09/17/16 16:10	-	50
L1628635-06	09/17/16 16:10	-	50
L1628635-07	09/17/16 16:10	-	50
L1628635-08	09/17/16 16:10	-	50
L1628635-09	09/17/16 16:10	-	50
WG933062-1	09/17/16 16:10	-	50
WG933062-2	09/17/16 16:10	-	50
WG933062-3	09/17/16 16:10	-	50
WG933062-4	09/17/16 16:10	-	50

Wet Chemistry

Total Solids / Percent Moisture Analysis

Results Summary

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: WG931213-1	**Date Collected**	: 09/12/16 14:25
Client ID	: PL07-01RDUP	**Date Received**	: 09/12/16
Sample Location	:	**Date Analyzed**	: 09/13/16 02:20
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG931213.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 82
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	81.5	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: L1628635-01	Date Collected	: 09/12/16 11:00
Client ID	: SB-AOC1C-2013-107R	Date Received	: 09/12/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/13/16 02:20
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 121,2540G	Analyst	: VB
Lab File ID	: WG931213.csv	Instrument ID	:
Sample Amount	:	%Solids	: 78
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	78.0	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628635-02	**Date Collected**	: 09/12/16 11:15
Client ID	: SB-C8R	**Date Received**	: 09/12/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/13/16 02:20
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG931213.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 85
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**85.0**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628635-03	**Date Collected**	: 09/12/16 12:00
Client ID	: SB-F9R	**Date Received**	: 09/12/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/13/16 02:20
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG931213.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 84
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**84.4**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628635-04	**Date Collected**	: 09/12/16 14:00
Client ID	: SB-F10R	**Date Received**	: 09/12/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/13/16 02:20
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG931213.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 83
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**83.2**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628635-05	**Date Collected**	: 09/12/16 14:25
Client ID	: PL07-01R	**Date Received**	: 09/12/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/13/16 02:20
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG931213.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 82
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**82.4**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628635-06	**Date Collected**	: 09/12/16 14:35
Client ID	: PL07-107R	**Date Received**	: 09/12/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/13/16 02:20
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG931213.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 85
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	84.7	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: L1628635-07	Date Collected	: 09/12/16 15:20
Client ID	: 4479-091216-1520	Date Received	: 09/12/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/13/16 02:20
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 121,2540G	Analyst	: VB
Lab File ID	: WG931213.csv	Instrument ID	:
Sample Amount	:	%Solids	: 76
Digestion Method	:	Date Digested	:

		%			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Solids, Total	75.9	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628635-08	**Date Collected**	: 09/12/16 15:22
Client ID	: 4479-091216-1522	**Date Received**	: 09/12/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/13/16 02:20
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG931213.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 79
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**79.3**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628635-09	**Date Collected**	: 09/12/16 15:24
Client ID	: 4479-091216-1524	**Date Received**	: 09/12/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/13/16 02:20
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG931213.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 78
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**78.4**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628635-10	**Date Collected**	: 09/12/16 15:30
Client ID	: 4479-091216-1530	**Date Received**	: 09/12/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/13/16 02:20
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG931213.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 81
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	80.6	0.100	NA	

Duplicate Sample Results Summary

Form 6
Lab Duplicates

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Client Sample ID	: PL07-01R	**Matrix**	: SOIL
Lab Sample ID	: L1628635-05	**Analysis Date**	: 09/13/16 02:20
Dup Sample ID	: WG931213-1	**DUP Analysis Date**	: 09/13/16 02:20

Parameter	Sample Concentration (%)	Duplicate Concentration (%)	RPD	RPD Limit
Solids, Total	82.4	81.5	1	20

Organic Carbon Analysis

Results Summary

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: WG933490-1	Date Collected	: NA
Client ID	: WG933490-1BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 09/19/16 09:03
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 13,-	Analyst	: AR
Lab File ID	: WG933490,AR,toc1,csv	Instrument ID	: TOC1
Sample Amount	:	%Solids	: NA
Digestion Method	:	Date Digested	:

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-44-0	Total Organic Carbon (Rep1)	ND	500	500.	U
7440-44-0	Total Organic Carbon (Rep2)	ND	500	500.	U

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: WG933490-2	Date Collected	:
Client ID	: WG933490-2SRM	Date Received	:
Sample Location	:	Date Analyzed	: 09/19/16 09:03
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 13,-	Analyst	: AR
Lab File ID	: WG933490,AR,toc1,csv	Instrument ID	: TOC1
Sample Amount	:	%Solids	: NA
Digestion Method	:	Date Digested	:

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-44-0	Total Organic Carbon (Rep1)	40200	500	500.	
7440-44-0	Total Organic Carbon (Rep2)	43200	500	500.	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: L1628635-03	Date Collected	: 09/12/16 12:00
Client ID	: SB-F9R	Date Received	: 09/12/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/19/16 09:03
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 13,-	Analyst	: AR
Lab File ID	: WG933490,AR,toc1,csv	Instrument ID	: TOC1
Sample Amount	:	%Solids	: 84
Digestion Method	:	Date Digested	:

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-44-0	Total Organic Carbon (Rep1)	1320	500	500.	
7440-44-0	Total Organic Carbon (Rep2)	1440	500	500.	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: L1628635-10	Date Collected	: 09/12/16 15:30
Client ID	: 4479-091216-1530	Date Received	: 09/12/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/19/16 09:03
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 13,-	Analyst	: AR
Lab File ID	: WG933490,AR,toc1,csv	Instrument ID	: TOC1
Sample Amount	:	%Solids	: 81
Digestion Method	:	Date Digested	:

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-44-0	Total Organic Carbon (Rep1)	683	500	500.	
7440-44-0	Total Organic Carbon (Rep2)	687	500	500.	

Calibration Summary

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: TOC1	**Units**	:

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R901684-10			R901684-8			R901684-7		R901684-6	
Date Analyzed :	09/19/16 09:03			09/19/16 10:50			09/19/16 12:29		09/19/16 13:46	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Total Organic Carbon (Rep1)	1.000	1.000	100	1.000	1.080	108	1.030	103	1.040	104

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: TOC1	**Units**	:

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R901684-5						
Date Analyzed :				09/19/16 15:22						
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Total Organic Carbon (Rep1)				1.000	1.110	111				

Blank Results Summary

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: TOC1		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R901684-9		R901684-4		R901684-3		R901684-2		WG933490-1	
Date Analyzed :	09/19/16 09:08		09/19/16 10:55		09/19/16 12:34		09/19/16 13:51		09/19/16 09:03	
Parameter	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q
Total Organic Carbon (Rep1)	0.0500	U	0.0500	U	0.0500	U	0.0500	U	500.	U
Total Organic Carbon (Rep2)	500.	U	500.	U	500.	U	500.	U	500.	U

Form 3
Blanks

Client	:	Haley & Aldrich, Inc.	**Lab Number**	:	L1628635
Project Name	:	EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	:	70614-814
Instrument ID	:	TOC1			

		Initial Calibration Blank		Continuing Calibration Blank(s)				Preparation Blank	
Lab ID	:			R901684-1					
Date Analyzed	:			09/19/16 15:27					
Parameter			**Q**		**Q**		**Q**		**Q**
Total Organic Carbon (Rep1)				0.0500	U				

Grainsize Analysis

Results Summary

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: WG936157-1	Date Collected	: 09/12/16 15:30
Client ID	: 4479-091216-1530DUP	Date Received	: 09/12/16
Sample Location	:	Date Analyzed	: 09/27/16 09:36
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 12,D422	Analyst	: SP
Lab File ID	: GS4479-091216-1530,WG9361	Instrument ID	:
Sample Amount	:	%Solids	: 81
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	% Results	% RL	% MDL	Qualifier
NONE	Cobbles	ND	0.100	NA	U
NONE	% Coarse Gravel	ND	0.100	NA	U
NONE	% Fine Gravel	1.40	0.100	NA	
NONE	% Coarse Sand	9.60	0.100	NA	
NONE	% Medium Sand	15.5	0.100	NA	
NONE	% Fine Sand	16.6	0.100	NA	
NONE	% Silt Fine	47.4	0.100	NA	
NONE	% Clay Fine	9.50	0.100	NA	
NONE	% Total Fines	56.9	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: L1628635-03	Date Collected	: 09/12/16 12:00
Client ID	: SB-F9R	Date Received	: 09/12/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/27/16 09:36
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 12,D422	Analyst	: SP
Lab File ID	: GSSB-F9R,L1628635-03,SP.x	Instrument ID	:
Sample Amount	:	%Solids	: 84
Digestion Method	:	Date Digested	:

		%			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Cobbles	ND	0.100	NA	U
NONE	% Coarse Gravel	ND	0.100	NA	U
NONE	% Fine Gravel	1.90	0.100	NA	
NONE	% Coarse Sand	2.80	0.100	NA	
NONE	% Medium Sand	9.20	0.100	NA	
NONE	% Fine Sand	10.7	0.100	NA	
NONE	% Silt Fine	58.5	0.100	NA	
NONE	% Clay Fine	16.9	0.100	NA	
NONE	% Total Fines	75.4	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: L1628635-10	Date Collected	: 09/12/16 15:30
Client ID	: 4479-091216-1530	Date Received	: 09/12/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/27/16 09:36
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 12,D422	Analyst	: SP
Lab File ID	: GS4479-091216-1530,L16286	Instrument ID	:
Sample Amount	:	%Solids	: 81
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	% Results	% RL	% MDL	Qualifier
NONE	Cobbles	ND	0.100	NA	U
NONE	% Coarse Gravel	ND	0.100	NA	U
NONE	% Fine Gravel	ND	0.100	NA	U
NONE	% Coarse Sand	2.40	0.100	NA	
NONE	% Medium Sand	7.80	0.100	NA	
NONE	% Fine Sand	18.4	0.100	NA	
NONE	% Silt Fine	57.5	0.100	NA	
NONE	% Clay Fine	13.9	0.100	NA	
NONE	% Total Fines	71.4	0.100	NA	

Duplicate Sample Results Summary

Form 6
Lab Duplicates

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628635
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Client Sample ID	: 4479-091216-1530	**Matrix**	: SOIL
Lab Sample ID	: L1628635-10	**Analysis Date**	: 09/27/16 09:36
Dup Sample ID	: WG936157-1	**DUP Analysis Date**	: 09/27/16 09:36

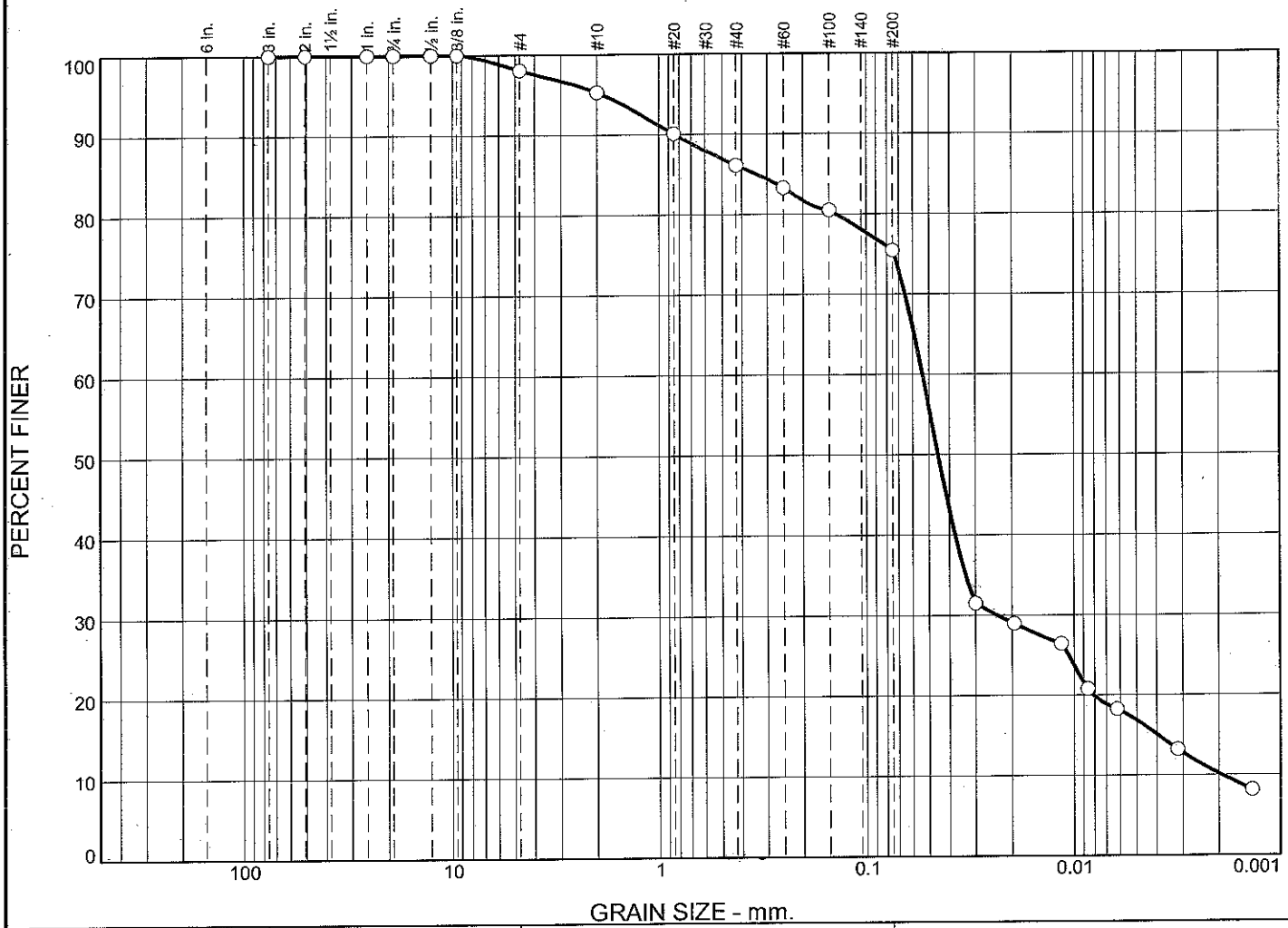
Parameter	Sample Concentration (%)	Duplicate Concentration (%)	RPD	RPD Limit
Cobbles	ND	ND	NC	20
% Coarse Gravel	ND	ND	NC	20
% Fine Gravel	ND	1.40	NC	20
% Coarse Sand	2.40	9.60	120 Q	20
% Medium Sand	7.80	15.5	66 Q	20
% Fine Sand	18.4	16.6	10	20
% Silt Fine	57.5	47.4	19	20
% Clay Fine	13.9	9.50	38 Q	20
% Total Fines	71.4	56.9	23 Q	20

Sample Raw Data

ASTM D422-63

GRAIN SIZE ANALYSIS

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	1.9	2.8	9.2	10.7	58.5	16.9

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3372	0.0539	0.0453	0.0234	0.0040	0.0019	5.26	27.83

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source of Sample:** SB-F9R **Sample Number:** L1628635-03

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/27/2016

Location: SB-F9R

Sample Number: L1628635-03

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 96.05
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
96.05	0.00	3	0.00	0.00	100.0
		2	0.00	0.00	100.0
		1	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		.5	0.00	0.00	100.0
		.375	0.00	0.00	100.0
		#4	1.84	0.00	98.1
		#10	2.67	0.00	95.3
		#20	5.00	0.00	90.1
		#40	3.81	0.00	86.1
		#60	2.73	0.00	83.3
		#100	2.70	0.00	80.5
		#200	4.85	0.00	75.4

Hydrometer Test Data

Hydrometer test uses material passing #200
Percent passing #200 based upon complete sample = 75.4
Weight of hydrometer sample =96.05
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

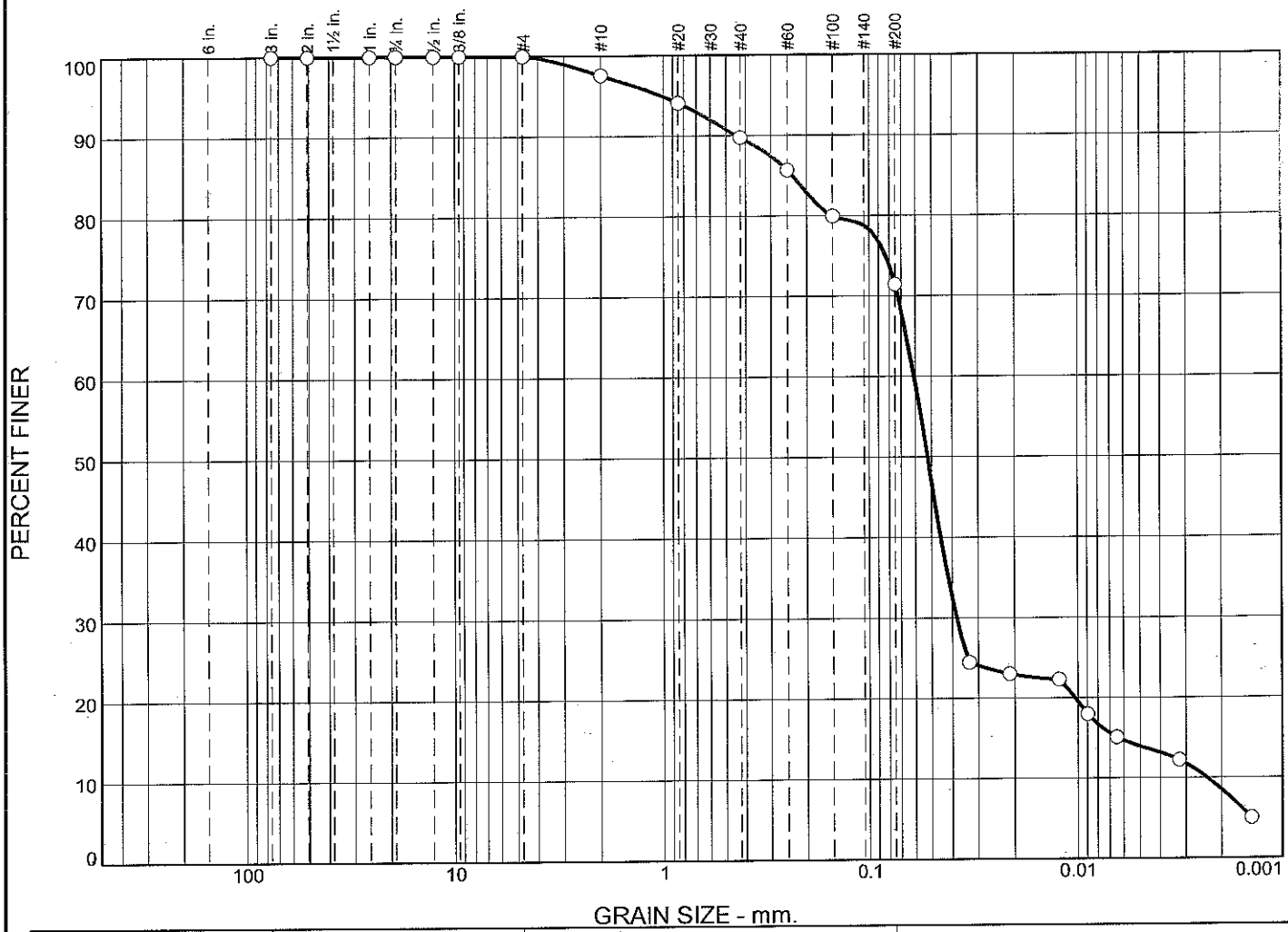
Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.0	1.0250	1.0250	0.0136	25.0	9.7	0.0300	31.5
5.00	20.0	1.0230	1.0230	0.0136	23.0	10.2	0.0195	29.0
15.00	20.0	1.0210	1.0210	0.0136	21.0	10.7	0.0115	26.5
30.00	20.0	1.0165	1.0165	0.0136	16.5	11.9	0.0086	20.8
60.00	20.0	1.0145	1.0145	0.0136	14.5	12.5	0.0062	18.3
250.00	20.0	1.0105	1.0105	0.0136	10.5	13.5	0.0032	13.2
1440.00	20.0	1.0065	1.0065	0.0136	6.5	14.6	0.0014	8.2

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	1.9	1.9	2.8	9.2	10.7	22.7	58.5	16.9	75.4

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0019	0.0040	0.0081	0.0234	0.0453	0.0539	0.1391	0.3372	0.8370	1.8763

Fineness Modulus	C_u	C_c
0.61	27.83	5.26

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	0.0	2.4	7.8	18.4	57.5	13.9

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2363	0.0608	0.0524	0.0381	0.0064	0.0024	10.12	25.75

Material Description	USCS	AASHTO
○		

Project No. **Client:**

Project:

○ **Source of Sample:** 4479-091216-1530 **Sample Number:** L1628635-10

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/27/2016

Location: 4479-091216-1530

Sample Number: L1628635-10

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 79.56
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
79.56	0.00	3	0.00	0.00	100.0
		2	0.00	0.00	100.0
		1	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		.5	0.00	0.00	100.0
		.375	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#10	1.94	0.00	97.6
		#20	2.77	0.00	94.1
		#40	3.43	0.00	89.8
		#60	3.26	0.00	85.7
		#100	4.56	0.00	79.9
		#200	6.78	0.00	71.4

Hydrometer Test Data

Hydrometer test uses material passing #200
Percent passing #200 based upon complete sample = 71.4
Weight of hydrometer sample =79.56
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.0	1.0170	1.0170	0.0136	17.0	11.8	0.0331	24.5
5.00	20.0	1.0160	1.0160	0.0136	16.0	12.1	0.0212	23.0
15.00	20.0	1.0155	1.0155	0.0136	15.5	12.2	0.0123	22.3
30.00	20.0	1.0125	1.0125	0.0136	12.5	13.0	0.0090	18.0
60.00	20.0	1.0105	1.0105	0.0136	10.5	13.5	0.0065	15.1
250.00	20.0	1.0085	1.0085	0.0136	8.5	14.0	0.0032	12.2
1440.00	20.0	1.0035	1.0035	0.0136	3.5	15.4	0.0014	5.0

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	2.4	7.8	18.4	28.6	57.5	13.9	71.4

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0024	0.0064	0.0104	0.0381	0.0524	0.0608	0.1516	0.2363	0.4410	1.0232

Fineness Modulus	C_u	C_c
0.47	25.75	10.12

Particle Size Distribution Report

	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	1.4	9.6	15.5	16.6	47.4	9.5

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			1.3851	0.0866	0.0617	0.0397	0.0097	0.0056	3.22	15.35

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source of Sample:** 4479-091216-1530 **Sample Number:** WG936157-1

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/27/2016

Location: 4479-091216-1530

Sample Number: WG936157-1

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 108.86
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
108.86	0.00	3	0.00	0.00	100.0
		2	0.00	0.00	100.0
		1	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		.5	0.00	0.00	100.0
		.375	0.00	0.00	100.0
		#4	1.52	0.00	98.6
		#10	10.49	0.00	89.0
		#20	9.45	0.00	80.3
		#40	7.40	0.00	73.5
		#60	5.31	0.00	68.6
		#100	5.60	0.00	63.5
		#200	7.13	0.00	56.9

Hydrometer Test Data

Hydrometer test uses material passing #200
Percent passing #200 based upon complete sample = 56.9
Weight of hydrometer sample =108.86
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.0	1.0250	1.0250	0.0136	25.0	9.7	0.0300	21.0
5.00	20.0	1.0230	1.0230	0.0136	23.0	10.2	0.0195	19.3
15.00	20.0	1.0215	1.0215	0.0136	21.5	10.6	0.0115	18.0
30.00	20.0	1.0155	1.0155	0.0136	15.5	12.2	0.0087	13.0
60.00	20.0	1.0125	1.0125	0.0136	12.5	13.0	0.0063	10.5
250.00	20.0	1.0095	1.0095	0.0136	9.5	13.8	0.0032	8.0
1440.00	20.0	1.0055	1.0055	0.0136	5.5	14.8	0.0014	4.6

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	1.4	1.4	9.6	15.5	16.6	41.7	47.4	9.5	56.9

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0056	0.0097	0.0238	0.0397	0.0617	0.0866	0.8256	1.3851	2.1773	3.2495

Fineness Modulus	C_u	C_c
1.16	15.35	3.22

ALPHA ANALYTICAL

World Class Chemistry

www.alphalab.com

Lab Number: L1628787

Client: Haley & Aldrich, Inc.

ATTN: Dimitri Quafisi

Project Name: EWING TOWNSHIP INDUSTRIAL

Project Number: 70614-814

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

ANALYTICAL DATA PACKAGE FOR THE
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
TRENTON NEW JERSEY 08625

Agency/Division:	**Bureau/Office:**
Project No: 70614-814	**Contract No:**
Laboratory: Alpha Analytical	**Laboratory Location:** Westborough, Ma.
	Laboratory Phone Number: (508) 898-9220
SDG No: L1628787	**NJDEP Certification #:** MA015/MA935
Date of First Sample Receipt: 09/13/2016	**Date of Last Sample Receipt:** 09/13/2016

Agency Sample Number	Laboratory Sample Number	Sample Location	Date/Time of Collection
4479-091316-0850	L1628787-01	EWING TOWNSHIP INDUS	09/13/2016 08:50
4479-091316-0915	L1628787-02	EWING TOWNSHIP INDUS	09/13/2016 09:15
4479-091316-0930	L1628787-03	EWING TOWNSHIP INDUS	09/13/2016 09:30
4479-091316-0940	L1628787-04	EWING TOWNSHIP INDUS	09/13/2016 09:40
4479-091316-1010	L1628787-05	EWING TOWNSHIP INDUS	09/13/2016 10:10
4479-091316-1115	L1628787-06	EWING TOWNSHIP INDUS	09/13/2016 11:15
4479-091316-1120	L1628787-07	EWING TOWNSHIP INDUS	09/13/2016 11:20
4479-091316-1200	L1628787-08	EWING TOWNSHIP INDUS	09/13/2016 12:00
4479-091316-1225	L1628787-09	EWING TOWNSHIP INDUS	09/13/2016 12:25
4479-091316-1410	L1628787-10	EWING TOWNSHIP INDUS	09/13/2016 14:10
4479-091316-1435	L1628787-11	EWING TOWNSHIP INDUS	09/13/2016 14:35
4479-091316-1500	L1628787-12	EWING TOWNSHIP INDUS	09/13/2016 15:00
4479-091316-1525	L1628787-13	EWING TOWNSHIP INDUS	09/13/2016 15:25

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on disk or electronically has been authorized by the laboratory director or his/her designee, as verified by the following signature.

Technical Director/Representative (Typed)	Melissa Cripps	09/23/16
Technical Director/Representative (Signature)	Melissa Cripps Melissa Cripps	

Table of Contents

New Jersey Reduced Data Deliverable Package 1
- Title Page 2
- Table of Contents 3
- Chain of Custody 5
  - External Chain of Custody 6
  - Lims COC (LN01) 9
  - Sample Receipt Tracking Report 12
- Methodology Review 33
  - Method References 34
- Laboratory Chronicle 35
  - Sample Receipt and Container Information 36
- NJ DEP DKQP Summary Questionnaire 41
  - DKQP Summary Questionnaire 42
- Conformance/Non-Conformance (Reliability) Summary 43
  - Conformance/Non-Conformance (Reliability) Report 44
- Glossary 47
  - Glossary Report 48
- SPLP Extraction Data 50
  - SPLP ZHE Extraction Data 51
    - Form 1 - Organics 52
  - SPLP Extraction Data - NonCLP 55
    - Form 1 - Organics 56
- Organics Analysis 63
  - GCMS 8260 Analysis 64
    - Sample Results Summary 65
      - Form 1 - Organics 66
    - Tune Results Summary 90
      - Form 5 - Organics 91
    - Blank Results Summary 94
      - Form 4 - Organics 95
    - Standards Data Summary 97
      - Form 6 - Organics 98
      - Form 7 - Organics 101
    - Surrogate Summary 107
      - Form 2 - Organics 108
    - Batch QC Summary 109
      - Form 3 - Organics 110
    - Internal Standard Summary 118
      - Form 8 - Organics 119
    - Chromatograms 121
      - Sample Raw Data 122
        - 4479-091316-0915 (L1628787-02) Analyzed: 09/14/16 12:24 123
        - 4479-091316-0940 (L1628787-04) Analyzed: 09/14/16 12:49 131
        - 4479-091316-1010 (L1628787-05) Analyzed: 09/14/16 13:40 138
        - 4479-091316-1225 (L1628787-09) Analyzed: 09/14/16 14:05 145
        - 4479-091316-1435 (L1628787-11) Analyzed: 09/14/16 14:31 153
        - 4479-091316-1500 (L1628787-12) Analyzed: 09/14/16 14:56 177
        - 4479-091316-1525 (L1628787-13) Analyzed: 09/14/16 15:22 185
        - 4479-091316-0850 (L1628787-01) Analyzed: 09/14/16 15:48 194
        - 4479-091316-0930 (L1628787-03) Analyzed: 09/14/16 16:14 216

Table of Contents

4479-091316-1410 (L1628787-10) Analyzed: 09/14/16 16:39 240
Method Blank Raw Data 264
Laboratory Method Bl (WG931857-5) Analyzed: 09/14/16 09:48 265
Laboratory Method Bl (WG931936-5) Analyzed: 09/14/16 09:48 272
Metals Analysis 279
Inorganic Data (ICP Analysis) 280
Sample Results Summary 281
Form 1 - Inorganics 282
Blank Results Summary 293
Form 3 - Inorganics 294
Calibration Summary 297
Form 2A - Inorganics 298
Form 2B - Inorganics 301
ICP Interference Check Sample Results Summary 303
Form 4A - Inorganics 304
Spike Sample Results 306
Form 5A - Inorganics 307
Duplicate Sample Results Summary 309
Form 6 - Inorganics 310
LCS Sample Results Summary 311
Form 7 - Inorganics 312
Serial Dilution Summary 314
Form 8 - Inorganics 315
Sample Run Logs 317
Form 13 - Inorganics 318
ICP Digestion 320
Form 12 - Inorganics 321
Inorganic Data (ICPMS Analysis) 323
Sample Results Summary 324
Form 1 - Inorganics 325
Blank Results Summary 332
Form 3 - Inorganics 333
Calibration Summary 334
Form 2A - Inorganics 335
ICP Interference Check Sample Results Summary 336
Form 4A - Inorganics 337
LCS Sample Results Summary 338
Form 7 - Inorganics 339
Internal Standard Summary 340
Form 15 - Inorganics 341
Sample Run Logs 342
Form 13 - Inorganics 343
ICPMS Digestion 344
Form 12 - Inorganics 345
Wet Chemistry Analysis 346
Total Solids Analysis 347
Results Summary 348
Form 1 - Inorganics 349
Duplicate Sample Results Summary 363
Form 6 - Inorganics 364

Chain of Custody

CHAIN OF CUSTODY

ALPHA ANALYTICAL — World Class Chemistry

Westborough, MA 01581 — 8 Walkup Dr. — TEL: 508-898-9220 — FAX: 508-898-9193

Mansfield, MA 02048 — 320 Forbes Blvd — TEL: 508-822-9300 — FAX: 508-822-3288

Service Centers
Brewer, ME 04412 — Portsmouth, NH 03801 — Mahwah, NJ 07430
Albany, NY 12205
Tonawanda, NY 14150 — Holmes, PA 19043

Page 1 of 3

Date Rec'd in Lab: 9/13/16

ALPHA Job #: L1628787

Project Information
Project Name: Ewing Township Industrial Land
Project Location: Ewing, NJ
Project #: 70613-814
(Use Project name as Project #) ☐
Project Manager: Daniel Putz
ALPHAQuote #:

Turn-Around Time
Standard ☐ — Due Date:
Rush (only if pre approved) ☒ — # of Days:

H&A Information
H&A Client: RACER
H&A Address: 6500 Rockside Rd Ste 200, Cleveland, OH 44131
H&A Phone: 216-706-1314
H&A Fax:
H&A Email: dputz@haleyaldrich.com

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Rush Totals
SPLP Samples on hold pending totals analysis

Please specify Metals or TAL.

Deliverables
☒ Email ☐ Fax
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other:

Billing Information
☐ Same as Client Info
PO #

Regulatory Requirements (Program/Criteria)
Note: Select State from menu & identify criteria.

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Total + SPLP Vinyl Chloride	Total + SPLP TCE	Total + SPLP Nickel	Total + SPLP Arsenic					Total Bottles	Sample Specific Comments
28787-01	4479-091316-0850	9/13/16	0850	Soil	TMD	X									
-02	4479-091316-0915	9/13/16	0915	Soil	TMD	X		X							
-03	4479-091316-0930	9/13/16	0930	Soil	TMD	X									
-04	4479-091316-0940	9/13/16	0940	Soil	TMD	X			X						
-05	4479-091316-1010	9/13/16	1010	Soil	TMD	X			X						
-06	4479-091316-1115	9/13/16	1115	Soil	TMD			X							
-07	4479-091316-1120	9/13/16	1120	Soil	TMD			X							
-08	4479-091316-1200	9/13/16	1200	Soil	TMD				X						
-09	4479-091316-1225	9/13/16	1225	Soil	TMD	X		X	X						
-10	4479-091316-1410	9/13/16	1410	Soil	TMD	X									
					Container Type	E	E	A	A						
					Preservative	A	A	A	A						

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	9/13/16 1625		9/13/16 1625
	9/13/16 1850		9-13-16 1850
	9-13-16 2311		9/13/16 2311

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. Alpha Analytical's services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement# 2015-18-Alpha Analytical by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Alpha Analytical.

Document ID: 20455 Rev 1 (1/28/2016)

CHAIN OF CUSTODY

ALPHA ANALYTICAL — Westborough, MA 01581, 8 Walkup Dr., TEL: 508-898-9220, FAX: 508-898-9193
Mansfield, MA 02048, 320 Forbes Blvd, TEL: 508-822-9300, FAX: 508-822-3288

Service Centers
Brewer, ME 04412 Portsmouth, NH 03801 Mahwah, NJ 07430
Albany, NY 12205
Tonawanda, NY 14150 Holmes, PA 19043

Page 2 of 3

Date Rec'd in Lab: 9/13/16

ALPHA Job #: L1628782

Project Information
Project Name: Ewing township Industrial Land
Project Location: Ewing, NJ
Project # 70613-814
(Use Project name as Project #) ☐
Project Manager: Dan Putz
ALPHAQuote #:

Turn-Around Time
Standard ☐ Due Date:
Rush (only if pre approved) ☒ # of Days:

Deliverables
☒ Email ☐ Fax
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other:

Billing Information
☐ Same as Client Info
PO #

Regulatory Requirements (Program/Criteria)
Note: Select State from menu & identify criteria.

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

H&A Information
H&A Client: RACER
H&A Address: 6500 Rockside Rd Ste 205 Cleveland, OH 44131
H&A Phone: 216-706-1314
H&A Fax:
H&A Email: dputz@haleyaldrich.com

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:
SPLP Samples Rush Totals on hold pending totals analysis

Please specify Metals or TAL.

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Total + SPLP TCL	Total + SPLP Nirvana	Total Bottles
L8282 -11	4479-091316-1435	9/13/16	1435	Soil	TMD	X		
-12	~~##~~ 4479-091316-1500	9/13/16	1500	Soil	TMD	X	X	
-13	4479-091316-1525	9/13/16	1525	Soil	TMD	X		

TMD

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

Sample Specific Comments

Container Type	E	A											
Preservative	A	A											

Preservative Code: A = None; B = HCl; C = HNO_3; D = H_2SO_4; E = NaOH; F = MeOH; G = $NaHSO_4$; H = $Na_2S_2O_3$; K/E = Zn Ac/NaOH; O = Other

Container Code: P = Plastic; A = Amber Glass; V = Vial; G = Glass; B = Bacteria Cup; C = Cube; O = Other; E = Encore; D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	9/13/16 1625		9/13/16 1625
	9/13/16 1850		9-13-16 1850
	9-13-16 2310		9/13/16 2310

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. Alpha Analytical's services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement# 2015-18-Alpha Analytical by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Alpha Analytical.

Document ID: 20455 Rev 1 (1/28/2016)

CHAIN OF CUSTODY

ALPHA ANALYTICAL — Westborough, MA 01581, 8 Walkup Dr., TEL: 508-898-9220, FAX: 508-898-9193; Mansfield, MA 02048, 320 Forbes Blvd, TEL: 508-822-9300, FAX: 508-822-3288

Service Centers
Brewer, ME 04412 Portsmouth, NH 03801 Mahwah, NJ 07430
Albany, NY 12205
Tonawanda, NY 14150 Holmes, PA 19043

Page of

Date Rec'd in Lab: 9/13/16

ALPHA Job #: L1628787

Project Information
- Project Name: Ewing Township Industrial Land
- Project Location: Ewing, NJ
- Project #: 70613-814
- (Use Project name as Project #) ☐
- Project Manager: Dan Putz
- ALPHAQuote #:

Turn-Around Time
- Standard ☐ Due Date:
- Rush (only if pre approved) ☐ # of Days:

H&A Information
- H&A Client: RACER
- H&A Address: 6500 Rockside Rd Ste 200 Cleveland, OH 44131
- H&A Phone: 216-706-1314
- H&A Fax:
- H&A Email: dputz@haleyaldrich.com

Deliverables
- ☒ Email ☐ Fax
- ☐ EQuIS (1 File) ☐ EQuIS (4 File)
- ☐ Other:

Billing Information
- ☐ Same as Client Info
- PO #

Regulatory Requirements (Program/Criteria)
Note: Select State from menu & identify criteria.

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
- ☐ NJ ☐ NY
- ☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:
Hold sample

Please specify Metals or TAL.

ANALYSIS
- Total Metals

Sample Filtration
- ☐ Done
- ☐ Lab to do

Preservation
- ☐ Lab to do

(Please Specify below)

Total Bottles

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Total Metals	Sample Specific Comments	Total Bottles
28787 -11	4479-091316-1435	9/13/16	1435	Soil	TMD	X	Hold Sample	

TMD

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type	A
Preservative	A

Relinquished By:	Date/Time	Received By:	Date/Time
Tim Dwyer	9/13/16 1625	Dave Lun AUT	9/13/16 1625
Dave Lun 9/13/16	1850	Tom Tokar	9-13-16 1850
Tom Tokar	9-13-16 2315	Dave Lun	9/13/16 2315

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. Alpha Analytical's services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement# 2015-18-Alpha Analytical by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Alpha Analytical.

Document ID: 20455 Rev 1 (1/28/2016)

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Sep 26 2016, 05:14 pm

Login Number: L1628787
Account: HALEY-OH2 Haley & Aldrich, Inc.Project: 70614-814
Received: 13SEP16 Due Date: 26SEP16

Sample #	Client ID	Mat	PR	Collected	Container

L1628787-01 4479-091316-0850 3 S0 13SEP16 08:50 2-EVial-A,2-Encore-25,3-Encore-5,1-Plastic-A-TS,1-SVial-F,4-SVial-W
8260 total/SPLP : Vinyl Chloride only Prelim 9/22, Final 10/13 NJ-RED Package Due Date: 09/22/16
ENCORE,HOLD-8260HLW,NJ-8260HLW,NJ-RED,NJ-SPLP-8260,NJ-SPLP-VOA,NJ-SPLPZHEEXT-DATA,SPLP-EXT-ZHE,
NJDEP,TS

L1628787-02 4479-091316-0915 3 S0 13SEP16 09:15 1-EPlastic-C.120,2-Encore-25,3-Encore-5,1-Glass-A.25,1-Plastic-A-TS,1-SVial-F,4-
8260: Vinyl Chloride only Prelim 9/22, Final 10/13 SPLP: Metals only Package Due Date: 09/22/16
ENCORE,HOLD-8260HLW,HOLD-CONTINGENCY,NI-TI,NJ-8260HLW,NJ-SPLPEXT-DATA,PREPP,PREPT,SPLP-NI-6020T-PPB,
TS

L1628787-03 4479-091316-0930 3 S0 13SEP16 09:30 2-EVial-A,2-Encore-25,3-Encore-5,1-Plastic-A-TS,1-SVial-F,4-SVial-W
8260 total/SPLP : Vinyl Chloride only Prelim 9/22, Final 10/13 Package Due Date: 09/22/16
ENCORE,HOLD-8260HLW,NJ-8260HLW,NJ-SPLP-8260,NJ-SPLP-VOA,NJ-SPLPZHEEXT-DATA,SPLP-EXT-ZHE,TS

L1628787-04 4479-091316-0940 3 S0 13SEP16 09:40 2-Encore-25,3-Encore-5,1-Glass-A.25,1-Plastic-A-TS,1-SVial-F,4-SVial-W
8260: Vinyl Chloride only Prelim 9/22, Final 10/13 Package Due Date: 09/22/16
AS-TI,ENCORE,HOLD-8260HLW,HOLD-CONTINGENCY,NJ-8260HLW,PREPT,TS

L1628787-05 4479-091316-1010 3 S0 13SEP16 10:10 1-EPlastic-C.120,2-Encore-25,3-Encore-5,1-Glass-A.25,1-Plastic-A-TS,1-SVial-F,4-
8260: Vinyl Chloride only Prelim 9/22, Final 10/13 SPLP: Metals only Package Due Date: 09/22/16
AS-TI,ENCORE,HOLD-8260HLW,HOLD-CONTINGENCY,NJ-8260HLW,NJ-SPLPEXT-DATA,PREPP,PREPT,SPLP-AS-6020T-PPB,
TS

L1628787-06 4479-091316-1115 3 S0 13SEP16 11:15 1-EPlastic-C.120,2-Glass-A.25,1-SGlass-A.06,1-Tumble Vessel
8260: Vinyl Chloride only Prelim 9/22, Final 10/13 SPLP: Metals only Package Due Date: 09/22/16
HOLD-CONTINGENCY,NI-TI,NJ-SPLPEXT-DATA,PREPP,PREPT,SPLP-NI-6020T-PPB,TS

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Sep 26 2016, 05:14 pm

Login Number: L1628787
Account: HALEY-OH2 Haley & Aldrich, Inc.Project: 70614-814
Received: 13SEP16 Due Date: 26SEP16

Sample #	Client ID	Mat	PR	Collected	Container

L1628787-07 4479-091316-1120 3 S0 13SEP16 11:20 1-EPlastic-C.120,1-Glass-A.25,1-SGlass-A.06,1-Tumble Vessel
8260: Vinyl Chloride only Prelim 9/22, Final 10/13 SPLP: Metals only Package Due Date: 09/22/16

HOLD-CONTINGENCY,NI-TI,NJ-SPLPEXT-DATA,PREPP,PREPT,SPLP-NI-6020T-PPB,TS

L1628787-08 4479-091316-1200 3 S0 13SEP16 12:00 1-EPlastic-C.120,2-Glass-A.25,1-SGlass-A.06,1-Tumble Vessel
8260: Vinyl Chloride only Prelim 9/22, Final 10/13 SPLP: Metals only Package Due Date: 09/22/16

AS-TI,HOLD-CONTINGENCY,NJ-SPLPEXT-DATA,PREPP,PREPT,SPLP-AS-6020T-PPB,TS

L1628787-09 4479-091316-1225 3 S0 13SEP16 12:25 1-EPlastic-C.120,2-Encore-25,3-Encore-5,1-Glass-A.25,1-Plastic-A-TS,1-SVial-F,4-
8260: Vinyl Chloride only Prelim 9/22, Final 10/13 SPLP: Metals only SPLP: running for As; SPLP-Ni must pass too for potential activation Package Due Date: 09/22/16

AS-TI,ENCORE,HOLD-8260HLW,HOLD-CONTINGENCY,NI-TI,NJ-8260HLW,NJ-SPLPEXT-DATA,PREPP,PREPT,SPLP-AS-6020T-PPB,TS

L1628787-10 4479-091316-1410 3 S0 13SEP16 14:10 2-EVial-A,2-Encore-25,3-Encore-5,1-Plastic-A-TS,1-SVial-F,4-SVial-W
8260 total/SPLP : Vinyl Chloride only Prelim 9/22, Final 10/13 Package Due Date: 09/22/16

ENCORE,HOLD-8260HLW,NJ-8260HLW,NJ-SPLP-8260,NJ-SPLP-VOA,NJ-SPLPZHEEXT-DATA,SPLP-EXT-ZHE,TS

L1628787-11 4479-091316-1435 3 S0 13SEP16 14:35 2-Encore-25,3-Encore-5,1-Glass-A.25,1-Plastic-A-TS,1-SVial-F,4-SVial-W
8260: TCE only Prelim 9/22, Final 10/13 Package Due Date: 09/22/16

ENCORE,HOLD-8260HLW,HOLD-METAL,NJ-8260HLW,TS

L1628787-12 4479-091316-1500 3 S0 13SEP16 15:00 2-Encore-25,3-Encore-5,1-Glass-A.25,1-Plastic-A-TS,1-SVial-F,4-SVial-W
8260: TCE only Prelim 9/22, Final 10/13 Package Due Date: 09/22/16

ENCORE,HOLD-8260HLW,HOLD-CONTINGENCY,NI-TI,NJ-8260HLW,PREPT,TS

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Sep 26 2016, 05:14 pm

Login Number: L1628787
Account: HALEY-OH2 Haley & Aldrich, Inc.Project: 70614-814
Received: 13SEP16 Due Date: 26SEP16

Sample #	Client ID	Mat	PR	Collected	Container
L1628787-13	4479-091316-1525	3	S0	13SEP16 15:25	2-Encore-25,3-Encore-5,1-Plastic-A-TS,1-SVial-F,4-SVial-W

8260: TCE only Prelim 9/22, Final 10/13 Package Due Date: 09/22/16

ENCORE,HOLD-8260HLW,NJ-8260HLW,TS

Logged By: Melissa Cripps

ALPHA ANALYTICAL LABORATORIES
Container Tracking Report

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1628787-01A	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-01A	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-01A	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-01B	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-01B	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-01B	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-01C	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-01C	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-01C	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-01D	Encore-25	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-01D	Encore-25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-01D	Encore-25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-01E	Encore-25	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-01E	Encore-25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-01E	Encore-25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-01F	Plastic-A-TS	INTACT	14-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Emily Keith
L1628787-01F	Plastic-A-TS	INTACT	14-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628787-01F	Plastic-A-TS	INTACT	14-SEP-16	CUSTODY	CUSTODY	Minh Ly	WETCHEM	WETCHEM	Minh Ly
L1628787-01F	Plastic-A-TS	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-01U	SVial-W	EMPTY	21-SEP-16	GC	GC/MS	Tyler Eno	CUSTODY	F-VOA CUSTODY	Tyler Eno
L1628787-01U	SVial-W	INTACT	21-SEP-16	GC/MS	F-VOA CUSTODY	Matilda Owusuaa	GC/MS	GC/MS	Matilda Owusuaa
L1628787-01U	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-01U	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-01U	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-01V	SVial-W	INTACT	22-SEP-16	GC/MS	GC/MS	Mike May	CUSTODY	VOA DEAD FRIDGE	CUSTODY Mike May

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628787-01V	SVial-W	INTACT	22-SEP-16	CUSTODY	F-VOA CUSTODY	Mike May	GC/MS	GC/MS	Mike May
L1628787-01V	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-01V	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-01V	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-01X	SVial-F	INTACT	14-SEP-16	GC/MS	GC/MS	Jing Cheng	CUSTODY	VOA CUSTODY	Jing Cheng
L1628787-01X	SVial-F	INTACT	14-SEP-16	CUSTODY	VOA CUSTODY	Jing Cheng	GC/MS	GC/MS	Jing Cheng
L1628787-01X	SVial-F	INTACT	14-SEP-16	GC/MS	GC/MS	Marco Soares	CUSTODY	VOA CUSTODY	Marco Soares
L1628787-01X	SVial-F	INTACT	14-SEP-16	CUSTODY	VOA CUSTODY	Marco Soares	GC/MS	GC/MS	Marco Soares
L1628787-01X	SVial-F	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-01X	SVial-F	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-01X	SVial-F	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-01Y	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-01Y	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-01Y	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-01Z	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-01Z	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-01Z	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-02A	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-02A	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-02A	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-02B	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-02B	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-02B	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-02C	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-02C	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628787-02C	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-02D	Encore-25	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-02D	Encore-25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-02D	Encore-25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-02E	Encore-25	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-02E	Encore-25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-02E	Encore-25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-02F	Plastic-A-TS	INTACT	22-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Fatima Cofie	A2-CUSTODY-MET3-S6	A2-CUSTODY-MET3-S6	Fatima Cofie
L1628787-02F	Plastic-A-TS	INTACT	22-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY-MET2-S2	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1628787-02F	Plastic-A-TS	INTACT	14-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET2-S2	A2-CUSTODY-MET2-S2	Rexford Bempong
L1628787-02F	Plastic-A-TS	INTACT	14-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1628787-02F	Plastic-A-TS	INTACT	14-SEP-16	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Romain	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628787-02F	Plastic-A-TS	INTACT	14-SEP-16	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Romain	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFI	
L1628787-02F	Plastic-A-TS	INTACT	14-SEP-16		CUSTODY	Roobenso Romain	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Ro
L1628787-02F	Plastic-A-TS	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-02G	Glass-A.25	INTACT	17-SEP-16		RETURN WALK-IN CUSTODY	Sam Bardsley	W13-S5-D CUSTODY	W13-S5-D CUSTODY	Sam Bardsley
L1628787-02G	Glass-A.25	INTACT	16-SEP-16	ORGPREP	ORGPREP	Lily Boateng	CUSTODY	RETURN WALK-IN CUSTODY	Lily Boateng
L1628787-02G	Glass-A.25	INTACT	16-SEP-16	ORGPREP	W1-S2-D CUSTODY	Thomas Asare	ORGPREP	ORGPREP	Thomas Asare
L1628787-02G	Glass-A.25	INTACT	14-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	W1-S2-D CUSTODY	W1-S2-D CUSTODY	Emily Keith
L1628787-02G	Glass-A.25	INTACT	14-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628787-02G	Glass-A.25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Minh Ly	WETCHEM	WETCHEM	Minh Ly
L1628787-02G	Glass-A.25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-02U	SVial-W	INTACT	21-SEP-16	GC/MS	GC/MS	Matilda Owusuaa	CUSTODY	F-VOA CUSTODY	Matilda Owusuaa
L1628787-02U	SVial-W	INTACT	21-SEP-16	GC/MS	CUSTODY	Matilda Owusuaa	GC/MS	GC/MS	Matilda Owusuaa
L1628787-02U	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Peter Paveglio	CUSTODY	CUSTODY	Peter Paveglio

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628787-02U	SVial-W	INTACT	14-SEP-16	CUSTODY	F-VOA CUSTODY	Peter Paveglio	GC/MS	GC/MS	Peter Paveglio
L1628787-02U	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-02U	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-02U	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-02V	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-02V	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-02V	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-02W	EPlastic-C.120	INTACT	20-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Alp Demiroz	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Alp Demiroz
L1628787-02W	EPlastic-C.120	INTACT	19-SEP-16	CUSTODY	A2-CUSTODY	Emily Keith	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Emily Keith
L1628787-02W	EPlastic-C.120	INTACT	19-SEP-16	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFIELD	Lily Boateng	A2-CUSTODY	A2-CUSTODY	Emily Keith
L1628787-02W	EPlastic-C.120	INTACT	19-SEP-16	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Lily Boateng	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSF	
L1628787-02W	EPlastic-C.120	INTACT	19-SEP-16		CUSTODY	Lily Boateng	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Lily Boater
L1628787-02W	EPlastic-C.120	INTACT	16-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-02X	SVial-F	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-02X	SVial-F	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-02X	SVial-F	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-02Y	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA DEAD FRIDGE	CUSTODY Kevin Deppel
L1628787-02Y	SVial-W	INTACT	14-SEP-16	CUSTODY	F-VOA CUSTODY	Peter Paveglio	GC/MS	GC/MS	Peter Paveglio
L1628787-02Y	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-02Y	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-02Y	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-02Z	SVial-W	INTACT	26-SEP-16	CUSTODY	VOA DEAD FRIDGE	CUSTODY Emily Keith	VOA DEAD FRIDGE CUSTODY	VOA DEAD FRIDGE CUSTODY	Emily Keith
L1628787-02Z	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA DEAD FRIDGE	CUSTODY Kevin Deppel
L1628787-02Z	SVial-W	INTACT	14-SEP-16	CUSTODY	F-VOA CUSTODY	Jing Cheng	GC/MS	GC/MS	Jing Cheng
L1628787-02Z	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628787-02Z	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-02Z	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-03A	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-03A	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-03A	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-03B	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-03B	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-03B	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-03C	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-03C	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-03C	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-03D	Encore-25	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-03D	Encore-25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-03D	Encore-25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-03E	Encore-25	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-03E	Encore-25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-03E	Encore-25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-03F	Plastic-A-TS	INTACT	14-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Emily Keith
L1628787-03F	Plastic-A-TS	INTACT	14-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628787-03F	Plastic-A-TS	INTACT	14-SEP-16	CUSTODY	CUSTODY	Minh Ly	WETCHEM	WETCHEM	Minh Ly
L1628787-03F	Plastic-A-TS	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-03U	SVial-W	EMPTY	21-SEP-16	GC	GC/MS	Tyler Eno	CUSTODY	F-VOA CUSTODY	Tyler Eno
L1628787-03U	SVial-W	INTACT	21-SEP-16	GC/MS	F-VOA CUSTODY	Matilda Owusuaa	GC/MS	GC/MS	Matilda Owusuaa
L1628787-03U	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-03U	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628787-03U	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-03V	SVial-W	INTACT	22-SEP-16	GC/MS	GC/MS	Mike May	CUSTODY	VOA DEAD FRIDGE	CUSTODY Mike May
L1628787-03V	SVial-W	INTACT	22-SEP-16	CUSTODY	F-VOA CUSTODY	Mike May	GC/MS	GC/MS	Mike May
L1628787-03V	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-03V	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-03V	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-03X	SVial-F	INTACT	14-SEP-16	GC/MS	GC/MS	Jing Cheng	CUSTODY	VOA CUSTODY	Jing Cheng
L1628787-03X	SVial-F	INTACT	14-SEP-16	CUSTODY	VOA CUSTODY	Jing Cheng	GC/MS	GC/MS	Jing Cheng
L1628787-03X	SVial-F	INTACT	14-SEP-16	GC/MS	GC/MS	Marco Soares	CUSTODY	VOA CUSTODY	Marco Soares
L1628787-03X	SVial-F	INTACT	14-SEP-16	CUSTODY	VOA CUSTODY	Marco Soares	GC/MS	GC/MS	Marco Soares
L1628787-03X	SVial-F	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-03X	SVial-F	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-03X	SVial-F	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-03Y	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-03Y	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-03Y	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-03Z	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-03Z	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-03Z	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-04A	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-04A	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-04A	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-04B	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-04B	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-04B	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628787-04C	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-04C	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-04C	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-04D	Encore-25	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-04D	Encore-25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-04D	Encore-25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-04E	Encore-25	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-04E	Encore-25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-04E	Encore-25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-04F	Plastic-A-TS	INTACT	14-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET2-S2	A2-CUSTODY-MET2-S2	Rexford Bempong
L1628787-04F	Plastic-A-TS	INTACT	14-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1628787-04F	Plastic-A-TS	INTACT	14-SEP-16	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Romain	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628787-04F	Plastic-A-TS	INTACT	14-SEP-16	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Romain	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFI	
L1628787-04F	Plastic-A-TS	INTACT	14-SEP-16		CUSTODY	Roobenso Romain	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Ro
L1628787-04F	Plastic-A-TS	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-04G	Glass-A.25	INTACT	14-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	W1-S2-D CUSTODY	W1-S2-D CUSTODY	Emily Keith
L1628787-04G	Glass-A.25	INTACT	14-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628787-04G	Glass-A.25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Minh Ly	WETCHEM	WETCHEM	Minh Ly
L1628787-04G	Glass-A.25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-04U	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Peter Paveglio	CUSTODY	CUSTODY	Peter Paveglio
L1628787-04U	SVial-W	INTACT	14-SEP-16	CUSTODY	F-VOA CUSTODY	Peter Paveglio	GC/MS	GC/MS	Peter Paveglio
L1628787-04U	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-04U	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-04U	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-04V	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628787-04V	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-04V	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-04X	SVial-F	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-04X	SVial-F	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-04X	SVial-F	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-04Y	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA DEAD FRIDGE	CUSTODY Kevin Deppel
L1628787-04Y	SVial-W	INTACT	14-SEP-16	CUSTODY	F-VOA CUSTODY	Peter Paveglio	GC/MS	GC/MS	Peter Paveglio
L1628787-04Y	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-04Y	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-04Y	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-04Z	SVial-W	INTACT	26-SEP-16	CUSTODY	VOA DEAD FRIDGE	CUSTODY Emily Keith	VOA DEAD	FRIDGE CUSTODY	VOA DEAD FRIDGE CUSTODY Emily Keith
L1628787-04Z	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA DEAD FRIDGE	CUSTODY Kevin Deppel
L1628787-04Z	SVial-W	INTACT	14-SEP-16	CUSTODY	F-VOA CUSTODY	Jing Cheng	GC/MS	GC/MS	Jing Cheng
L1628787-04Z	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-04Z	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-04Z	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-05A	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-05A	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-05A	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-05B	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-05B	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-05B	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-05C	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-05C	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-05C	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628787-05D	Encore-25	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-05D	Encore-25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-05D	Encore-25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-05E	Encore-25	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-05E	Encore-25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-05E	Encore-25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-05F	Plastic-A-TS	INTACT	14-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET2-S2	A2-CUSTODY-MET2-S2	Rexford Bempong
L1628787-05F	Plastic-A-TS	INTACT	14-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1628787-05F	Plastic-A-TS	INTACT	14-SEP-16	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Romain	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628787-05F	Plastic-A-TS	INTACT	14-SEP-16	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Romain	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFI	
L1628787-05F	Plastic-A-TS	INTACT	14-SEP-16		CUSTODY	Roobenso Romain	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Ro
L1628787-05F	Plastic-A-TS	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-05G	Glass-A.25	INTACT	17-SEP-16		RETURN WALK-IN CUSTODY	Sam Bardsley	W13-S5-D CUSTODY	W13-S5-D CUSTODY	Sam Bardsley
L1628787-05G	Glass-A.25	INTACT	16-SEP-16	ORGPREP	ORGPREP	Lily Boateng	CUSTODY	RETURN WALK-IN CUSTODY	Lily Boateng
L1628787-05G	Glass-A.25	INTACT	16-SEP-16	ORGPREP	W1-S2-D CUSTODY	Thomas Asare	ORGPREP	ORGPREP	Thomas Asare
L1628787-05G	Glass-A.25	INTACT	14-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	W1-S2-D CUSTODY	W1-S2-D CUSTODY	Emily Keith
L1628787-05G	Glass-A.25	INTACT	14-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628787-05G	Glass-A.25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Minh Ly	WETCHEM	WETCHEM	Minh Ly
L1628787-05G	Glass-A.25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-05U	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-05U	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-05U	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-05V	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-05V	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-05V	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1628787-05W	EPlastic-C.120	INTACT	20-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Alp Demiroz	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Alp Demiroz
L1628787-05W	EPlastic-C.120	INTACT	19-SEP-16	CUSTODY	A2-CUSTODY	Emily Keith	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Emily Keith
L1628787-05W	EPlastic-C.120	INTACT	19-SEP-16	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFIELD	Lily Boateng	A2-CUSTODY	A2-CUSTODY	Emily Keith
L1628787-05W	EPlastic-C.120	INTACT	19-SEP-16	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Lily Boateng	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSF	
L1628787-05W	EPlastic-C.120	INTACT	19-SEP-16		CUSTODY	Lily Boateng	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Lily Boate
L1628787-05W	EPlastic-C.120	INTACT	16-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-05X	SVial-F	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-05X	SVial-F	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-05X	SVial-F	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-05Y	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA DEAD FRIDGE	CUSTODY Kevin Deppel
L1628787-05Y	SVial-W	INTACT	14-SEP-16	CUSTODY	F-VOA CUSTODY	Peter Paveglio	GC/MS	GC/MS	Peter Paveglio
L1628787-05Y	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-05Y	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-05Y	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-05Z	SVial-W	INTACT	26-SEP-16	CUSTODY	VOA DEAD FRIDGE	CUSTODY Emily Keith	VOA DEAD FRIDGE	CUSTODY	VOA DEAD FRIDGE CUSTODY Emily Keith
L1628787-05Z	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA DEAD FRIDGE	CUSTODY Kevin Deppel
L1628787-05Z	SVial-W	INTACT	14-SEP-16	CUSTODY	F-VOA CUSTODY	Jing Cheng	GC/MS	GC/MS	Jing Cheng
L1628787-05Z	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-05Z	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-05Z	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-06A	SGlass-A.06	INTACT	14-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET2-S2	A2-CUSTODY-MET2-S2	Rexford Bempong
L1628787-06A	SGlass-A.06	INTACT	14-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1628787-06A	SGlass-A.06	INTACT	14-SEP-16	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Romain	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628787-06A	SGlass-A.06	INTACT	14-SEP-16	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Romain	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFI	
L1628787-06A	SGlass-A.06	INTACT	14-SEP-16		CUSTODY	Roobenso Romain	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Ro

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628787-06A	SGlass-A.06	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-06B	Glass-A.25	INTACT	14-SEP-16		RETURN WALK-IN	CUSTODY Emily Keith	W1-S2-D CUSTODY	W1-S2-D CUSTODY	Emily Keith
L1628787-06B	Glass-A.25	INTACT	14-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628787-06B	Glass-A.25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Minh Ly	WETCHEM	WETCHEM	Minh Ly
L1628787-06B	Glass-A.25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-06W	EPlastic-C.120	INTACT	20-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Alp Demiroz	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Alp Demiroz
L1628787-06W	EPlastic-C.120	INTACT	19-SEP-16	CUSTODY	A2-CUSTODY	Emily Keith	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Emily Keith
L1628787-06W	EPlastic-C.120	INTACT	19-SEP-16	TRANSIT COURIER	COOLER20-TRANSFER_TO_MANSFIELD	Emily Keith	A2-CUSTODY	A2-CUSTODY	Emily Keith
L1628787-06W	EPlastic-C.120	INTACT	19-SEP-16	COOLER20-TRANSFER_TO_MANSFIELD	COOLER20-TRANSFER_TO_MANSFIELD	Emily Keith	TRANSIT COURIER	COOLER20-TRANSFER_TO_MANSF	
L1628787-06W	EPlastic-C.120	INTACT	19-SEP-16		CUSTODY	Emily Keith	COOLER20-TRANSFER_TO_MANSFIELD	COOLER20-TRANSFER_TO_MANSFIELD	Emily Keit
L1628787-06W	EPlastic-C.120	INTACT	19-SEP-16		COOLER24-TRANSFER_TO_MANSFIELD	Emily Keith	CUSTODY	CUSTODY	Emily Keith
L1628787-06W	EPlastic-C.120	INTACT	19-SEP-16		CUSTODY	Lily Boateng	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Lily Boate
L1628787-06W	EPlastic-C.120	INTACT	16-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-07A	SGlass-A.06	INTACT	14-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET2-S2	A2-CUSTODY-MET2-S2	Rexford Bempong
L1628787-07A	SGlass-A.06	INTACT	14-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1628787-07A	SGlass-A.06	INTACT	14-SEP-16	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Romain	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628787-07A	SGlass-A.06	INTACT	14-SEP-16	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Romain	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFI	
L1628787-07A	SGlass-A.06	INTACT	14-SEP-16		CUSTODY	Roobenso Romain	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Ro
L1628787-07A	SGlass-A.06	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-07B	Glass-A.25	INTACT	17-SEP-16		RETURN WALK-IN	CUSTODY Sam Bardsley	W13-S5-D CUSTODY	W13-S5-D CUSTODY	Sam Bardsley
L1628787-07B	Glass-A.25	INTACT	16-SEP-16	ORGPREP	ORGPREP	Lily Boateng	CUSTODY	RETURN WALK-IN CUSTODY	Lily Boateng
L1628787-07B	Glass-A.25	INTACT	16-SEP-16	ORGPREP	W1-S2-D CUSTODY	Thomas Asare	ORGPREP	ORGPREP	Thomas Asare
L1628787-07B	Glass-A.25	INTACT	14-SEP-16		RETURN WALK-IN	CUSTODY Emily Keith	W1-S2-D CUSTODY	W1-S2-D CUSTODY	Emily Keith
L1628787-07B	Glass-A.25	INTACT	14-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628787-07B	Glass-A.25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Minh Ly	WETCHEM	WETCHEM	Minh Ly

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1628787-07B	Glass-A.25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-07W	EPlastic-C.120	INTACT	20-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Alp Demiroz	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Alp Demiroz
L1628787-07W	EPlastic-C.120	INTACT	19-SEP-16	CUSTODY	A2-CUSTODY	Emily Keith	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Emily Keith
L1628787-07W	EPlastic-C.120	INTACT	19-SEP-16	TRANSIT COURIER	COOLER20-TRANSFER_TO_MANSFIELD	Emily Keith	A2-CUSTODY	A2-CUSTODY	Emily Keith
L1628787-07W	EPlastic-C.120	INTACT	19-SEP-16	COOLER20-TRANSFER_TO_MANSFIELD	COOLER20-TRANSFER_TO_MANSFIELD	Emily Keith	TRANSIT COURIER	COOLER20-TRANSFER_TO_MANSF	
L1628787-07W	EPlastic-C.120	INTACT	19-SEP-16		CUSTODY	Emily Keith	COOLER20-TRANSFER_TO_MANSFIELD	COOLER20-TRANSFER_TO_MANSFIELD	Emily Keit
L1628787-07W	EPlastic-C.120	INTACT	19-SEP-16		COOLER24-TRANSFER_TO_MANSFIELD	Emily Keith	CUSTODY	CUSTODY	Emily Keith
L1628787-07W	EPlastic-C.120	INTACT	19-SEP-16		CUSTODY	Lily Boateng	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Lily Boate
L1628787-07W	EPlastic-C.120	INTACT	16-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-08A	SGlass-A.06	INTACT	14-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET2-S2	A2-CUSTODY-MET2-S2	Rexford Bempong
L1628787-08A	SGlass-A.06	INTACT	14-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1628787-08A	SGlass-A.06	INTACT	14-SEP-16	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Romain	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628787-08A	SGlass-A.06	INTACT	14-SEP-16	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Romain	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFI	
L1628787-08A	SGlass-A.06	INTACT	14-SEP-16		CUSTODY	Roobenso Romain	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Ro
L1628787-08A	SGlass-A.06	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-08B	Glass-A.25	INTACT	17-SEP-16		RETURN WALK-IN CUSTODY	Sam Bardsley	W13-S5-D CUSTODY	W13-S5-D CUSTODY	Sam Bardsley
L1628787-08B	Glass-A.25	INTACT	16-SEP-16	ORGPREP	ORGPREP	Lily Boateng	CUSTODY	RETURN WALK-IN CUSTODY	Lily Boateng
L1628787-08B	Glass-A.25	INTACT	16-SEP-16	ORGPREP	W1-S2-D CUSTODY	Thomas Asare	ORGPREP	ORGPREP	Thomas Asare
L1628787-08B	Glass-A.25	INTACT	14-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	W1-S2-D CUSTODY	W1-S2-D CUSTODY	Emily Keith
L1628787-08B	Glass-A.25	INTACT	14-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628787-08B	Glass-A.25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Minh Ly	WETCHEM	WETCHEM	Minh Ly
L1628787-08B	Glass-A.25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-08W	EPlastic-C.120	INTACT	20-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Alp Demiroz	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Alp Demiroz
L1628787-08W	EPlastic-C.120	INTACT	19-SEP-16	CUSTODY	A2-CUSTODY	Emily Keith	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Emily Keith
L1628787-08W	EPlastic-C.120	INTACT	19-SEP-16	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFIELD	Lily Boateng	A2-CUSTODY	A2-CUSTODY	Emily Keith

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1628787-08W	EPlastic-C.120	INTACT	19-SEP-16	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Lily Boateng	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSF	
L1628787-08W	EPlastic-C.120	INTACT	19-SEP-16		CUSTODY	Lily Boateng	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Lily Boate
L1628787-08W	EPlastic-C.120	INTACT	16-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-09A	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-09A	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-09A	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-09B	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-09B	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-09B	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-09C	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-09C	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-09C	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-09D	Encore-25	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-09D	Encore-25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-09D	Encore-25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-09E	Encore-25	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-09E	Encore-25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-09E	Encore-25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-09F	Plastic-A-TS	INTACT	22-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Fatima Cofie	A2-CUSTODY-MET3-S6	A2-CUSTODY-MET3-S6	Fatima Cofie
L1628787-09F	Plastic-A-TS	INTACT	22-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY-MET2-S2	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1628787-09F	Plastic-A-TS	INTACT	14-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET2-S2	A2-CUSTODY-MET2-S2	Rexford Bempong
L1628787-09F	Plastic-A-TS	INTACT	14-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1628787-09F	Plastic-A-TS	INTACT	14-SEP-16	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Romain	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628787-09F	Plastic-A-TS	INTACT	14-SEP-16	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Romain	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFI	
L1628787-09F	Plastic-A-TS	INTACT	14-SEP-16		CUSTODY	Roobenso Romain	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Ro

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628787-09F	Plastic-A-TS	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-09G	Glass-A.25	INTACT	17-SEP-16		RETURN WALK-IN CUSTODY	Sam Bardsley	W13-S5-D CUSTODY	W13-S5-D CUSTODY	Sam Bardsley
L1628787-09G	Glass-A.25	INTACT	16-SEP-16	ORGPREP	ORGPREP	Lily Boateng	CUSTODY	RETURN WALK-IN CUSTODY	Lily Boateng
L1628787-09G	Glass-A.25	INTACT	16-SEP-16	ORGPREP	W1-S2-D CUSTODY	Thomas Asare	ORGPREP	ORGPREP	Thomas Asare
L1628787-09G	Glass-A.25	INTACT	14-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	W1-S2-D CUSTODY	W1-S2-D CUSTODY	Emily Keith
L1628787-09G	Glass-A.25	INTACT	14-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628787-09G	Glass-A.25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Minh Ly	WETCHEM	WETCHEM	Minh Ly
L1628787-09G	Glass-A.25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-09U	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-09U	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-09U	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-09V	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-09V	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-09V	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-09W	EPlastic-C.120	INTACT	20-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Alp Demiroz	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Alp Demiroz
L1628787-09W	EPlastic-C.120	INTACT	19-SEP-16	CUSTODY	A2-CUSTODY	Emily Keith	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Emily Keith
L1628787-09W	EPlastic-C.120	INTACT	19-SEP-16	TRANSIT COURIER	COOLER20-TRANSFER_TO_MANSFIELD	Emily Keith	A2-CUSTODY	A2-CUSTODY	Emily Keith
L1628787-09W	EPlastic-C.120	INTACT	19-SEP-16	COOLER20-TRANSFER_TO_MANSFIELD	COOLER20-TRANSFER_TO_MANSFIELD	Emily Keith	TRANSIT COURIER	COOLER20-TRANSFER_TO_MANSF	
L1628787-09W	EPlastic-C.120	INTACT	19-SEP-16		CUSTODY	Emily Keith	COOLER20-TRANSFER_TO_MANSFIELD	COOLER20-TRANSFER_TO_MANSFIELD	Emily Keith
L1628787-09W	EPlastic-C.120	INTACT	19-SEP-16		COOLER24-TRANSFER_TO_MANSFIELD	Emily Keith	CUSTODY	CUSTODY	Emily Keith
L1628787-09W	EPlastic-C.120	INTACT	19-SEP-16		CUSTODY	Lily Boateng	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Lily Boater
L1628787-09W	EPlastic-C.120	INTACT	16-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-09X	SVial-F	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-09X	SVial-F	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-09X	SVial-F	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628787-09Y	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-09Y	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-09Y	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-09Z	SVial-W	INTACT	26-SEP-16	CUSTODY	VOA DEAD FRIDGE	CUSTODY Emily Keith	VOA DEAD	FRIDGE CUSTODY	VOA DEAD FRIDGE CUSTODY Emily Keith
L1628787-09Z	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA DEAD FRIDGE	CUSTODY Kevin Deppel
L1628787-09Z	SVial-W	INTACT	14-SEP-16	CUSTODY	F-VOA CUSTODY	Jing Cheng	GC/MS	GC/MS	Jing Cheng
L1628787-09Z	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-09Z	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-09Z	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-10A	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-10A	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-10A	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-10B	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-10B	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-10B	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-10C	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-10C	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-10C	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-10D	Encore-25	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-10D	Encore-25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-10D	Encore-25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-10E	Encore-25	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-10E	Encore-25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-10E	Encore-25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-10F	Plastic-A-TS	INTACT	14-SEP-16		RETURN WALK-IN	CUSTODY Emily Keith	RETURN WALK-IN	CUSTODY	RETURN WALK-IN CUSTODY Emily Keith

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628787-10F	Plastic-A-TS	INTACT	14-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628787-10F	Plastic-A-TS	INTACT	14-SEP-16	CUSTODY	CUSTODY	Minh Ly	WETCHEM	WETCHEM	Minh Ly
L1628787-10F	Plastic-A-TS	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-10U	SVial-W	EMPTY	21-SEP-16	GC	GC/MS	Tyler Eno	CUSTODY	F-VOA CUSTODY	Tyler Eno
L1628787-10U	SVial-W	INTACT	21-SEP-16	GC/MS	F-VOA CUSTODY	Matilda Owusuaa	GC/MS	GC/MS	Matilda Owusuaa
L1628787-10U	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-10U	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-10U	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-10V	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-10V	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-10V	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-10X	SVial-F	INTACT	14-SEP-16	GC/MS	GC/MS	Jing Cheng	CUSTODY	VOA CUSTODY	Jing Cheng
L1628787-10X	SVial-F	INTACT	14-SEP-16	CUSTODY	VOA CUSTODY	Jing Cheng	GC/MS	GC/MS	Jing Cheng
L1628787-10X	SVial-F	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-10X	SVial-F	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-10X	SVial-F	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-10Y	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-10Y	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-10Y	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-10Z	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-10Z	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-10Z	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-11A	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-11A	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-11A	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis

Container ID	Type	Status	Transaction Date	From Response	Location	Operator	To Response	Location	Operator
L1628787-11B	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-11B	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-11B	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-11C	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-11C	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-11C	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-11D	Encore-25	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-11D	Encore-25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-11D	Encore-25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-11E	Encore-25	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-11E	Encore-25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-11E	Encore-25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-11F	Plastic-A-TS	INTACT	14-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET2-S2	A2-CUSTODY-MET2-S2	Rexford Bempong
L1628787-11F	Plastic-A-TS	INTACT	14-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1628787-11F	Plastic-A-TS	INTACT	14-SEP-16	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Romain	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628787-11F	Plastic-A-TS	INTACT	14-SEP-16	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Romain	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFI	
L1628787-11F	Plastic-A-TS	INTACT	14-SEP-16		CUSTODY	Roobenso Romain	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Ro
L1628787-11F	Plastic-A-TS	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-11G	Glass-A.25	INTACT	14-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	W1-S2-D CUSTODY	W1-S2-D CUSTODY	Emily Keith
L1628787-11G	Glass-A.25	INTACT	14-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628787-11G	Glass-A.25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Minh Ly	WETCHEM	WETCHEM	Minh Ly
L1628787-11G	Glass-A.25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-11U	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-11U	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-11U	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628787-11V	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-11V	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-11V	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-11X	SVial-F	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-11X	SVial-F	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-11X	SVial-F	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-11Y	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-11Y	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-11Y	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-11Z	SVial-W	INTACT	26-SEP-16	CUSTODY	VOA DEAD FRIDGE	CUSTODY Emily Keith	VOA DEAD FRIDGE CUSTODY	VOA DEAD FRIDGE CUSTODY Emily Keith	
L1628787-11Z	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA DEAD FRIDGE	CUSTODY Kevin Deppel
L1628787-11Z	SVial-W	INTACT	14-SEP-16	CUSTODY	F-VOA CUSTODY	Jing Cheng	GC/MS	GC/MS	Jing Cheng
L1628787-11Z	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-11Z	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-11Z	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-12A	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-12A	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-12A	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-12B	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-12B	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-12B	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-12C	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-12C	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-12C	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-12D	Encore-25	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628787-12D	Encore-25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-12D	Encore-25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-12E	Encore-25	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-12E	Encore-25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-12E	Encore-25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-12F	Plastic-A-TS	INTACT	14-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET2-S2	A2-CUSTODY-MET2-S2	Rexford Bempong
L1628787-12F	Plastic-A-TS	INTACT	14-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1628787-12F	Plastic-A-TS	INTACT	14-SEP-16	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Romain	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628787-12F	Plastic-A-TS	INTACT	14-SEP-16	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Romain	TRANSIT COURIER	COOLER14-TRANSFER_TO_MANSFI	
L1628787-12F	Plastic-A-TS	INTACT	14-SEP-16		CUSTODY	Roobenso Romain	COOLER14-TRANSFER_TO_MANSFIELD	COOLER14-TRANSFER_TO_MANSFIELD	Roobenso Ro
L1628787-12F	Plastic-A-TS	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-12G	Glass-A.25	INTACT	14-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	W1-S2-D CUSTODY	W1-S2-D CUSTODY	Emily Keith
L1628787-12G	Glass-A.25	INTACT	14-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628787-12G	Glass-A.25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Minh Ly	WETCHEM	WETCHEM	Minh Ly
L1628787-12G	Glass-A.25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-12U	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-12U	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-12U	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-12V	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-12V	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-12V	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-12X	SVial-F	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-12X	SVial-F	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-12X	SVial-F	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-12Y	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA DEAD FRIDGE	CUSTODY Kevin Deppel

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628787-12Y	SVial-W	INTACT	14-SEP-16	CUSTODY	F-VOA CUSTODY	Peter Paveglio	GC/MS	GC/MS	Peter Paveglio
L1628787-12Y	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-12Y	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-12Y	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-12Z	SVial-W	INTACT	26-SEP-16	CUSTODY	VOA DEAD FRIDGE	CUSTODY Emily Keith	VOA DEAD	FRIDGE CUSTODY	VOA DEAD FRIDGE CUSTODY Emily Keith
L1628787-12Z	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA DEAD FRIDGE	CUSTODY Kevin Deppel
L1628787-12Z	SVial-W	INTACT	14-SEP-16	CUSTODY	F-VOA CUSTODY	Jing Cheng	GC/MS	GC/MS	Jing Cheng
L1628787-12Z	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-12Z	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-12Z	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-13A	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-13A	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-13A	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-13B	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-13B	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-13B	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-13C	Encore-5	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-13C	Encore-5	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-13C	Encore-5	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-13D	Encore-25	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-13D	Encore-25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-13D	Encore-25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-13E	Encore-25	EMPTY	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-13E	Encore-25	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-13E	Encore-25	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628787-13F	Plastic-A-TS	INTACT	14-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Emily Keith
L1628787-13F	Plastic-A-TS	INTACT	14-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628787-13F	Plastic-A-TS	INTACT	14-SEP-16	CUSTODY	CUSTODY	Minh Ly	WETCHEM	WETCHEM	Minh Ly
L1628787-13F	Plastic-A-TS	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-13U	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-13U	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-13U	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-13V	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-13V	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-13V	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-13X	SVial-F	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628787-13X	SVial-F	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-13X	SVial-F	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-13Y	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-13Y	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-13Y	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628787-13Z	SVial-W	INTACT	26-SEP-16	CUSTODY	VOA DEAD FRIDGE	CUSTODY Emily Keith	VOA DEAD FRIDGE CUSTODY	VOA DEAD FRIDGE CUSTODY	Emily Keith
L1628787-13Z	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA DEAD FRIDGE	CUSTODY Kevin Deppel
L1628787-13Z	SVial-W	INTACT	14-SEP-16	CUSTODY	F-VOA CUSTODY	Jing Cheng	GC/MS	GC/MS	Jing Cheng
L1628787-13Z	SVial-W	INTACT	14-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628787-13Z	SVial-W	INTACT	14-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628787-13Z	SVial-W	INTACT	14-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis

Methodology Review

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Laboratory Chronicle

Sample Receipt and Container Information

Were project specific reporting limits specified? NO

Reagent H2O Preserved Vials Frozen on: 21-SEP-16 12:28

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1628787-01A	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-01B	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-01C	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-01D	25 gram Encore Sampler	A	N/A	2.8	Y	Absent	SPLP-EXT-ZHE(14),HOLD-8260HLW(2)
L1628787-01E	25 gram Encore Sampler	A	N/A	2.8	Y	Absent	SPLP-EXT-ZHE(14),HOLD-8260HLW(2)
L1628787-01F	Plastic 2oz unpreserved for TS	A	N/A	2.8	Y	Absent	TS(7)
L1628787-01S	Vial unpreserved Extracts	A	N/A	2.8	Y	Absent	NJ-SPLP-VOA(14)
L1628787-01T	Vial unpreserved Extracts	A	N/A	2.8	Y	Absent	NJ-SPLP-VOA(14)
L1628787-01U	Vial Water preserved split	A	N/A	2.8	Y	Absent	HOLD-8260HLW(14),SPLP-EXT-ZHE(14)
L1628787-01V	Vial Water preserved split	A	N/A	2.8	Y	Absent	HOLD-8260HLW(14),SPLP-EXT-ZHE(14)
L1628787-01X	Vial MeOH preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-01Y	Vial Water preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-01Z	Vial Water preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-02A	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-02B	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-02C	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-02D	25 gram Encore Sampler	A	N/A	2.8	Y	Absent	HOLD-8260HLW(2)
L1628787-02E	25 gram Encore Sampler	A	N/A	2.8	Y	Absent	HOLD-8260HLW(2)
L1628787-02F	Plastic 2oz unpreserved for TS	A	N/A	2.8	Y	Absent	-
L1628787-02G	Glass 250ml/8oz unpreserved	A	N/A	2.8	Y	Absent	HOLD-CONTINGENCY(14),TS(7)
L1628787-02U	Vial Water preserved split	A	N/A	2.8	Y	Absent	HOLD-8260HLW(14)
L1628787-02V	Vial Water preserved split	A	N/A	2.8	Y	Absent	HOLD-8260HLW(14)
L1628787-02W	Plastic 120ml HNO3 preserved Ext	A	<2	2.8	Y	Absent	SPLP-NI-6020T-PPB(180)
L1628787-02W9	Tumble Vessel	A	N/A	2.8	Y	Absent	-

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1628787-02X	Vial MeOH preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-02Y	Vial Water preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-02Z	Vial Water preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-03A	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-03B	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-03C	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-03D	25 gram Encore Sampler	A	N/A	2.8	Y	Absent	SPLP-EXT-ZHE(14),HOLD-8260HLW(2)
L1628787-03E	25 gram Encore Sampler	A	N/A	2.8	Y	Absent	SPLP-EXT-ZHE(14),HOLD-8260HLW(2)
L1628787-03F	Plastic 2oz unpreserved for TS	A	N/A	2.8	Y	Absent	TS(7)
L1628787-03S	Vial unpreserved Extracts	A	N/A	2.8	Y	Absent	NJ-SPLP-VOA(14)
L1628787-03T	Vial unpreserved Extracts	A	N/A	2.8	Y	Absent	NJ-SPLP-VOA(14)
L1628787-03U	Vial Water preserved split	A	N/A	2.8	Y	Absent	HOLD-8260HLW(14),SPLP-EXT-ZHE(14)
L1628787-03V	Vial Water preserved split	A	N/A	2.8	Y	Absent	HOLD-8260HLW(14),SPLP-EXT-ZHE(14)
L1628787-03X	Vial MeOH preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-03Y	Vial Water preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-03Z	Vial Water preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-04A	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-04B	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-04C	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-04D	25 gram Encore Sampler	A	N/A	2.8	Y	Absent	HOLD-8260HLW(2)
L1628787-04E	25 gram Encore Sampler	A	N/A	2.8	Y	Absent	HOLD-8260HLW(2)
L1628787-04F	Plastic 2oz unpreserved for TS	A	N/A	2.8	Y	Absent	AS-TI(180)
L1628787-04G	Glass 250ml/8oz unpreserved	A	N/A	2.8	Y	Absent	HOLD-CONTINGENCY(14),TS(7)
L1628787-04U	Vial Water preserved split	A	N/A	2.8	Y	Absent	HOLD-8260HLW(14)
L1628787-04V	Vial Water preserved split	A	N/A	2.8	Y	Absent	HOLD-8260HLW(14)
L1628787-04X	Vial MeOH preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-04Y	Vial Water preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-04Z	Vial Water preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-05A	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-05B	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-05C	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-05D	25 gram Encore Sampler	A	N/A	2.8	Y	Absent	HOLD-8260HLW(2)
L1628787-05E	25 gram Encore Sampler	A	N/A	2.8	Y	Absent	HOLD-8260HLW(2)
L1628787-05F	Plastic 2oz unpreserved for TS	A	N/A	2.8	Y	Absent	AS-TI(180)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1628787-05G	Glass 250ml/8oz unpreserved	A	N/A	2.8	Y	Absent	HOLD-CONTINGENCY(14),TS(7)
L1628787-05U	Vial Water preserved split	A	N/A	2.8	Y	Absent	HOLD-8260HLW(14)
L1628787-05V	Vial Water preserved split	A	N/A	2.8	Y	Absent	HOLD-8260HLW(14)
L1628787-05W	Plastic 120ml HNO3 preserved Ext	A	<2	2.8	Y	Absent	SPLP-AS-6020T-PPB(180)
L1628787-05W9	Tumble Vessel	A	N/A	2.8	Y	Absent	-
L1628787-05X	Vial MeOH preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-05Y	Vial Water preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-05Z	Vial Water preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-06A	Glass 60ml unpreserved split	A	N/A	2.8	Y	Absent	NI-TI(180)
L1628787-06B	Glass 250ml/8oz unpreserved	A	N/A	2.8	Y	Absent	HOLD-CONTINGENCY(14),TS(7)
L1628787-06G	Glass 250ml/8oz unpreserved	A	N/A	2.8	Y	Absent	-
L1628787-06W	Plastic 120ml HNO3 preserved Ext	A	<2	2.8	Y	Absent	SPLP-NI-6020T-PPB(180)
L1628787-06W9	Tumble Vessel	A	N/A	2.8	Y	Absent	-
L1628787-07A	Glass 60ml unpreserved split	A	N/A	2.8	Y	Absent	NI-TI(180)
L1628787-07B	Glass 250ml/8oz unpreserved	A	N/A	2.8	Y	Absent	HOLD-CONTINGENCY(14),TS(7)
L1628787-07W	Plastic 120ml HNO3 preserved Ext	A	<2	2.8	Y	Absent	SPLP-NI-6020T-PPB(180)
L1628787-07W9	Tumble Vessel	A	N/A	2.8	Y	Absent	-
L1628787-08A	Glass 60ml unpreserved split	A	N/A	2.8	Y	Absent	AS-TI(180)
L1628787-08B	Glass 250ml/8oz unpreserved	A	N/A	2.8	Y	Absent	HOLD-CONTINGENCY(14),TS(7)
L1628787-08G	Glass 250ml/8oz unpreserved	A	N/A	2.8	Y	Absent	-
L1628787-08W	Plastic 120ml HNO3 preserved Ext	A	<2	2.8	Y	Absent	SPLP-AS-6020T-PPB(180)
L1628787-08W9	Tumble Vessel	A	N/A	2.8	Y	Absent	-
L1628787-09A	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-09B	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-09C	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-09D	25 gram Encore Sampler	A	N/A	2.8	Y	Absent	HOLD-8260HLW(2)
L1628787-09E	25 gram Encore Sampler	A	N/A	2.8	Y	Absent	HOLD-8260HLW(2)
L1628787-09F	Plastic 2oz unpreserved for TS	A	N/A	2.8	Y	Absent	-
L1628787-09G	Glass 250ml/8oz unpreserved	A	N/A	2.8	Y	Absent	HOLD-CONTINGENCY(14),TS(7)
L1628787-09U	Vial Water preserved split	A	N/A	2.8	Y	Absent	HOLD-8260HLW(14)
L1628787-09V	Vial Water preserved split	A	N/A	2.8	Y	Absent	HOLD-8260HLW(14)
L1628787-09W	Plastic 120ml HNO3 preserved Ext	A	<2	2.8	Y	Absent	SPLP-AS-6020T-PPB(180)
L1628787-09W9	Tumble Vessel	A	N/A	2.8	Y	Absent	-
L1628787-09X	Vial MeOH preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1628787-09Y	Vial Water preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-09Z	Vial Water preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-10A	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-10B	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-10C	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-10D	25 gram Encore Sampler	A	N/A	2.8	Y	Absent	SPLP-EXT-ZHE(14),HOLD-8260HLW(2)
L1628787-10E	25 gram Encore Sampler	A	N/A	2.8	Y	Absent	SPLP-EXT-ZHE(14),HOLD-8260HLW(2)
L1628787-10F	Plastic 2oz unpreserved for TS	A	N/A	2.8	Y	Absent	TS(7)
L1628787-10S	Vial unpreserved Extracts	A	N/A	2.8	Y	Absent	NJ-SPLP-VOA(14)
L1628787-10T	Vial unpreserved Extracts	A	N/A	2.8	Y	Absent	NJ-SPLP-VOA(14)
L1628787-10U	Vial Water preserved split	A	N/A	2.8	Y	Absent	HOLD-8260HLW(14),SPLP-EXT-ZHE(14)
L1628787-10V	Vial Water preserved split	A	N/A	2.8	Y	Absent	HOLD-8260HLW(14),SPLP-EXT-ZHE(14)
L1628787-10X	Vial MeOH preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-10Y	Vial Water preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-10Z	Vial Water preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-11A	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-11B	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-11C	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-11D	25 gram Encore Sampler	A	N/A	2.8	Y	Absent	HOLD-8260HLW(2)
L1628787-11E	25 gram Encore Sampler	A	N/A	2.8	Y	Absent	HOLD-8260HLW(2)
L1628787-11F	Plastic 2oz unpreserved for TS	A	N/A	2.8	Y	Absent	HOLD-METAL(180)
L1628787-11G	Glass 250ml/8oz unpreserved	A	N/A	2.8	Y	Absent	TS(7)
L1628787-11U	Vial Water preserved split	A	N/A	2.8	Y	Absent	HOLD-8260HLW(14)
L1628787-11V	Vial Water preserved split	A	N/A	2.8	Y	Absent	HOLD-8260HLW(14)
L1628787-11X	Vial MeOH preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-11Y	Vial Water preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-11Z	Vial Water preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-12A	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-12B	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-12C	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-12D	25 gram Encore Sampler	A	N/A	2.8	Y	Absent	HOLD-8260HLW(2)
L1628787-12E	25 gram Encore Sampler	A	N/A	2.8	Y	Absent	HOLD-8260HLW(2)
L1628787-12F	Plastic 2oz unpreserved for TS	A	N/A	2.8	Y	Absent	NI-TI(180)
L1628787-12G	Glass 250ml/8oz unpreserved	A	N/A	2.8	Y	Absent	HOLD-CONTINGENCY(14),TS(7)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1628787-12U	Vial Water preserved split	A	N/A	2.8	Y	Absent	HOLD-8260HLW(14)
L1628787-12V	Vial Water preserved split	A	N/A	2.8	Y	Absent	HOLD-8260HLW(14)
L1628787-12X	Vial MeOH preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-12Y	Vial Water preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-12Z	Vial Water preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-13A	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-13B	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-13C	5 gram Encore Sampler	A	N/A	2.8	Y	Absent	NJ-8260HLW(2)
L1628787-13D	25 gram Encore Sampler	A	N/A	2.8	Y	Absent	HOLD-8260HLW(2)
L1628787-13E	25 gram Encore Sampler	A	N/A	2.8	Y	Absent	HOLD-8260HLW(2)
L1628787-13F	Plastic 2oz unpreserved for TS	A	N/A	2.8	Y	Absent	TS(7)
L1628787-13U	Vial Water preserved split	A	N/A	2.8	Y	Absent	HOLD-8260HLW(14)
L1628787-13V	Vial Water preserved split	A	N/A	2.8	Y	Absent	HOLD-8260HLW(14)
L1628787-13X	Vial MeOH preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-13Y	Vial Water preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)
L1628787-13Z	Vial Water preserved split	A	N/A	2.8	Y	Absent	NJ-8260HLW(14)

*Values in parentheses indicate holding time in days

NJ DEP
Data of Known Quality Protocols
Conformance/Non-Conformance
Summary Questionnaire

NJ DEP Data of Known Quality Protocols
Conformance/Non-Conformance
Summary Questionnaire

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	YES
1a	Were the method specified handling, preservation, and holding time requirements met?	YES
1b	EPH Method: Was the EPH Method conducted without significant modifications (see Section 11.3 of respective DKQ methods)?	N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	YES
3	Were all samples received at an appropriate temperature (4 ± 2° C)?	YES
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	NO
5a	Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	NO
5b	Were these reporting limits met?	N/A
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	NO
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	YES

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1a or #1b is "No", the data package does not meet the requirements for "Data of Known Quality".

Conformance/Non-Conformance Summary

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Case Narrative (continued)

Report Submission
This final report replaces the partial report issued September 22, 2016, and includes the results of all requested analyses.

A previously-issued partial report replaced the partial report issued September 19, 2016. At the client's request, the following analyses were performed:
L1628787-01, -03, and -10: SPLP Volatile Organics, Vinyl Chloride only;
L1628787-02, -06, and -07: SPLP Metals, Nickel only; and
L1628787-05, -08, and -09: SPLP Metals, Arsenic only.

A previously-issued partial report replaced the partial report issued September 14, 2016. The Volatile Organics TICs had been removed from all samples.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

DKQP Related Narratives
Report Submission
In reference to question 5a:
Reporting limits were not specified.

Volatile Organics
L1628787-01 (4479-091316-0850), -03 (4479-091316-0930), and -10 (4479-091316-1410): The analysis of Volatile Organics by EPA Method 5035/8260 Low Level could not be performed due to the elevated concentrations of non-target compounds in the sample.
In reference to question 6:
At the client's request, all submitted samples were not analyzed for the full DKQP list of constituents identified in the method specific analyte list presented in the DKQP documents.

Case Narrative (continued)

SPLP Volatile Organics

In reference to question 6:

At the client's request, all submitted samples were not analyzed for the full DKQP list of constituents identified in the method specific analyte list presented in the DKQP documents.

Metals

In reference to question 4:

The WG931636-4 MS recovery for nickel (398%), performed on L1628787-02 (4479-091316-0915), do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG931636-3 Laboratory Duplicate RPD, performed on L1628787-02 (4479-091316-0915), is outside the acceptance criteria for nickel (34%). The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

In reference to question 6:

At the client's request, all submitted samples were not analyzed for the full DKQP list of constituents identified in the method specific analyte list presented in the DKQP documents.

SPLP Metals

In reference to question 6:

At the client's request, all submitted samples were not analyzed for the full DKQP list of constituents identified in the method specific analyte list presented in the DKQP documents.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Melissa Cripps Melissa Cripps Report Date: 09/26/16

Title: Technical Director/Representative

Glossary

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the

Data Qualifiers

reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

SPLP Extraction Data

SPLP Extraction Data
Volatile Organics

Form 1
Volatile Organics

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-01	**Date Collected**	: 09/13/16 08:50
Client ID	: 4479-091316-0850	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/22/16 19:30
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: MS
Lab File ID	:	**Instrument ID**	:
Sample Amount	: 0.0	**GC Column**	:
Level	: LOW	**%Solids**	: 76
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

			kg		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Sample Weight	0.025	-	NA	
NONE	Leachate Volume	0.500	-	NA	
NONE	pH, Extraction Post-Filtration	7.59	-	NA	

Form 1
Volatile Organics

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-03	**Date Collected**	: 09/13/16 09:30
Client ID	: 4479-091316-0930	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/22/16 19:30
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: MS
Lab File ID	:	**Instrument ID**	:
Sample Amount	: 0.0	**GC Column**	:
Level	: LOW	**%Solids**	: 75
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Sample Weight	0.025	-	NA	
NONE	Leachate Volume	0.500	-	NA	
NONE	pH, Extraction Post-Filtration	7.77	-	NA	

Form 1
Volatile Organics

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-10	**Date Collected**	: 09/13/16 14:10
Client ID	: 4479-091316-1410	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/22/16 19:30
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: MS
Lab File ID	:	**Instrument ID**	:
Sample Amount	: 0.0	**GC Column**	:
Level	: LOW	**%Solids**	: 87
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

			kg		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Sample Weight	0.025	-	NA	
NONE	Leachate Volume	0.500	-	NA	
NONE	pH, Extraction Post-Filtration	8.49	-	NA	

SPLP Extraction Data
Non- Volatiles

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-02	**Date Collected**	: 09/13/16 09:15
Client ID	: 4479-091316-0915	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 18:34
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: LB
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 86

CAS NO.	Parameter	Results	SU RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	9.15	-	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-05	**Date Collected**	: 09/13/16 10:10
Client ID	: 4479-091316-1010	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 18:34
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: LB
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 80

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	9.69	-	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-06	**Date Collected**	: 09/13/16 11:15
Client ID	: 4479-091316-1115	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 18:34
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: LB
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 60

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	9.76	-	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-07	**Date Collected**	: 09/13/16 11:20
Client ID	: 4479-091316-1120	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 18:34
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: LB
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 71

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	9.80	-	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-08	**Date Collected**	: 09/13/16 12:00
Client ID	: 4479-091316-1200	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 18:34
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: LB
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 84

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	10.1	-	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-09	**Date Collected**	: 09/13/16 12:25
Client ID	: 4479-091316-1225	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 18:34
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: LB
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 79

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	7.99	-	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: WG933322-1	**Date Collected**	: NA
Client ID	: WG933322-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/17/16 18:34
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: LB
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0kg	**%Solids**	: NA

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	ND	-	NA	U
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	6.23	-	NA	

Organics

GC/MS 8260
Analysis

Sample Results Summary

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-01	**Date Collected**	: 09/13/16 08:50
Client ID	: 4479-091316-0850	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 15:48
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: V11160914A20	**Instrument ID**	: VOA111
Sample Amount	:	**GC Column**	: RTX-VMS
Level	: HIGH	**%Solids**	: 76
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.1 ml

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-01-4	Vinyl chloride	0.080	0.29	0.017	J

Tentatively Identified Compounds
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-01	**Date Collected**	: 09/13/16 08:50
Client ID	: 4479-091316-0850	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 15:48
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: V11160914A20	**Instrument ID**	: VOA111
Sample Amount	:	**GC Column**	:
Level	:	**%Solids**	: 76
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.1 g

Number TICS found: 16 **Concentration Units: mg/kg**

CAS Number	Compound Name	RT	EST. CONC.	Qualifier
	Unknown 1	10.95	2.83	J
	Unknown 2	10.99	2.05	J
	Unknown Aromatic A	11.09	1.9	J
	Unknown Aromatic B	11.21	4.8	J
	Unknown Aromatic C	11.44	1.47	J
	Unknown Aromatic D	11.64	8.4	J
	Unknown Aromatic E	11.75	1.26	J
	Unknown Aromatic F	12.24	6.24	J
	Unknown 3	12.29	2.17	J
	Unknown Aromatic G	12.33	5.55	J
	Unknown Aromatic H	12.62	1.37	J
	Unknown Aromatic I	12.71	2.87	J
	Unknown Aromatic J	12.80	2.86	J
	Unknown Aromatic K	13.10	1.57	J
	Unknown Aromatic L	13.15	1.88	J
	Total TIC Compounds		47.2J	J

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-02	**Date Collected**	: 09/13/16 09:15
Client ID	: 4479-091316-0915	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 12:24
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: V11160914A12	**Instrument ID**	: VOA111
Sample Amount	: 3.1 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 86
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-01-4	Vinyl chloride	0.0010	0.0037	0.00022	J

Tentatively Identified Compounds
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-02	**Date Collected**	: 09/13/16 09:15
Client ID	: 4479-091316-0915	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 12:24
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: V11160914A12	**Instrument ID**	: VOA111
Sample Amount	:	**GC Column**	:
Level	:	**%Solids**	: 86
Extract Volume (MeOH)	: NA	**Injection Volume**	: 1

Number TICS found: 0 **Concentration Units: mg/kg**

CAS Number	Compound Name	RT	EST. CONC.	Qualifier
	NO TENTATIVELY IDENTIFIED COMPOUNDS			

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-03	**Date Collected**	: 09/13/16 09:30
Client ID	: 4479-091316-0930	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 16:14
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: V11160914A21	**Instrument ID**	: VOA111
Sample Amount	:	**GC Column**	: RTX-VMS
Level	: HIGH	**%Solids**	: 75
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.1 ml

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-01-4	Vinyl chloride	0.31	0.18	0.010	

Tentatively Identified Compounds
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-03	**Date Collected**	: 09/13/16 09:30
Client ID	: 4479-091316-0930	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 16:14
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: V11160914A21	**Instrument ID**	: VOA111
Sample Amount	:	**GC Column**	:
Level	:	**%Solids**	: 75
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.1 g

Number TICS found: 16 **Concentration Units: mg/kg**

CAS Number	Compound Name	RT	EST. CONC.	Qualifier
	Unknown 1	10.95	2.16	J
	Unknown Aromatic A	11.21	.941	J
	Unknown Aromatic B	11.64	.925	J
	Unknown Aromatic C	12.10	.799	J
	Unknown 2	12.29	.797	J
	Unknown 3	12.79	.999	J
	Unknown 4	13.33	1.02	J
	Unknown Aromatic D	13.52	.924	J
	Unknown Aromatic E	13.86	.911	J
	Unknown Aromatic F	14.21	.666	J
	Unknown 5	15.66	.634	J
	Unknown 6	15.77	.671	J
	Unknown 7	15.80	1.41	J
	Unknown Aromatic G	15.83	1.53	J
	Unknown 8	16.01	1.44	J
	Total TIC Compounds		15.8J	J

Form 1
VOA

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: L1628787-04	Date Collected	: 09/13/16 09:40
Client ID	: 4479-091316-0940	Date Received	: 09/13/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/14/16 12:49
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MS
Lab File ID	: V11160914A13	Instrument ID	: VOA111
Sample Amount	: 4.6 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: 85
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-01-4	Vinyl chloride	ND	0.0026	0.00015	U

Tentatively Identified Compounds
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-04	**Date Collected**	: 09/13/16 09:40
Client ID	: 4479-091316-0940	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 12:49
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: V11160914A13	**Instrument ID**	: VOA111
Sample Amount	:	**GC Column**	:
Level	:	**%Solids**	: 85
Extract Volume (MeOH)	: NA	**Injection Volume**	: 1

Number TICS found: 0 **Concentration Units: mg/kg**

CAS Number	Compound Name	RT	EST. CONC.	Qualifier
	NO TENTATIVELY IDENTIFIED COMPOUNDS			

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-05	**Date Collected**	: 09/13/16 10:10
Client ID	: 4479-091316-1010	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 13:40
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: V11160914A15	**Instrument ID**	: VOA111
Sample Amount	: 3.1 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 80
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-01-4	Vinyl chloride	ND	0.0040	0.00024	U

Tentatively Identified Compounds
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-05	**Date Collected**	: 09/13/16 10:10
Client ID	: 4479-091316-1010	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 13:40
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: V11160914A15	**Instrument ID**	: VOA111
Sample Amount	:	**GC Column**	:
Level	:	**%Solids**	: 80
Extract Volume (MeOH)	: NA	**Injection Volume**	: 1

Number TICS found: 0 **Concentration Units: mg/kg**

CAS Number	Compound Name	RT	EST. CONC.	Qualifier
	NO TENTATIVELY IDENTIFIED COMPOUNDS			

Form 1
VOA

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: L1628787-09	Date Collected	: 09/13/16 12:25
Client ID	: 4479-091316-1225	Date Received	: 09/13/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/14/16 14:05
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MS
Lab File ID	: V11160914A16	Instrument ID	: VOA111
Sample Amount	: 3.0 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: 79
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-01-4	Vinyl chloride	0.00072	0.0042	0.00025	J

Tentatively Identified Compounds
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-09	**Date Collected**	: 09/13/16 12:25
Client ID	: 4479-091316-1225	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 14:05
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: V11160914A16	**Instrument ID**	: VOA111
Sample Amount	:	**GC Column**	:
Level	:	**%Solids**	: 79
Extract Volume (MeOH)	: NA	**Injection Volume**	: 1

Number TICS found: 0 **Concentration Units: mg/kg**

CAS Number	Compound Name	RT	EST. CONC.	Qualifier
	NO TENTATIVELY IDENTIFIED COMPOUNDS			

Form 1
VOA

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: L1628787-10	Date Collected	: 09/13/16 14:10
Client ID	: 4479-091316-1410	Date Received	: 09/13/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/14/16 16:39
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MS
Lab File ID	: V11160914A22	Instrument ID	: VOA111
Sample Amount	:	GC Column	: RTX-VMS
Level	: HIGH	%Solids	: 87
Extract Volume (MeOH)	: NA	Injection Volume	: 0.1 ml

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-01-4	Vinyl chloride	0.060	0.25	0.014	J

Tentatively Identified Compounds
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-10	**Date Collected**	: 09/13/16 14:10
Client ID	: 4479-091316-1410	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 16:39
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: V11160914A22	**Instrument ID**	: VOA111
Sample Amount	:	**GC Column**	:
Level	:	**%Solids**	: 87
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.1 g

Number TICS found: 16 **Concentration Units: mg/kg**

CAS Number	Compound Name	RT	EST. CONC.	Qualifier
	Unknown Aromatic A	12.71	.838	J
	Unknown Aromatic B	12.82	1.47	J
	Unknown 1	12.90	.919	J
	Unknown Aromatic C	13.19	.769	J
	Unknown Aromatic D	13.23	.77	J
	Unknown 2	13.26	.8	J
	Unknown Aromatic E	13.35	1.32	J
	Unknown Aromatic F	13.46	.86	J
	Unknown Aromatic G	13.52	1.28	J
	Unknown Aromatic H	13.58	1.07	J
	Unknown Aromatic I	13.63	1.14	J
	Unknown Aromatic J	13.86	2.34	J
	Unknown 3	13.93	1	J
	Unknown Aromatic K	14.03	.908	J
	Unknown Aromatic L	14.10	.955	J
	Total TIC Compounds		16.4J	J

Form 1
VOA

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: L1628787-11	Date Collected	: 09/13/16 14:35
Client ID	: 4479-091316-1435	Date Received	: 09/13/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/14/16 14:31
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MS
Lab File ID	: V11160914A17	Instrument ID	: VOA111
Sample Amount	: 4.8 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: 76
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
79-01-6	Trichloroethene	0.0014	0.0014	0.00017	

Tentatively Identified Compounds
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-11	**Date Collected**	: 09/13/16 14:35
Client ID	: 4479-091316-1435	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 14:31
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: V11160914A17	**Instrument ID**	: VOA111
Sample Amount	:	**GC Column**	:
Level	:	**%Solids**	: 76
Extract Volume (MeOH)	: NA	**Injection Volume**	: 1

Number TICS found: 16 **Concentration Units: mg/kg**

CAS Number	Compound Name	RT	EST. CONC.	Qualifier
	Unknown 1	10.98	.00601	J
	Unknown Aromatic A	11.10	.00614	J
	Unknown Aromatic B	11.44	.00656	J
	Unknown Aromatic C	11.64	.00794	J
	Unknown 2	12.29	.0103	J
	Unknown 3	12.99	.00656	J
	Unknown 4	13.33	.0303	J
	Unknown Alkane A	13.49	.0179	J
	Unknown 5	13.81	.00435	J
	Unknown 6	13.87	.00992	J
	Unknown 7	14.02	.0161	J
	Unknown 8	14.20	.045	J
	Unknown Alkane B	14.72	.00608	J
	Unknown Alkane C	14.85	.0124	J
	Unknown Alkane D	14.97	.0209	J
	Total TIC Compounds		0.206J	J

Form 1
VOA

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: L1628787-12	Date Collected	: 09/13/16 15:00
Client ID	: 4479-091316-1500	Date Received	: 09/13/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/14/16 14:56
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MS
Lab File ID	: V11160914A18	Instrument ID	: VOA111
Sample Amount	: 3.8 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: 91
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
79-01-6	Trichloroethene	ND	0.0014	0.00018	U

Tentatively Identified Compounds
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-12	**Date Collected**	: 09/13/16 15:00
Client ID	: 4479-091316-1500	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 14:56
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: V11160914A18	**Instrument ID**	: VOA111
Sample Amount	:	**GC Column**	:
Level	:	**%Solids**	: 91
Extract Volume (MeOH)	: NA	**Injection Volume**	: 1

Number TICS found: 0 **Concentration Units: mg/kg**

CAS Number	Compound Name	RT	EST. CONC.	Qualifier
	NO TENTATIVELY IDENTIFIED COMPOUNDS			

Form 1
VOA

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: L1628787-13	Date Collected	: 09/13/16 15:25
Client ID	: 4479-091316-1525	Date Received	: 09/13/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/14/16 15:22
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MS
Lab File ID	: V11160914A19	Instrument ID	: VOA111
Sample Amount	: 4.0 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: 86
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
79-01-6	Trichloroethene	0.0054	0.0014	0.00018	

Tentatively Identified Compounds
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-13	**Date Collected**	: 09/13/16 15:25
Client ID	: 4479-091316-1525	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 15:22
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: V11160914A19	**Instrument ID**	: VOA111
Sample Amount	:	**GC Column**	:
Level	:	**%Solids**	: 86
Extract Volume (MeOH)	: NA	**Injection Volume**	: 1

Number TICS found: 3 **Concentration Units: mg/kg**

CAS Number	Compound Name	RT	EST. CONC.	Qualifier
	Unknown 1	13.55	.00303	J
	Unknown 2	13.86	.00334	J
	Total TIC Compounds		0.006J	J

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: WG931857-5	**Date Collected**	: NA
Client ID	: WG931857-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/14/16 09:48
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: BD
Lab File ID	: V11160914A06	**Instrument ID**	: VOA111
Sample Amount	: 5.0 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: NA
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-01-4	Vinyl chloride	ND	0.0020	0.00012	U
79-01-6	Trichloroethene	ND	0.0010	0.00012	U

Tentatively Identified Compounds
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: WG931857-5	**Date Collected**	: NA
Client ID	: WG931857-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/14/16 09:48
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: BD
Lab File ID	: V11160914A06	**Instrument ID**	: VOA111
Sample Amount	:	**GC Column**	:
Level	:	**%Solids**	: NA
Extract Volume (MeOH)	: NA	**Injection Volume**	: 1

Number TICS found: 0 **Concentration Units: mg/kg**

CAS Number	Compound Name	RT	EST. CONC.	Qualifier
	NO TENTATIVELY IDENTIFIED COMPOUNDS			

Form 1
VOA

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: WG931936-5	Date Collected	: NA
Client ID	: WG931936-5BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 09/14/16 09:48
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: BD
Lab File ID	: V11160914A06	Instrument ID	: VOA111
Sample Amount	:	GC Column	: RTX-VMS
Level	: HIGH	%Solids	: NA
Extract Volume (MeOH)	: NA	Injection Volume	: 0.1 ml

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
75-01-4	Vinyl chloride	ND	0.10	0.0059	U

Tentatively Identified Compounds
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: WG931936-5	**Date Collected**	: NA
Client ID	: WG931936-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/14/16 09:48
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: BD
Lab File ID	: V11160914A06	**Instrument ID**	: VOA111
Sample Amount	:	**GC Column**	:
Level	:	**%Solids**	: NA
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.1 g

Number TICS found: 0 **Concentration Units: mg/kg**

CAS Number	Compound Name	RT	EST. CONC.	Qualifier
	NO TENTATIVELY IDENTIFIED COMPOUNDS			

Tuning Results Summary

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: VOA111	**Analysis Date**	: 08/19/16 09:11
Tune Standard	: WG924340-1	**Tune File ID**	: V11160819BF2_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	28.4
75	30.0 - 60.0% of mass 95	56.9
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7
173	Less than 2.0% of mass 174	0 (0)1
174	Greater than 50.0 of mass 95	60.2
175	5.0 - 9.0% of mass 174	5.2 (8.6)1
176	95.0 - 101% of mass 174	59.1 (98.2)1
177	5.0 - 9.0% of mass 176	4.2 (7)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STDL1	R893416-1	V11160819B01	08/19/16 10:01
STDL2	R893416-2	V11160819B02	08/19/16 10:27
STDL3	R893416-3	V11160819B03	08/19/16 10:52
STDL4	R893416-4	V11160819B04	08/19/16 11:17
STDL5	R893416-5	V11160819B05	08/19/16 11:43
STDL6	R893416-6	V11160819B06	08/19/16 12:08
STDL7	R893416-7	V11160819B07	08/19/16 12:34
STDL8	R893416-8	V11160819B08	08/19/16 13:00
ICV Quant Report	R893416-9	V11160819B12	08/19/16 14:42

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: VOA111	**Analysis Date**	: 09/14/16 07:13
Tune Standard	: WG931857-1	**Tune File ID**	: V11160914BF3_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	21.2
75	30.0 - 60.0% of mass 95	57.2
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.3 (.4)1
174	Greater than 50.0 of mass 95	76.3
175	5.0 - 9.0% of mass 174	5.7 (7.4)1
176	95.0 - 101% of mass 174	75.9 (99.5)1
177	5.0 - 9.0% of mass 176	5.3 (7)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG931857-2CCAL	WG931857-2	V11160914A02	09/14/16 08:07
WG931857-3LCS	WG931857-3	V11160914A02	09/14/16 08:07
WG931857-4LCSD	WG931857-4	V11160914A04	09/14/16 08:58
WG931857-5BLANK	WG931857-5	V11160914A06	09/14/16 09:48
4479-091316-0915	L1628787-02	V11160914A12	09/14/16 12:24
4479-091316-0940	L1628787-04	V11160914A13	09/14/16 12:49
4479-091316-1010	L1628787-05	V11160914A15	09/14/16 13:40
4479-091316-1225	L1628787-09	V11160914A16	09/14/16 14:05
4479-091316-1435	L1628787-11	V11160914A17	09/14/16 14:31
4479-091316-1500	L1628787-12	V11160914A18	09/14/16 14:56
4479-091316-1525	L1628787-13	V11160914A19	09/14/16 15:22

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: VOA111	**Analysis Date**	: 09/14/16 07:13
Tune Standard	: WG931936-1	**Tune File ID**	: V11160914BF3_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	21.2
75	30.0 - 60.0% of mass 95	57.2
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.3 (.4)1
174	Greater than 50.0 of mass 95	76.3
175	5.0 - 9.0% of mass 174	5.7 (7.4)1
176	95.0 - 101% of mass 174	75.9 (99.5)1
177	5.0 - 9.0% of mass 176	5.3 (7)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG931936-2CCAL	WG931936-2	V11160914A02	09/14/16 08:07
WG931936-3LCS	WG931936-3	V11160914A02	09/14/16 08:07
WG931936-4LCSD	WG931936-4	V11160914A04	09/14/16 08:58
WG931936-5BLANK	WG931936-5	V11160914A06	09/14/16 09:48
4479-091316-0850	L1628787-01	V11160914A20	09/14/16 15:48
4479-091316-0930	L1628787-03	V11160914A21	09/14/16 16:14
4479-091316-1410	L1628787-10	V11160914A22	09/14/16 16:39

Blank Results Summary

Method Blank Summary
Form 4

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab Sample ID	: WG931857-5	**Lab File ID**	: V11160914A06
Instrument ID	: VOA111		
Matrix	: SOIL	**Analysis Date**	: 09/14/16 09:48

Client Sample No.	Lab Sample ID	Analysis Date
WG931857-3LCS	WG931857-3	09/14/16 08:07
WG931857-4LCSD	WG931857-4	09/14/16 08:58
4479-091316-0915	L1628787-02	09/14/16 12:24
4479-091316-0940	L1628787-04	09/14/16 12:49
4479-091316-1010	L1628787-05	09/14/16 13:40
4479-091316-1225	L1628787-09	09/14/16 14:05
4479-091316-1435	L1628787-11	09/14/16 14:31
4479-091316-1500	L1628787-12	09/14/16 14:56
4479-091316-1525	L1628787-13	09/14/16 15:22

Method Blank Summary
Form 4

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab Sample ID	: WG931936-5	**Lab File ID**	: V11160914A06
Instrument ID	: VOA111		
Matrix	: SOIL	**Analysis Date**	: 09/14/16 09:48

Client Sample No.	Lab Sample ID	Analysis Date
WG931936-3LCS	WG931936-3	09/14/16 08:07
WG931936-4LCSD	WG931936-4	09/14/16 08:58
4479-091316-0850	L1628787-01	09/14/16 15:48
4479-091316-0930	L1628787-03	09/14/16 16:14
4479-091316-1410	L1628787-10	09/14/16 16:39

Standards Data Summary

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1628787**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70614-814**
Instrument ID	**: VOA111**	**Ical Ref**	**: ICAL12787**
Calibration dates	**: 08/19/16 10:01 08/19/16 13:00**		

Calibration Files

L1 =V11160819B01.D L2 =V11160819B02.D L3 =V11160819B03.D L4 =V11160819B04.D L5 =V11160819B05.D

L6 =V11160819B06.D L7 =V11160819B07.D L8 =V11160819B08.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------									
2)	T	Dichlorodifluoromethane	0.183	0.155	0.138	0.140	0.162	0.158	0.159	0.184	0.160	10.73
3)	T	Chloromethane	0.612	0.391	0.341	0.331	0.368	0.353	0.338	0.378	*L	0.9970
4)	C	Vinyl chloride	0.283	0.284	0.244	0.244	0.287	0.273	0.275	0.324	0.277	9.30
5)	T	Bromomethane	0.123	0.107	0.093	0.090	0.097	0.097	0.101	0.117	0.103	11.52
6)	T	Chloroethane	0.146	0.128	0.112	0.109	0.123	0.115	0.096	0.112	0.118	12.58
7)	T	Trichlorofluoromethane	0.343	0.303	0.273	0.267	0.316	0.308	0.307	0.295	0.301	7.99
8)	T	Ethyl ether	0.120	0.097	0.115	0.104	0.103	0.107	0.109	0.114	0.108	6.88
10)	T	1,1-Dichloroethene	0.157	0.149	0.150	0.147	0.168	0.163	0.164	0.182	0.160	7.33
11)	T	Carbon disulfide	1.705	0.890	0.613	0.562	0.634	0.608	0.600	0.660	*L	0.9965
12)	T	Freon-113	0.163	0.165	0.146	0.142	0.159	0.160	0.155	0.173	0.158	6.37
14)	T	Acrolein	0.042	0.043	0.045	0.044	0.043	0.047	0.047	0.047	0.045	4.71
15)	T	Methylene chloride	0.384	0.235	0.207	0.203	0.215	0.216	0.210	0.224	*L	0.9986
17)	T	Acetone	0.201	0.070	0.062	0.054	0.057	0.055	0.056	0.054	*L	0.9987
18)	T	trans-1,2-Dichloroethene	0.199	0.195	0.183	0.176	0.199	0.193	0.190	0.207	0.193	5.00
19)	T	Methyl acetate	0.177	0.159	0.174	0.166	0.155	0.161	0.157	0.152	0.163	5.51
20)	T	Methyl tert-butyl ether	0.656	0.585	0.613	0.591	0.586	0.603	0.611	0.627	0.609	3.94
21)	T	tert-Butyl alcohol	0.054	0.036	0.035	0.033	0.032	0.033	0.033	0.034	*L	0.9994
22)	T	Diisopropyl ether	1.167	1.068	1.052	1.041	1.054	1.048	1.020	1.014	1.058	4.50
23)	C	1,1-Dichloroethane	0.585	0.564	0.530	0.515	0.567	0.560	0.546	0.582	0.556	4.39
24)	T	Halothane	0.137	0.131	0.128	0.124	0.143	0.134	0.135	0.147	0.135	5.68
25)	T	Acrylonitrile	0.115	0.105	0.118	0.115	0.115	0.115	0.116	0.113	0.114	3.30
26)	T	Ethyl tert-butyl ether	1.365	1.191	1.187	1.171	1.171	1.186	1.173	1.200	1.206	5.42
27)	T	Vinyl acetate	0.488	0.536	0.589	0.585	0.580	0.583	0.563	0.547	0.559	6.20
28)	T	cis-1,2-Dichloroethene	0.211	0.232	0.214	0.208	0.226	0.227	0.219	0.236	0.222	4.59
29)	T	2,2-Dichloropropane	0.368	0.313	0.304	0.301	0.342	0.337	0.329	0.357	0.331	7.42
30)	T	Bromochloromethane	0.117	0.090	0.091	0.090	0.090	0.090	0.089	0.091	0.094	10.15
31)	T	Cyclohexane	0.724	0.631	0.578	0.575	0.652	0.629	0.604	0.650	0.631	7.61
32)	C	Chloroform	0.465	0.412	0.387	0.382	0.399	0.393	0.389	0.412	0.405	6.57
33)	T	Ethyl acetate		0.598	0.303	0.299	0.250	0.238	0.231	0.222	*L	0.9978
34)	T	Carbon tetrachloride	0.259	0.255	0.247	0.246	0.292	0.280	0.276	0.304	0.270	7.95
35)	T	Tetrahydrofuran	0.142	0.099	0.094	0.089	0.083	0.079	0.079	0.075	*L	0.9973
36)	S	Dibromofluoromethane	0.221	0.224	0.235	0.233	0.227	0.228	0.224	0.219	0.226	2.44
37)	T	1,1,1-Trichloroethane	0.418	0.349	0.309	0.316	0.360	0.343	0.338	0.362	0.349	9.69
39)	T	2-Butanone	0.147	0.114	0.105	0.105	0.109	0.108	0.104	0.093	0.111	14.39
40)	T	1,1-Dichloropropene	0.328	0.270	0.249	0.242	0.275	0.270	0.258	0.281	0.272	9.71
41)	T	Benzene	0.947	0.854	0.792	0.773	0.831	0.815	0.793	0.848	0.832	6.55
42)	T	tert-Amyl methyl ether	0.736	0.617	0.623	0.623	0.614	0.623	0.621	0.638	0.637	6.39
43)	S	1,2-Dichloroethane-d4	0.322	0.325	0.329	0.333	0.335	0.326	0.331	0.334	0.329	1.48
44)	T	1,2-Dichloroethane	0.432	0.417	0.435	0.420	0.418	0.417	0.406	0.415	0.420	2.24

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1628787**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70614-814**
Instrument ID	**: VOA111**	**Ical Ref**	**: ICAL12787**
Calibration dates	**: 08/19/16 10:01 08/19/16 13:00**		

Calibration Files

L1 =V11160819B01.D L2 =V11160819B02.D L3 =V11160819B03.D L4 =V11160819B04.D L5 =V11160819B05.D

L6 =V11160819B06.D L7 =V11160819B07.D L8 =V11160819B08.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
47)	T	Methyl cyclohexane	0.364	0.306	0.289	0.295	0.331	0.325	0.320	0.349	0.323	8.01
48)	T	Trichloroethene	0.254	0.243	0.209	0.204	0.226	0.224	0.216	0.233	0.226	7.44
50)	T	Dibromomethane	0.137	0.135	0.134	0.136	0.132	0.137	0.137	0.144	0.137	2.42
51)	C	1,2-Dichloropropane	0.410	0.359	0.350	0.338	0.352	0.348	0.342	0.358	0.357	6.27
53)	T	2-Chloroethyl vinyl ether	0.213	0.168	0.187	0.197	0.185	0.196	0.197	0.198	0.193	6.80
54)	T	Bromodichloromethane	0.352	0.299	0.307	0.309	0.319	0.316	0.320	0.337	0.320	5.39
57)	T	1,4-Dioxane	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	11.23
58)	T	cis-1,3-Dichloropropene	0.368	0.330	0.354	0.349	0.366	0.370	0.370	0.389	0.362	4.89
59)	I	Chlorobenzene-d5	----------ISTD----------									
60)	S	Toluene-d8	1.353	1.329	1.350	1.397	1.368	1.373	1.371	1.361	1.363	1.47
61)	C	Toluene	0.975	0.807	0.709	0.727	0.783	0.762	0.740	0.764	0.784	10.65
62)	T	4-Methyl-2-pentanone	0.234	0.163	0.189	0.196	0.181	0.184	0.184	0.180	0.189	10.83
63)	T	Tetrachloroethene	0.358	0.280	0.260	0.267	0.298	0.283	0.279	0.293	0.290	10.45
65)	T	trans-1,3-Dichloropropene	0.525	0.439	0.471	0.492	0.481	0.496	0.497	0.498	0.487	5.13
67)	T	Ethyl methacrylate	0.405	0.329	0.376	0.390	0.382	0.395	0.395	0.389	0.383	6.13
68)	T	1,1,2-Trichloroethane	0.313	0.241	0.242	0.242	0.237	0.239	0.237	0.237	0.248	10.62
69)	T	Chlorodibromomethane	0.351	0.279	0.281	0.299	0.302	0.306	0.305	0.309	0.304	7.23
70)	T	1,3-Dichloropropane	0.601	0.463	0.447	0.464	0.450	0.460	0.447	0.446	0.472	11.17
71)	T	1,2-Dibromoethane	0.293	0.260	0.258	0.270	0.262	0.266	0.266	0.269	0.268	4.07
72)	T	2-Hexanone	0.264	0.201	0.237	0.250	0.250	0.247	0.247	0.230	0.241	7.89
73)	T	Chlorobenzene	1.102	0.837	0.777	0.794	0.823	0.826	0.805	0.825	0.849	12.30
74)	C	Ethylbenzene	1.798	1.562	1.395	1.422	1.535	1.509	1.472	1.516	1.526	8.10
75)	T	1,1,1,2-Tetrachloroethane	0.379	0.311	0.255	0.271	0.279	0.273	0.273	0.274	0.289	13.62
76)	T	p/m Xylene	0.700	0.575	0.519	0.537	0.568	0.550	0.523	0.525	0.562	10.60
77)	T	o Xylene	0.683	0.552	0.518	0.533	0.548	0.548	0.523	0.529	0.554	9.70
78)	T	Styrene	1.153	0.876	0.883	0.904	0.922	0.914	0.873	0.872	0.925	10.20
79)	I	1,4-Dichlorobenzene-d4	----------ISTD----------									
80)	T	Bromoform	0.493	0.372	0.414	0.404	0.402	0.422	0.438	0.417	0.420	8.38
82)	T	Isopropylbenzene	3.642	2.877	2.691	2.666	2.980	2.965	3.017	3.046	2.986	10.10
83)	S	4-Bromofluorobenzene	1.047	1.051	1.075	1.083	1.062	1.107	1.139	1.127	1.086	3.19
84)	T	Bromobenzene	0.888	0.687	0.661	0.677	0.682	0.700	0.729	0.724	0.719	10.06
85)	T	n-Propylbenzene	4.607	3.668	3.430	3.405	3.767	3.766	3.817	3.866	3.791	9.81
86)	T	1,4-Dichlorobutane	2.558	1.830	1.968	1.897	1.857	1.903	1.920	1.804	1.967	12.41
87)	T	1,1,2,2-Tetrachloroethane	1.015	0.742	0.729	0.719	0.710	0.735	0.752	0.735	0.767	13.19
88)	T	4-Ethyltoluene	3.851	3.133	2.910	2.839	3.155	3.130	3.142	3.165	3.166	9.58
89)	T	2-Chlorotoluene	3.348	2.730	2.513	2.446	2.634	2.654	2.685	2.682	2.712	10.11
90)	T	1,3,5-Trimethylbenzene	3.205	2.706	2.409	2.351	2.553	2.565	2.539	2.553	2.610	10.08
91)	T	1,2,3-Trichloropropane	0.806	0.583	0.593	0.564	0.555	0.568	0.577	0.552	0.600	14.11
92)	T	trans-1,4-Dichloro-2-b...	0.286	0.277	0.314	0.316	0.311	0.322	0.325	0.309	0.308	5.54
93)	T	4-Chlorotoluene	3.114	2.230	2.255	2.175	2.340	2.362	2.389	2.383	2.406	12.32

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1628787**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70614-814**
Instrument ID	**: VOA111**	**Ical Ref**	**: ICAL12787**
Calibration dates	**: 08/19/16 10:01 08/19/16 13:00**		

Calibration Files
L1 =V11160819B01.D L2 =V11160819B02.D L3 =V11160819B03.D L4 =V11160819B04.D L5 =V11160819B05.D
L6 =V11160819B06.D L7 =V11160819B07.D L8 =V11160819B08.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
94)	T	tert-Butylbenzene	2.541	1.985	1.797	1.751	1.962	1.942	1.942	1.979	1.987	12.08
97)	T	1,2,4-Trimethylbenzene	3.344	2.550	2.446	2.431	2.615	2.627	2.655	2.671	2.667	10.80
98)	T	sec-Butylbenzene	4.116	3.127	2.933	2.857	3.225	3.188	3.204	3.267	3.240	11.82
99)	T	p-Isopropyltoluene	3.043	2.417	2.273	2.214	2.461	2.476	2.501	2.525	2.489	10.04
100)	T	1,3-Dichlorobenzene	1.775	1.286	1.256	1.212	1.297	1.319	1.319	1.304	1.346	13.15
101)	T	1,4-Dichlorobenzene	1.682	1.317	1.263	1.229	1.292	1.303	1.307	1.288	1.335	10.71
102)	T	p-Diethylbenzene	2.025	1.548	1.487	1.431	1.620	1.605	1.624	1.650	1.624	11.00
103)	T	n-Butylbenzene	3.211	2.613	2.574	2.458	2.801	2.780	2.817	2.839	2.762	8.25
104)	T	1,2-Dichlorobenzene	1.644	1.259	1.205	1.186	1.203	1.226	1.252	1.236	1.276	11.81
105)	T	1,2,4,5-Tetramethylben...	3.212	2.548	2.565	2.529	2.698	2.758	2.814	2.814	2.742	8.13
106)	T	1,2-Dibromo-3-chloropr...	0.049	0.091	0.091	0.092	0.092	0.098	0.106	0.102	*L	0.9981
107)	T	1,3,5-Trichlorobenzene	1.360	1.095	1.072	1.015	1.111	1.112	1.128	1.099	1.124	9.03
108)	T	Hexachlorobutadiene	0.601	0.506	0.482	0.464	0.534	0.532	0.532	0.541	0.524	7.96
109)	T	1,2,4-Trichlorobenzene	1.065	0.936	0.916	0.872	0.920	0.938	0.928	0.896	0.934	6.14
110)	T	Naphthalene	2.608	1.993	1.988	1.946	1.918	1.983	2.070	1.997	2.063	10.88
111)	T	1,2,3-Trichlorobenzene	1.167	0.889	0.833	0.816	0.847	0.866	0.882	0.847	0.893	12.69

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628787	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814	
Instrument ID	: VOA111	Calibration Date	: 09/14/16 08:07	
Lab File ID	: V11160914A02	Init. Calib. Date(s)	: 08/19/16	08/19/16
Sample No	: WG931857-2	Init. Calib. Times	: 10:01	13:00
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	63	0
Dichlorodifluoromethane	0.16	0.215	-	-34.4*	20	99	0
Chloromethane	20	20.424	-	-2.1	20	70	0
Vinyl chloride	0.277	0.327	-	-18.1	20	85	0
Bromomethane	0.103	0.15	-	-45.6*	20	102	0
Chloroethane	0.118	0.148	-	-25.4*	20	83	0
Trichlorofluoromethane	0.301	0.445	-	-47.8*	20	103	0
Ethyl ether	0.108	0.118	-	-9.3	20	65	0
1,1-Dichloroethene	0.16	0.202	-	-26.3*	20	85	0
Carbon disulfide	20	22.857	-	-14.3	20	78	0
Freon-113	0.158	0.199	-	-25.9*	20	86	0
Acrolein	0.045	0.044	-	2.2	20	62	0
Methylene chloride	20	22.863	-	-14.3	20	77	0
Acetone	20	17.693	-	11.5	20	56	0
trans-1,2-Dichloroethene	0.193	0.231	-	-19.7	20	80	0
Methyl acetate	0.163	0.152	-	6.7	20	55	0
Methyl tert-butyl ether	0.609	0.701	-	-15.1	20	72	0
tert-Butyl alcohol	100	88.5	-	11.5	20	55	0
Diisopropyl ether	1.058	1.092	-	-3.2	20	66	0
1,1-Dichloroethane	0.556	0.663	-	-19.2	20	79	0
Halothane	0.135	0.148	-	-9.6	20	73	0
Acrylonitrile	0.114	0.111	-	2.6	20	60	0
Ethyl tert-butyl ether	1.206	1.291	-	-7	20	69	0
Vinyl acetate	0.559	0.556	-	0.5	20	60	0
cis-1,2-Dichloroethene	0.222	0.26	-	-17.1	20	77	0
2,2-Dichloropropane	0.331	0.463	-	-39.9*	20	97	0
Bromochloromethane	0.094	0.112	-	-19.1	20	78	0
Cyclohexane	0.631	0.713	-	-13	20	78	0
Chloroform	0.405	0.52	-	-28.4*	20	85	0
Ethyl acetate	20	11.705	-	41.5*	20	44	0
Carbon tetrachloride	0.27	0.415	-	-53.7*	20	106	0
Tetrahydrofuran	20	18.512	-	7.4	20	51	0
Dibromofluoromethane	0.226	0.265	-	-17.3	20	71	0
1,1,1-Trichloroethane	0.349	0.499	-	-43*	20	102	0
2-Butanone	0.111	0.1	-	9.9	20	60	0
1,1-Dichloropropene	0.272	0.326	-	-19.9	20	83	0
Benzene	0.832	0.927	-	-11.4	20	74	0
tert-Amyl methyl ether	0.637	0.694	-	-8.9	20	71	0
1,2-Dichloroethane-d4	0.329	0.385	-	-17	20	74	0
1,2-Dichloroethane	0.42	0.518	-	-23.3*	20	75	0
Methyl cyclohexane	0.323	0.379	-	-17.3	20	83	0
Trichloroethene	0.226	0.273	-	-20.8*	20	83	0
Dibromomethane	0.137	0.157	-	-14.6	20	74	-.01
1,2-Dichloropropane	0.357	0.386	-	-8.1	20	70	0
2-Chloroethyl vinyl ether	0.193	0.183	-	5.2	20	62	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628787	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814	
Instrument ID	: VOA111	Calibration Date	: 09/14/16 08:07	
Lab File ID	: V11160914A02	Init. Calib. Date(s)	: 08/19/16	08/19/16
Sample No	: WG931857-2	Init. Calib. Times	: 10:01	13:00
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Bromodichloromethane	0.32	0.399	-	-24.7*	20	82	0
1,4-Dioxane	0.00224	0.00207	-	7.6	20	59	0
cis-1,3-Dichloropropene	0.362	0.415	-	-14.6	20	74	0
Chlorobenzene-d5	1	1	-	0	20	70	0
Toluene-d8	1.363	1.308	-	4	20	68	0
Toluene	0.784	0.805	-	-2.7	20	79	0
4-Methyl-2-pentanone	0.189	0.159	-	15.9	20	59	0
Tetrachloroethene	0.29	0.33	-	-13.8	20	89	0
trans-1,3-Dichloropropene	0.487	0.502	-	-3.1	20	74	0
Ethyl methacrylate	0.383	0.339	-	11.5	20	63	0
1,1,2-Trichloroethane	0.248	0.221	-	10.9	20	64	0
Chlorodibromomethane	0.304	0.319	-	-4.9	20	79	0
1,3-Dichloropropane	0.472	0.446	-	5.5	20	70	0
1,2-Dibromoethane	0.268	0.262	-	2.2	20	71	-.01
2-Hexanone	0.241	0.195	-	19.1	20	57	0
Chlorobenzene	0.849	0.866	-	-2	20	78	0
Ethylbenzene	1.526	1.635	-	-7.1	20	82	0
1,1,1,2-Tetrachloroethane	0.289	0.307	-	-6.2	20	84	0
p/m Xylene	0.562	0.602	-	-7.1	20	81	0
o Xylene	0.554	0.587	-	-6	20	79	0
Styrene	0.925	0.981	-	-6.1	20	78	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	77	0
Bromoform	0.42	0.408	-	2.9	20	76	0
Isopropylbenzene	2.986	2.92	-	2.2	20	84	0
4-Bromofluorobenzene	1.086	1.059	-	2.5	20	76	0
Bromobenzene	0.719	0.69	-	4	20	80	0
n-Propylbenzene	3.791	3.64	-	4	20	82	0
1,4-Dichlorobutane	1.967	1.629	-	17.2	20	64	0
1,1,2,2-Tetrachloroethane	0.767	0.573	-	25.3*	20	61	0
4-Ethyltoluene	3.166	3.004	-	5.1	20	80	0
2-Chlorotoluene	2.712	2.674	-	1.4	20	82	0
1,3,5-Trimethylbenzene	2.61	2.603	-	0.3	20	83	0
1,2,3-Trichloropropane	0.6	0.491	-	18.2	20	64	0
trans-1,4-Dichloro-2-buten	0.308	0.257	-	16.6	20	63	0
4-Chlorotoluene	2.406	2.351	-	2.3	20	80	0
tert-Butylbenzene	1.987	1.973	-	0.7	20	85	0
1,2,4-Trimethylbenzene	2.667	2.648	-	0.7	20	83	0
sec-Butylbenzene	3.24	3.103	-	4.2	20	82	0
p-Isopropyltoluene	2.489	2.451	-	1.5	20	83	0
1,3-Dichlorobenzene	1.346	1.283	-	4.7	20	79	0
1,4-Dichlorobenzene	1.335	1.328	-	0.5	20	81	0
p-Diethylbenzene	1.624	1.552	-	4.4	20	80	0
n-Butylbenzene	2.762	2.702	-	2.2	20	81	0
1,2-Dichlorobenzene	1.276	1.214	-	4.9	20	78	0
1,2,4,5-Tetramethylbenzene	2.742	2.604	-	5	20	78	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814	
Instrument ID	: VOA111	**Calibration Date**	: 09/14/16 08:07	
Lab File ID	: V11160914A02	**Init. Calib. Date(s)**	: 08/19/16	08/19/16
Sample No	: WG931857-2	**Init. Calib. Times**	: 10:01	13:00
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dibromo-3-chloropropan	20	16.739	-	16.3	20	69	0
1,3,5-Trichlorobenzene	1.124	1.155	-	-2.8	20	83	0
Hexachlorobutadiene	0.524	0.611	-	-16.6	20	98	0
1,2,4-Trichlorobenzene	0.934	0.923	-	1.2	20	78	0
Naphthalene	2.063	1.669	-	19.1	20	65	0
1,2,3-Trichlorobenzene	0.893	0.849	-	4.9	20	79	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628787	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814	
Instrument ID	: VOA111	Calibration Date	: 09/14/16 08:07	
Lab File ID	: V11160914A02	Init. Calib. Date(s)	: 08/19/16	08/19/16
Sample No	: WG931936-2	Init. Calib. Times	: 10:01	13:00
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	63	0
Dichlorodifluoromethane	0.16	0.215	-	-34.4*	20	99	0
Chloromethane	20	20.424	-	-2.1	20	70	0
Vinyl chloride	0.277	0.327	-	-18.1	20	85	0
Bromomethane	0.103	0.15	-	-45.6*	20	102	0
Chloroethane	0.118	0.148	-	-25.4*	20	83	0
Trichlorofluoromethane	0.301	0.445	-	-47.8*	20	103	0
Ethyl ether	0.108	0.118	-	-9.3	20	65	0
1,1-Dichloroethene	0.16	0.202	-	-26.3*	20	85	0
Carbon disulfide	20	22.857	-	-14.3	20	78	0
Freon-113	0.158	0.199	-	-25.9*	20	86	0
Acrolein	0.045	0.044	-	2.2	20	62	0
Methylene chloride	20	22.863	-	-14.3	20	77	0
Acetone	20	17.693	-	11.5	20	56	0
trans-1,2-Dichloroethene	0.193	0.231	-	-19.7	20	80	0
Methyl acetate	0.163	0.152	-	6.7	20	55	0
Methyl tert-butyl ether	0.609	0.701	-	-15.1	20	72	0
tert-Butyl alcohol	100	88.5	-	11.5	20	55	0
Diisopropyl ether	1.058	1.092	-	-3.2	20	66	0
1,1-Dichloroethane	0.556	0.663	-	-19.2	20	79	0
Halothane	0.135	0.148	-	-9.6	20	73	0
Acrylonitrile	0.114	0.111	-	2.6	20	60	0
Ethyl tert-butyl ether	1.206	1.291	-	-7	20	69	0
Vinyl acetate	0.559	0.556	-	0.5	20	60	0
cis-1,2-Dichloroethene	0.222	0.26	-	-17.1	20	77	0
2,2-Dichloropropane	0.331	0.463	-	-39.9*	20	97	0
Bromochloromethane	0.094	0.112	-	-19.1	20	78	0
Cyclohexane	0.631	0.713	-	-13	20	78	0
Chloroform	0.405	0.52	-	-28.4*	20	85	0
Ethyl acetate	20	11.705	-	41.5*	20	44	0
Carbon tetrachloride	0.27	0.415	-	-53.7*	20	106	0
Tetrahydrofuran	20	18.512	-	7.4	20	51	0
Dibromofluoromethane	0.226	0.265	-	-17.3	20	71	0
1,1,1-Trichloroethane	0.349	0.499	-	-43*	20	102	0
2-Butanone	0.111	0.1	-	9.9	20	60	0
1,1-Dichloropropene	0.272	0.326	-	-19.9	20	83	0
Benzene	0.832	0.927	-	-11.4	20	74	0
tert-Amyl methyl ether	0.637	0.694	-	-8.9	20	71	0
1,2-Dichloroethane-d4	0.329	0.385	-	-17	20	74	0
1,2-Dichloroethane	0.42	0.518	-	-23.3*	20	75	0
Methyl cyclohexane	0.323	0.379	-	-17.3	20	83	0
Trichloroethene	0.226	0.273	-	-20.8*	20	83	0
Dibromomethane	0.137	0.157	-	-14.6	20	74	-.01
1,2-Dichloropropane	0.357	0.386	-	-8.1	20	70	0
2-Chloroethyl vinyl ether	0.193	0.183	-	5.2	20	62	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628787	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814	
Instrument ID	: VOA111	Calibration Date	: 09/14/16 08:07	
Lab File ID	: V11160914A02	Init. Calib. Date(s)	: 08/19/16	08/19/16
Sample No	: WG931936-2	Init. Calib. Times	: 10:01	13:00
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Bromodichloromethane	0.32	0.399	-	-24.7*	20	82	0
1,4-Dioxane	0.00224	0.00207	-	7.6	20	59	0
cis-1,3-Dichloropropene	0.362	0.415	-	-14.6	20	74	0
Chlorobenzene-d5	1	1	-	0	20	70	0
Toluene-d8	1.363	1.308	-	4	20	68	0
Toluene	0.784	0.805	-	-2.7	20	79	0
4-Methyl-2-pentanone	0.189	0.159	-	15.9	20	59	0
Tetrachloroethene	0.29	0.33	-	-13.8	20	89	0
trans-1,3-Dichloropropene	0.487	0.502	-	-3.1	20	74	0
Ethyl methacrylate	0.383	0.339	-	11.5	20	63	0
1,1,2-Trichloroethane	0.248	0.221	-	10.9	20	64	0
Chlorodibromomethane	0.304	0.319	-	-4.9	20	79	0
1,3-Dichloropropane	0.472	0.446	-	5.5	20	70	0
1,2-Dibromoethane	0.268	0.262	-	2.2	20	71	-.01
2-Hexanone	0.241	0.195	-	19.1	20	57	0
Chlorobenzene	0.849	0.866	-	-2	20	78	0
Ethylbenzene	1.526	1.635	-	-7.1	20	82	0
1,1,1,2-Tetrachloroethane	0.289	0.307	-	-6.2	20	84	0
p/m Xylene	0.562	0.602	-	-7.1	20	81	0
o Xylene	0.554	0.587	-	-6	20	79	0
Styrene	0.925	0.981	-	-6.1	20	78	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	77	0
Bromoform	0.42	0.408	-	2.9	20	76	0
Isopropylbenzene	2.986	2.92	-	2.2	20	84	0
4-Bromofluorobenzene	1.086	1.059	-	2.5	20	76	0
Bromobenzene	0.719	0.69	-	4	20	80	0
n-Propylbenzene	3.791	3.64	-	4	20	82	0
1,4-Dichlorobutane	1.967	1.629	-	17.2	20	64	0
1,1,2,2-Tetrachloroethane	0.767	0.573	-	25.3*	20	61	0
4-Ethyltoluene	3.166	3.004	-	5.1	20	80	0
2-Chlorotoluene	2.712	2.674	-	1.4	20	82	0
1,3,5-Trimethylbenzene	2.61	2.603	-	0.3	20	83	0
1,2,3-Trichloropropane	0.6	0.491	-	18.2	20	64	0
trans-1,4-Dichloro-2-buten	0.308	0.257	-	16.6	20	63	0
4-Chlorotoluene	2.406	2.351	-	2.3	20	80	0
tert-Butylbenzene	1.987	1.973	-	0.7	20	85	0
1,2,4-Trimethylbenzene	2.667	2.648	-	0.7	20	83	0
sec-Butylbenzene	3.24	3.103	-	4.2	20	82	0
p-Isopropyltoluene	2.489	2.451	-	1.5	20	83	0
1,3-Dichlorobenzene	1.346	1.283	-	4.7	20	79	0
1,4-Dichlorobenzene	1.335	1.328	-	0.5	20	81	0
p-Diethylbenzene	1.624	1.552	-	4.4	20	80	0
n-Butylbenzene	2.762	2.702	-	2.2	20	81	0
1,2-Dichlorobenzene	1.276	1.214	-	4.9	20	78	0
1,2,4,5-Tetramethylbenzene	2.742	2.604	-	5	20	78	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814	
Instrument ID	: VOA111	**Calibration Date**	: 09/14/16 08:07	
Lab File ID	: V11160914A02	**Init. Calib. Date(s)**	: 08/19/16	08/19/16
Sample No	: WG931936-2	**Init. Calib. Times**	: 10:01	13:00
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dibromo-3-chloropropan	20	16.739	-	16.3	20	69	0
1,3,5-Trichlorobenzene	1.124	1.155	-	-2.8	20	83	0
Hexachlorobutadiene	0.524	0.611	-	-16.6	20	98	0
1,2,4-Trichlorobenzene	0.934	0.923	-	1.2	20	78	0
Naphthalene	2.063	1.669	-	19.1	20	65	0
1,2,3-Trichlorobenzene	0.893	0.849	-	4.9	20	79	0

* Value outside of QC limits.

Surrogate Summary

Form 2
Surrogate Recovery
VOLATILES

Client: Haley & Aldrich, Inc.
Project Name: EWING TOWNSHIP INDUSTRIAL LAND

Lab Number: L1628787
Project Number: 70614-814
Matrix:

CLIENT ID (LAB SAMPLE NO.)	SMC1 TOL	SMC2 BFB	SMC3 DCA	SMC4 DBFM	TOT OUT
4479-091316-0915 (L1628787-02)	100	107	114	115	0
4479-091316-0940 (L1628787-04)	97	106	127	117	0
4479-091316-1010 (L1628787-05)	99	112	122	120	0
4479-091316-1225 (L1628787-09)	99	103	129	119	0
4479-091316-1435 (L1628787-11)	96	100	128	119	0
4479-091316-1500 (L1628787-12)	95	100	127	123	0
4479-091316-1525 (L1628787-13)	95	97	125	117	0
WG931857-4LCSD	95	101	117	113	0
WG931857-3LCS	96	98	117	117	0
WG931857-5BLANK	95	103	118	116	0
4479-091316-0850 (L1628787-01)	97	104	123	113	0
4479-091316-0930 (L1628787-03)	96	101	115	110	0
4479-091316-1410 (L1628787-10)	97	100	116	114	0
WG931936-4LCSD	95	101	117	113	0
WG931936-3LCS	96	98	117	117	0
WG931936-5BLANK	95	103	118	116	0

	QC LIMITS
TOL = TOLUENE-D8	(70-130)
BFB = 4-BROMOFLUOROBENZENE	(70-130)
DCA = 1,2-DICHLOROETHANE-D4	(70-130)
DBFM = DIBROMOFLUOROMETHANE)	(70-130)

* Values outside of QC limits

FORM II

Batch QC Summary

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1628787	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70614-814	
Matrix	: SOIL				
LCS Sample ID	: WG931857-3	**Analysis Date :** 09/14/16 08:07	**File ID**	: V11160914A02	
LCSD Sample ID	: WG931857-4	**Analysis Date :** 09/14/16 08:58	**File ID**	: V11160914A04	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,2-Dibromo-3-chloropropane	0.02	0.017	84	0.02	0.019	96	13	40-160	30
1,4-Dioxane	1	0.92	92	1	0.86	86	7	40-160	30
1,2-Dibromoethane	0.02	0.020	98	0.02	0.018	93	5	70-130	30
Methylene chloride	0.02	0.023	114	0.02	0.020	102	11	70-130	30
1,1-Dichloroethane	0.02	0.024	119	0.02	0.021	106	12	70-130	30
Chloroform	0.02	0.026	129	0.02	0.024	119	8	70-130	30
Carbon tetrachloride	0.02	0.031	154 Q	0.02	0.026	127	19	70-130	30
1,2-Dichloropropane	0.02	0.022	108	0.02	0.019	97	11	70-130	30
Dibromochloromethane	0.02	0.021	105	0.02	0.021	107	2	70-130	30
1,1,2-Trichloroethane	0.02	0.018	89	0.02	0.017	84	6	70-130	30
2-Chloroethylvinyl ether	0.02	0.019	95	0.02	0.020	98	3	40-160	30
Tetrachloroethene	0.02	0.023	114	0.02	0.021	104	9	70-130	30
Chlorobenzene	0.02	0.020	102	0.02	0.018	92	10	70-130	30
Trichlorofluoromethane	0.02	0.030	148	0.02	0.024	118	23	40-160	30
1,2-Dichloroethane	0.02	0.025	123	0.02	0.024	120	2	70-130	30
1,1,1-Trichloroethane	0.02	0.029	143 Q	0.02	0.025	124	14	70-130	30
Bromodichloromethane	0.02	0.025	125	0.02	0.024	120	4	70-130	30
trans-1,3-Dichloropropene	0.02	0.021	103	0.02	0.020	100	3	70-130	30
cis-1,3-Dichloropropene	0.02	0.023	115	0.02	0.022	110	4	40-160	30
1,1-Dichloropropene	0.02	0.024	120	0.02	0.020	102	16	70-130	30
Bromoform	0.02	0.019	97	0.02	0.019	97	0	40-160	30
1,1,2,2-Tetrachloroethane	0.02	0.015	75	0.02	0.015	77	3	40-160	30
Benzene	0.02	0.022	111	0.02	0.020	102	8	70-130	30
Toluene	0.02	0.020	103	0.02	0.019	94	9	70-130	30
Ethylbenzene	0.02	0.021	107	0.02	0.019	97	10	70-130	30
Chloromethane	0.02	0.020	102	0.02	0.018	90	13	40-160	30
Bromomethane	0.02	0.029	145	0.02	0.025	126	14	40-160	30
Vinyl chloride	0.02	0.024	118	0.02	0.020	98	19	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Matrix	: SOIL		
LCS Sample ID	: WG931857-3 **Analysis Date :** 09/14/16 08:07	**File ID**	: V11160914A02
LCSD Sample ID	: WG931857-4 **Analysis Date :** 09/14/16 08:58	**File ID**	: V11160914A04

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
Chloroethane	0.02	0.025	126	0.02	0.022	111	13	40-160	30
1,1-Dichloroethene	0.02	0.025	126	0.02	0.021	105	18	70-130	30
trans-1,2-Dichloroethene	0.02	0.024	120	0.02	0.021	104	14	70-130	30
Trichloroethene	0.02	0.024	121	0.02	0.021	105	14	70-130	30
1,2-Dichlorobenzene	0.02	0.019	95	0.02	0.019	93	2	70-130	30
1,3-Dichlorobenzene	0.02	0.019	95	0.02	0.019	95	0	70-130	30
1,4-Dichlorobenzene	0.02	0.020	99	0.02	0.019	94	5	70-130	30
Methyl tert butyl ether	0.02	0.023	115	0.02	0.022	110	4	70-130	30
p/m-Xylene	0.04	0.043	107	0.04	0.039	97	10	70-130	30
o-Xylene	0.04	0.042	106	0.04	0.038	96	10	70-130	30
cis-1,2-Dichloroethene	0.02	0.024	118	0.02	0.022	108	9	70-130	30
Dibromomethane	0.02	0.023	115	0.02	0.022	109	5	70-130	30
1,4-Dichlorobutane	0.02	0.017	83	0.02	0.016	82	1	70-130	30
1,2,3-Trichloropropane	0.02	0.016	82	0.02	0.017	86	5	70-130	30
Styrene	0.04	0.042	106	0.04	0.039	98	8	40-160	30
Dichlorodifluoromethane	0.02	0.027	134	0.02	0.022	109	21	40-160	30
Acetone	0.02	0.018	88	0.02	0.017	84	5	40-160	30
Carbon disulfide	0.02	0.023	114	0.02	0.019	94	19	40-160	30
2-Butanone	0.02	0.018	90	0.02	0.018	91	1	40-160	30
Vinyl acetate	0.02	0.020	100	0.02	0.020	98	2	70-130	30
4-Methyl-2-pentanone	0.02	0.017	84	0.02	0.017	83	1	40-160	30
2-Hexanone	0.02	0.016	81	0.02	0.016	80	1	40-160	30
Ethyl methacrylate	0.02	0.018	89	0.02	0.017	87	2	70-130	30
Acrolein	0.02	0.020	99	0.02	0.022	112	12	40-160	30
Acrylonitrile	0.02	0.020	98	0.02	0.019	95	3	70-130	30
Bromochloromethane	0.02	0.024	120	0.02	0.021	104	14	70-130	30
Tetrahydrofuran	0.02	0.018	93	0.02	0.019	95	2	70-130	30
2,2-Dichloropropane	0.02	0.028	140	0.02	0.025	124	12	40-160	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1628787	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70614-814	
Matrix	: SOIL				
LCS Sample ID	: WG931857-3	**Analysis Date :** 09/14/16 08:07	**File ID**	: V11160914A02	
LCSD Sample ID	: WG931857-4	**Analysis Date :** 09/14/16 08:58	**File ID**	: V11160914A04	

	Laboratory Control Sample				Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R		True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,3-Dichloropropane	0.02	0.019	94		0.02	0.018	90	4	70-130	30
1,1,1,2-Tetrachloroethane	0.02	0.021	106		0.02	0.021	103	3	70-130	30
Bromobenzene	0.02	0.019	96		0.02	0.018	91	5	70-130	30
n-Butylbenzene	0.02	0.020	98		0.02	0.018	91	7	70-130	30
sec-Butylbenzene	0.02	0.019	96		0.02	0.018	88	9	70-130	30
tert-Butylbenzene	0.02	0.020	99		0.02	0.019	94	5	70-130	30
o-Chlorotoluene	0.02	0.020	99		0.02	0.018	92	7	70-130	30
p-Chlorotoluene	0.02	0.020	98		0.02	0.019	93	5	70-130	30
Hexachlorobutadiene	0.02	0.023	116		0.02	0.021	105	10	70-130	30
Isopropylbenzene	0.02	0.020	98		0.02	0.018	91	7	70-130	30
p-Isopropyltoluene	0.02	0.020	98		0.02	0.018	92	6	70-130	30
Naphthalene	0.02	0.016	81		0.02	0.017	83	2	40-160	30
n-Propylbenzene	0.02	0.019	96		0.02	0.017	87	10	70-130	30
1,2,3-Trichlorobenzene	0.02	0.019	95		0.02	0.019	94	1	70-130	30
1,2,4-Trichlorobenzene	0.02	0.020	99		0.02	0.020	98	1	70-130	30
1,3,5-Trimethylbenzene	0.02	0.020	100		0.02	0.019	95	5	70-130	30
1,2,4-Trimethylbenzene	0.02	0.020	99		0.02	0.019	94	5	70-130	30
trans-1,4-Dichloro-2-butene	0.02	0.017	84		0.02	0.018	89	6	70-130	30
Ethyl ether	0.02	0.022	109		0.02	0.020	99	10	70-130	30
Methyl Acetate	0.02	0.019	93		0.02	0.018	88	6	70-130	30
Ethyl Acetate	0.02	0.012	58	Q	0.02	0.012	61	Q 5	70-130	30
Isopropyl Ether	0.02	0.021	103		0.02	0.019	94	9	70-130	30
Cyclohexane	0.02	0.023	113		0.02	0.018	92	20	70-130	30
tert-Butyl Alcohol	0.1	0.088	88		0.1	0.089	89	1	40-160	30
Ethyl-Tert-Butyl-Ether	0.02	0.021	107		0.02	0.020	102	5	70-130	30
Tertiary-Amyl Methyl Ether	0.02	0.022	109		0.02	0.021	105	4	70-130	30
Methyl cyclohexane	0.02	0.024	117		0.02	0.018	92	24	70-130	30
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.02	0.025	126		0.02	0.020	101	22	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1628787	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70614-814	
Matrix	: SOIL				
LCS Sample ID	: WG931857-3	**Analysis Date :** 09/14/16 08:07	**File ID**	: V11160914A02	
LCSD Sample ID	: WG931857-4	**Analysis Date :** 09/14/16 08:58	**File ID**	: V11160914A04	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,2,4,5-Tetramethylbenzene	0.02	0.019	95	0.02	0.018	90	5	70-130	30
1,4-Diethylbenzene	0.02	0.019	96	0.02	0.017	86	11	70-130	30
4-Ethyltoluene	0.02	0.019	95	0.02	0.017	86	10	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Matrix	: SOIL		
LCS Sample ID	: WG931936-3 **Analysis Date :** 09/14/16 08:07	**File ID**	: V11160914A02
LCSD Sample ID	: WG931936-4 **Analysis Date :** 09/14/16 08:58	**File ID**	: V11160914A04

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,2-Dibromo-3-chloropropane	1	0.84	84	1	0.96	96	13	40-160	30
1,4-Dioxane	50	46.	92	50	43.	86	7	40-160	30
1,2-Dibromoethane	1	0.98	98	1	0.93	93	5	70-130	30
Methylene chloride	1	1.1	114	1	1.0	102	11	70-130	30
1,1-Dichloroethane	1	1.2	119	1	1.1	106	12	70-130	30
Chloroform	1	1.3	129	1	1.2	119	8	70-130	30
Carbon tetrachloride	1	1.5	154 Q	1	1.3	127	19	70-130	30
1,2-Dichloropropane	1	1.1	108	1	0.97	97	11	70-130	30
Dibromochloromethane	1	1.0	105	1	1.1	107	2	70-130	30
1,1,2-Trichloroethane	1	0.89	89	1	0.84	84	6	70-130	30
2-Chloroethylvinyl ether	1	0.95	95	1	0.98	98	3	40-160	30
Tetrachloroethene	1	1.1	114	1	1.0	104	9	70-130	30
Chlorobenzene	1	1.0	102	1	0.92	92	10	70-130	30
Trichlorofluoromethane	1	1.5	148	1	1.2	118	23	40-160	30
1,2-Dichloroethane	1	1.2	123	1	1.2	120	2	70-130	30
1,1,1-Trichloroethane	1	1.4	143 Q	1	1.2	124	14	70-130	30
Bromodichloromethane	1	1.2	125	1	1.2	120	4	70-130	30
trans-1,3-Dichloropropene	1	1.0	103	1	1.0	100	3	70-130	30
cis-1,3-Dichloropropene	1	1.2	115	1	1.1	110	4	40-160	30
1,1-Dichloropropene	1	1.2	120	1	1.0	102	16	70-130	30
Bromoform	1	0.97	97	1	0.97	97	0	40-160	30
1,1,2,2-Tetrachloroethane	1	0.75	75	1	0.77	77	3	40-160	30
Benzene	1	1.1	111	1	1.0	102	8	70-130	30
Toluene	1	1.0	103	1	0.94	94	9	70-130	30
Ethylbenzene	1	1.1	107	1	0.97	97	10	70-130	30
Chloromethane	1	1.0	102	1	0.90	90	13	40-160	30
Bromomethane	1	1.4	145	1	1.3	126	14	40-160	30
Vinyl chloride	1	1.2	118	1	0.98	98	19	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		Lab Number	: L1628787	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		Project Number	: 70614-814	
Matrix	: SOIL				
LCS Sample ID	: WG931936-3	Analysis Date : 09/14/16 08:07	File ID	: V11160914A02	
LCSD Sample ID	: WG931936-4	Analysis Date : 09/14/16 08:58	File ID	: V11160914A04	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
Chloroethane	1	1.3	126	1	1.1	111	13	40-160	30
1,1-Dichloroethene	1	1.3	126	1	1.0	105	18	70-130	30
trans-1,2-Dichloroethene	1	1.2	120	1	1.0	104	14	70-130	30
Trichloroethene	1	1.2	121	1	1.0	105	14	70-130	30
1,2-Dichlorobenzene	1	0.95	95	1	0.93	93	2	70-130	30
1,3-Dichlorobenzene	1	0.95	95	1	0.95	95	0	70-130	30
1,4-Dichlorobenzene	1	0.99	99	1	0.94	94	5	70-130	30
Methyl tert butyl ether	1	1.2	115	1	1.1	110	4	70-130	30
p/m-Xylene	2	2.1	107	2	1.9	97	10	70-130	30
o-Xylene	2	2.1	106	2	1.9	96	10	70-130	30
cis-1,2-Dichloroethene	1	1.2	118	1	1.1	108	9	70-130	30
Dibromomethane	1	1.2	115	1	1.1	109	5	70-130	30
1,4-Dichlorobutane	1	0.83	83	1	0.82	82	1	70-130	30
1,2,3-Trichloropropane	1	0.82	82	1	0.86	86	5	70-130	30
Styrene	2	2.1	106	2	2.0	98	8	40-160	30
Dichlorodifluoromethane	1	1.3	134	1	1.1	109	21	40-160	30
Acetone	1	0.88	88	1	0.84	84	5	40-160	30
Carbon disulfide	1	1.1	114	1	0.94	94	19	40-160	30
2-Butanone	1	0.90	90	1	0.91	91	1	40-160	30
Vinyl acetate	1	1.0	100	1	0.98	98	2	70-130	30
4-Methyl-2-pentanone	1	0.84	84	1	0.83	83	1	40-160	30
2-Hexanone	1	0.81	81	1	0.80	80	1	40-160	30
Ethyl methacrylate	1	0.89	89	1	0.87	87	2	70-130	30
Acrolein	1	0.99	99	1	1.1	112	12	40-160	30
Acrylonitrile	1	0.98	98	1	0.95	95	3	70-130	30
Bromochloromethane	1	1.2	120	1	1.0	104	14	70-130	30
Tetrahydrofuran	1	0.93	93	1	0.95	95	2	70-130	30
2,2-Dichloropropane	1	1.4	140	1	1.2	124	12	40-160	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1628787	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70614-814	
Matrix	: SOIL				
LCS Sample ID	: WG931936-3	**Analysis Date :** 09/14/16 08:07	**File ID**	: V11160914A02	
LCSD Sample ID	: WG931936-4	**Analysis Date :** 09/14/16 08:58	**File ID**	: V11160914A04	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,3-Dichloropropane	1	0.94	94	1	0.90	90	4	70-130	30
1,1,1,2-Tetrachloroethane	1	1.1	106	1	1.0	103	3	70-130	30
Bromobenzene	1	0.96	96	1	0.91	91	5	70-130	30
n-Butylbenzene	1	0.98	98	1	0.91	91	7	70-130	30
sec-Butylbenzene	1	0.96	96	1	0.88	88	9	70-130	30
tert-Butylbenzene	1	0.99	99	1	0.94	94	5	70-130	30
o-Chlorotoluene	1	0.99	99	1	0.92	92	7	70-130	30
p-Chlorotoluene	1	0.98	98	1	0.93	93	5	70-130	30
Hexachlorobutadiene	1	1.2	116	1	1.0	105	10	70-130	30
Isopropylbenzene	1	0.98	98	1	0.91	91	7	70-130	30
p-Isopropyltoluene	1	0.98	98	1	0.92	92	6	70-130	30
Naphthalene	1	0.81	81	1	0.83	83	2	40-160	30
n-Propylbenzene	1	0.96	96	1	0.87	87	10	70-130	30
1,2,3-Trichlorobenzene	1	0.95	95	1	0.94	94	1	70-130	30
1,2,4-Trichlorobenzene	1	0.99	99	1	0.98	98	1	70-130	30
1,3,5-Trimethylbenzene	1	1.0	100	1	0.95	95	5	70-130	30
1,2,4-Trimethylbenzene	1	0.99	99	1	0.94	94	5	70-130	30
trans-1,4-Dichloro-2-butene	1	0.84	84	1	0.89	89	6	70-130	30
Ethyl ether	1	1.1	109	1	0.99	99	10	70-130	30
Methyl Acetate	1	0.93	93	1	0.88	88	6	70-130	30
Ethyl Acetate	1	0.58	58 Q	1	0.61	61 Q	5	70-130	30
Isopropyl Ether	1	1.0	103	1	0.94	94	9	70-130	30
Cyclohexane	1	1.1	113	1	0.92	92	20	70-130	30
tert-Butyl Alcohol	5	4.4	88	5	4.5	89	1	40-160	30
Ethyl-Tert-Butyl-Ether	1	1.1	107	1	1.0	102	5	70-130	30
Tertiary-Amyl Methyl Ether	1	1.1	109	1	1.0	105	4	70-130	30
Methyl cyclohexane	1	1.2	117	1	0.92	92	24	70-130	30
1,1,2-Trichloro-1,2,2-Trifluoroethane	1	1.3	126	1	1.0	101	22	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1628787	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70614-814	
Matrix	: SOIL				
LCS Sample ID	: WG931936-3	**Analysis Date :** 09/14/16 08:07	**File ID**	: V11160914A02	
LCSD Sample ID	: WG931936-4	**Analysis Date :** 09/14/16 08:58	**File ID**	: V11160914A04	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,2,4,5-Tetramethylbenzene	1	0.95	95	1	0.90	90	5	70-130	30
1,4-Diethylbenzene	1	0.96	96	1	0.86	86	11	70-130	30
4-Ethyltoluene	1	0.95	95	1	0.86	86	10	70-130	30

Internal Standard Summary

Internal Standard Area and RT Summary
Form 8

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: VOA111	**Analysis Date**	: 09/14/16 08:07
Sample No	: WG931857-2	**Lab File ID**	: V11160914A02

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG931857-2	144511	5.79	111926	9.28	58934	12.05
Upper Limit	289022	6.29	223852	9.78	117868	12.55
Lower Limit	72256	5.29	55963	8.78	29467	11.55
Sample ID						
WG931857-3 LCS	144511	5.79	111926	9.28	58934	12.05
WG931857-4 LCSD	141468	5.79	108635	9.28	56182	12.05
WG931857-5 BLANK	136135	5.79	107179	9.28	51549	12.05
4479-091316-0915	129617	5.79	94038	9.28	45642	12.05
4479-091316-0940	125105	5.79	96796	9.28	44536	12.05
4479-091316-1010	120851	5.79	90876	9.28	38018	12.05
4479-091316-1225	119946	5.79	91740	9.29	42498	12.06
4479-091316-1435	121506	5.79	94119	9.28	47270	12.05
4479-091316-1500	120566	5.79	95527	9.29	47224	12.05
4479-091316-1525	120256	5.79	94085	9.28	47641	12.05

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: VOA111	**Analysis Date**	: 09/14/16 08:07
Sample No	: WG931936-2	**Lab File ID**	: V11160914A02

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG931936-2	144511	5.79	111926	9.28	58934	12.05
Upper Limit	289022	6.29	223852	9.78	117868	12.55
Lower Limit	72256	5.29	55963	8.78	29467	11.55
Sample ID						
WG931936-3 LCS	144511	5.79	111926	9.28	58934	12.05
WG931936-4 LCSD	141468	5.79	108635	9.28	56182	12.05
WG931936-5 BLANK	136135	5.79	107179	9.28	51549	12.05
4479-091316-0850	120968	5.79	95172	9.28	50699	12.05
4479-091316-0930	125510	5.79	96543	9.28	50911	12.05
4479-091316-1410	127993	5.78	98382	9.28	51325	12.05

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Chromatograms

Sample Raw Data

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A12.D
Acq On : 14 Sep 2016 12:24
Operator : VOA111:MS
Sample : l1628787-02,31,3.1,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 14 15:25:15 2016
Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA111\2016\160914A\V11160914A02.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.787	96	129617	20.000	ug/L	0.00
Standard Area 1 = 144511			Recovery = 89.69%			
59) Chlorobenzene-d5	9.284	117	94038	20.000	ug/L	0.00
Standard Area 1 = 111926			Recovery = 84.02%			
79) 1,4-Dichlorobenzene-d4	12.052	152	45642	20.000	ug/L	0.00
Standard Area 1 = 58934			Recovery = 77.45%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.995	113	33744	23.004	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 115.02%			
43) 1,2-Dichloroethane-d4	5.509	65	48777	22.854	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 114.27%			
60) Toluene-d8	7.459	98	128264	20.019	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 100.10%			
83) 4-Bromofluorobenzene	10.810	95	53056	21.401	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 107.01%			
Target Compounds						Qvalue
4) Vinyl chloride	1.849	62	980	0.547	ug/L	94

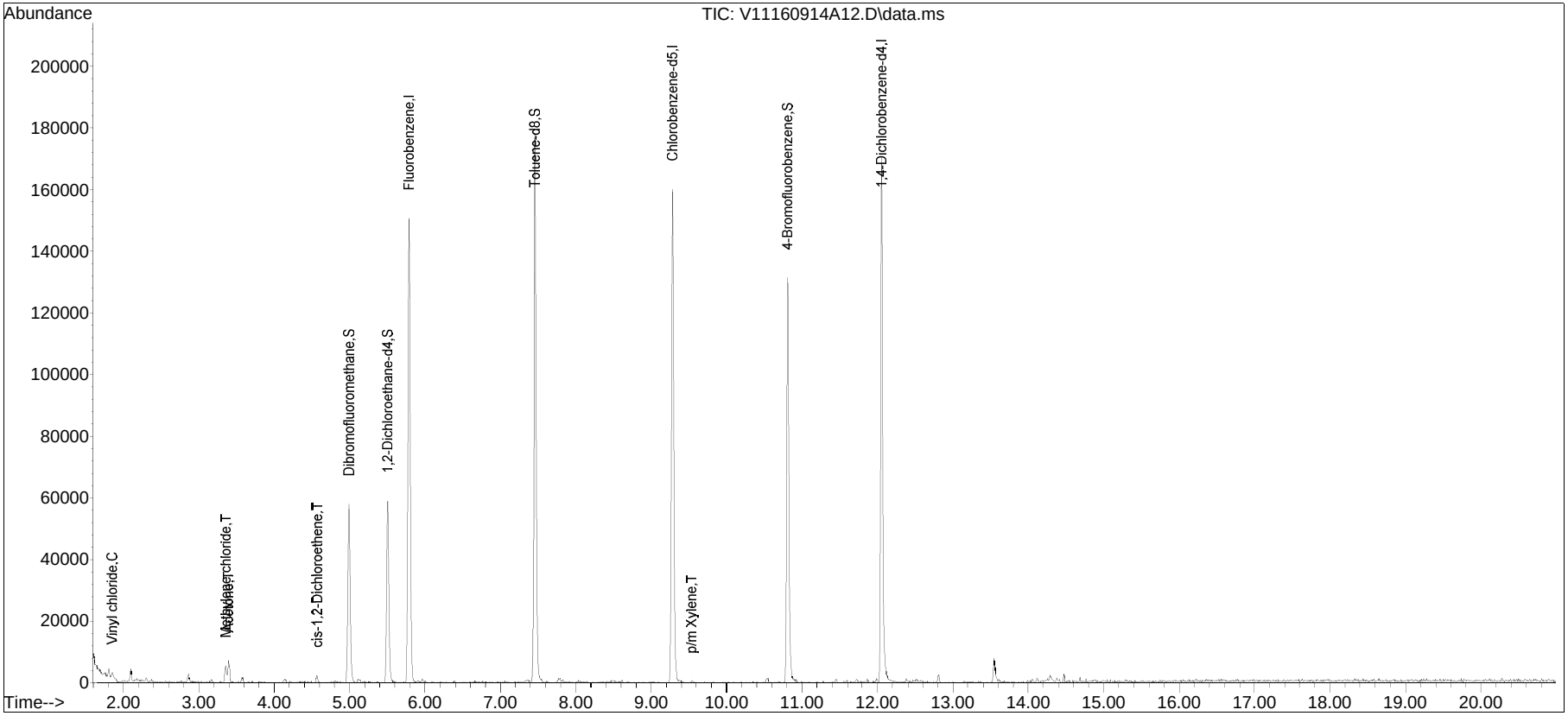
(#) = qualifier out of range (m) = manual integration (+) = signals summed

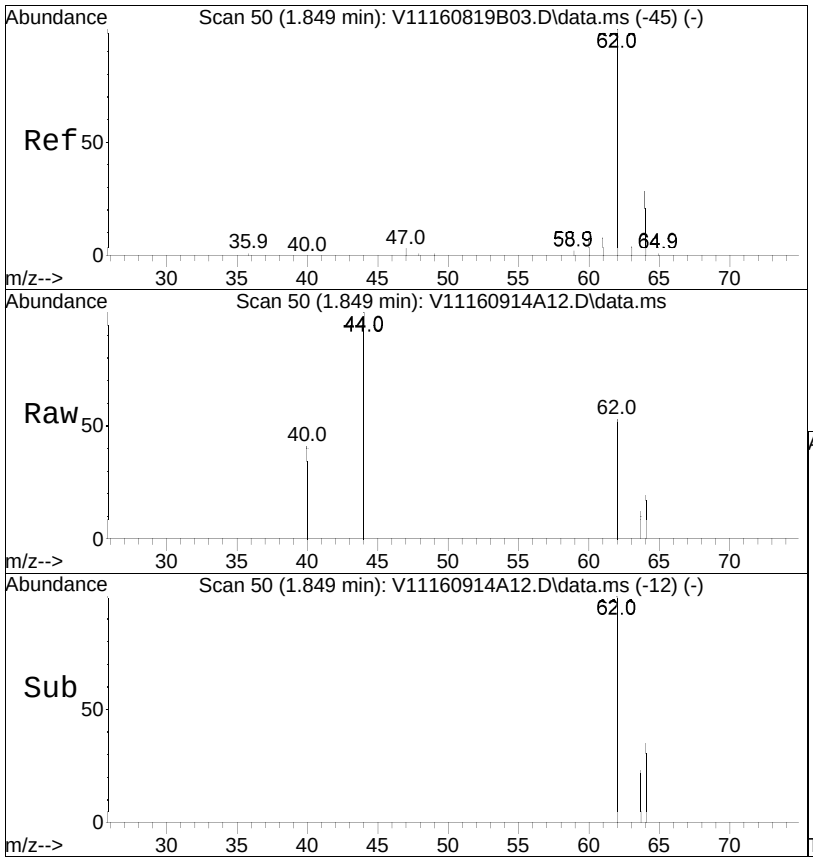
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A12.D
Acq On : 14 Sep 2016 12:24
Operator : VOA111:MS
Sample : l1628787-02,31,3.1,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 14 15:25:15 2016
Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist914A\V11160914A02.D•

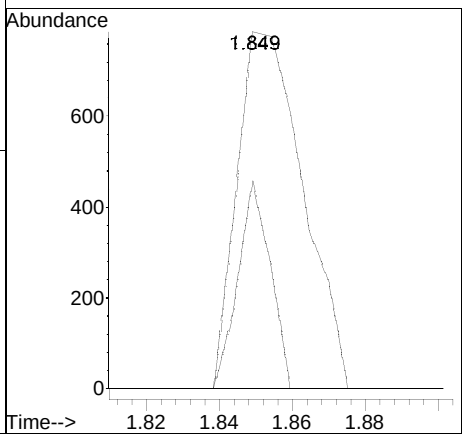




#4
Vinyl chloride
Concen: 0.55 ug/L
RT: 1.849 min Scan# 50
Delta R.T. 0.000 min
Lab File: V11160914A12.D
Acq: 14 Sep 2016 12:24

Tgt Ion: 62 Resp: 980

Ion	Ratio	Lower	Upper
62	100		
64	28.6	11.9	51.9



Manual Integration Report

Data Path	: I:\VOLATILES\VOA111\2016\1	QMethod	: V111_160819_8260.m
Data File	: V11160914A12.D	Operator	: VOA111:MS
Date Inj'd	: 9/14/2016 12:24	Instrument	: VOA111
Sample	: l1628787-02,31,3.1,5,,z	Quant Date	: 9/14/2016 3:23 pm

There are no manual integrations or false positives in this file.

LSC Area Percent Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A12.D
Acq On : 14 Sep 2016 12:24
Operator : VOA111:MS
Sample : l1628787-02,31,3.1,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Title : VOLATILES BY GC/MS

Signal : TIC: V11160914A12.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.396	342	345	354	rVB	7322	11411	3.19%	0.640%
2	4.995	641	650	667	rBB	57950	112565	31.43%	6.311%
3	5.509	738	748	764	rBB2	58932	116665	32.58%	6.541%
4	5.787	790	801	820	rBV	150810	291937	81.52%	16.367%
5	7.459	1111	1120	1145	rVB	178394	358120	100.00%	20.077%
6	9.284	1459	1468	1483	rBV	160333	324088	90.50%	18.169%
7	10.810	1748	1759	1779	rBB	131501	253442	70.77%	14.209%
8	12.052	1988	1996	2019	rBV	170853	300787	83.99%	16.863%
9	13.546	2270	2281	2291	rBV4	7833	14708	4.11%	0.825%

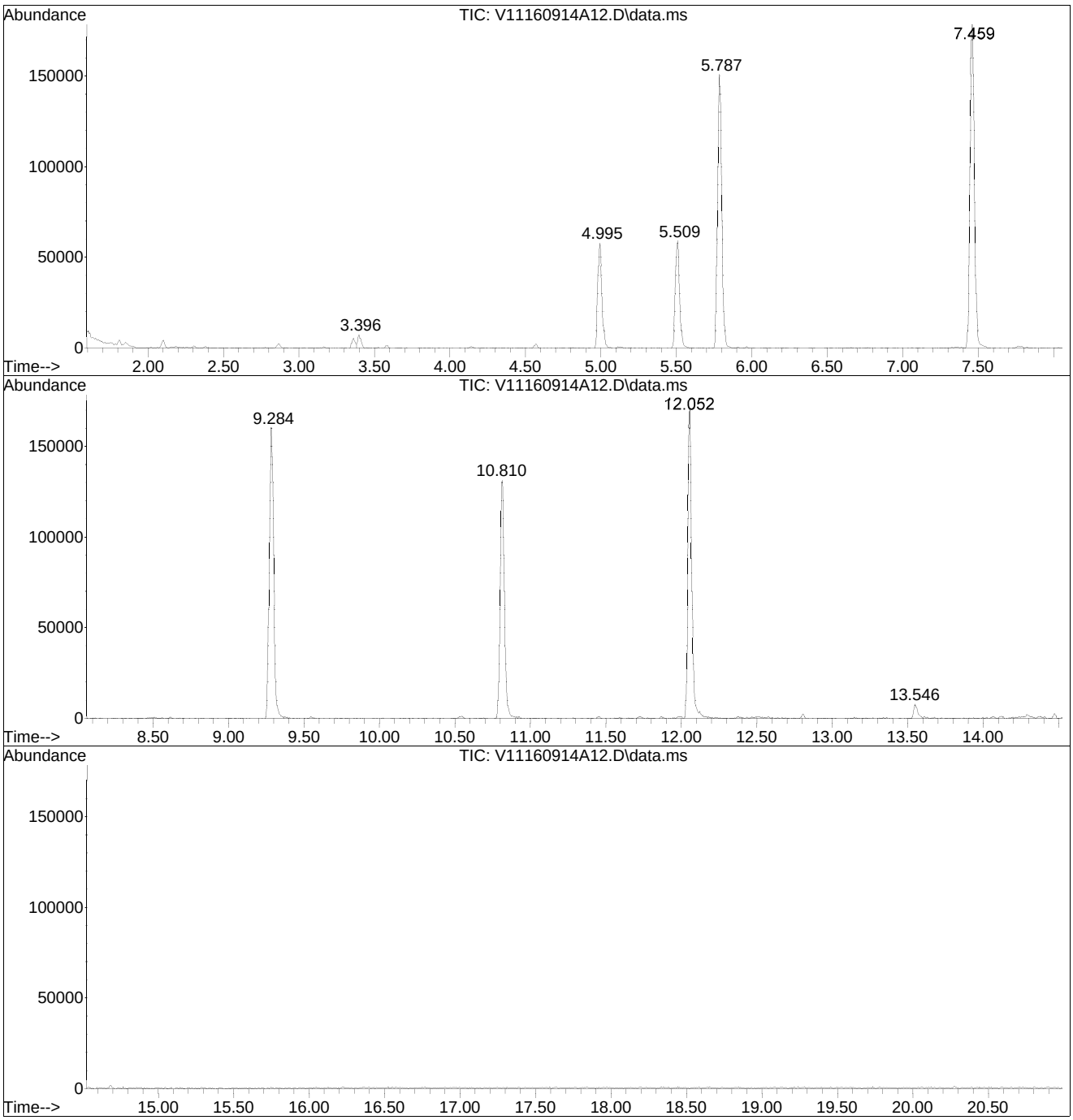
Sum of corrected areas: 1783723

LSC Report - Integrated Chromatogram

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A12.D
Acq On : 14 Sep 2016 12:24
Operator : VOA111:MS
Sample : l1628787-02,31,3.1,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 12 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p



Library Search Compound Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A12.D
Acq On : 14 Sep 2016 12:24
Operator : VOA111:MS
Sample : l1628787-02,31,3.1,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 12 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A12.D
Acq On : 14 Sep 2016 12:24
Operator : VOA111:MS
Sample : l1628787-02,31,3.1,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 12 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A13.D
Acq On : 14 Sep 2016 12:49
Operator : VOA111:MS
Sample : l1628787-04,31,4.6,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 14 15:25:52 2016
Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA111\2016\160914A\V11160914A02.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.786	96	125105	20.000	ug/L	0.00
Standard Area 1 = 144511			Recovery = 86.57%			
59) Chlorobenzene-d5	9.284	117	96796	20.000	ug/L	0.00
Standard Area 1 = 111926			Recovery = 86.48%			
79) 1,4-Dichlorobenzene-d4	12.052	152	44536	20.000	ug/L	0.00
Standard Area 1 = 58934			Recovery = 75.57%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.989	113	33016	23.320	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 116.60%			
43) 1,2-Dichloroethane-d4	5.509	65	52153	25.317	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 126.58%			
60) Toluene-d8	7.459	98	127699	19.363	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 96.81%			
83) 4-Bromofluorobenzene	10.815	95	51049	21.103	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 105.52%			
Target Compounds						Qvalue
4) Vinyl chloride	0.000		0	N.D.		

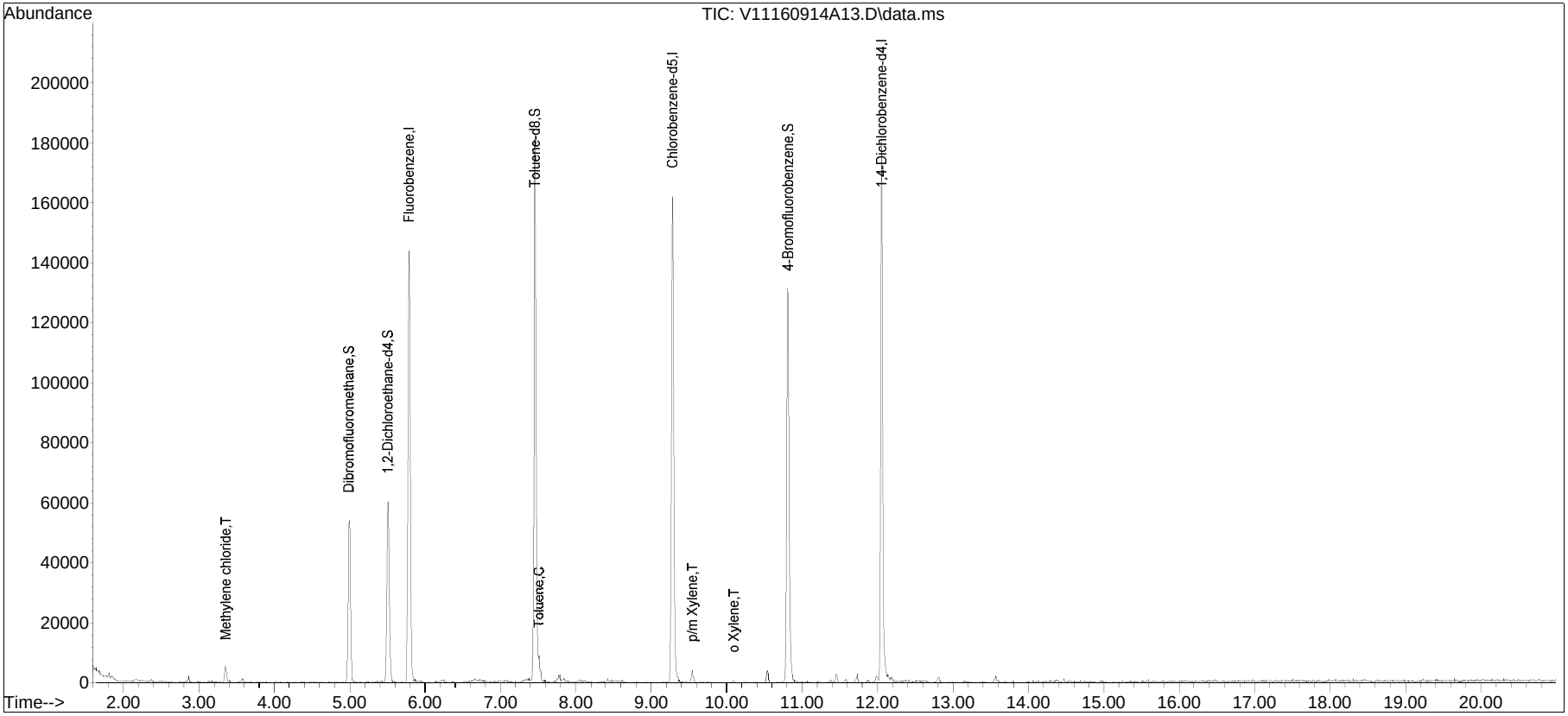
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A13.D
Acq On : 14 Sep 2016 12:49
Operator : VOA111:MS
Sample : l1628787-04,31,4.6,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 14 15:25:52 2016
Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist914A\V11160914A02.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA111\2016\1	QMethod	: V111_160819_8260.m
Data File	: V11160914A13.D	Operator	: VOA111:MS
Date Inj'd	: 9/14/2016 12:49	Instrument	: VOA111
Sample	: l1628787-04,31,4.6,5,,z	Quant Date	: 9/14/2016 3:23 pm

There are no manual integrations or false positives in this file.

LSC Area Percent Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A13.D
Acq On : 14 Sep 2016 12:49
Operator : VOA111:MS
Sample : l1628787-04,31,4.6,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Title : VOLATILES BY GC/MS

Signal : TIC: V11160914A13.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.989	638	649	666	rBB2	54145	111303	31.35%	6.292%
2	5.509	739	748	769	rVB2	60298	121055	34.09%	6.843%
3	5.786	788	801	813	rBV	144195	284068	80.00%	16.058%
4	7.459	1109	1120	1128	rBV2	182566	355071	100.00%	20.072%
5	9.284	1457	1468	1490	rBB	162218	333964	94.06%	18.878%
6	10.809	1747	1759	1777	rBV2	131609	256232	72.16%	14.484%
7	12.052	1989	1996	2018	rVB	180669	307331	86.55%	17.373%

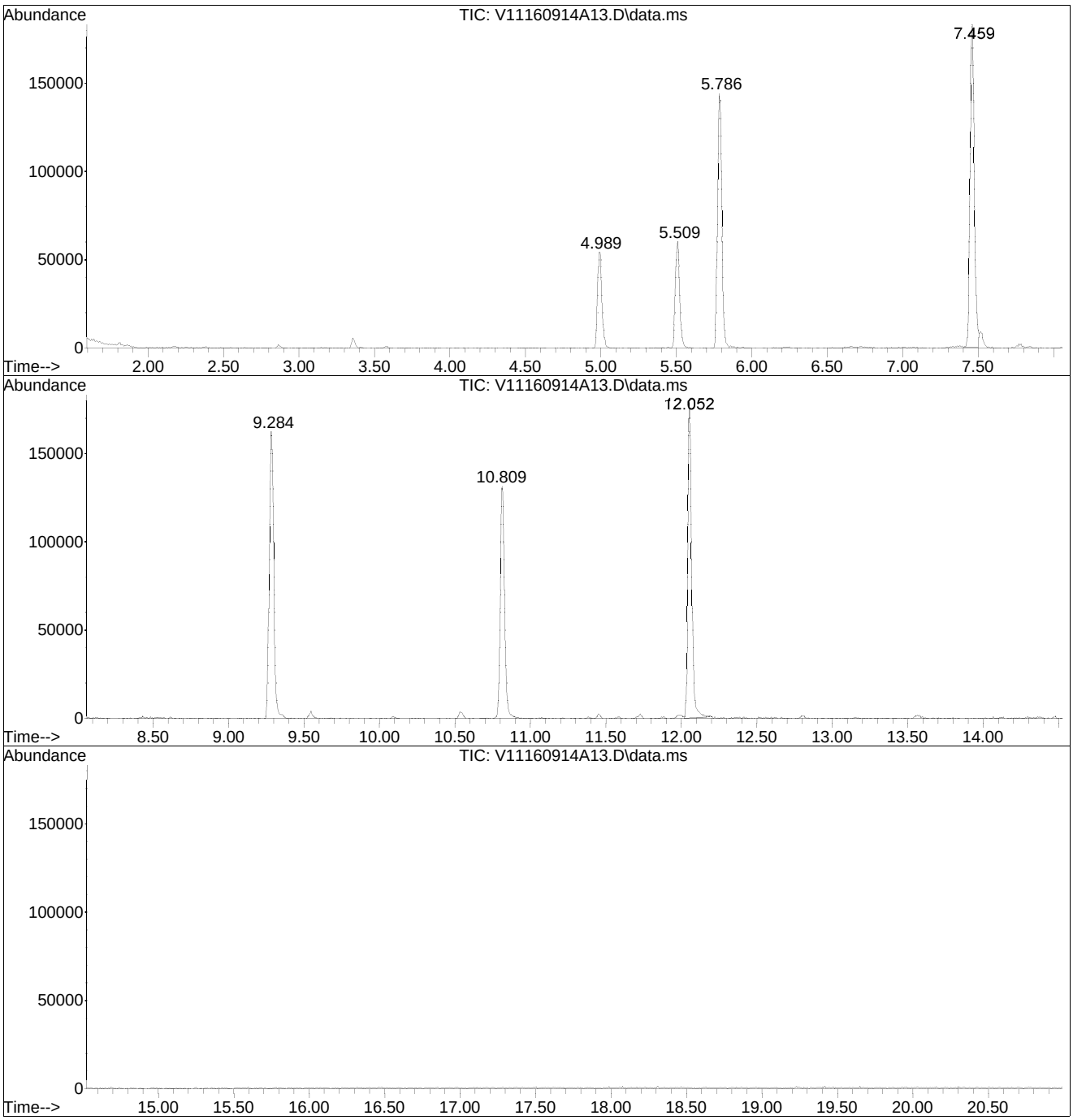
Sum of corrected areas: 1769024

LSC Report - Integrated Chromatogram

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A13.D
Acq On : 14 Sep 2016 12:49
Operator : VOA111:MS
Sample : l1628787-04,31,4.6,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p



Library Search Compound Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A13.D
Acq On : 14 Sep 2016 12:49
Operator : VOA111:MS
Sample : l1628787-04,31,4.6,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A13.D
Acq On : 14 Sep 2016 12:49
Operator : VOA111:MS
Sample : l1628787-04,31,4.6,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

						Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A15.D
Acq On : 14 Sep 2016 13:40
Operator : VOA111:MS
Sample : l1628787-05,31,3.1,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 14 15:27:05 2016
Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA111\2016\160914A\V11160914A02.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.792	96	120851	20.000	ug/L	0.00
Standard Area 1 = 144511			Recovery = 83.63%			
59) Chlorobenzene-d5	9.284	117	90876	20.000	ug/L	0.00
Standard Area 1 = 111926			Recovery = 81.19%			
79) 1,4-Dichlorobenzene-d4	12.052	152	38018	20.000	ug/L	0.00
Standard Area 1 = 58934			Recovery = 64.51%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.000	113	32707	23.915	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 119.57%			
43) 1,2-Dichloroethane-d4	5.509	65	48573	24.409	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 122.05%			
60) Toluene-d8	7.459	98	122337	19.758	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 98.79%			
83) 4-Bromofluorobenzene	10.809	95	46077	22.313	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 111.57%			
Target Compounds						Qvalue
4) Vinyl chloride	0.000		0	N.D.		

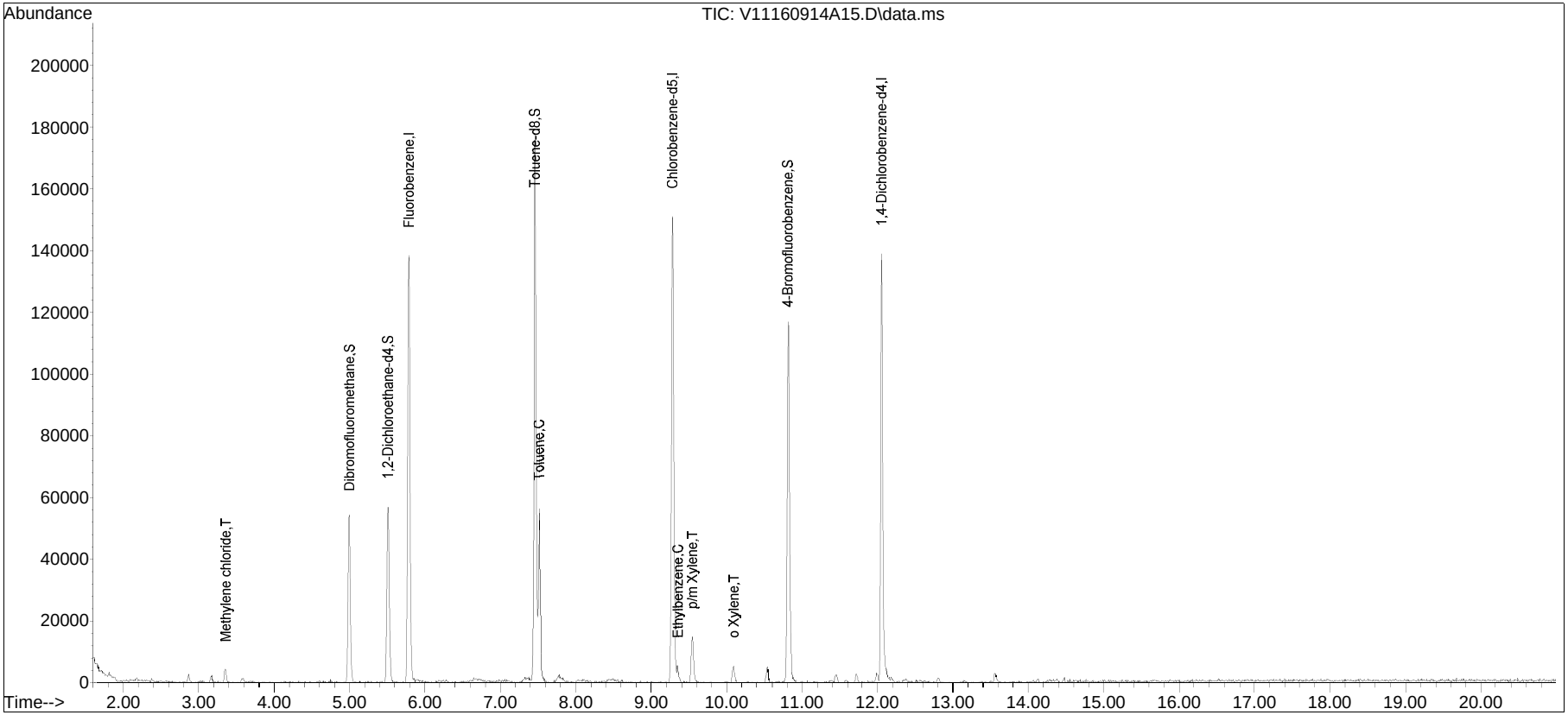
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A15.D
Acq On : 14 Sep 2016 13:40
Operator : VOA111:MS
Sample : l1628787-05,31,3.1,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 14 15:27:05 2016
Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist914A\V11160914A02.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA111\2016\1	QMethod	: V111_160819_8260.m
Data File	: V11160914A15.D	Operator	: VOA111:MS
Date Inj'd	: 9/14/2016 13:40	Instrument	: VOA111
Sample	: l1628787-05,31,3.1,5,,z	Quant Date	: 9/14/2016 3:26 pm

There are no manual integrations or false positives in this file.

LSC Area Percent Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A15.D
Acq On : 14 Sep 2016 13:40
Operator : VOA111:MS
Sample : l1628787-05,31,3.1,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Title : VOLATILES BY GC/MS

Signal : TIC: V11160914A15.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.995	639	650	662	rBB2	54503	109677	32.12%	6.155%
2	5.509	737	748	764	rBB	56962	115137	33.72%	6.461%
3	5.792	792	802	817	rBV2	138460	277840	81.37%	15.591%
4	7.459	1111	1120	1126	rBV	177558	341461	100.00%	19.162%
5	7.511	1126	1130	1150	rVB	56606	112930	33.07%	6.337%
6	9.284	1459	1468	1478	rBV	151210	309628	90.68%	17.375%
7	9.541	1507	1517	1529	rBV5	14819	31519	9.23%	1.769%
8	10.091	1614	1622	1630	rBB2	5421	10779	3.16%	0.605%
9	10.815	1747	1760	1783	rBB2	116922	226255	66.26%	12.697%
10	12.052	1989	1996	2018	rVV	138586	246777	72.27%	13.848%

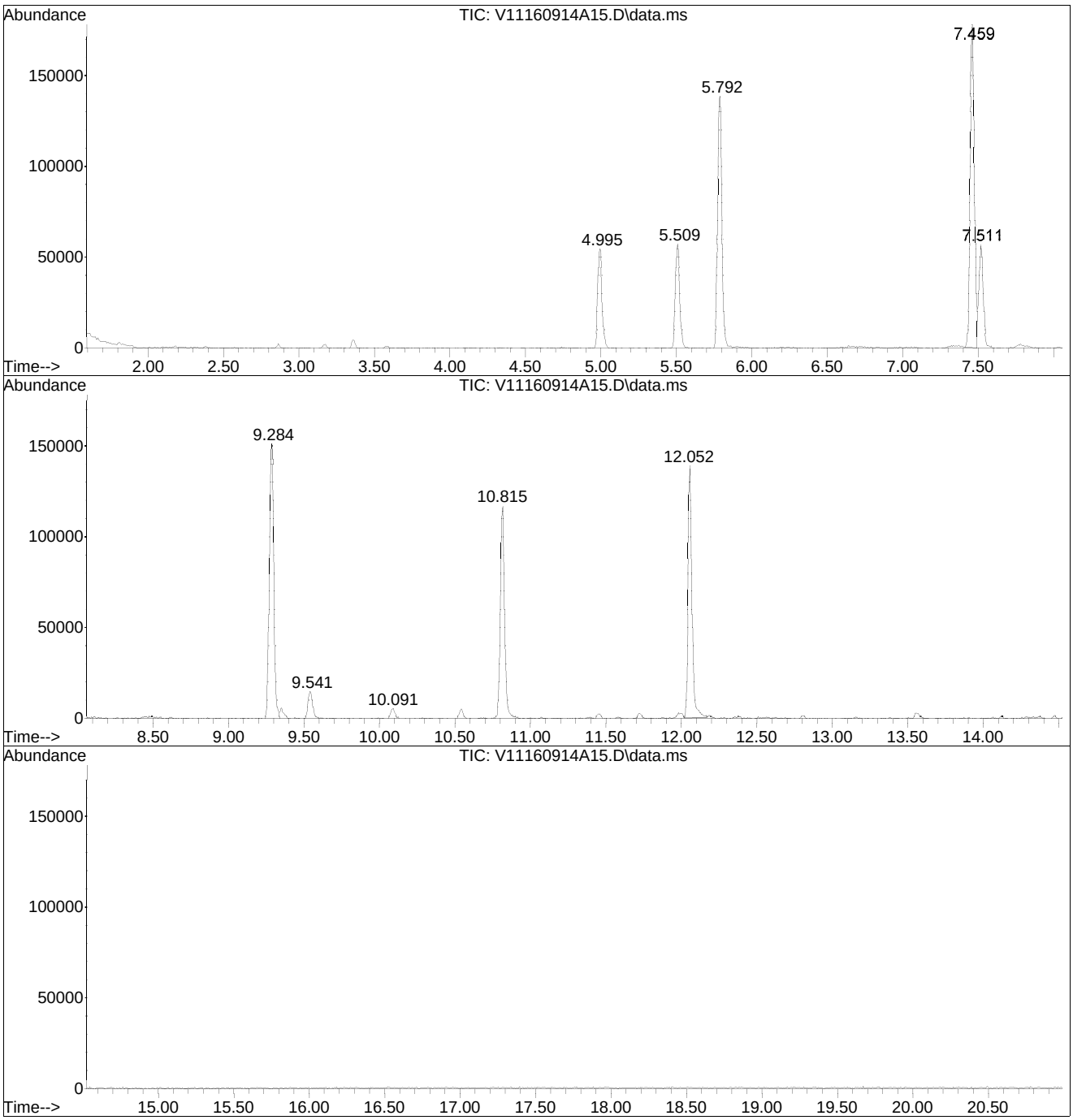
Sum of corrected areas: 1782003

LSC Report - Integrated Chromatogram

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A15.D
Acq On : 14 Sep 2016 13:40
Operator : VOA111:MS
Sample : l1628787-05,31,3.1,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 15 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p



Library Search Compound Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A15.D
Acq On : 14 Sep 2016 13:40
Operator : VOA111:MS
Sample : l1628787-05,31,3.1,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 15 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A15.D
Acq On : 14 Sep 2016 13:40
Operator : VOA111:MS
Sample : l1628787-05,31,3.1,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 15 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A16.D
Acq On : 14 Sep 2016 14:05
Operator : VOA111:MS
Sample : l1628787-09,31,3.0,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 15:27:55 2016
Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA111\2016\160914A\V11160914A02.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.786	96	119946	20.000	ug/L	0.00
Standard Area 1 = 144511			Recovery = 83.00%			
59) Chlorobenzene-d5	9.289	117	91740	20.000	ug/L	0.00
Standard Area 1 = 111926			Recovery = 81.96%			
79) 1,4-Dichlorobenzene-d4	12.057	152	42498	20.000	ug/L	0.00
Standard Area 1 = 58934			Recovery = 72.11%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.995	113	32422	23.885	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 119.43%			
43) 1,2-Dichloroethane-d4	5.509	65	50943	25.793	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 128.97%			
60) Toluene-d8	7.459	98	123320	19.729	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 98.64%			
83) 4-Bromofluorobenzene	10.809	95	47377	20.524	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 102.62%			
Target Compounds						Qvalue
4) Vinyl chloride	1.849	62	564	0.340	ug/L	# 59

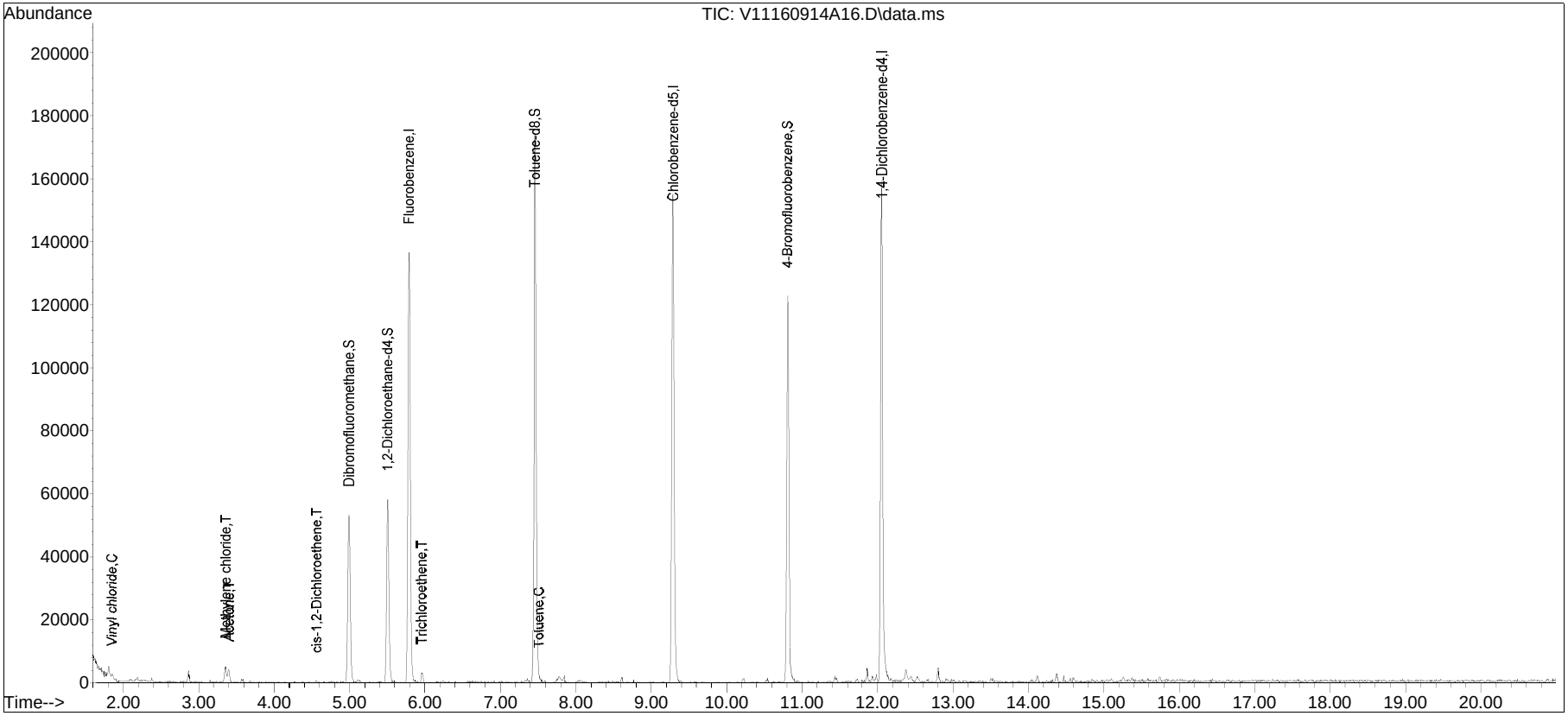
(#) = qualifier out of range (m) = manual integration (+) = signals summed

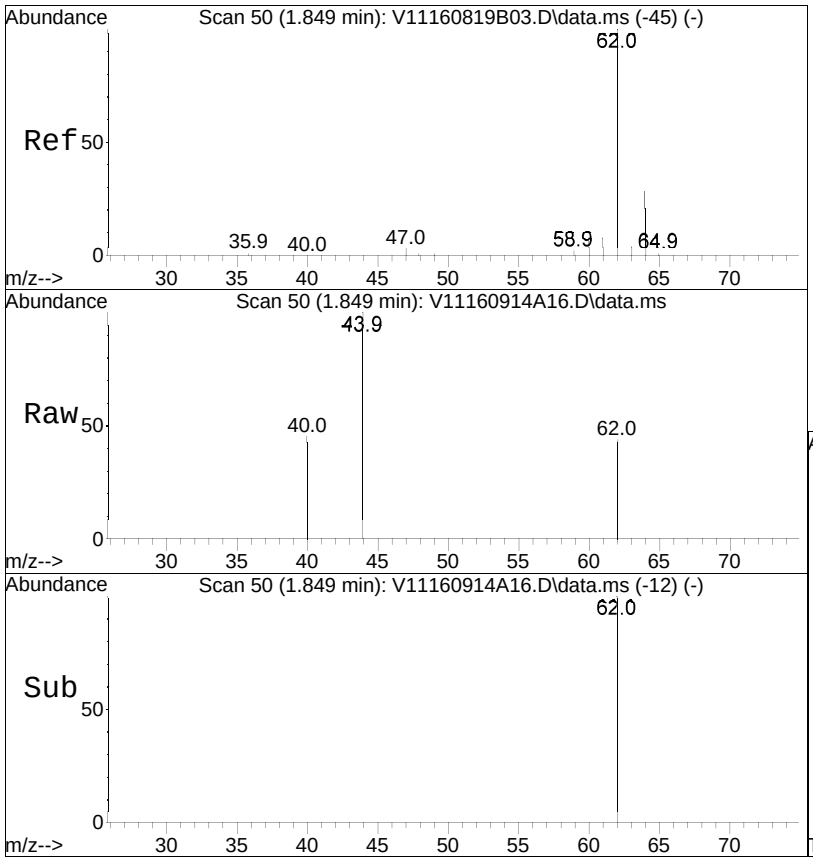
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A16.D
Acq On : 14 Sep 2016 14:05
Operator : VOA111:MS
Sample : l1628787-09,31,3.0,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 14 15:27:55 2016
Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist914A\V11160914A02.D•

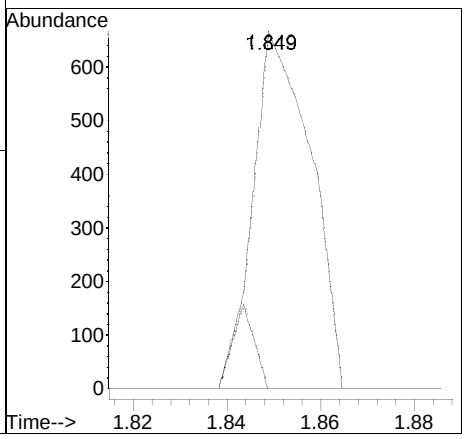




#4
Vinyl chloride
Concen: 0.34 ug/L
RT: 1.849 min Scan# 50
Delta R.T. -0.000 min
Lab File: V11160914A16.D
Acq: 14 Sep 2016 14:05

Tgt Ion: 62 Resp: 564

Ion	Ratio	Lower	Upper
62	100		
64	8.9	11.9	51.9#



Manual Integration Report

Data Path	: I:\VOLATILES\VOA111\2016\1	QMethod	: V111_160819_8260.m
Data File	: V11160914A16.D	Operator	: VOA111:MS
Date Inj'd	: 9/14/2016 14:05	Instrument	: VOA111
Sample	: l1628787-09,31,3.0,5,,z	Quant Date	: 9/14/2016 3:23 pm

There are no manual integrations or false positives in this file.

LSC Area Percent Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A16.D
Acq On : 14 Sep 2016 14:05
Operator : VOA111:MS
Sample : l1628787-09,31,3.0,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Title : VOLATILES BY GC/MS

Signal : TIC: V11160914A16.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.995	641	650	664	rBB2	53397	110649	31.91%	6.520%
2	5.509	739	748	764	rBV	58213	117172	33.80%	6.904%
3	5.786	792	801	815	rBV	136668	277564	80.06%	16.355%
4	7.459	1110	1120	1135	rBV	174562	346713	100.00%	20.430%
5	9.284	1458	1468	1485	rBV2	155308	321918	92.85%	18.969%
6	10.809	1749	1759	1779	rBV2	122875	245914	70.93%	14.490%
7	12.052	1989	1996	2017	rBV2	159246	277182	79.95%	16.333%

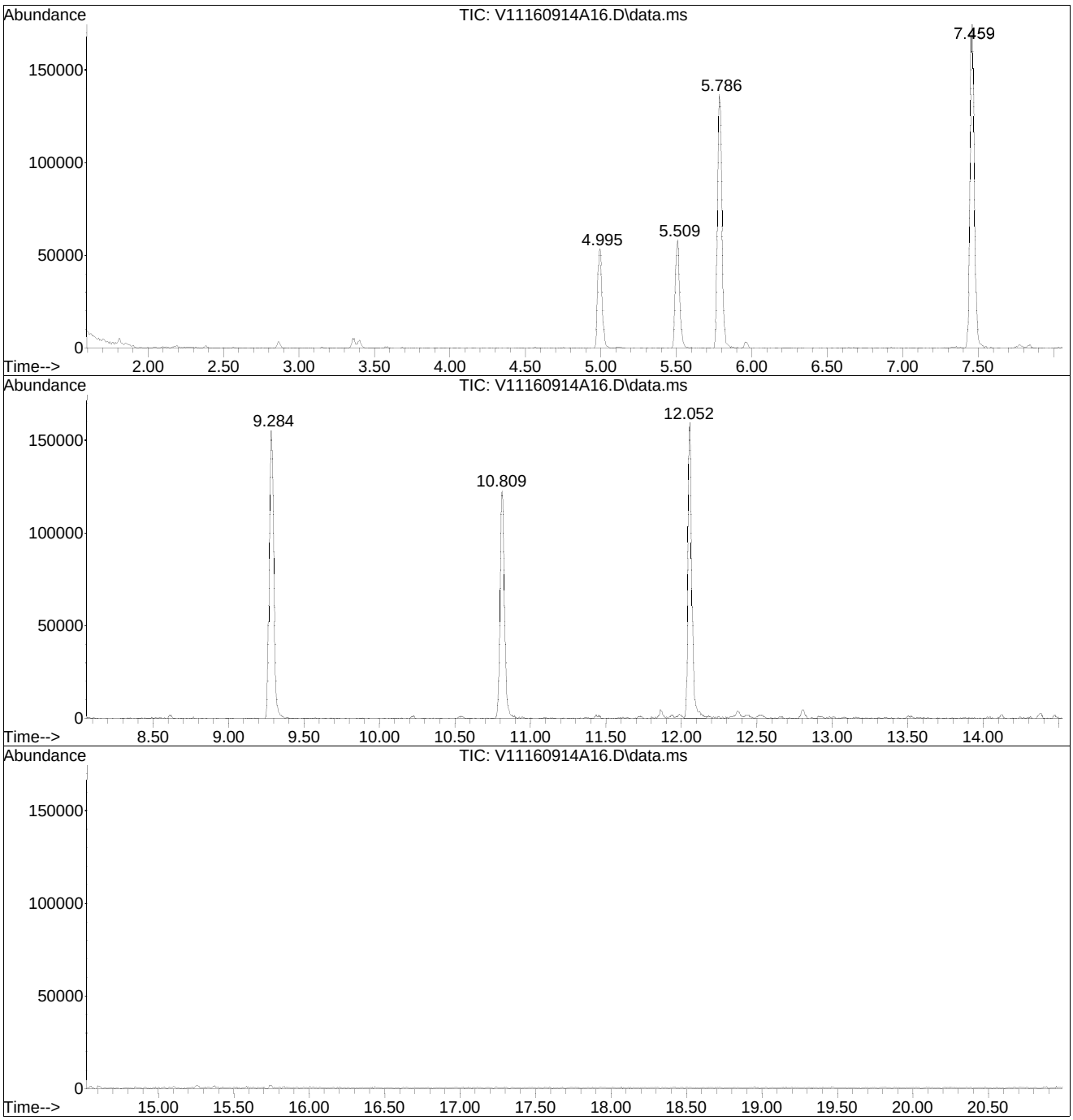
Sum of corrected areas: 1697112

LSC Report - Integrated Chromatogram

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A16.D
Acq On : 14 Sep 2016 14:05
Operator : VOA111:MS
Sample : l1628787-09,31,3.0,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p



Library Search Compound Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A16.D
Acq On : 14 Sep 2016 14:05
Operator : VOA111:MS
Sample : l1628787-09,31,3.0,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A16.D
Acq On : 14 Sep 2016 14:05
Operator : VOA111:MS
Sample : l1628787-09,31,3.0,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A17.D
Acq On : 14 Sep 2016 14:31
Operator : VOA111:MS
Sample : l1628787-11,31,4.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 14 15:29:07 2016
Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA111\2016\160914A\V11160914A02.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	5.786	96	121506	20.000 ug/L	0.00
Standard Area 1 = 144511			Recovery = 84.08%		
59) Chlorobenzene-d5	9.284	117	94119	20.000 ug/L	0.00
Standard Area 1 = 111926			Recovery = 84.09%		
79) 1,4-Dichlorobenzene-d4	12.052	152	47270	20.000 ug/L	0.00
Standard Area 1 = 58934			Recovery = 80.21%		
System Monitoring Compounds					
36) Dibromofluoromethane	4.995	113	32734	23.806 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 119.03%		
43) 1,2-Dichloroethane-d4	5.509	65	51354	25.668 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 128.34%		
60) Toluene-d8	7.459	98	122886	19.163 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 95.82%		
83) 4-Bromofluorobenzene	10.809	95	51436	20.033 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 100.17%		
Target Compounds					Qvalue
48) Trichloroethene	5.965	95	1385M1	1.008 ug/L	

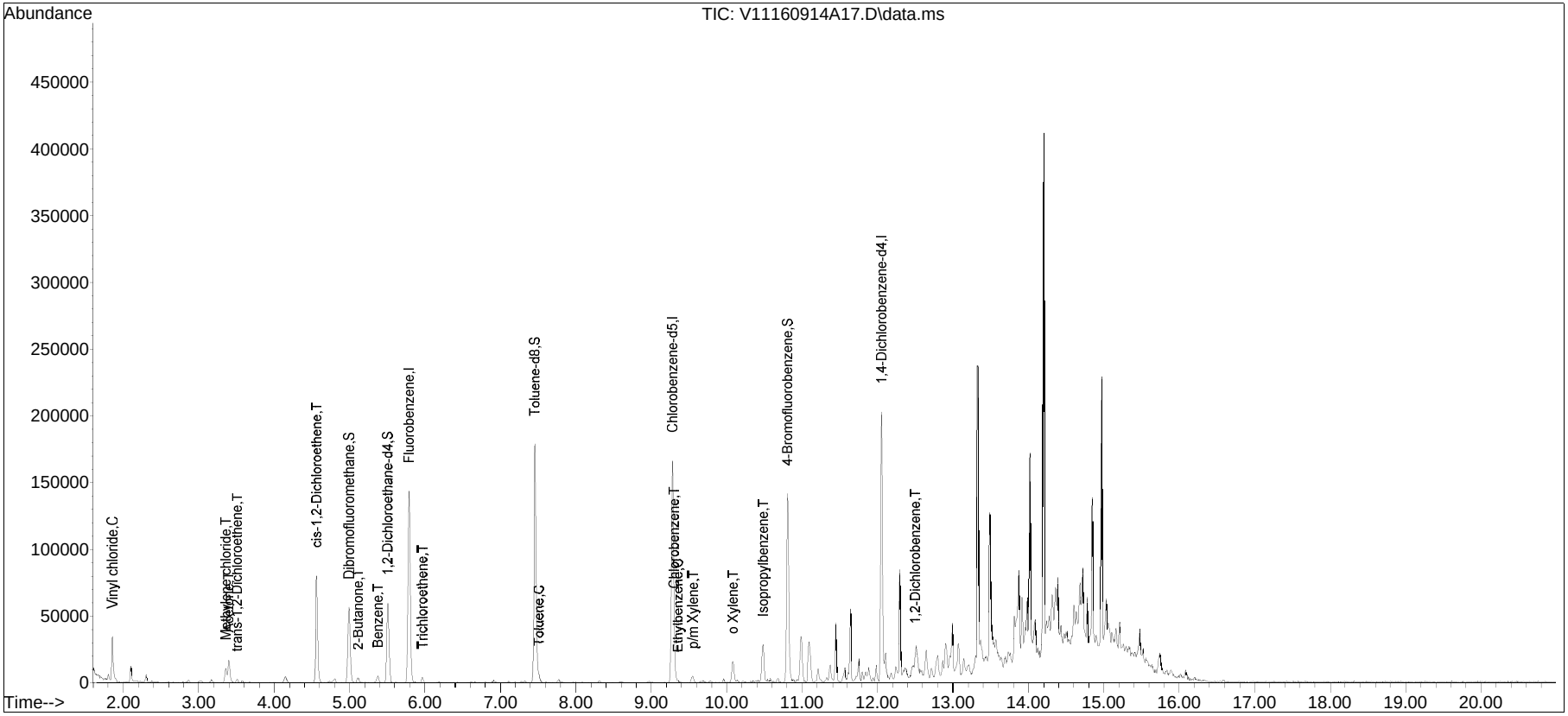
(#) = qualifier out of range (m) = manual integration (+) = signals summed

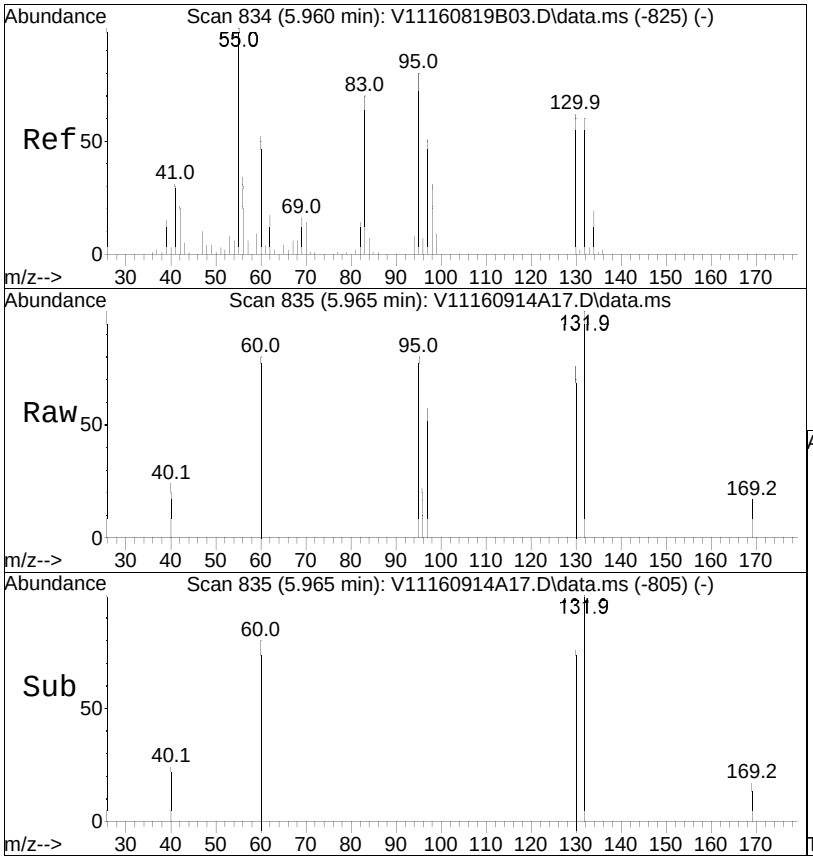
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A17.D
Acq On : 14 Sep 2016 14:31
Operator : VOA111:MS
Sample : l1628787-11,31,4.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 14 15:29:07 2016
Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist914A\V11160914A02.D•

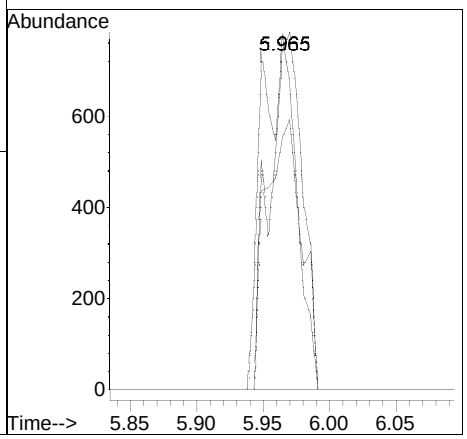




#48
Trichloroethene
Concen: 1.01 ug/L M1
RT: 5.965 min Scan# 835
Delta R.T. 0.005 min
Lab File: V11160914A17.D
Acq: 14 Sep 2016 14:31

Tgt Ion: 95 Resp: 1385

Ion	Ratio	Lower	Upper
95	100		
97	79.2	54.6	82.0
130	96.8	78.4	117.6

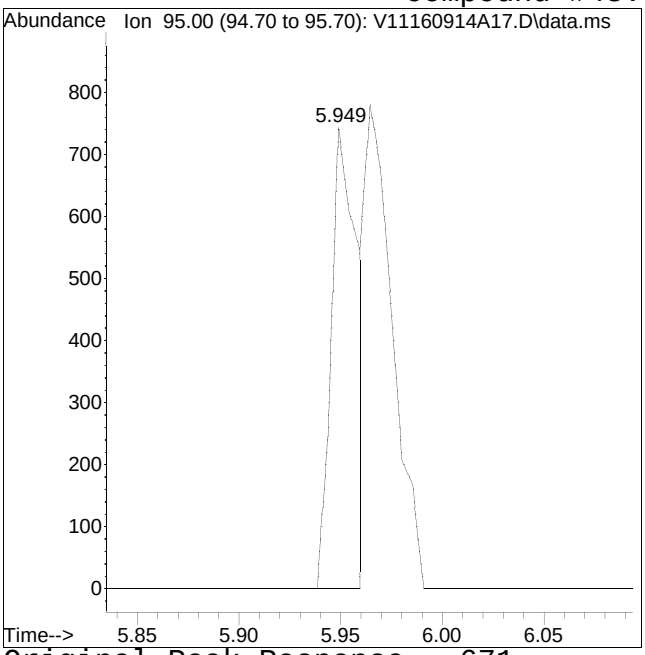


Manual Integration Report

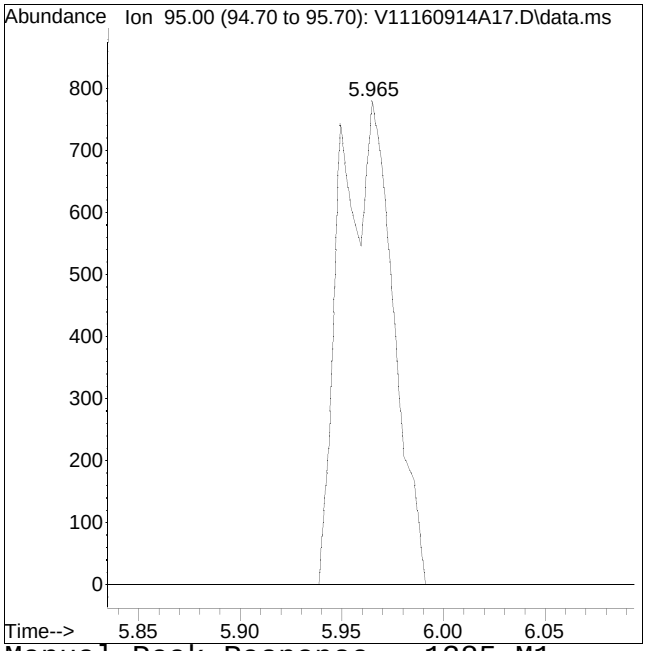
Data Path : I:\VOLATILES\VOA111\2016\1Q
Data File : V11160914A17.D
Date Inj'd : 9/14/2016 14:31
Sample : l1628787-11,31,4.8,5,,z

Method : V111_160819_8260.m
Operator : VOA111:MS
Instrument : VOA111
Quant Date : 9/14/2016 3:23 pm

Compound #48: Trichloroethene



Original Peak Response = 671



Manual Peak Response = 1385 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

LSC Area Percent Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A17.D
Acq On : 14 Sep 2016 14:31
Operator : VOA111:MS
Sample : l1628787-11,31,4.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Title : VOLATILES BY GC/MS

Signal : TIC: V11160914A17.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.854	46	51	65	rVB	34304	46189	8.79%	0.836%
2	2.095	92	97	106	rBV3	12073	17879	3.40%	0.323%
3	3.359	331	338	341	rBV2	10978	18268	3.48%	0.330%
4	3.396	341	345	355	rVB2	16549	28600	5.44%	0.517%
5	4.565	557	568	585	rBB	80267	153643	29.25%	2.780%
6	4.995	638	650	665	rBB2	56759	111624	21.25%	2.019%
7	5.509	738	748	765	rBB	59675	119738	22.79%	2.166%
8	5.786	790	801	814	rBV	143614	279768	53.26%	5.061%
9	7.459	1109	1120	1143	rBB	179070	360494	68.63%	6.522%
10	9.284	1456	1468	1488	rBV	166591	340397	64.80%	6.158%
11	10.081	1609	1620	1629	rBV2	16305	33634	6.40%	0.608%
12	10.484	1688	1697	1705	rBV3	28054	54410	10.36%	0.984%
13	10.809	1747	1759	1771	rBV2	141568	267290	50.88%	4.836%
14	10.982	1785	1792	1804	rVB2	34074	70007	13.33%	1.266%
15	11.098	1804	1814	1826	rVB2	30652	71698	13.65%	1.297%
16	11.213	1826	1836	1847	rBV4	10477	20605	3.92%	0.373%
17	11.370	1860	1866	1874	rBV3	11818	19194	3.65%	0.347%
18	11.444	1874	1880	1890	rVB2	44581	76435	14.55%	1.383%
19	11.554	1892	1901	1907	rBV6	10209	21919	4.17%	0.397%
20	11.638	1907	1917	1925	rVB	54104	92593	17.63%	1.675%
21	11.753	1926	1939	1944	rBV3	16302	31355	5.97%	0.567%
22	11.884	1960	1964	1971	rVB3	10539	16287	3.10%	0.295%
23	11.979	1977	1982	1989	rBV4	12055	20965	3.99%	0.379%
24	12.052	1989	1996	2002	rVV	201408	319204	60.77%	5.775%
25	12.104	2002	2006	2017	rVB4	20197	39060	7.44%	0.707%
26	12.235	2026	2031	2036	rBV4	9408	16690	3.18%	0.302%
27	12.293	2036	2042	2048	rVV2	81297	120259	22.89%	2.176%
28	12.361	2049	2055	2065	rVB8	7773	23151	4.41%	0.419%

LSC Area Percent Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A17.D
Acq On : 14 Sep 2016 14:31
Operator : VOA111:MS
Sample : l1628787-11,31,4.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Title : VOLATILES BY GC/MS

29	12.466	2065	2075	2076	rBV3	9541	16660	3.17%	0.301%
30	12.503	2078	2082	2091	rVB6	21109	49308	9.39%	0.892%
31	12.650	2103	2110	2118	rVB4	21094	40621	7.73%	0.735%
32	12.797	2130	2138	2145	rBV9	16456	37581	7.15%	0.680%
33	12.901	2153	2158	2165	rBV3	18845	32992	6.28%	0.597%
34	12.990	2165	2175	2181	rVB6	36301	76510	14.57%	1.384%
35	13.074	2182	2191	2196	rVB3	23454	46906	8.93%	0.849%
36	13.143	2198	2204	2210	rBV6	11591	20067	3.82%	0.363%
37	13.326	2224	2239	2245	rBV	231195	353664	67.33%	6.398%
38	13.489	2264	2270	2283	rBV2	111317	209287	39.84%	3.786%
39	13.814	2325	2332	2334	rBV2	35516	50775	9.67%	0.919%
40	13.866	2338	2342	2348	rVB5	60488	115633	22.01%	2.092%
41	13.913	2348	2351	2355	rBV	38025	42770	8.14%	0.774%
42	13.981	2361	2364	2367	rVV	25206	27676	5.27%	0.501%
43	14.023	2367	2372	2379	rVV	143227	187864	35.76%	3.399%
44	14.086	2379	2384	2390	rVB6	24891	47719	9.08%	0.863%
45	14.202	2397	2406	2412	rBV	392052	525299	100.00%	9.503%
46	14.317	2424	2428	2432	rBV6	26813	43033	8.19%	0.779%
47	14.359	2433	2436	2439	rVV4	33643	47545	9.05%	0.860%
48	14.385	2439	2441	2447	rVB2	42587	48510	9.23%	0.878%
49	14.611	2480	2484	2487	rBV2	23607	30806	5.86%	0.557%
50	14.684	2493	2498	2501	rBV4	31264	48412	9.22%	0.876%
51	14.715	2501	2504	2512	rVB3	50094	70930	13.50%	1.283%
52	14.778	2513	2516	2520	rVB2	33506	36773	7.00%	0.665%
53	14.852	2524	2530	2537	rVB	108602	144691	27.54%	2.618%
54	14.972	2547	2553	2558	rBV	201234	244211	46.49%	4.418%
55	15.030	2559	2564	2569	rBV5	28314	40601	7.73%	0.735%
56	15.203	2594	2597	2606	rBV7	19545	32473	6.18%	0.587%
57	15.470	2643	2648	2654	rVB4	19691	27321	5.20%	0.494%
58	15.743	2692	2700	2710	rVB4	15745	39633	7.54%	0.717%

LSC Area Percent Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A17.D
Acq On : 14 Sep 2016 14:31
Operator : VOA111:MS
Sample : l1628787-11,31,4.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Title : VOLATILES BY GC/MS

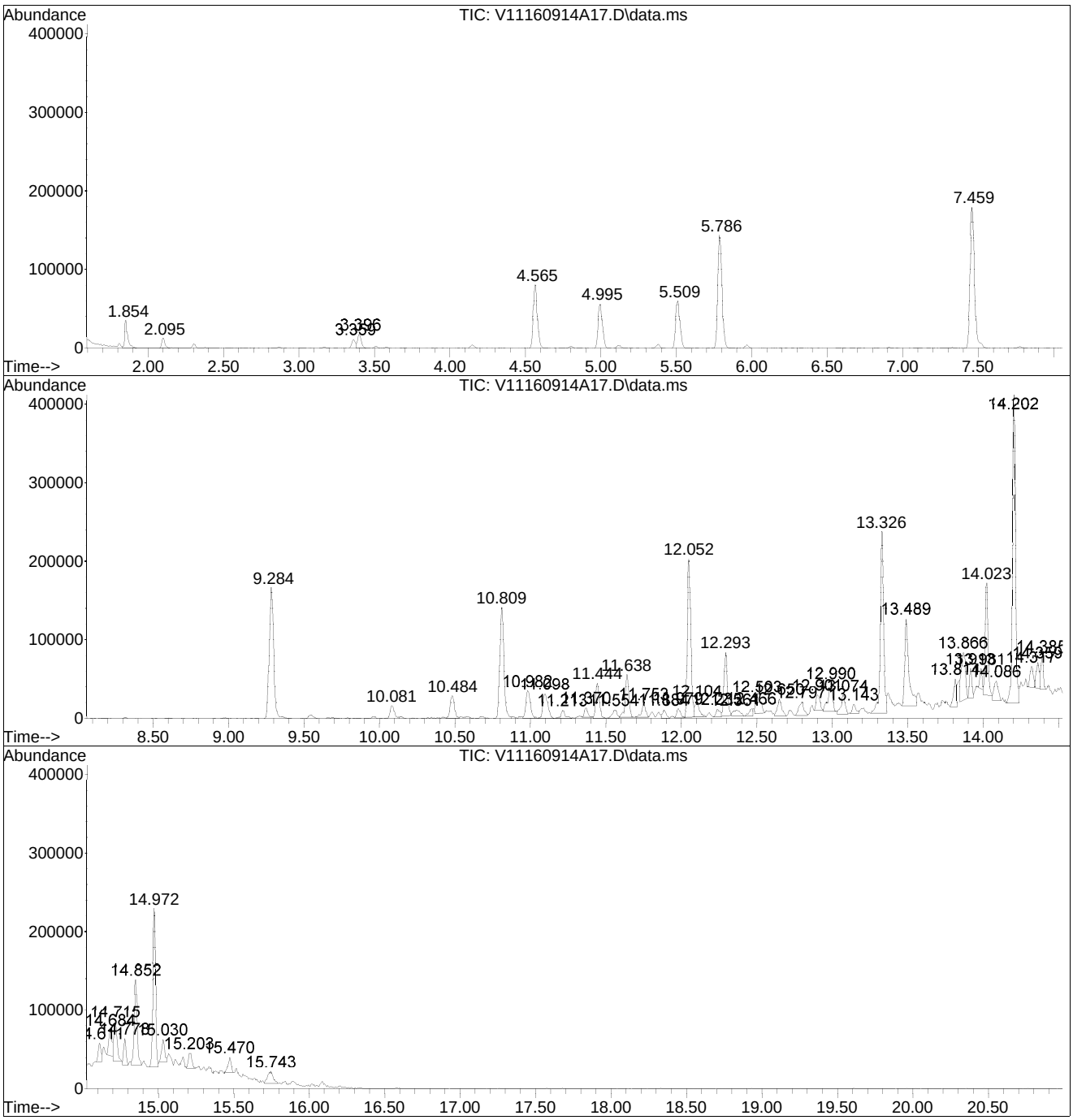
Sum of corrected areas: 5527627

LSC Report - Integrated Chromatogram

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A17.D
Acq On : 14 Sep 2016 14:31
Operator : VOA111:MS
Sample : l1628787-11,31,4.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 17 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p



Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A17.D
Acq On : 14 Sep 2016 14:31
Operator : VOA111:MS
Sample : l1628787-11,31,4.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 17 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

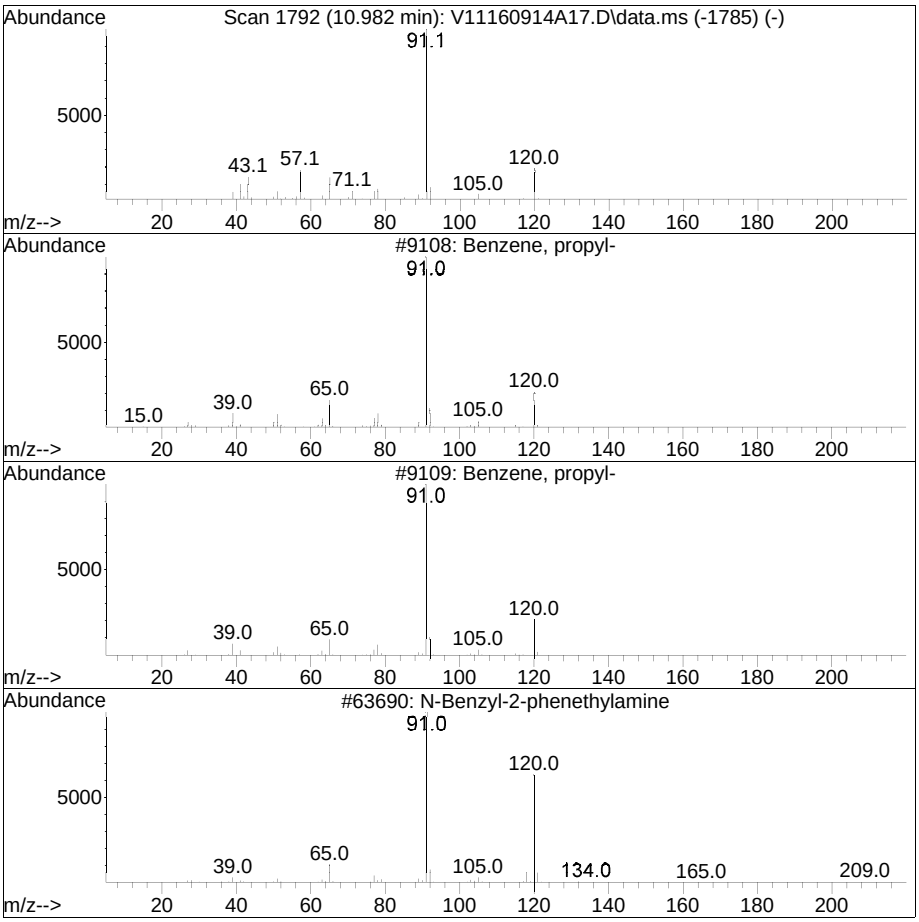
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

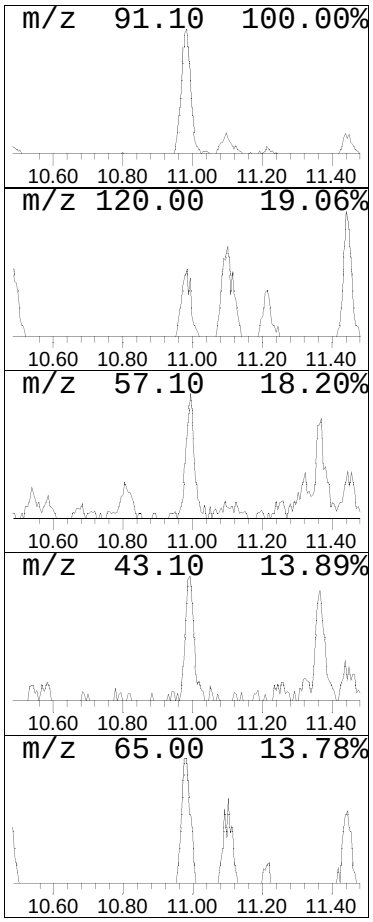
****

Peak Number 1 Unknown 1 Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.982	4.39 ug/L	70007	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, propyl-	120	C9H12	000103-65-1	74
2	Benzene, propyl-	120	C9H12	000103-65-1	68
3	N-Benzyl-2-phenethylamine	211	C15H17N	003647-71-0	64
4	Ethanol, 2-[(phenylmethyl)amino]-	151	C9H13NO	000104-63-2	59
5	1,2-Ethanediamine, N,N'-bis(phen...	240	C16H20N2	000140-28-3	59





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A17.D
Acq On : 14 Sep 2016 14:31
Operator : VOA111:MS
Sample : l1628787-11,31,4.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 17 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

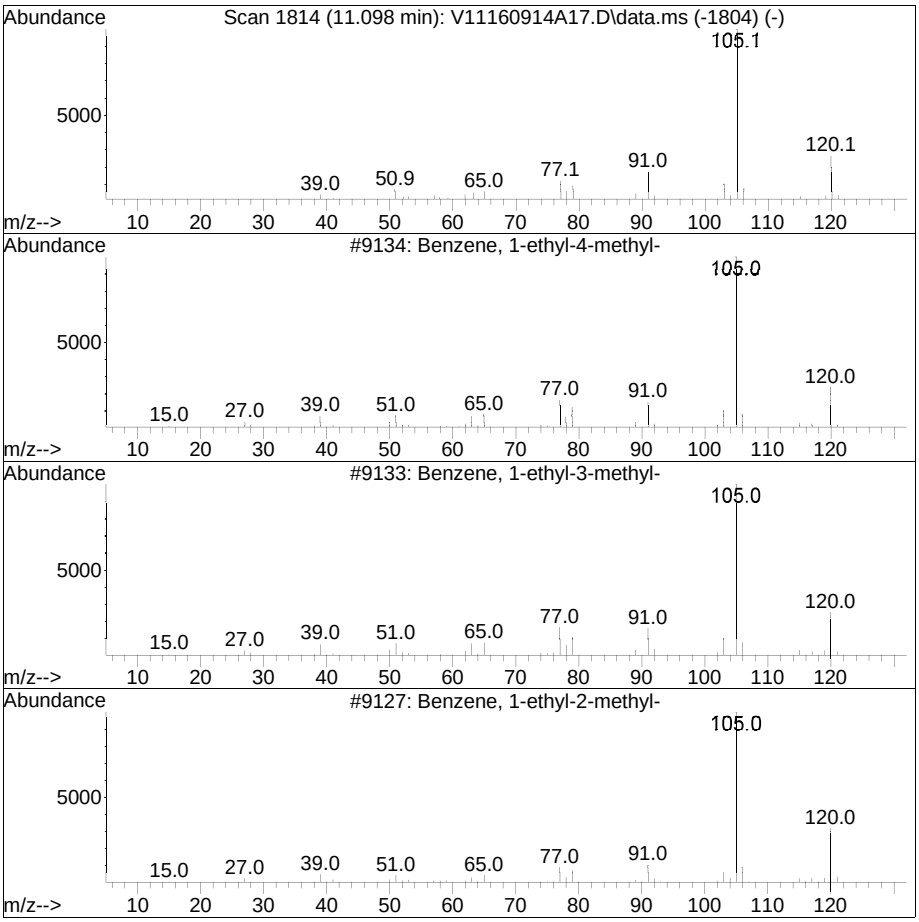
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

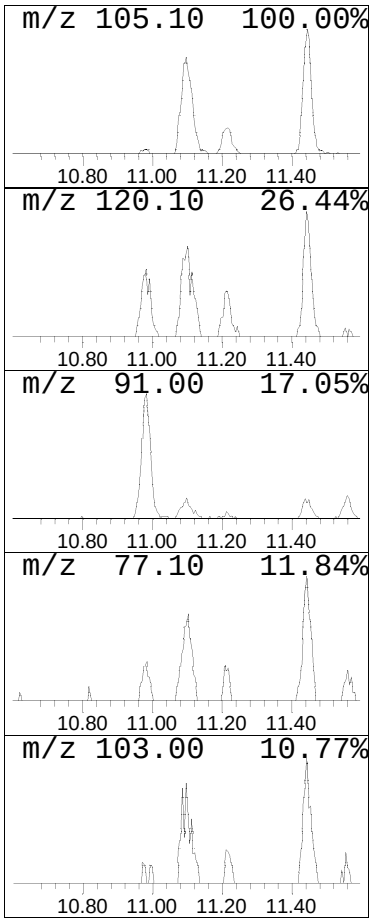
****

Peak Number 2 Unknown Aromatic A Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.098	4.49 ug/L	71698	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	91
2	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	91
3	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	91
4	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	91
5	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	90





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A17.D
Acq On : 14 Sep 2016 14:31
Operator : VOA111:MS
Sample : l1628787-11,31,4.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 17 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

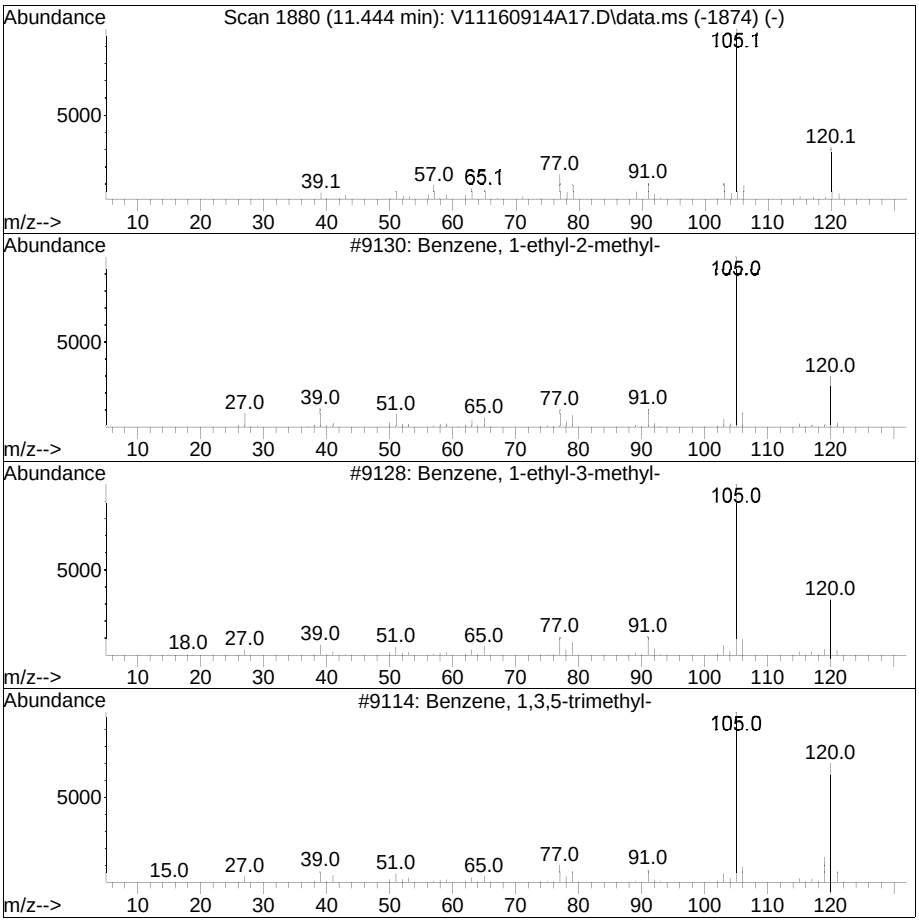
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

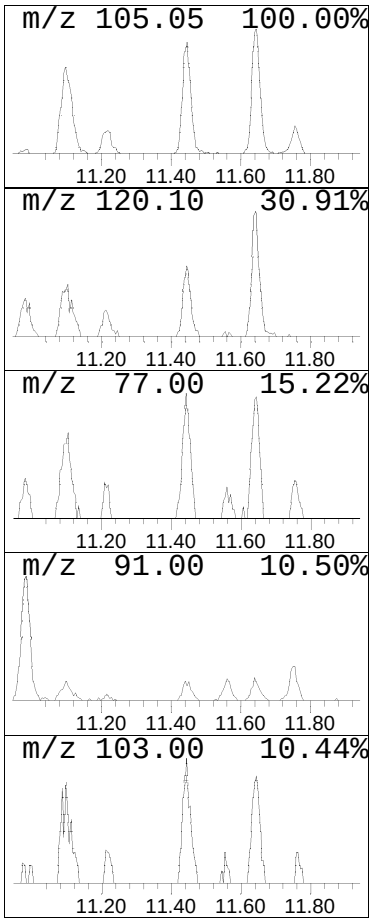
****

Peak Number 3 Unknown Aromatic B Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.444	4.79 ug/L	76435	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	94
2	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	91
3	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	91
4	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	91
5	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	91





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A17.D
Acq On : 14 Sep 2016 14:31
Operator : VOA111:MS
Sample : l1628787-11,31,4.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 17 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

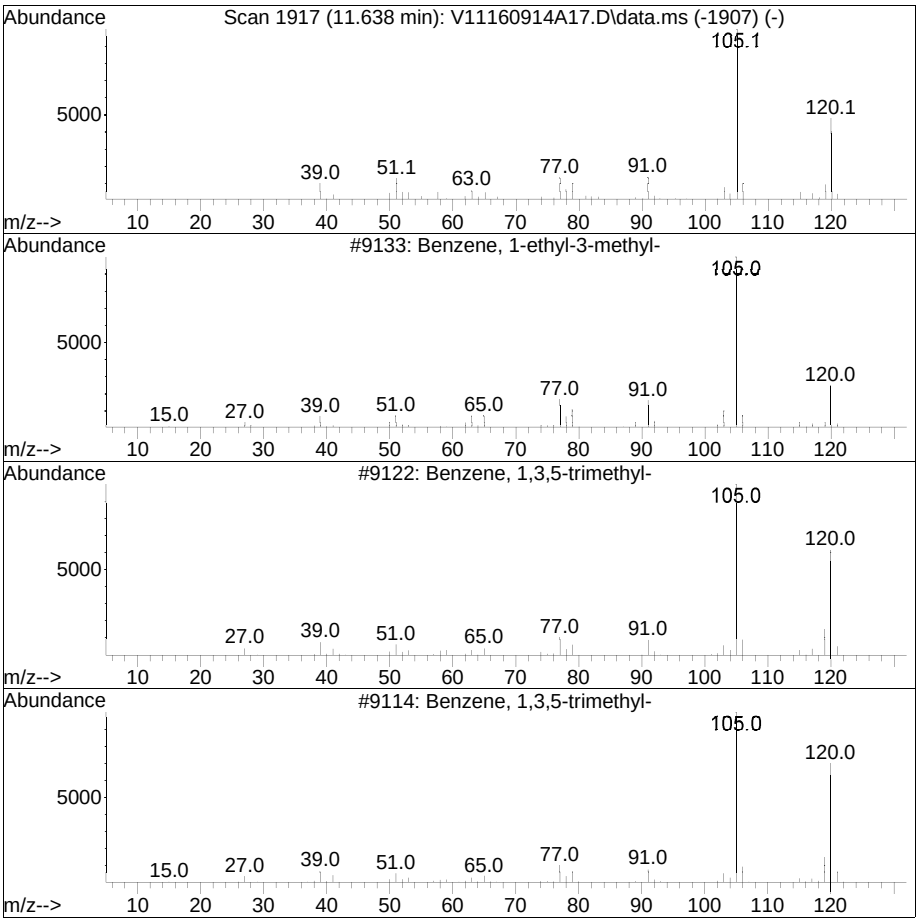
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

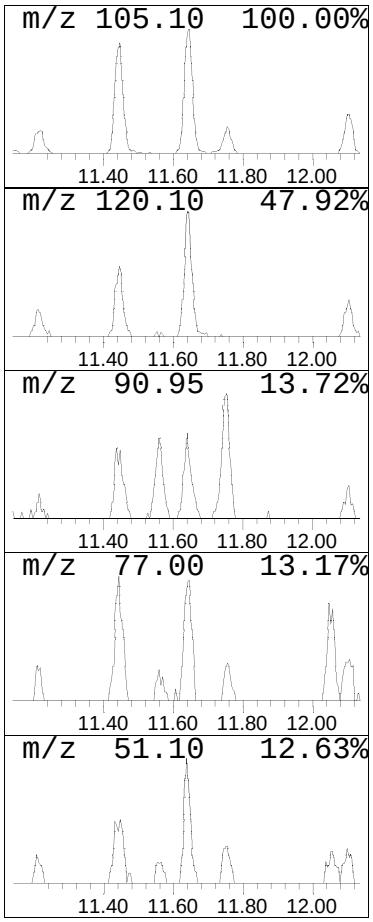
****

Peak Number 4 Unknown Aromatic C Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.638	5.80 ug/L	92593	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	95
2	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	95
3	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	91
4	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	91
5	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	91





Library Search Compound Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A17.D
Acq On : 14 Sep 2016 14:31
Operator : VOA111:MS
Sample : l1628787-11,31,4.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 17 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

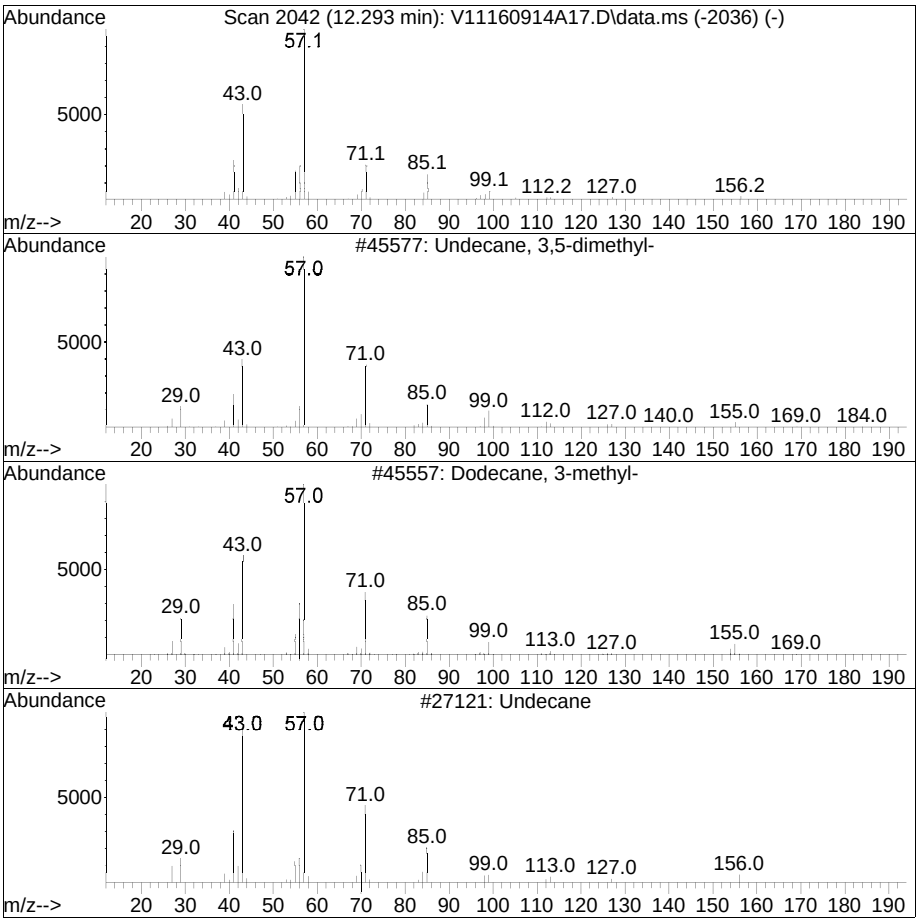
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

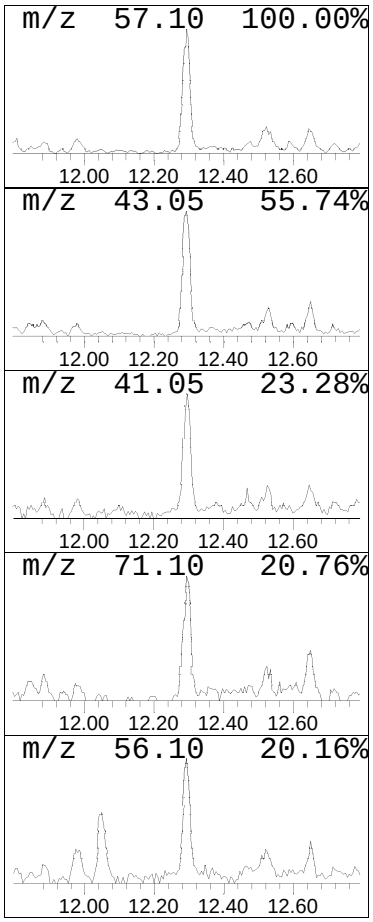
****

Peak Number 5 Unknown 2 Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.293	7.53 ug/L	120259	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecane, 3,5-dimethyl-	184	C13H28	017312-81-1	59
2	Dodecane, 3-methyl-	184	C13H28	017312-57-1	59
3	Undecane	156	C11H24	001120-21-4	58
4	Heptane, 3,5-dimethyl-	128	C9H20	000926-82-9	53
5	3-Hexanone, 2,4-dimethyl-	128	C8H16O	018641-70-8	50





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A17.D
Acq On : 14 Sep 2016 14:31
Operator : VOA111:MS
Sample : l1628787-11,31,4.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 17 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

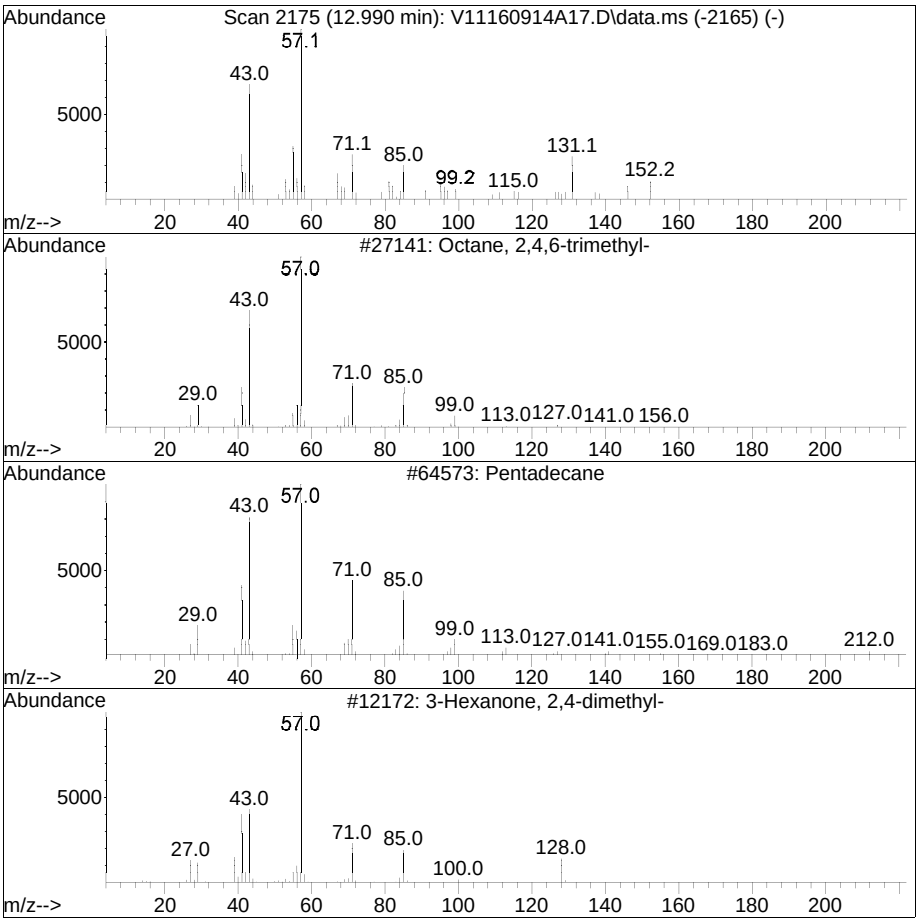
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

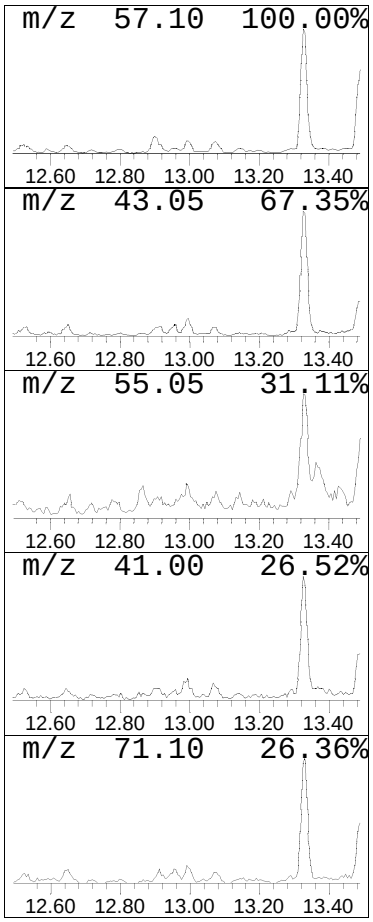
****

Peak Number 6 Unknown 3 Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.991	4.79 ug/L	76510	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,4,6-trimethyl-	156	C11H24	062016-37-9	38
2	Pentadecane	212	C15H32	000629-62-9	38
3	3-Hexanone, 2,4-dimethyl-	128	C8H16O	018641-70-8	38
4	Tetratetracontane	619	C44H90	007098-22-8	35
5	Dodecane, 1-bromo-	248	C12H25Br	000143-15-7	27





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A17.D
Acq On : 14 Sep 2016 14:31
Operator : VOA111:MS
Sample : l1628787-11,31,4.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 17 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

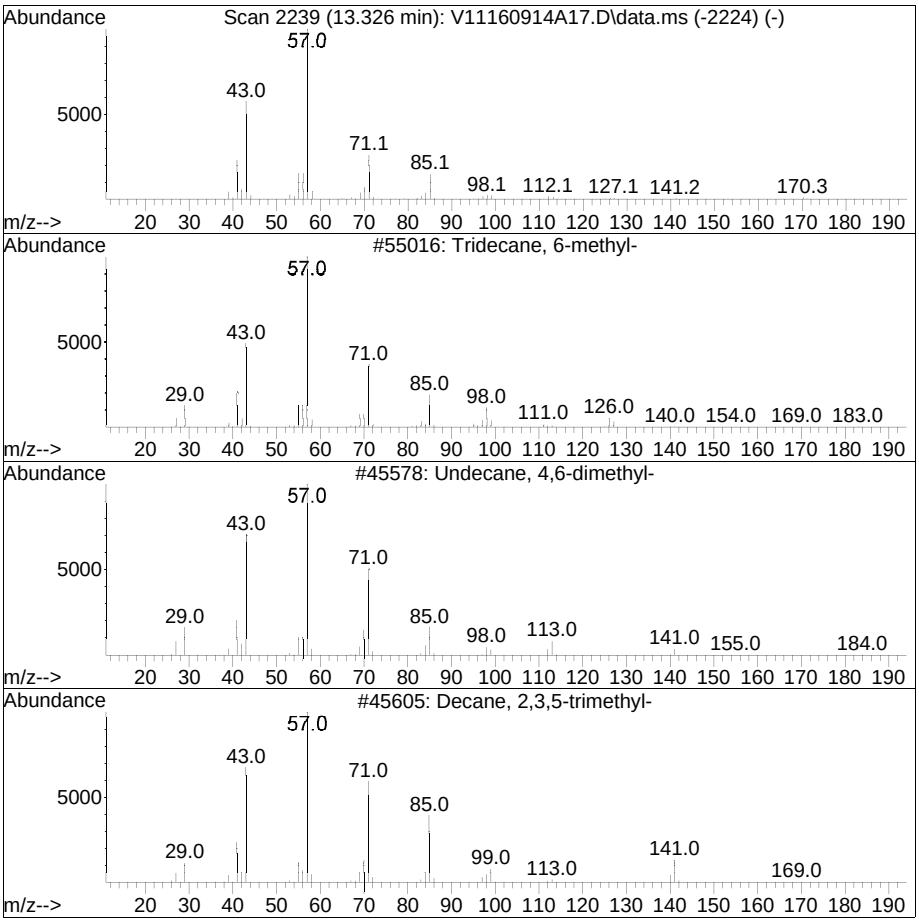
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

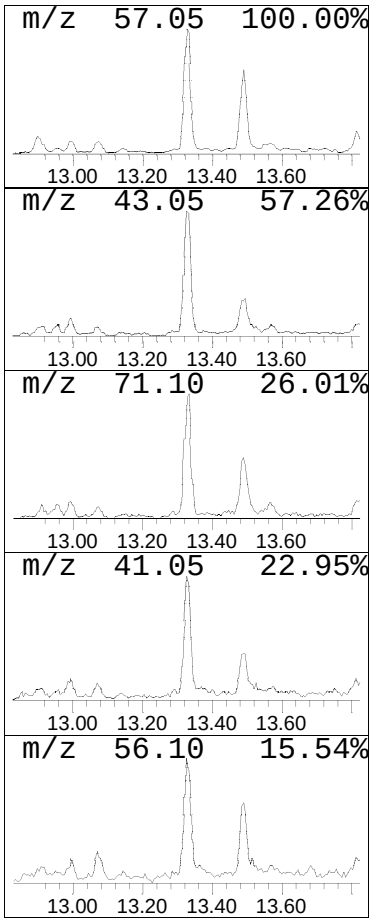
****

Peak Number 7 Unknown 4 Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.326	22.16 ug/L	353664	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tridecane, 6-methyl-	198	C14H30	013287-21-3	64
2	Undecane, 4,6-dimethyl-	184	C13H28	017312-82-2	64
3	Decane, 2,3,5-trimethyl-	184	C13H28	062238-11-3	59
4	3-Hexanone, 2,4-dimethyl-	128	C8H16O	018641-70-8	59
5	Undecane, 2,6-dimethyl-	184	C13H28	017301-23-4	59





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A17.D
Acq On : 14 Sep 2016 14:31
Operator : VOA111:MS
Sample : l1628787-11,31,4.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 17 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

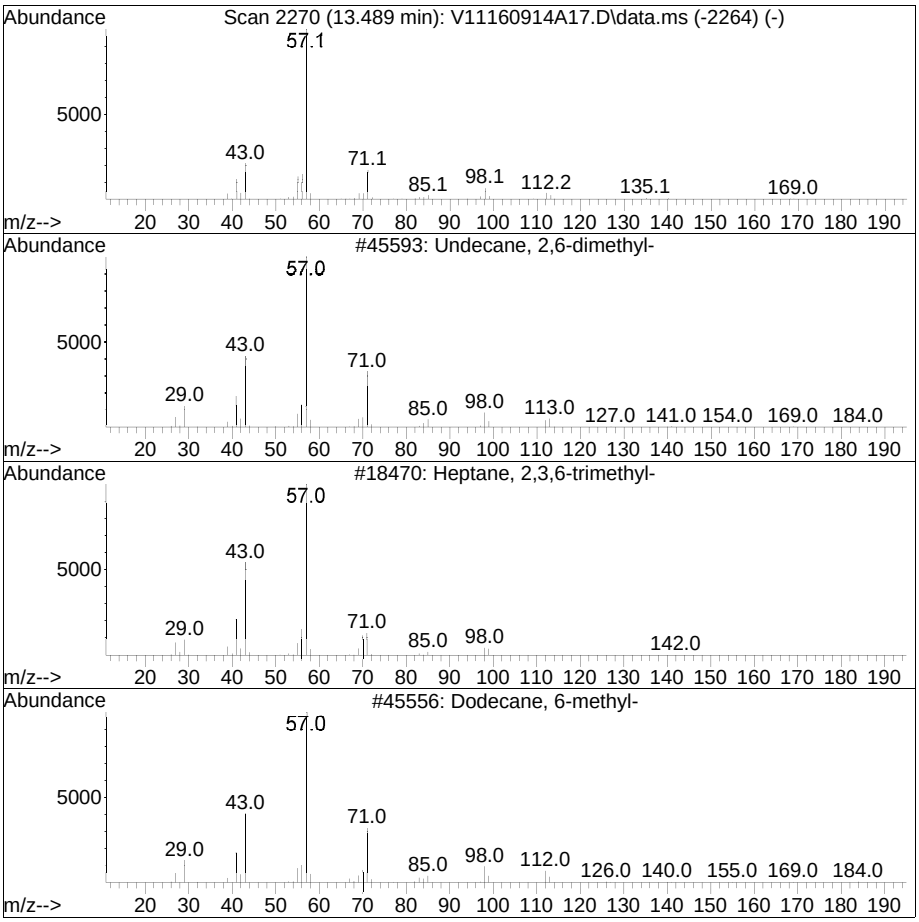
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

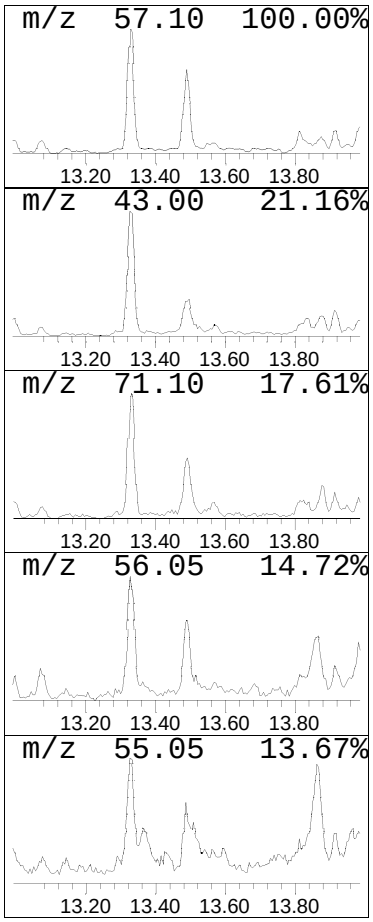
****

Peak Number 8 Unknown Alkane A Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.489	13.11 ug/L	209287	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecane, 2,6-dimethyl-	184	C13H28	017301-23-4	59
2	Heptane, 2,3,6-trimethyl-	142	C10H22	004032-93-3	59
3	Dodecane, 6-methyl-	184	C13H28	006044-71-9	50
4	Undecane, 2,5-dimethyl-	184	C13H28	017301-22-3	47
5	Undecane, 2,6-dimethyl-	184	C13H28	017301-23-4	47





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A17.D
Acq On : 14 Sep 2016 14:31
Operator : VOA111:MS
Sample : l1628787-11,31,4.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 17 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

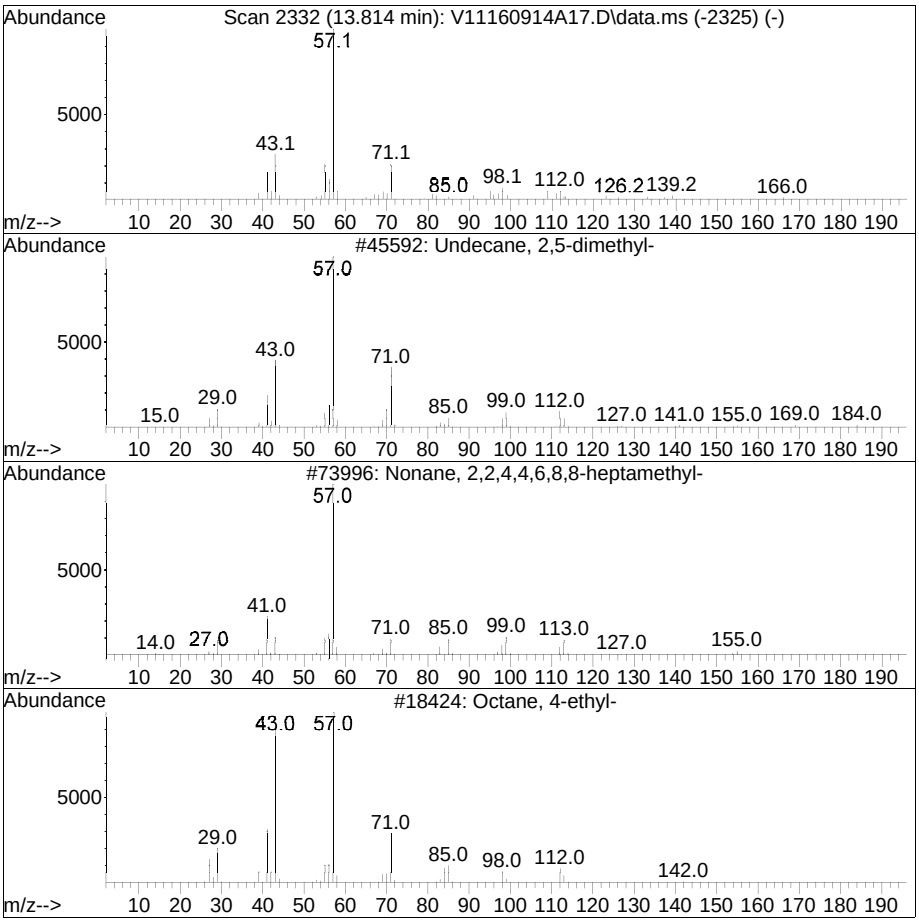
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

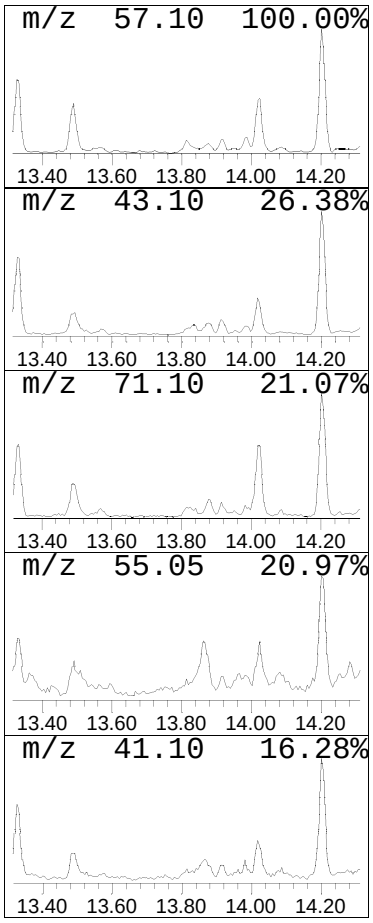
****

Peak Number 9 Unknown 5 Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.814	3.18 ug/L	50775	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecane, 2,5-dimethyl-	184	C13H28	017301-22-3	53
2	Nonane, 2,2,4,4,6,8,8-heptamethyl-	226	C16H34	004390-04-9	50
3	Octane, 4-ethyl-	142	C10H22	015869-86-0	45
4	2-Undecene, 4,5-dimethyl-, [R*,S...	182	C13H26	055170-93-9	40
5	Undecane, 2,6-dimethyl-	184	C13H28	017301-23-4	38





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A17.D
Acq On : 14 Sep 2016 14:31
Operator : VOA111:MS
Sample : l1628787-11,31,4.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 17 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

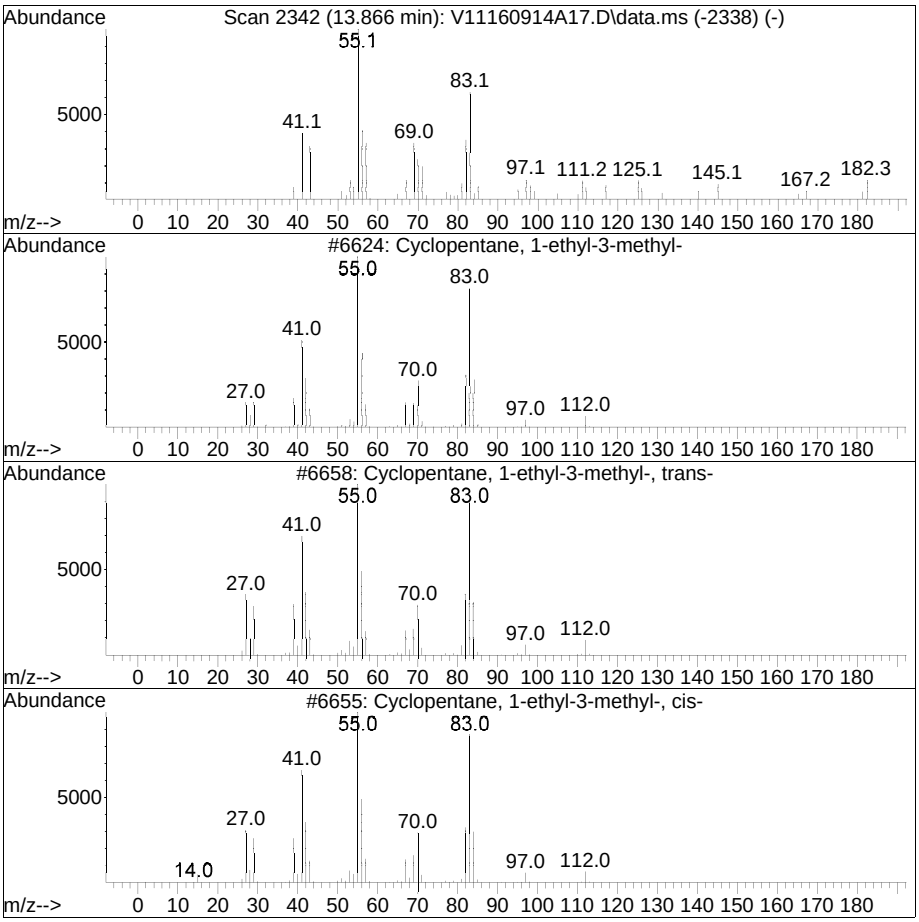
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

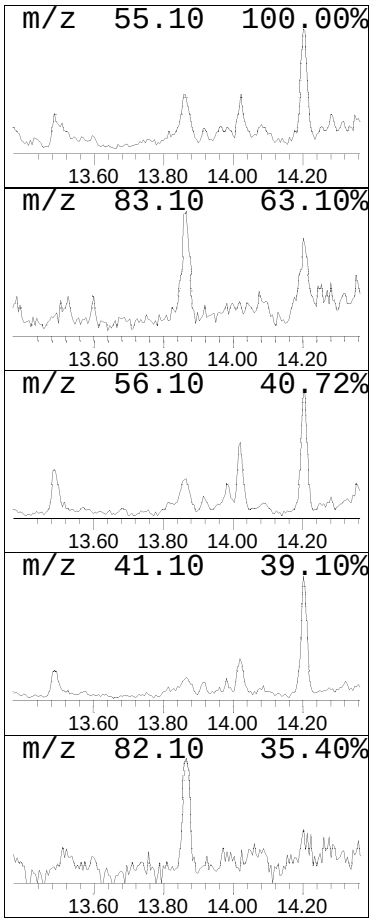
****

Peak Number 10 Unknown 6 Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.866	7.25 ug/L	115633	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, 1-ethyl-3-methyl-	112	C8H16	003726-47-4	52
2	Cyclopentane, 1-ethyl-3-methyl-,...	112	C8H16	002613-65-2	52
3	Cyclopentane, 1-ethyl-3-methyl-,...	112	C8H16	002613-66-3	52
4	6-Tridecene	182	C13H26	024949-38-0	47
5	4-Nonene, 5-butyl-	182	C13H26	007367-38-6	46





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A17.D
Acq On : 14 Sep 2016 14:31
Operator : VOA111:MS
Sample : l1628787-11,31,4.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 17 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

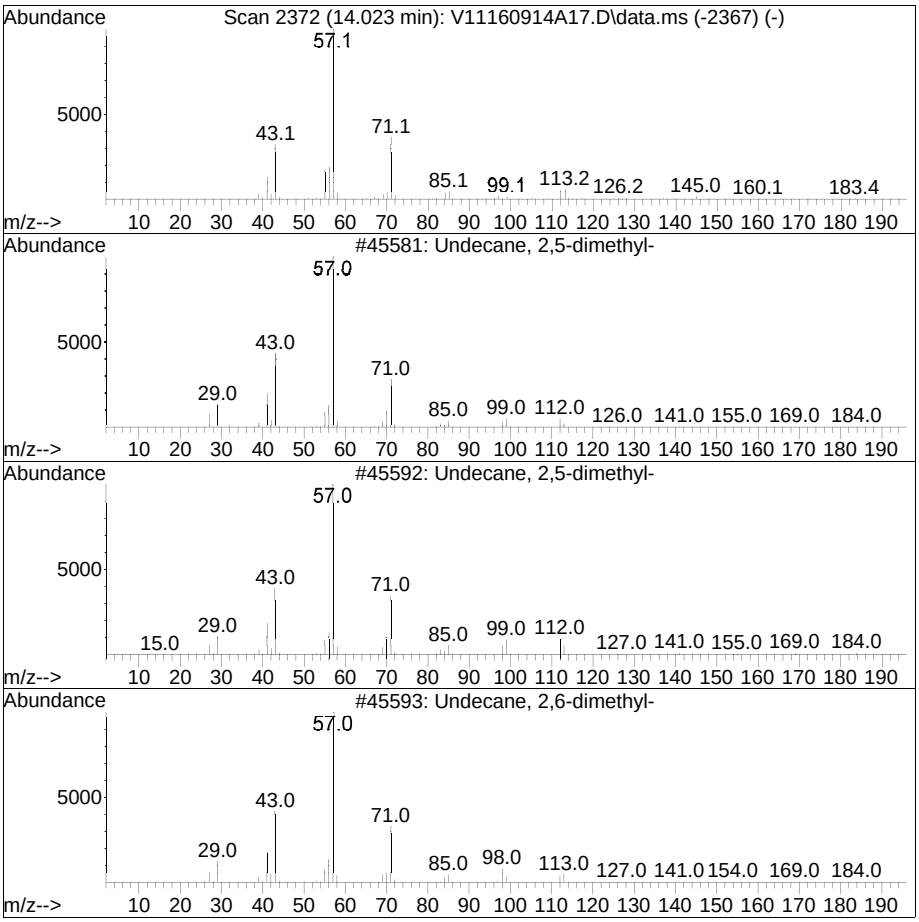
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

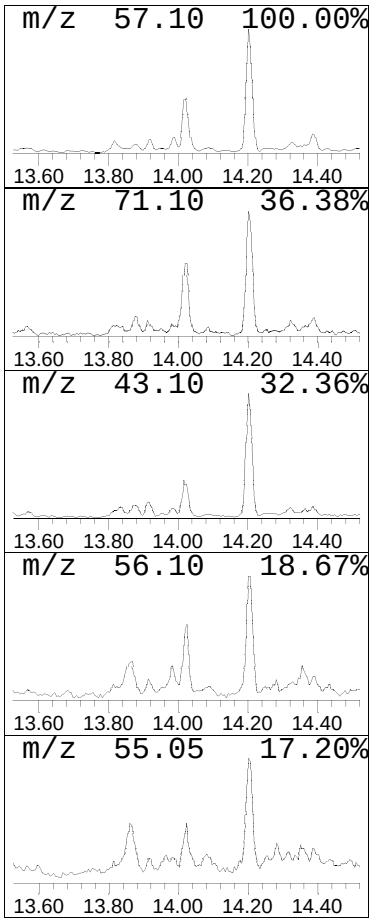
****

Peak Number 11 Unknown 7 Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.023	11.77 ug/L	187864	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecane, 2,5-dimethyl-	184	C13H28	017301-22-3	72
2	Undecane, 2,5-dimethyl-	184	C13H28	017301-22-3	64
3	Undecane, 2,6-dimethyl-	184	C13H28	017301-23-4	64
4	Octane, 3,6-dimethyl-	142	C10H22	015869-94-0	59
5	Dodecane, 2,7,10-trimethyl-	212	C15H32	074645-98-0	59





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A17.D
Acq On : 14 Sep 2016 14:31
Operator : VOA111:MS
Sample : l1628787-11,31,4.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 17 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

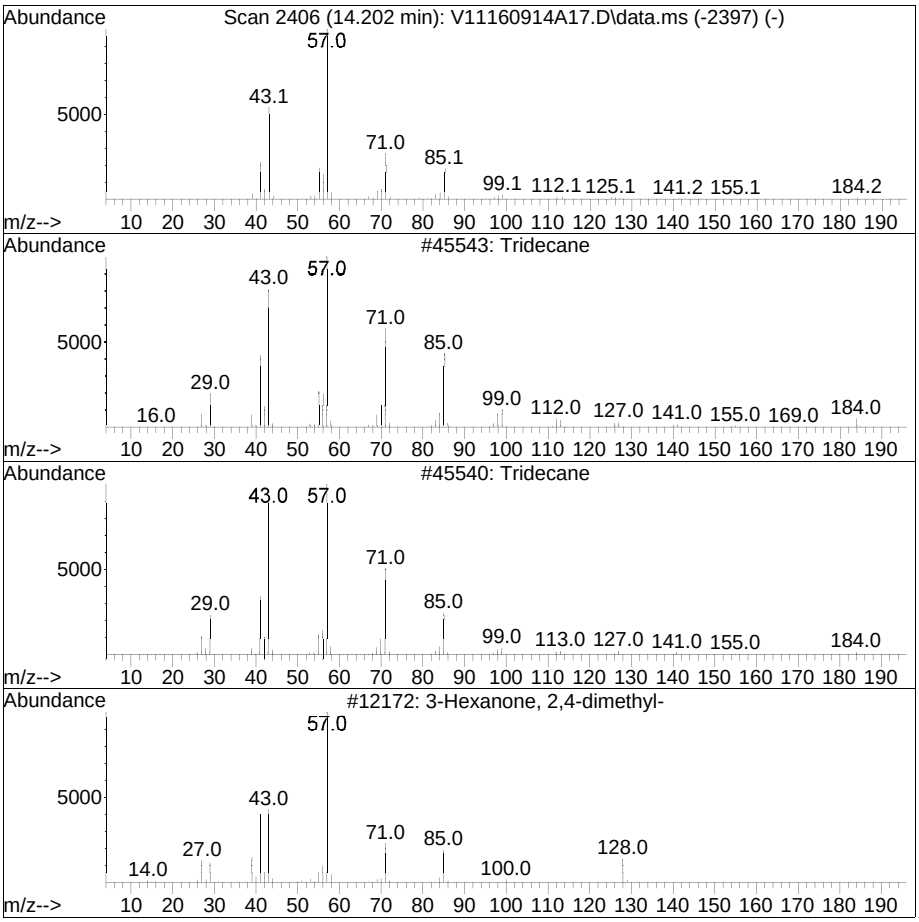
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

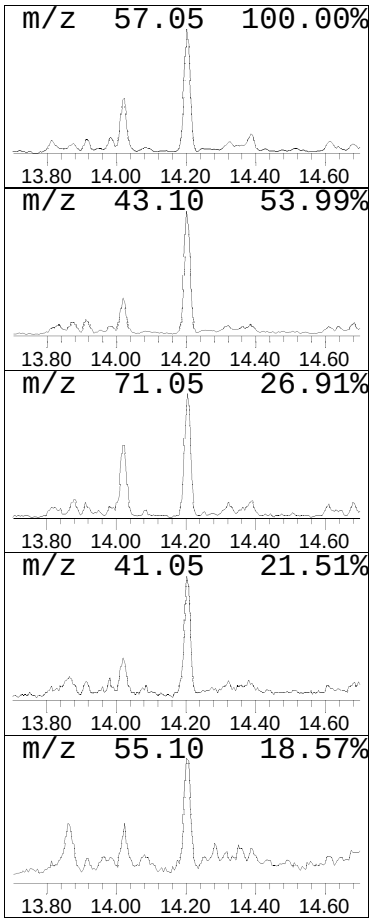
****

Peak Number 12 Unknown 8 Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.202	32.91 ug/L	525299	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tridecane	184	C13H28	000629-50-5	81
2	Tridecane	184	C13H28	000629-50-5	81
3	3-Hexanone, 2,4-dimethyl-	128	C8H16O	018641-70-8	64
4	Tridecane	184	C13H28	000629-50-5	59
5	Undecane	156	C11H24	001120-21-4	59





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A17.D
Acq On : 14 Sep 2016 14:31
Operator : VOA111:MS
Sample : l1628787-11,31,4.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 17 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

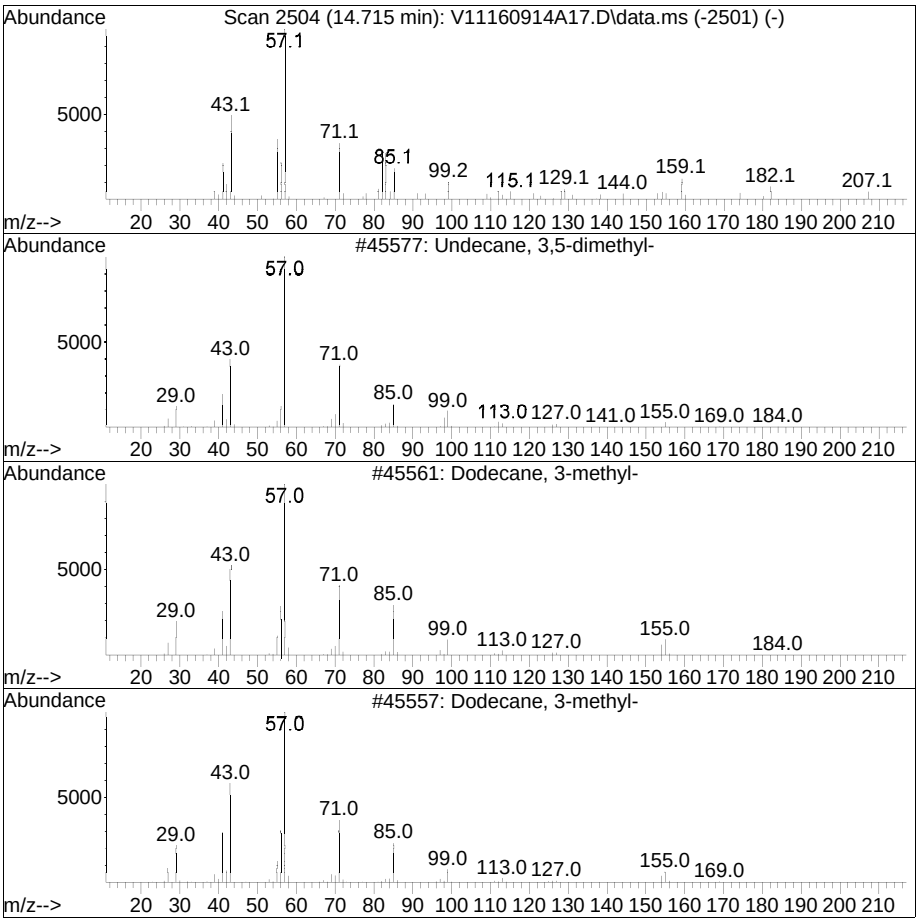
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

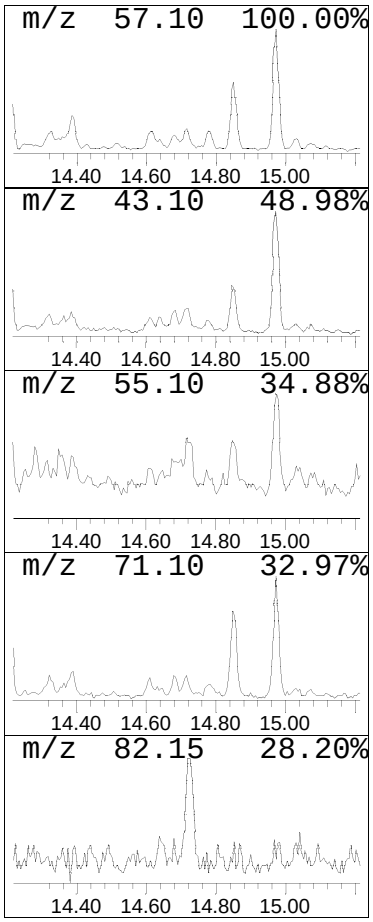
****

Peak Number 13 Unknown Alkane B Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.716	4.44 ug/L	70930	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecane, 3,5-dimethyl-	184	C13H28	017312-81-1	38
2	Dodecane, 3-methyl-	184	C13H28	017312-57-1	38
3	Dodecane, 3-methyl-	184	C13H28	017312-57-1	37
4	Decane, 2,6,6-trimethyl-	184	C13H28	062108-24-1	37
5	Decane, 2,6,7-trimethyl-	184	C13H28	062108-25-2	35





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A17.D
Acq On : 14 Sep 2016 14:31
Operator : VOA111:MS
Sample : l1628787-11,31,4.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 17 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

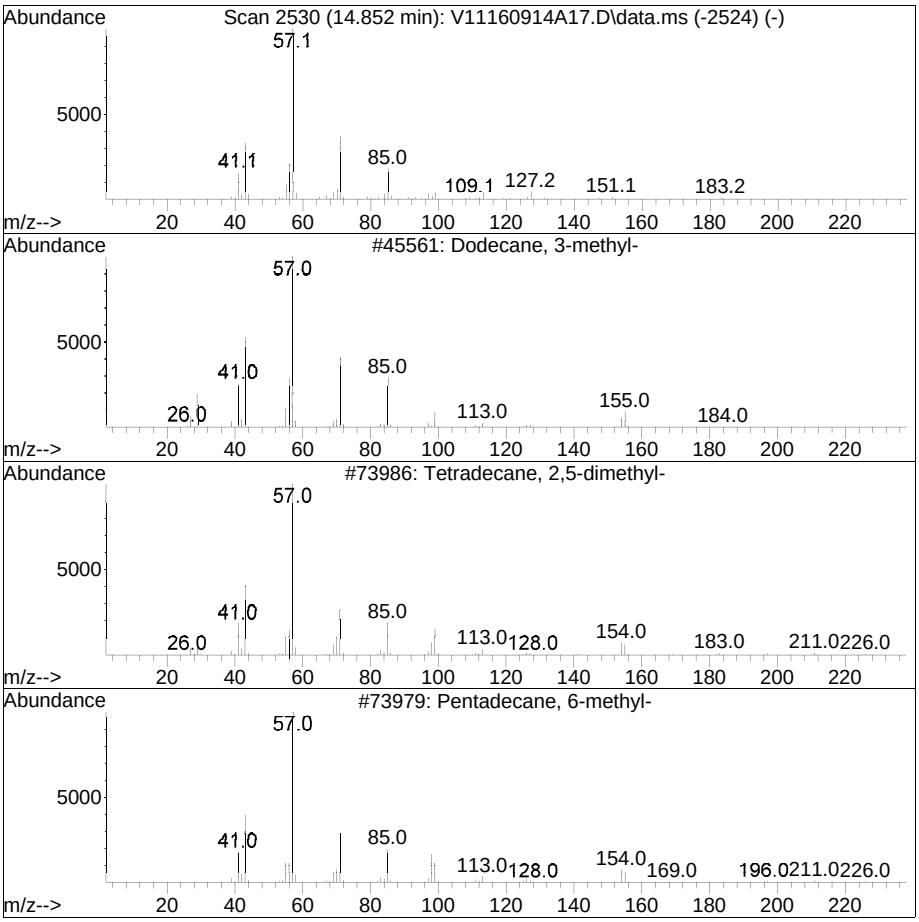
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

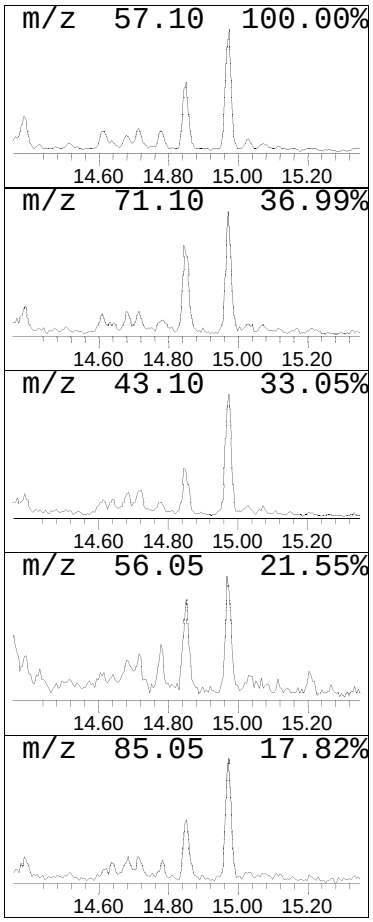
****

Peak Number 14 Unknown Alkane C Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.852	9.07 ug/L	144691	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dodecane, 3-methyl-	184	C13H28	017312-57-1	64
2	Tetradecane, 2,5-dimethyl-	226	C16H34	056292-69-4	64
3	Pentadecane, 6-methyl-	226	C16H34	010105-38-1	59
4	Undecane, 3-methyl-	170	C12H26	001002-43-3	53
5	Tridecane, 6-methyl-	198	C14H30	013287-21-3	53





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A17.D
Acq On : 14 Sep 2016 14:31
Operator : VOA111:MS
Sample : l1628787-11,31,4.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 17 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

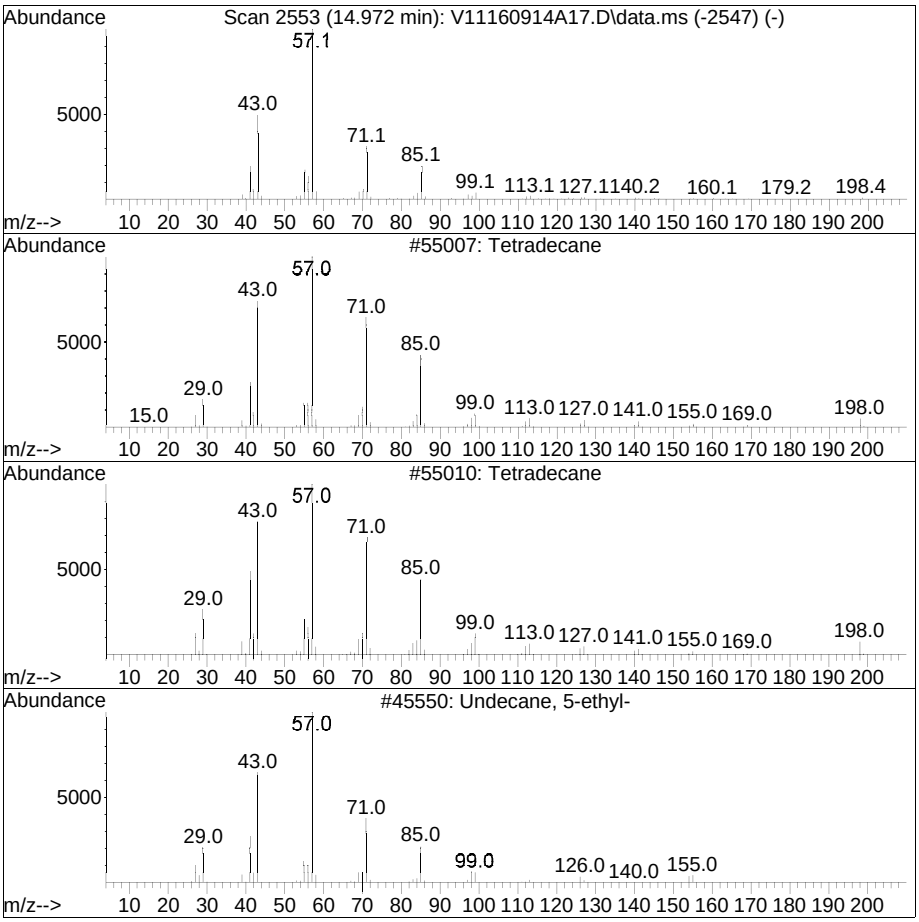
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

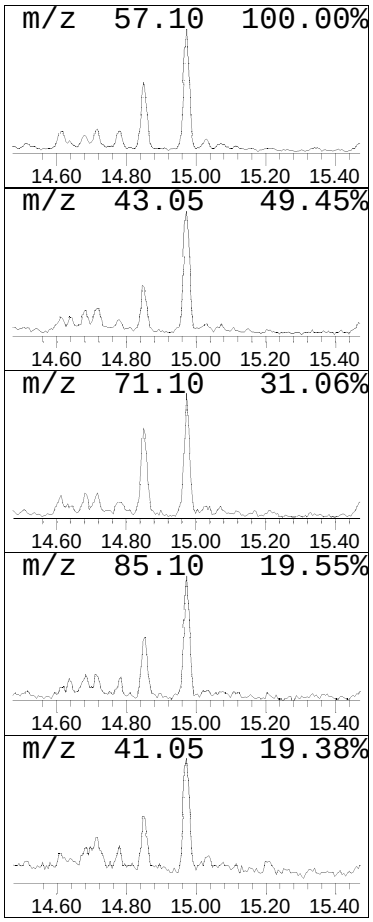
****

Peak Number 15 Unknown Alkane D Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.972	15.30 ug/L	244211	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tetradecane	198	C14H30	000629-59-4	80
2	Tetradecane	198	C14H30	000629-59-4	80
3	Undecane, 5-ethyl-	184	C13H28	017453-94-0	72
4	Tetradecane	198	C14H30	000629-59-4	72
5	Pentadecane, 6-methyl-	226	C16H34	010105-38-1	72





Tentatively Identified Compound (LSC) summary

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A17.D
Acq On : 14 Sep 2016 14:31
Operator : VOA111:MS
Sample : l1628787-11,31,4.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 17 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

					Internal Standard		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Unknown 1	10.982	4.4	ug/L	70007	3	12.052	319204	20.0
Unknown Aromatic A	11.098	4.5	ug/L	71698	3	12.052	319204	20.0
Unknown Aromatic B	11.444	4.8	ug/L	76435	3	12.052	319204	20.0
Unknown Aromatic C	11.638	5.8	ug/L	92593	3	12.052	319204	20.0
Unknown 2	12.293	7.5	ug/L	120259	3	12.052	319204	20.0
Unknown 3	12.991	4.8	ug/L	76510	3	12.052	319204	20.0
Unknown 4	13.326	22.2	ug/L	353664	3	12.052	319204	20.0
Unknown Alkane A	13.489	13.1	ug/L	209287	3	12.052	319204	20.0
Unknown 5	13.814	3.2	ug/L	50775	3	12.052	319204	20.0
Unknown 6	13.866	7.2	ug/L	115633	3	12.052	319204	20.0
Unknown 7	14.023	11.8	ug/L	187864	3	12.052	319204	20.0
Unknown 8	14.202	32.9	ug/L	525299	3	12.052	319204	20.0
Unknown Alkane B	14.716	4.4	ug/L	70930	3	12.052	319204	20.0
Unknown Alkane C	14.852	9.1	ug/L	144691	3	12.052	319204	20.0
Unknown Alkane D	14.972	15.3	ug/L	244211	3	12.052	319204	20.0

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A18.D
Acq On : 14 Sep 2016 14:56
Operator : VOA111:MS
Sample : l1628787-12,31,3.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 14 15:29:56 2016
Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA111\2016\160914A\V11160914A02.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.787	96	120566	20.000	ug/L	0.00
Standard Area 1 = 144511			Recovery = 83.43%			
59) Chlorobenzene-d5	9.289	117	95527	20.000	ug/L	0.00
Standard Area 1 = 111926			Recovery = 85.35%			
79) 1,4-Dichlorobenzene-d4	12.052	152	47224	20.000	ug/L	0.00
Standard Area 1 = 58934			Recovery = 80.13%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.995	113	33587	24.616	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 123.08%			
43) 1,2-Dichloroethane-d4	5.509	65	50407	25.391	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 126.96%			
60) Toluene-d8	7.459	98	123096	18.913	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 94.56%			
83) 4-Bromofluorobenzene	10.815	95	51202	19.961	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 99.80%			
Target Compounds						Qvalue
48) Trichloroethene	5.954	95	119	0.087	ug/L	# 53

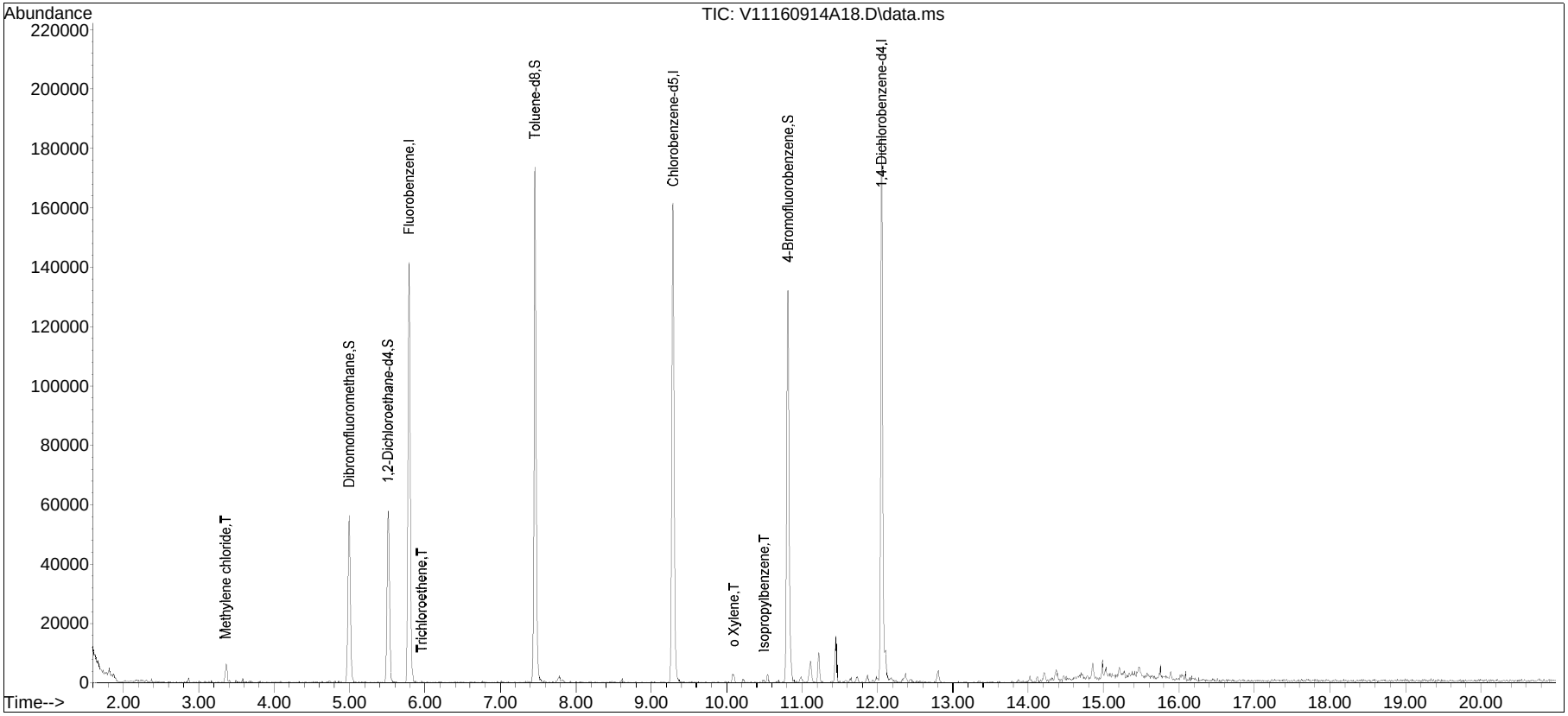
(#) = qualifier out of range (m) = manual integration (+) = signals summed

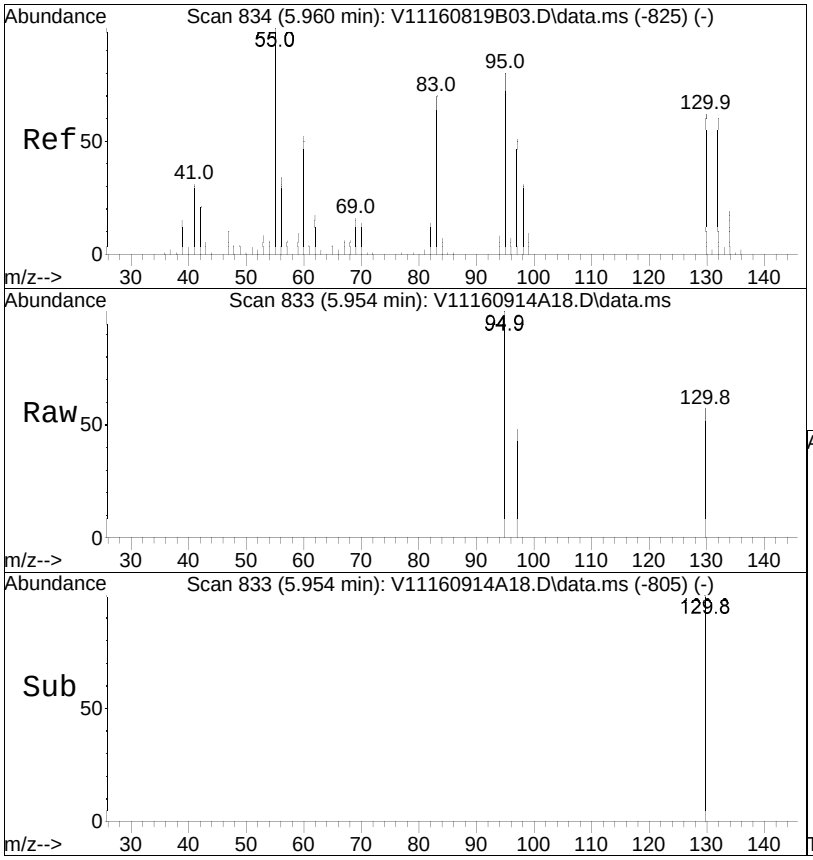
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A18.D
Acq On : 14 Sep 2016 14:56
Operator : VOA111:MS
Sample : l1628787-12,31,3.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 14 15:29:56 2016
Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist914A\V11160914A02.D•

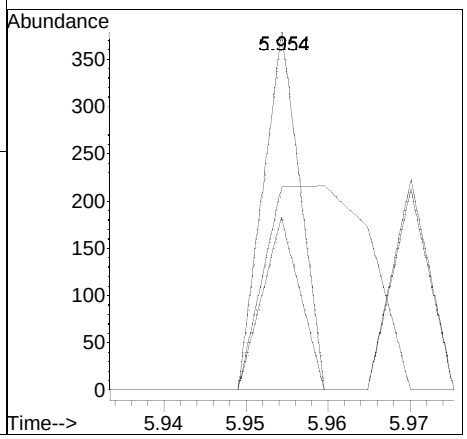




#48
Trichloroethene
Concen: 0.09 ug/L
RT: 5.954 min Scan# 833
Delta R.T. -0.006 min
Lab File: V11160914A18.D
Acq: 14 Sep 2016 14:56

Tgt Ion: 95 Resp: 119

Ion	Ratio	Lower	Upper
95	100		
97	48.7	54.6	82.0#
130	159.7	78.4	117.6#



Manual Integration Report

Data Path	: I:\VOLATILES\VOA111\2016\1	QMethod	: V111_160819_8260.m
Data File	: V11160914A18.D	Operator	: VOA111:MS
Date Inj'd	: 9/14/2016 14:56	Instrument	: VOA111
Sample	: l1628787-12,31,3.8,5,,z	Quant Date	: 9/14/2016 3:23 pm

There are no manual integrations or false positives in this file.

LSC Area Percent Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A18.D
Acq On : 14 Sep 2016 14:56
Operator : VOA111:MS
Sample : l1628787-12,31,3.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Title : VOLATILES BY GC/MS

Signal : TIC: V11160914A18.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.995	640	650	667	rBB2	56418	111291	32.09%	6.139%
2	5.509	737	748	764	rBB3	57889	117629	33.92%	6.489%
3	5.787	792	801	817	rBV	141616	274757	79.24%	15.157%
4	7.459	1111	1120	1142	rVB	173756	346758	100.00%	19.129%
5	9.284	1455	1468	1488	rBB2	161695	328689	94.79%	18.132%
6	10.815	1749	1760	1773	rBV2	132186	259688	74.89%	14.326%
7	11.114	1808	1817	1829	rVB2	7255	14447	4.17%	0.797%
8	11.218	1829	1837	1845	rBB2	10092	15690	4.52%	0.866%
9	11.449	1874	1881	1889	rBB4	15610	26136	7.54%	1.442%
10	12.052	1988	1996	2004	rBV	184306	306538	88.40%	16.910%
11	14.978	2548	2554	2560	rBV4	6360	11114	3.21%	0.613%

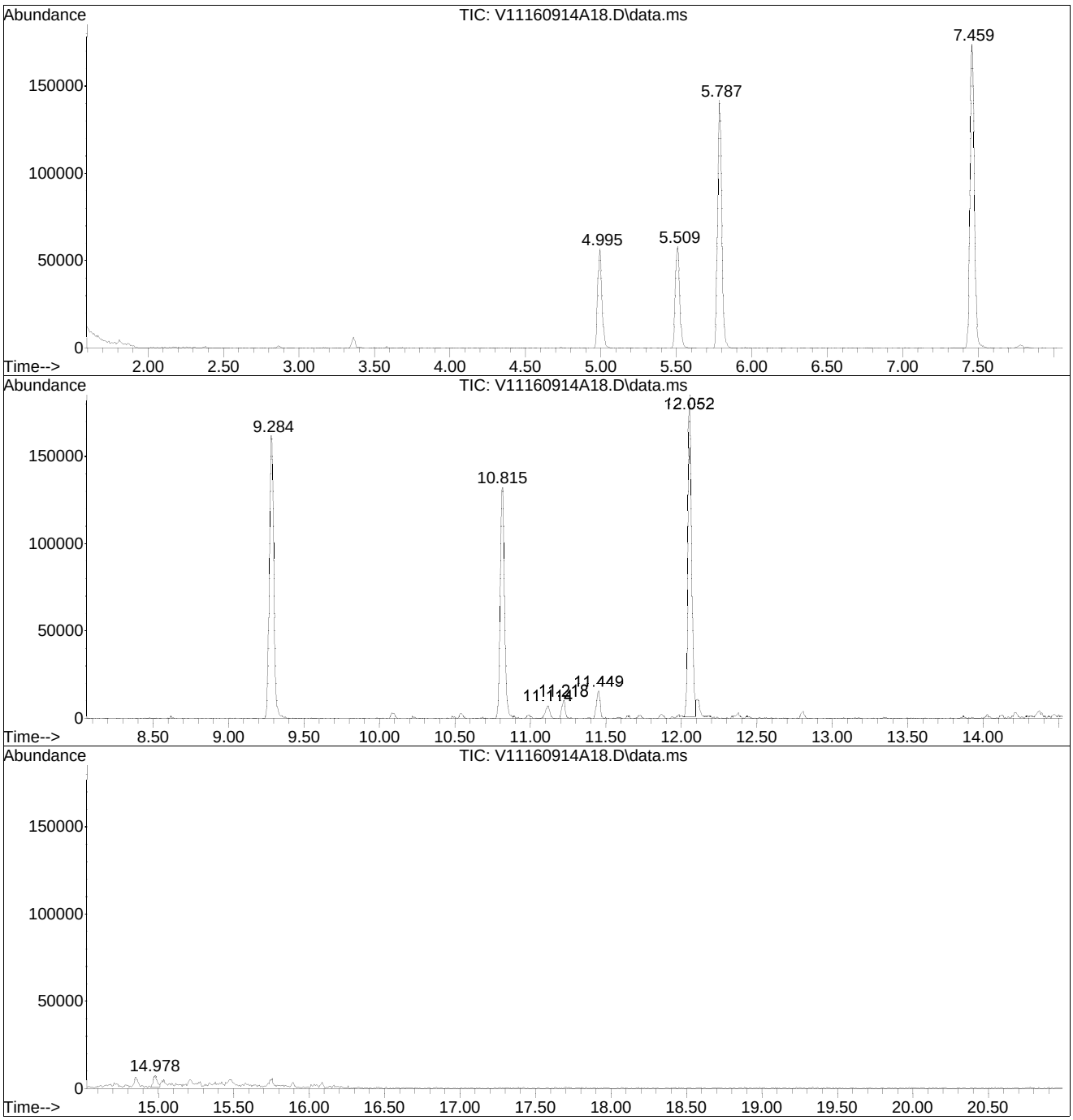
Sum of corrected areas: 1812737

LSC Report - Integrated Chromatogram

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A18.D
Acq On : 14 Sep 2016 14:56
Operator : VOA111:MS
Sample : l1628787-12,31,3.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 18 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p



Library Search Compound Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A18.D
Acq On : 14 Sep 2016 14:56
Operator : VOA111:MS
Sample : l1628787-12,31,3.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 18 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A18.D
Acq On : 14 Sep 2016 14:56
Operator : VOA111:MS
Sample : l1628787-12,31,3.8,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 18 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A19.D
Acq On : 14 Sep 2016 15:22
Operator : VOA111:MS
Sample : l1628787-13,31,4.0,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 14 16:07:51 2016
Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA111\2016\160914A\V11160914A02.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.786	96	120256	20.000	ug/L	0.00
Standard Area 1 = 144511			Recovery = 83.22%			
59) Chlorobenzene-d5	9.284	117	94085	20.000	ug/L	0.00
Standard Area 1 = 111926			Recovery = 84.06%			
79) 1,4-Dichlorobenzene-d4	12.052	152	47641	20.000	ug/L	0.00
Standard Area 1 = 58934			Recovery = 80.84%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.995	113	31740	23.323	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 116.62%			
43) 1,2-Dichloroethane-d4	5.509	65	49622	25.060	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 125.30%			
60) Toluene-d8	7.459	98	122028	19.036	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 95.18%			
83) 4-Bromofluorobenzene	10.815	95	50286	19.433	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 97.17%			
Target Compounds						Qvalue
48) Trichloroethene	5.960	95	5074	3.732	ug/L #	82

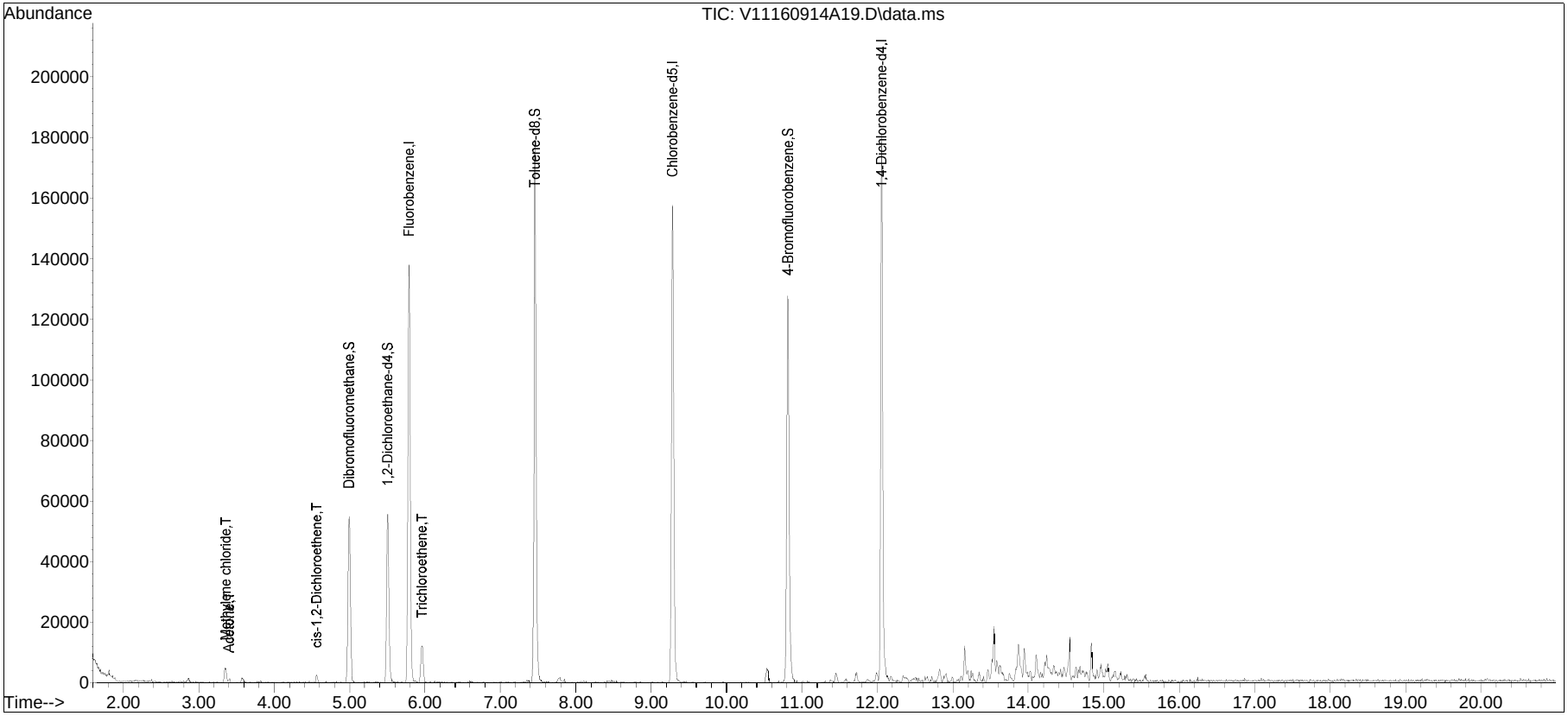
(#) = qualifier out of range (m) = manual integration (+) = signals summed

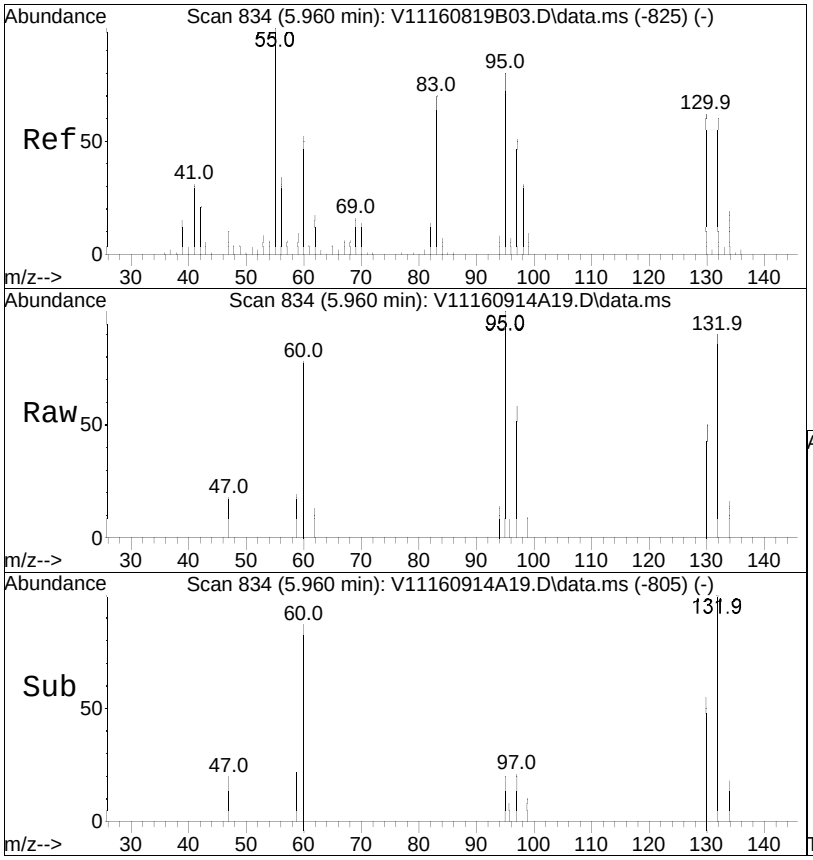
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A19.D
Acq On : 14 Sep 2016 15:22
Operator : VOA111:MS
Sample : l1628787-13,31,4.0,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 14 16:07:51 2016
Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist914A\V11160914A02.D•

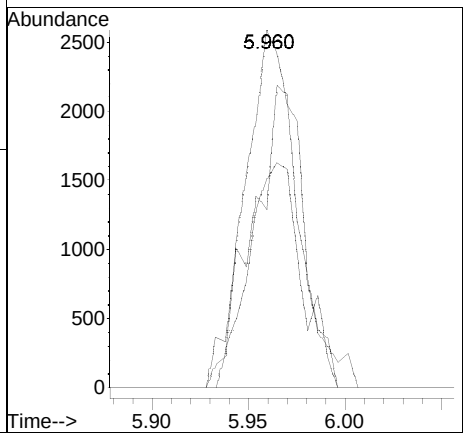




#48
Trichloroethene
Concen: 3.73 ug/L
RT: 5.960 min Scan# 834
Delta R.T. -0.000 min
Lab File: V11160914A19.D
Acq: 14 Sep 2016 15:22

Tgt Ion: 95 Resp: 5074

Ion	Ratio	Lower	Upper
95	100		
97	60.8	54.6	82.0
130	74.8	78.4	117.6#



Manual Integration Report

Data Path	: I:\VOLATILES\VOA111\2016\1	QMethod	: V111_160819_8260.m
Data File	: V11160914A19.D	Operator	: VOA111:MS
Date Inj'd	: 9/14/2016 15:22	Instrument	: VOA111
Sample	: l1628787-13,31,4.0,5,,z	Quant Date	: 9/14/2016 4:07 pm

There are no manual integrations or false positives in this file.

LSC Area Percent Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A19.D
Acq On : 14 Sep 2016 15:22
Operator : VOA111:MS
Sample : l1628787-13,31,4.0,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Title : VOLATILES BY GC/MS

Signal : TIC: V11160914A19.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.995	641	650	666	rBB	54916	109858	31.68%	5.711%
2	5.509	737	748	770	rBB	55687	113578	32.75%	5.905%
3	5.786	790	801	814	rBV	138204	272308	78.52%	14.157%
4	5.960	827	834	843	rBB4	12228	24978	7.20%	1.299%
5	7.459	1110	1120	1140	rVB	177131	346791	100.00%	18.029%
6	9.284	1458	1468	1488	rBB	157764	320000	92.27%	16.637%
7	10.809	1746	1759	1776	rBV	127733	250896	72.35%	13.044%
8	12.052	1988	1996	2010	rBV	180805	309308	89.19%	16.081%
9	13.153	2201	2206	2211	rBV4	11221	15304	4.41%	0.796%
10	13.546	2270	2281	2285	rVV6	17295	32397	9.34%	1.684%
11	13.861	2330	2341	2352	rBV7	12111	35607	10.27%	1.851%
12	13.940	2352	2356	2368	rVV5	9838	18736	5.40%	0.974%
13	14.107	2382	2388	2396	rVB4	7665	13033	3.76%	0.678%
14	14.244	2411	2414	2427	rVB7	6654	11443	3.30%	0.595%
15	14.548	2462	2472	2477	rVB5	14279	27820	8.02%	1.446%
16	14.836	2521	2527	2537	rBV7	12475	21421	6.18%	1.114%

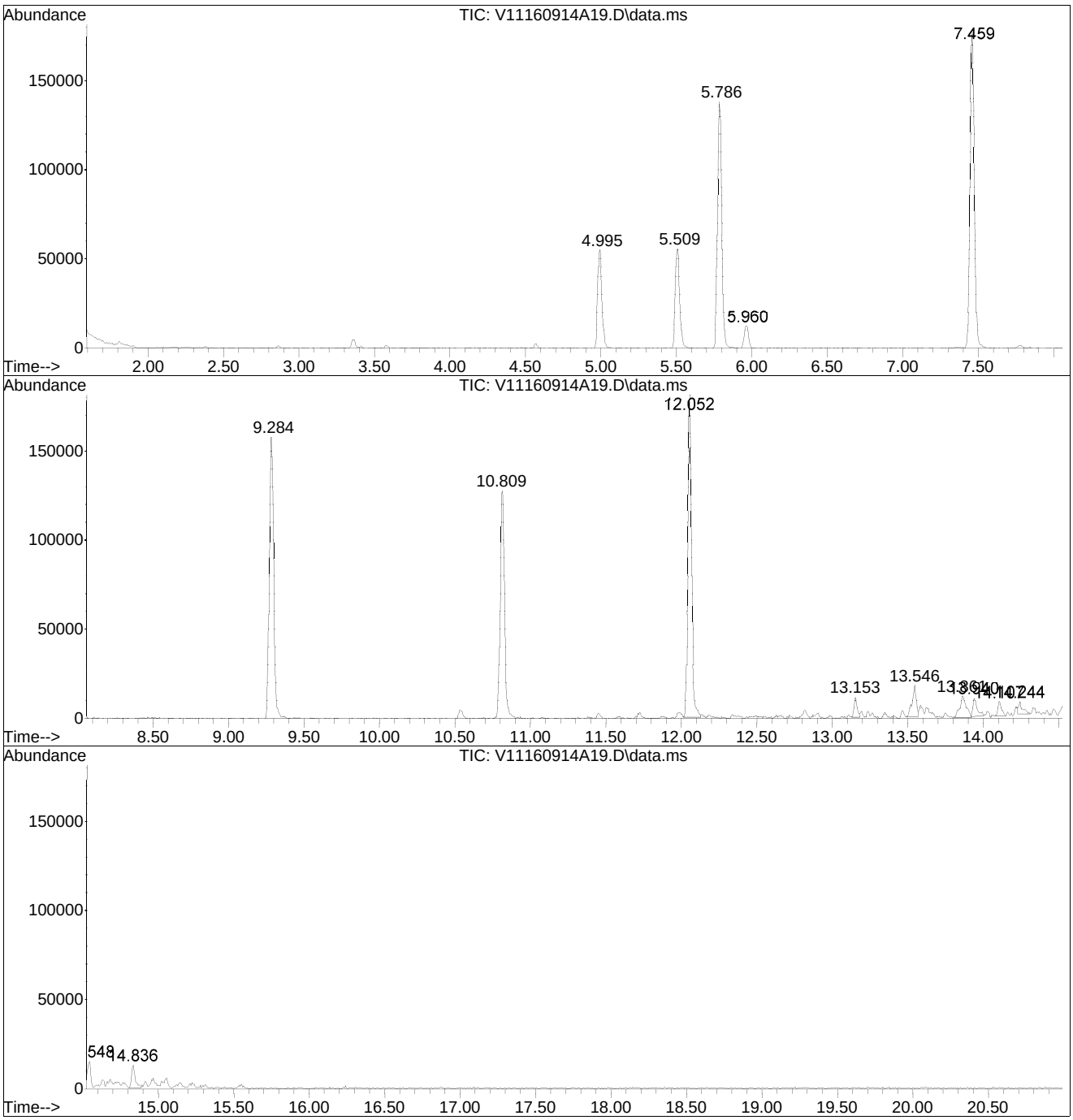
Sum of corrected areas: 1923478

LSC Report - Integrated Chromatogram

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A19.D
Acq On : 14 Sep 2016 15:22
Operator : VOA111:MS
Sample : l1628787-13,31,4.0,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 19 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p



Library Search Compound Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A19.D
Acq On : 14 Sep 2016 15:22
Operator : VOA111:MS
Sample : l1628787-13,31,4.0,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 19 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

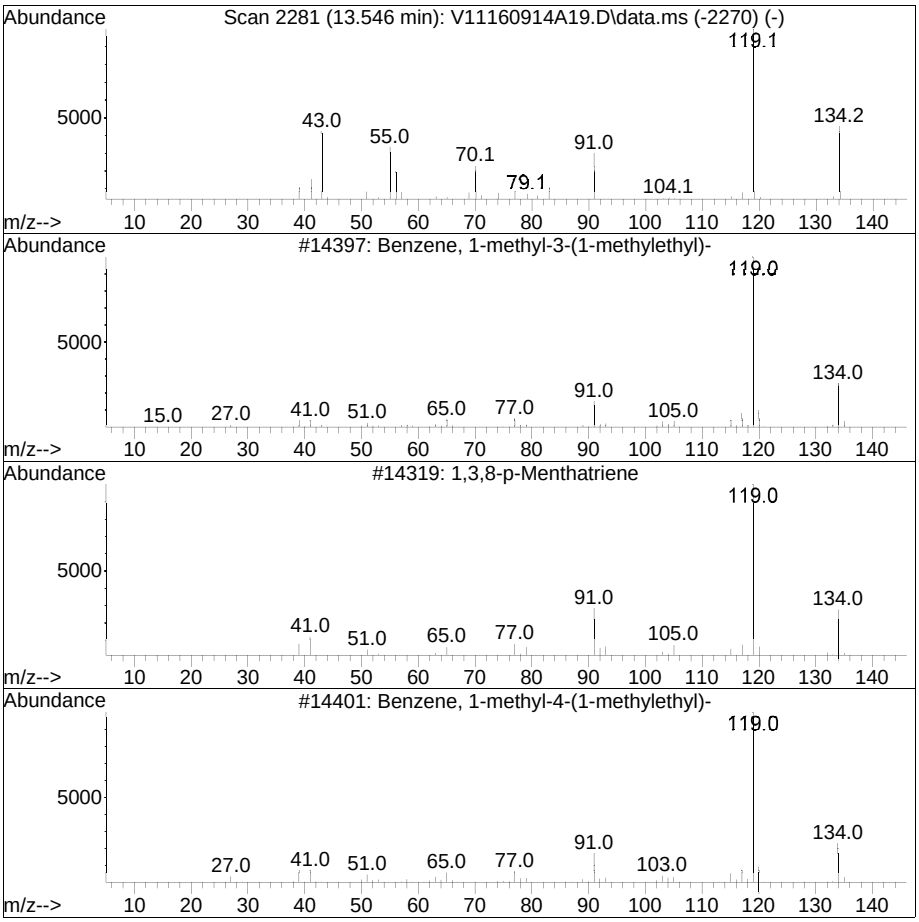
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

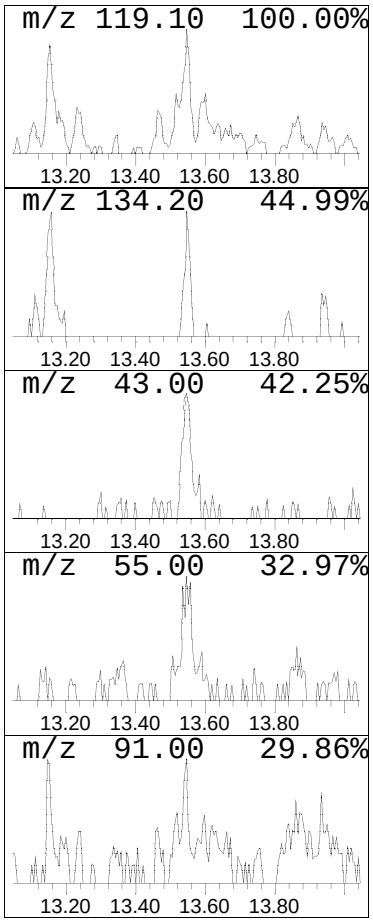
****

Peak Number 1 Unknown 1 Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.546	2.09 ug/L	32397	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	58
2	1,3,8-p-Menthatriene	134	C10H14	021195-59-5	58
3	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	53
4	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	53
5	Benzene, 1-ethyl-2,4-dimethyl-	134	C10H14	000874-41-9	53





Library Search Compound Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A19.D
Acq On : 14 Sep 2016 15:22
Operator : VOA111:MS
Sample : l1628787-13,31,4.0,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 19 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

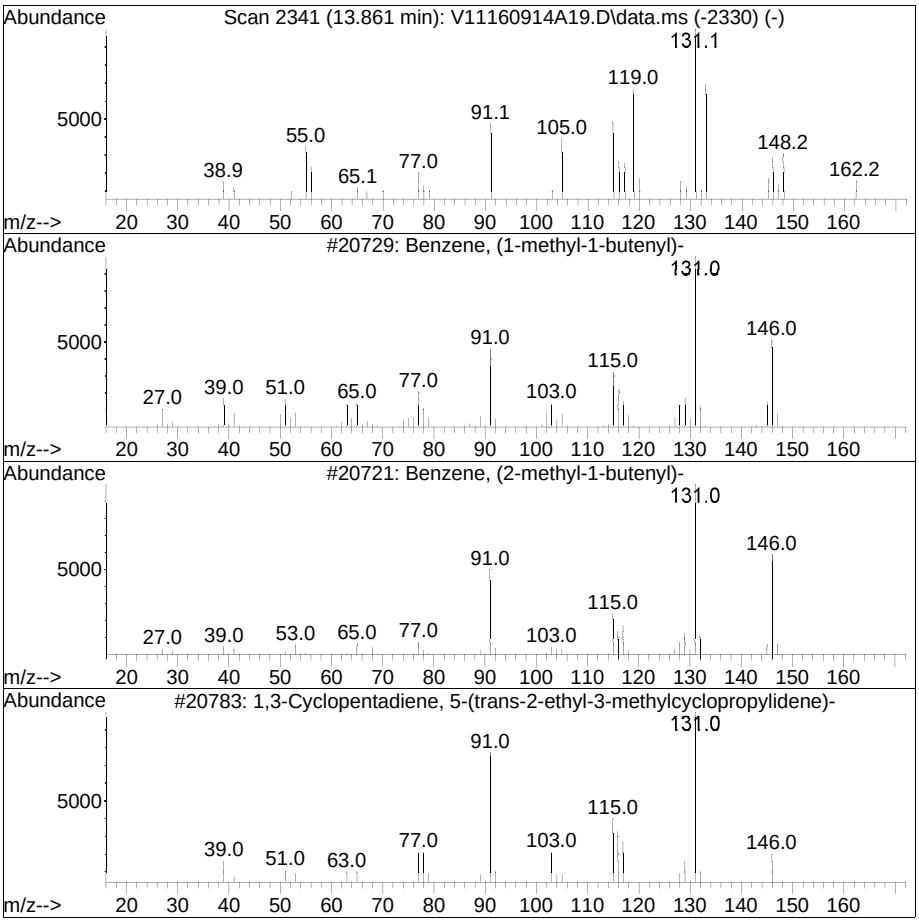
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

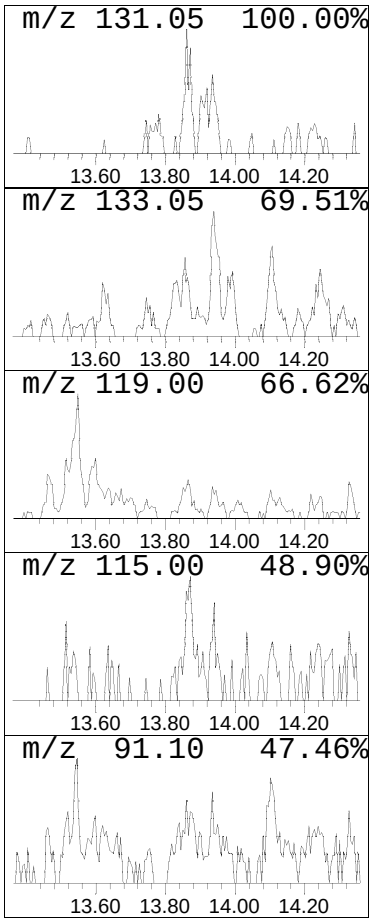
****

Peak Number 2 Unknown 2 Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.861	2.30 ug/L	35607	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, (1-methyl-1-butenyl)-	146	C11H14	053172-84-2	46
2	Benzene, (2-methyl-1-butenyl)-	146	C11H14	056253-64-6	43
3	1,3-Cyclopentadiene, 5-(trans-2-...	146	C11H14	079209-36-2	43
4	Benzene, (1-methyl-1-butenyl)-	146	C11H14	053172-84-2	41
5	Benzene, 1-methyl-4-(1-methyl-2-...	146	C11H14	097664-18-1	38





Tentatively Identified Compound (LSC) summary

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A19.D
Acq On : 14 Sep 2016 15:22
Operator : VOA111:MS
Sample : l1628787-13,31,4.0,5,,z
Misc : WG931857,ICAL12787
ALS Vial : 19 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

					Internal Standard		
TIC Top Hit name	RT	EstConc	Units	Response	# RT	Resp	Conc
Unknown 1	13.546	2.1	ug/L	32397	3 12.052	309308	20.0
Unknown 2	13.861	2.3	ug/L	35607	3 12.052	309308	20.0

Quantitation Report (QT/LSC Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A20.D
Acq On : 14 Sep 2016 15:48
Operator : VOA111:MS
Sample : l1628787-01,31H,2.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 14 16:39:11 2016
Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA111\2016\160914A\V11160914A02.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.786	96	120968	20.000	ug/L	0.00
Standard Area 1 = 144511			Recovery = 83.71%			
59) Chlorobenzene-d5	9.284	117	95172	20.000	ug/L	0.00
Standard Area 1 = 111926			Recovery = 85.03%			
79) 1,4-Dichlorobenzene-d4	12.052	152	50699	20.000	ug/L	0.00
Standard Area 1 = 58934			Recovery = 86.03%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.990	113	30944	22.604	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 113.02%			
43) 1,2-Dichloroethane-d4	5.503	65	49005	24.602	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 123.01%			
60) Toluene-d8	7.454	98	125404	19.339	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 96.69%			
83) 4-Bromofluorobenzene	10.809	95	57151	20.753	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 103.77%			
Target Compounds						Qvalue
4) Vinyl chloride	1.849	62	939	0.561	ug/L	65

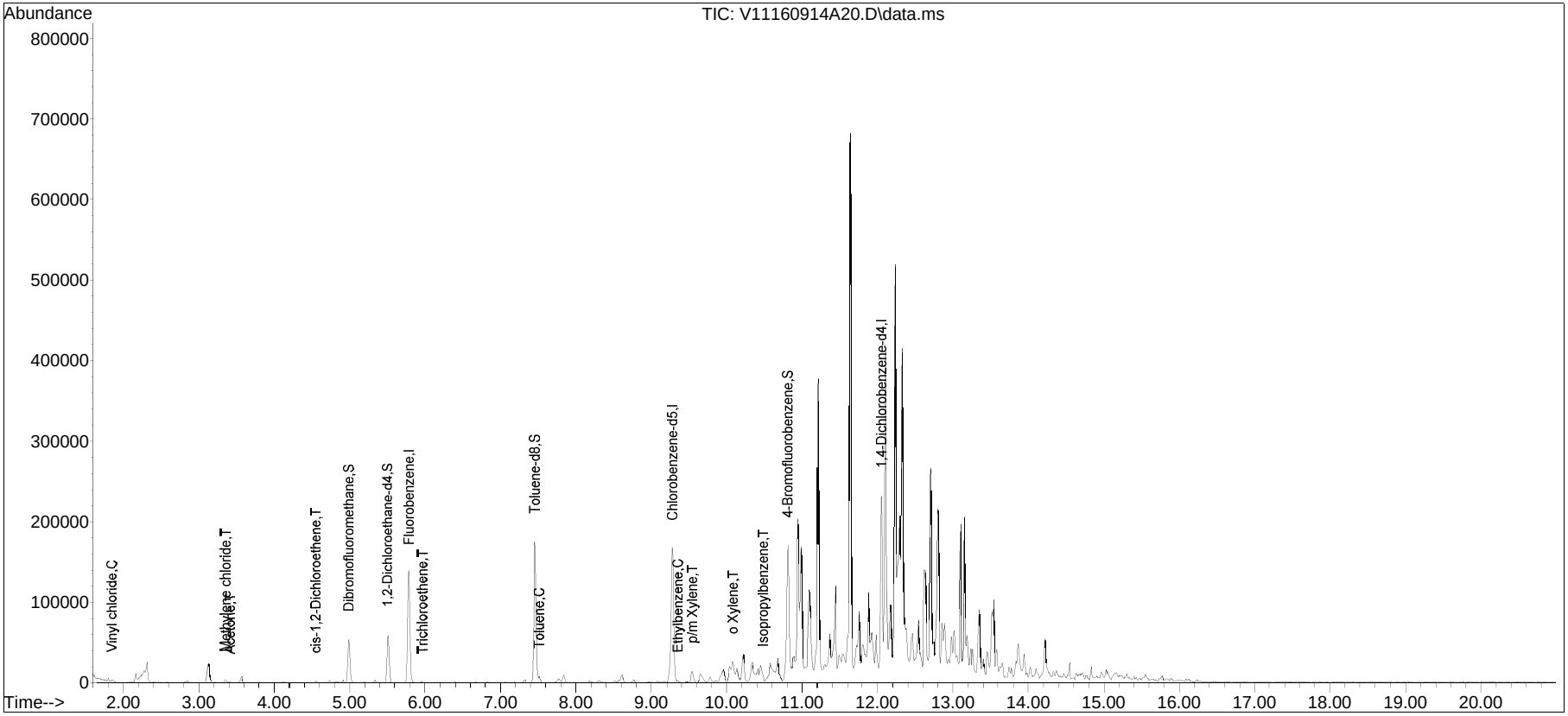
(#) = qualifier out of range (m) = manual integration (+) = signals summed

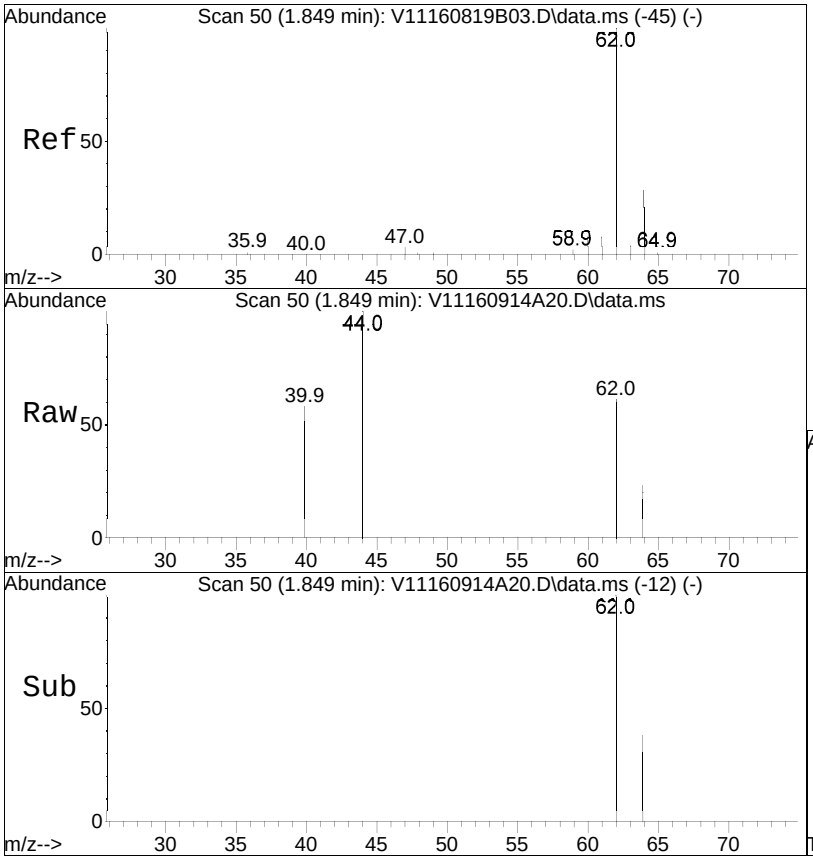
Quantitation Report (QT/LSC Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A20.D
Acq On : 14 Sep 2016 15:48
Operator : VOA111:MS
Sample : l1628787-01,31H,2.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 14 16:39:11 2016
Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist914A\V11160914A02.D•

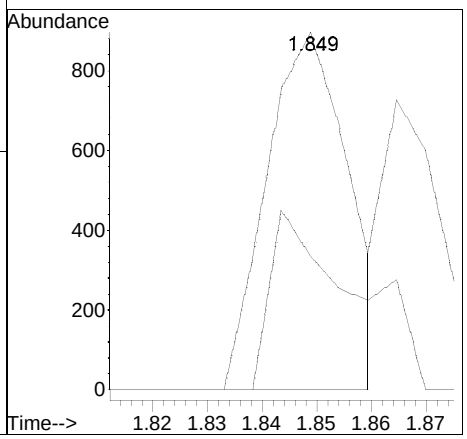




#4
Vinyl chloride
Concen: 0.56 ug/L
RT: 1.849 min Scan# 50
Delta R.T. -0.000 min
Lab File: V11160914A20.D
Acq: 14 Sep 2016 15:48

Tgt Ion: 62 Resp: 939

Ion	Ratio	Lower	Upper
62	100		
64	51.7	11.9	51.9



LSC Area Percent Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A20.D
Acq On : 14 Sep 2016 15:48
Operator : VOA111:MS
Sample : l1628787-01,31H,2.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Title : VOLATILES BY GC/MS

Signal : TIC: V11160914A20.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.316	134	139	152	rVB2	25111	39807	3.51%	0.357%
2	3.128	285	294	306	rVB2	23819	49544	4.37%	0.444%
3	4.990	641	649	664	rVB2	53894	104272	9.20%	0.935%
4	5.503	738	747	765	rBB	59581	114549	10.11%	1.027%
5	5.781	788	800	822	rBV	139393	276613	24.41%	2.481%
6	7.454	1107	1119	1128	rBV	175233	351864	31.05%	3.156%
7	9.278	1451	1467	1479	rBV2	167772	389389	34.36%	3.493%
8	9.955	1581	1596	1605	rVB5	15621	51085	4.51%	0.458%
9	10.044	1605	1613	1616	rBV5	19473	41233	3.64%	0.370%
10	10.081	1616	1620	1627	rVV4	22289	49930	4.41%	0.448%
11	10.222	1641	1647	1659	rVB3	33533	72593	6.41%	0.651%
12	10.337	1659	1669	1678	rBV7	23799	73063	6.45%	0.655%
13	10.453	1687	1691	1701	rVB9	19846	45667	4.03%	0.410%
14	10.584	1701	1716	1727	rBV6	22065	86022	7.59%	0.772%
15	10.673	1727	1733	1746	rVB5	28333	69613	6.14%	0.624%
16	10.809	1746	1759	1769	rBV2	168847	374796	33.07%	3.362%
17	10.946	1777	1785	1789	rVV4	186752	381599	33.67%	3.423%
18	10.988	1789	1793	1802	rVB2	151224	276761	24.42%	2.482%
19	11.092	1807	1813	1824	rVV2	101797	255831	22.58%	2.295%
20	11.213	1824	1836	1846	rVV	362151	647628	57.15%	5.809%
21	11.360	1858	1864	1870	rBV4	38000	72095	6.36%	0.647%
22	11.439	1872	1879	1885	rVB2	103305	198212	17.49%	1.778%
23	11.638	1905	1917	1926	rVB	664774	1133221	100.00%	10.165%
24	11.748	1926	1938	1944	rBV3	69744	170679	15.06%	1.531%
25	11.811	1945	1950	1957	rBV9	21714	50588	4.46%	0.454%
26	11.879	1958	1963	1967	rBV2	80115	121586	10.73%	1.091%
27	11.979	1978	1982	1989	rVB5	40726	65211	5.75%	0.585%
28	12.052	1989	1996	2000	rBV2	213486	342833	30.25%	3.075%

LSC Area Percent Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A20.D
Acq On : 14 Sep 2016 15:48
Operator : VOA111:MS
Sample : l1628787-01,31H,2.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Title : VOLATILES BY GC/MS

29	12.099	2000	2005	2014	rVV	399735	686797	60.61%	6.160%
30	12.173	2014	2019	2024	rVV3	75586	131106	11.57%	1.176%
31	12.235	2024	2031	2036	rVV2	497296	842171	74.32%	7.554%
32	12.288	2038	2041	2044	rVV2	182826	292456	25.81%	2.623%
33	12.325	2044	2048	2065	rVV2	389998	749159	66.11%	6.720%
34	12.456	2066	2073	2077	rVV6	34869	57763	5.10%	0.518%
35	12.540	2084	2089	2098	rVB	56874	109457	9.66%	0.982%
36	12.618	2098	2104	2106	rBV	119987	184431	16.27%	1.654%
37	12.707	2114	2121	2131	rBV	237950	387909	34.23%	3.479%
38	12.802	2131	2139	2146	rVB3	191388	385272	34.00%	3.456%
39	12.859	2146	2150	2153	rBV4	50018	71180	6.28%	0.638%
40	12.896	2154	2157	2163	rVB2	50346	70526	6.22%	0.633%
41	12.980	2169	2173	2177	rBV4	33078	47640	4.20%	0.427%
42	13.017	2177	2180	2185	rVB2	34669	45581	4.02%	0.409%
43	13.101	2191	2196	2201	rBV	173007	211707	18.68%	1.899%
44	13.148	2201	2205	2211	rBV	178533	253947	22.41%	2.278%
45	13.190	2211	2213	2217	rVB3	36892	38637	3.41%	0.347%
46	13.263	2224	2227	2235	rVB3	28842	37492	3.31%	0.336%
47	13.352	2236	2244	2249	rBV4	77681	153734	13.57%	1.379%
48	13.462	2260	2265	2270	rBV5	28655	51315	4.53%	0.460%
49	13.520	2270	2276	2278	rBV3	69064	108214	9.55%	0.971%
50	13.588	2285	2289	2293	rVB5	27603	38421	3.39%	0.345%
51	13.861	2329	2341	2351	rBV9	41370	121983	10.76%	1.094%
52	13.939	2351	2356	2362	rVB5	25923	40456	3.57%	0.363%
53	14.223	2396	2410	2424	rBV3	49445	124968	11.03%	1.121%

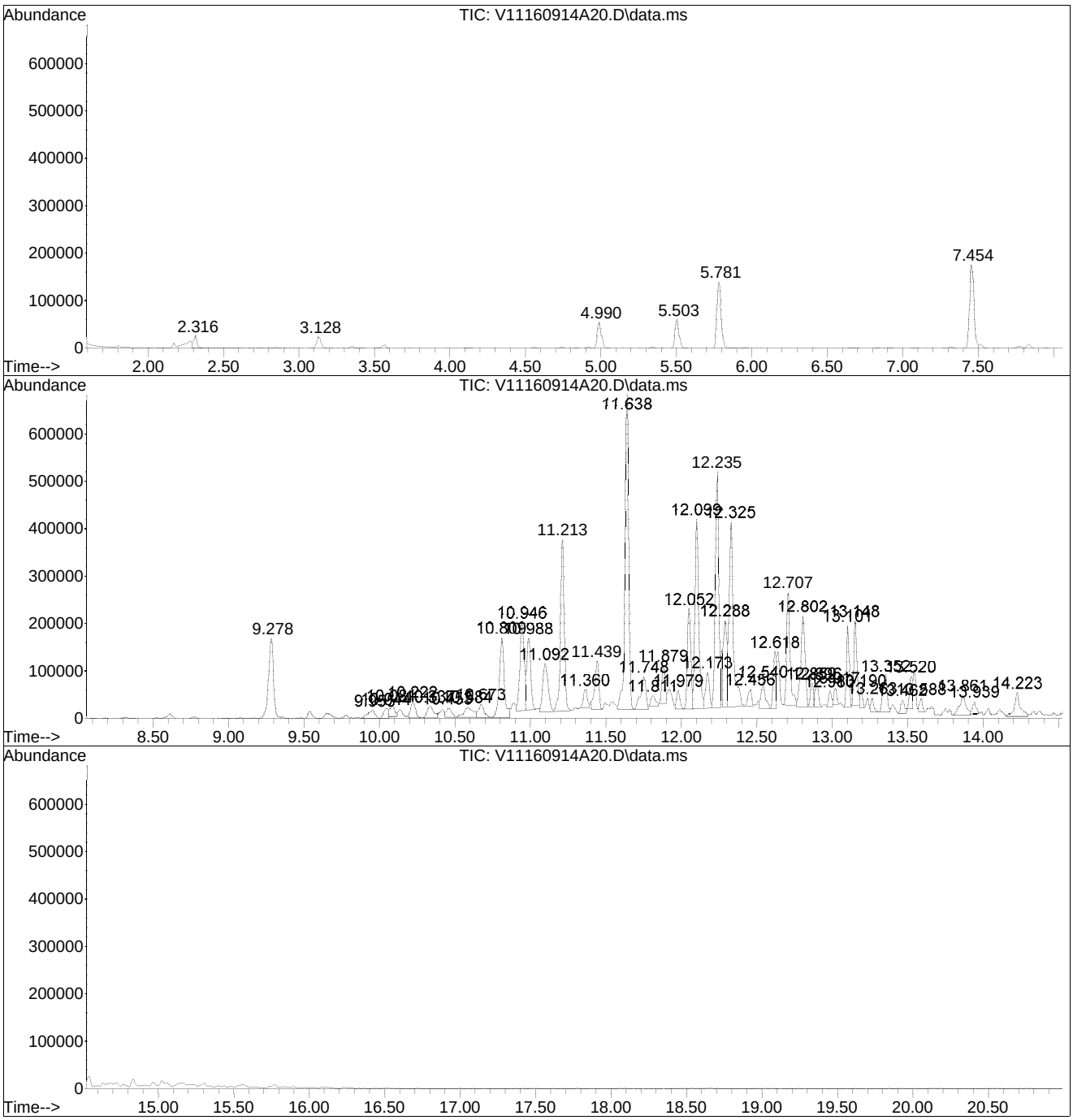
Sum of corrected areas: 11148606

LSC Report - Integrated Chromatogram

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A20.D
Acq On : 14 Sep 2016 15:48
Operator : VOA111:MS
Sample : l1628787-01,31H,2.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 20 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p



Library Search Compound Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A20.D
Acq On : 14 Sep 2016 15:48
Operator : VOA111:MS
Sample : l1628787-01,31H,2.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 20 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

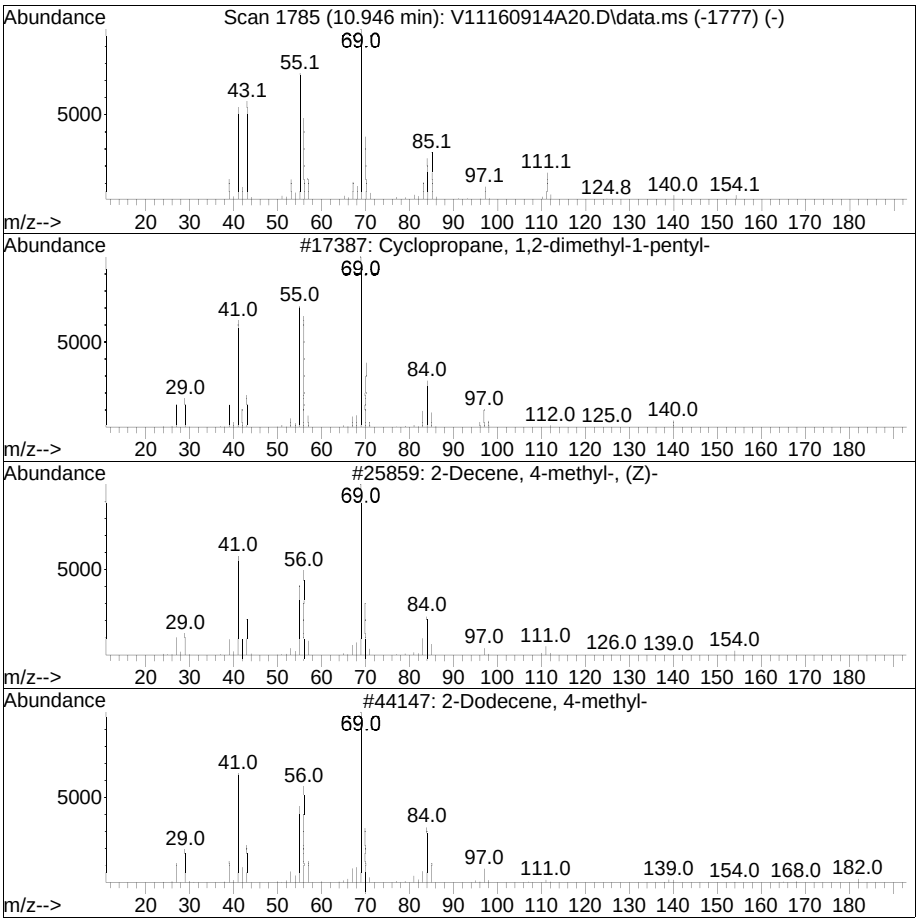
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

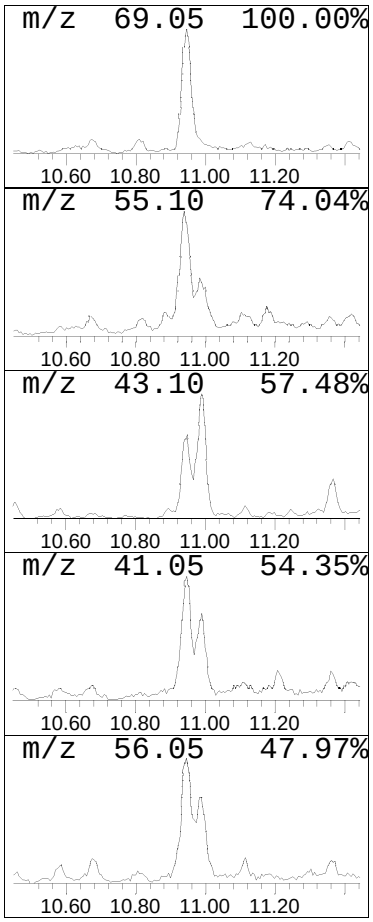
****

Peak Number 1 Unknown 1 Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.946	22.26 ug/L	381599	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopropane, 1,2-dimethyl-1-pen...	140	C10H20	062238-04-4	81
2	2-Decene, 4-methyl-, (Z)-	154	C11H22	074630-30-1	74
3	2-Dodecene, 4-methyl-	182	C13H26	056851-45-7	59
4	2-Undecene, 4-methyl-	168	C12H24	091695-32-8	59
5	1-Hexene, 3,3-dimethyl-	112	C8H16	003404-77-1	52





Library Search Compound Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A20.D
Acq On : 14 Sep 2016 15:48
Operator : VOA111:MS
Sample : l1628787-01,31H,2.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 20 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

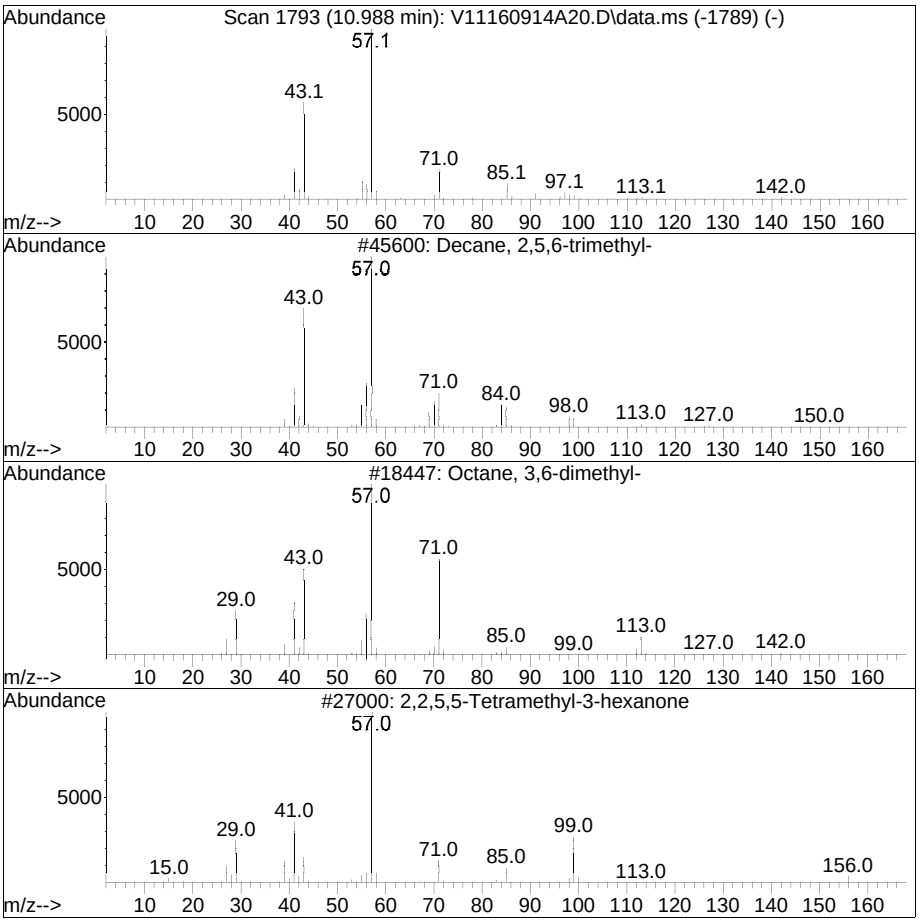
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

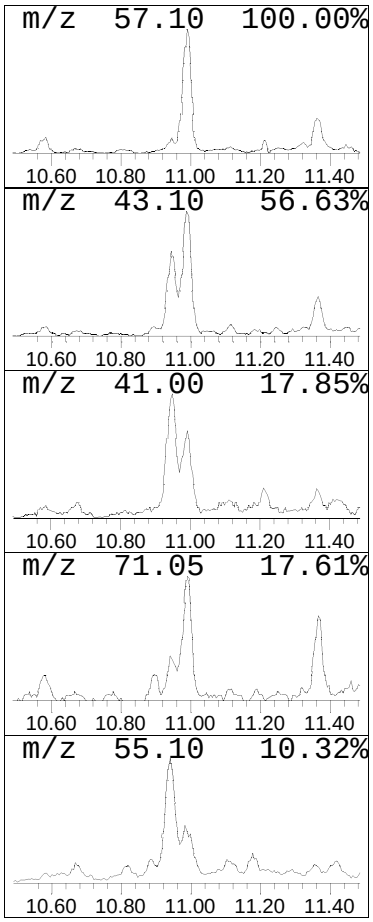
****

Peak Number 2 Unknown 2 Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.988	16.15 ug/L	276761	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 2,5,6-trimethyl-	184	C13H28	062108-23-0	50
2	Octane, 3,6-dimethyl-	142	C10H22	015869-94-0	43
3	2,2,5,5-Tetramethyl-3-hexanone	156	C10H20O	000868-91-7	42
4	Pentane, 2,2,3,4-tetramethyl-	128	C9H20	001186-53-4	40
5	Undecane	156	C11H24	001120-21-4	38





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A20.D
Acq On : 14 Sep 2016 15:48
Operator : VOA111:MS
Sample : l1628787-01,31H,2.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 20 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

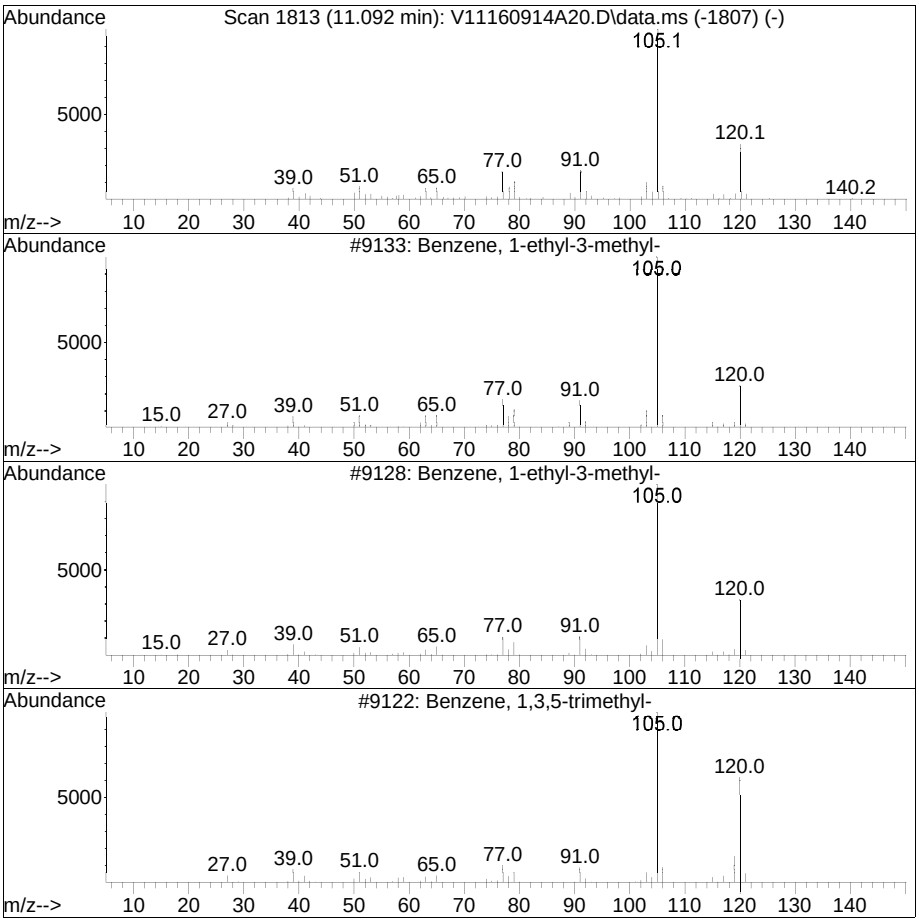
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

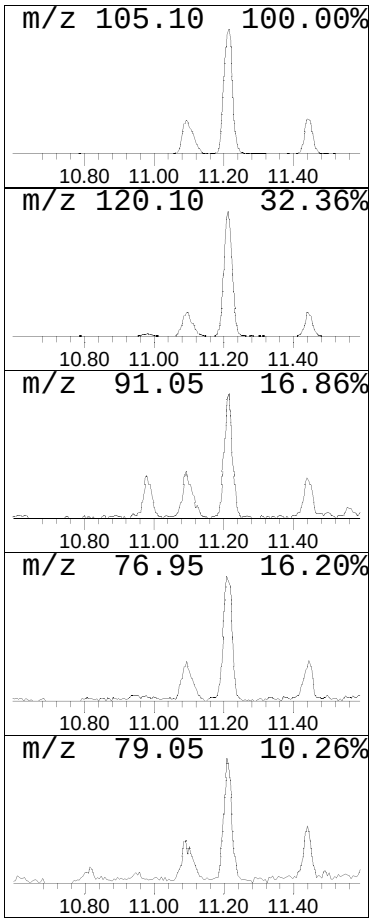
****

Peak Number 3 Unknown Aromatic A Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.092	14.92 ug/L	255831	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	94
2	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	91
3	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	91
4	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	91
5	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	91





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A20.D
Acq On : 14 Sep 2016 15:48
Operator : VOA111:MS
Sample : l1628787-01,31H,2.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 20 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

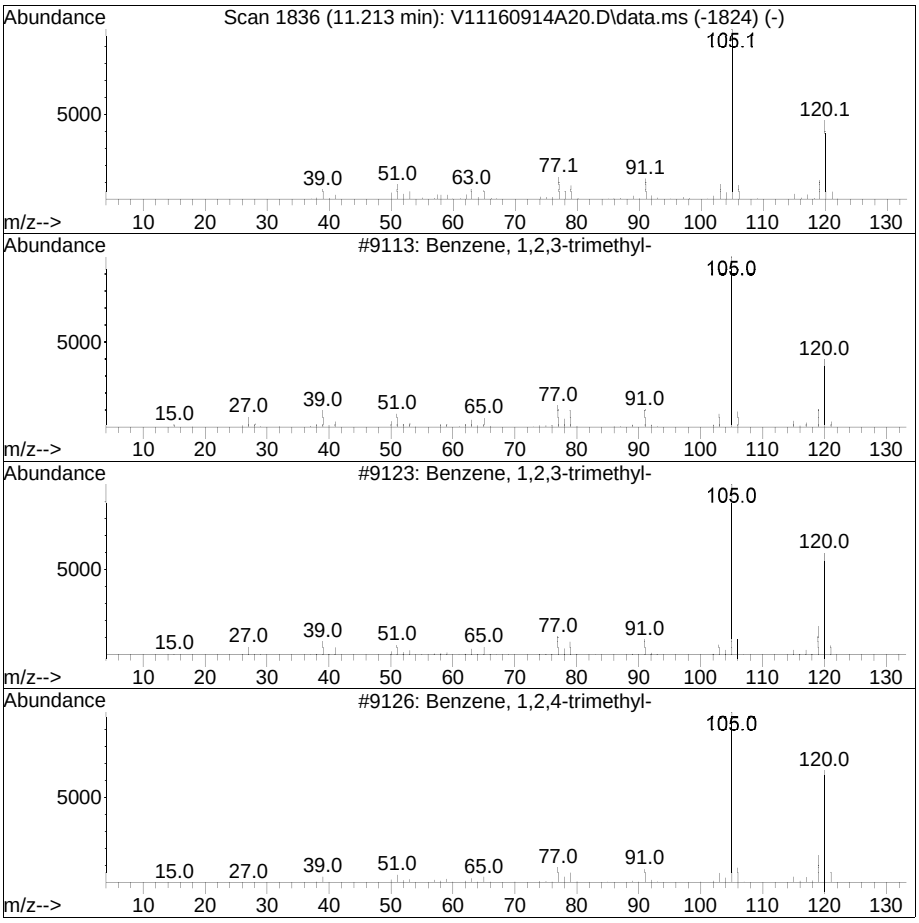
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

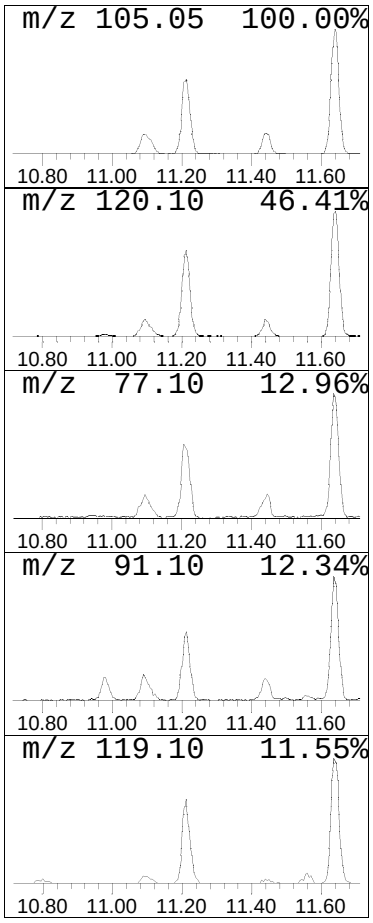
****

Peak Number 4 Unknown Aromatic B Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.213	37.78 ug/L	647628	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	97
2	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	95
3	Benzene, 1,2,4-trimethyl-	120	C9H12	000095-63-6	95
4	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	95
5	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	94





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A20.D
Acq On : 14 Sep 2016 15:48
Operator : VOA111:MS
Sample : l1628787-01,31H,2.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 20 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

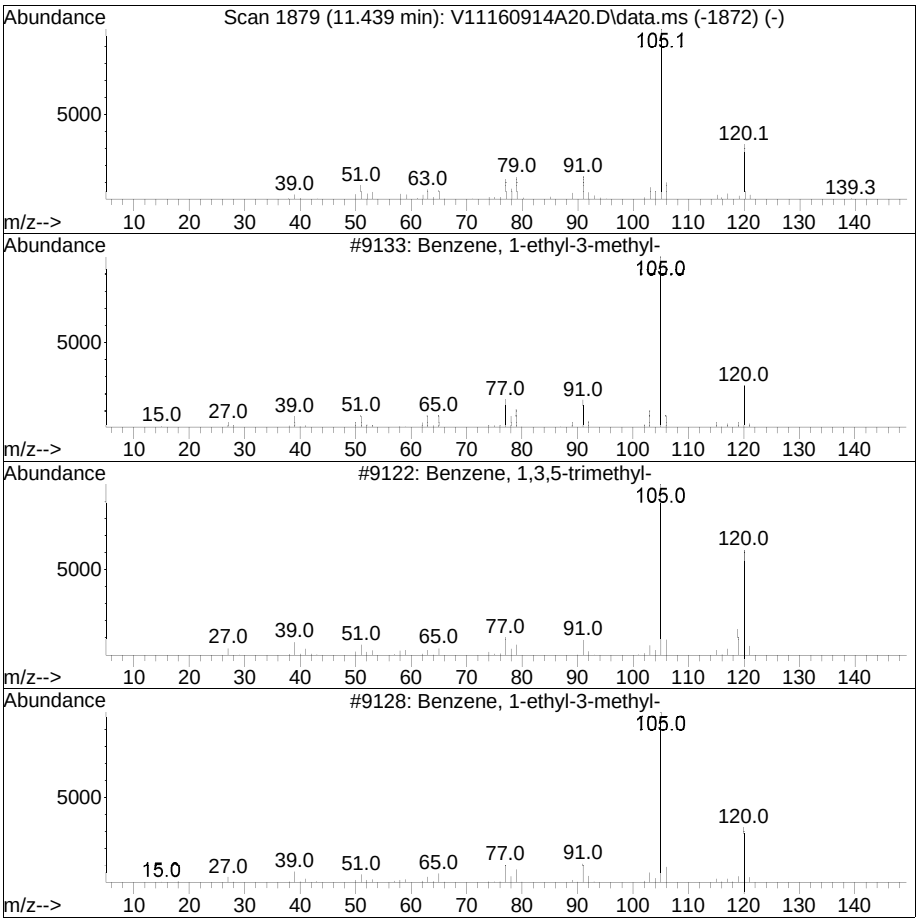
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

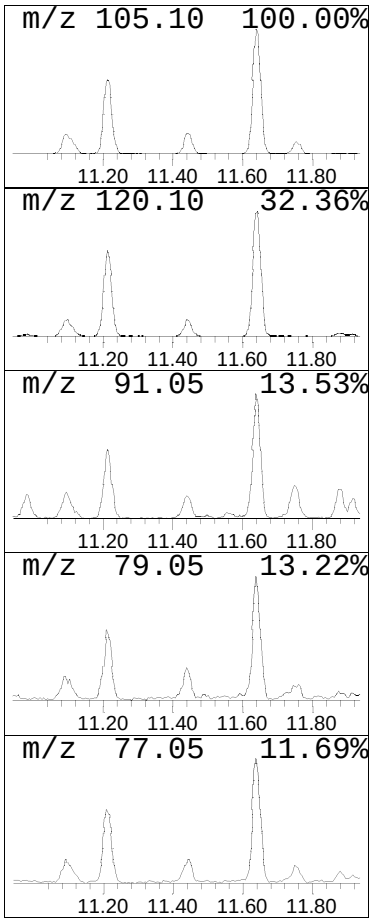
****

Peak Number 5 Unknown Aromatic C Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.438	11.56 ug/L	198212	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	91
2	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	91
3	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	91
4	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	91
5	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	90





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A20.D
Acq On : 14 Sep 2016 15:48
Operator : VOA111:MS
Sample : l1628787-01,31H,2.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 20 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

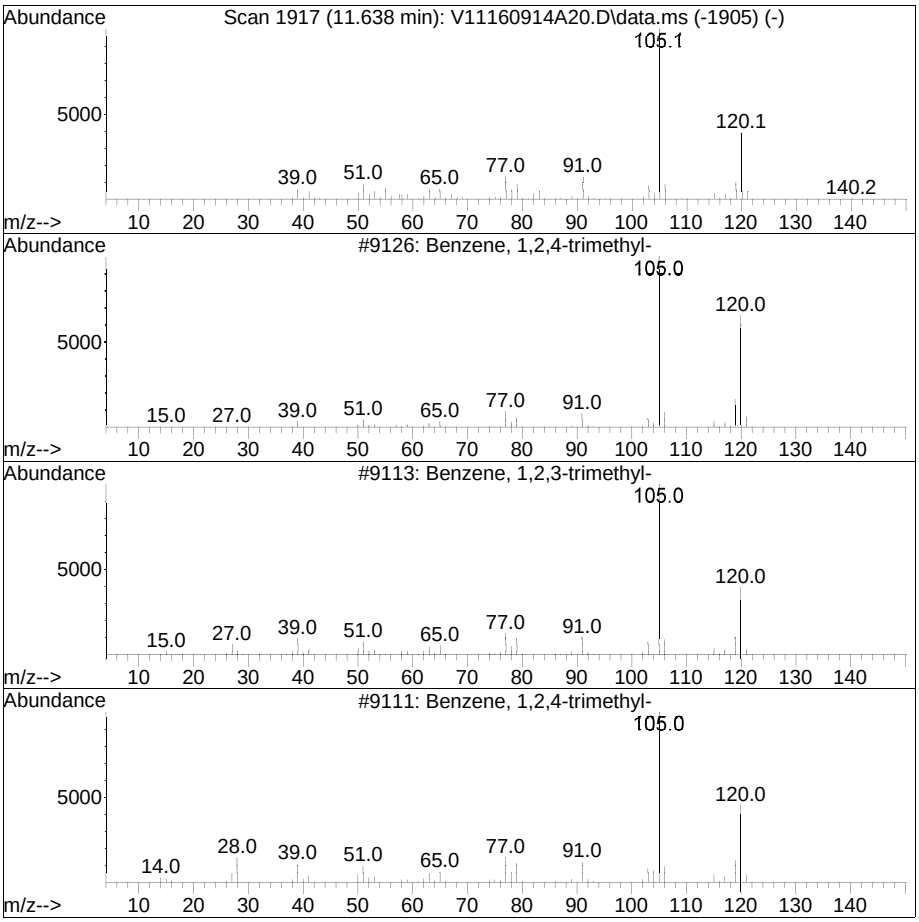
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

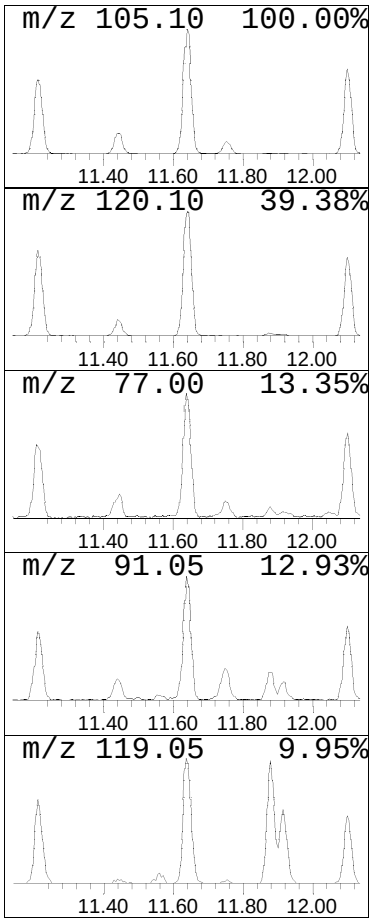
****

Peak Number 6 Unknown Aromatic D Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.638	66.11 ug/L	1133220	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,4-trimethyl-	120	C9H12	000095-63-6	95
2	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	95
3	Benzene, 1,2,4-trimethyl-	120	C9H12	000095-63-6	94
4	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	93
5	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	93





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A20.D
Acq On : 14 Sep 2016 15:48
Operator : VOA111:MS
Sample : l1628787-01,31H,2.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 20 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

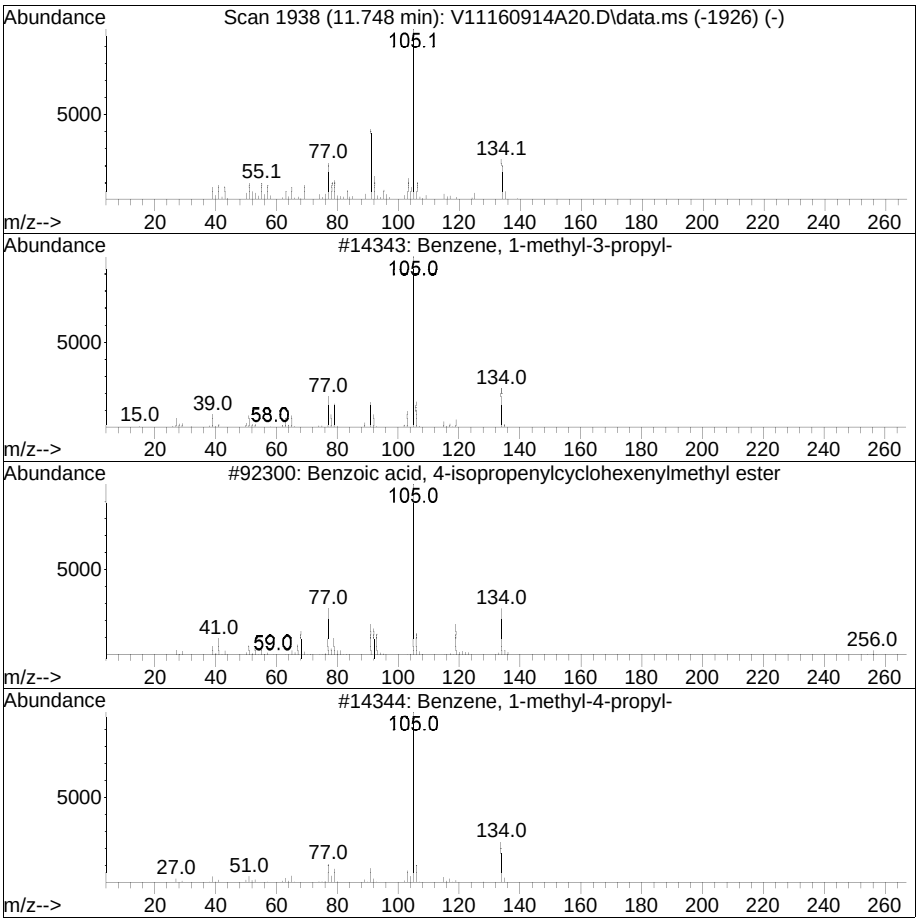
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

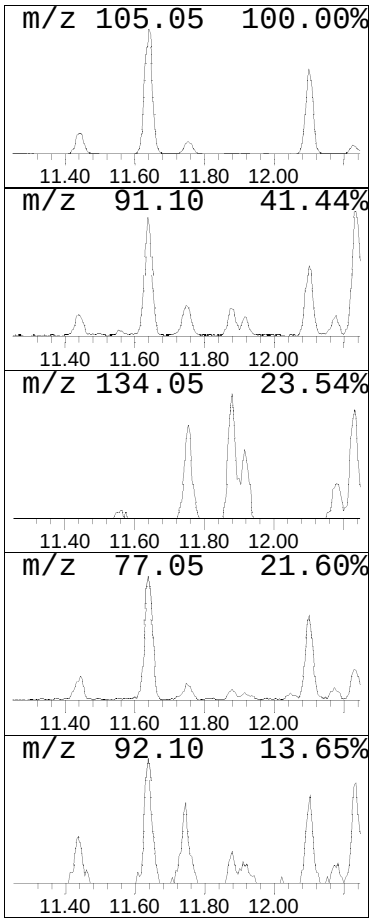
****

Peak Number 7 Unknown Aromatic E Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.748	9.96 ug/L	170679	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-3-propyl-	134	C10H14	001074-43-7	62
2	Benzoic acid, 4-isopropenylcyclo...	256	C17H20O2	1000196-48-6	59
3	Benzene, 1-methyl-4-propyl-	134	C10H14	001074-55-1	58
4	Benzeneacetaldehyde, 4-methyl-	134	C9H10O	000104-09-6	58
5	2-Tolyloxirane	134	C9H10O	002783-26-8	53





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A20.D
Acq On : 14 Sep 2016 15:48
Operator : VOA111:MS
Sample : l1628787-01,31H,2.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 20 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

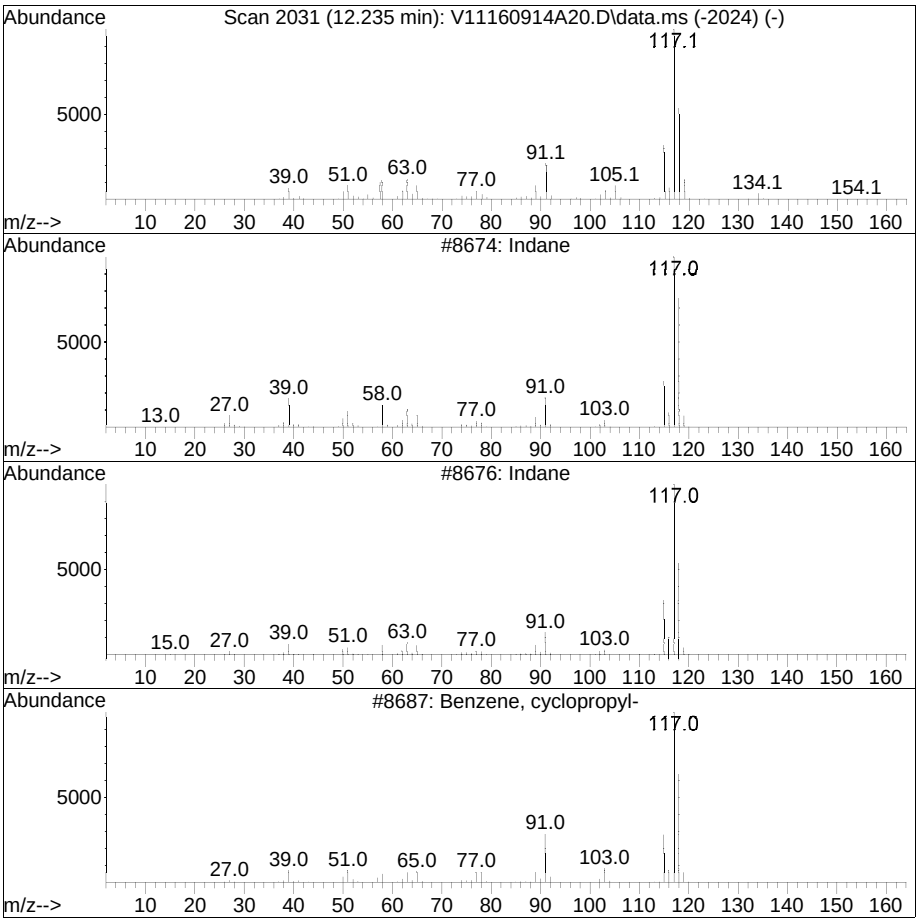
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

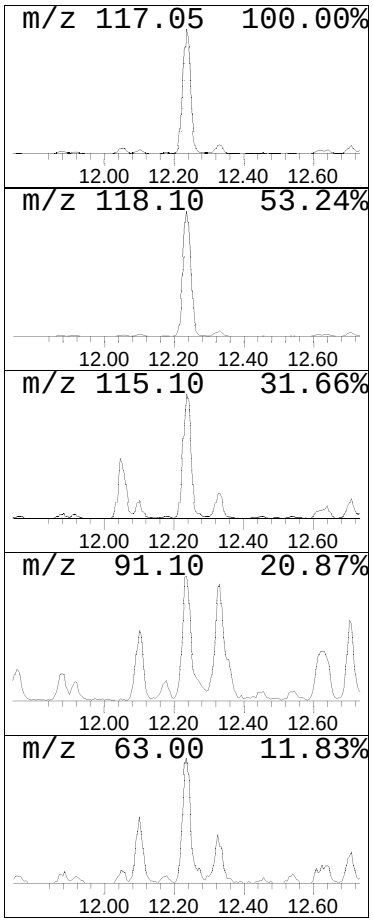
****

Peak Number 8 Unknown Aromatic F Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.236	49.13 ug/L	842171	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indane	118	C9H10	000496-11-7	93
2	Indane	118	C9H10	000496-11-7	81
3	Benzene, cyclopropyl-	118	C9H10	000873-49-4	76
4	Benzene, cyclopropyl-	118	C9H10	000873-49-4	72
5	Benzene, 2-propenyl-	118	C9H10	000300-57-2	68





Library Search Compound Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A20.D
Acq On : 14 Sep 2016 15:48
Operator : VOA111:MS
Sample : l1628787-01,31H,2.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 20 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

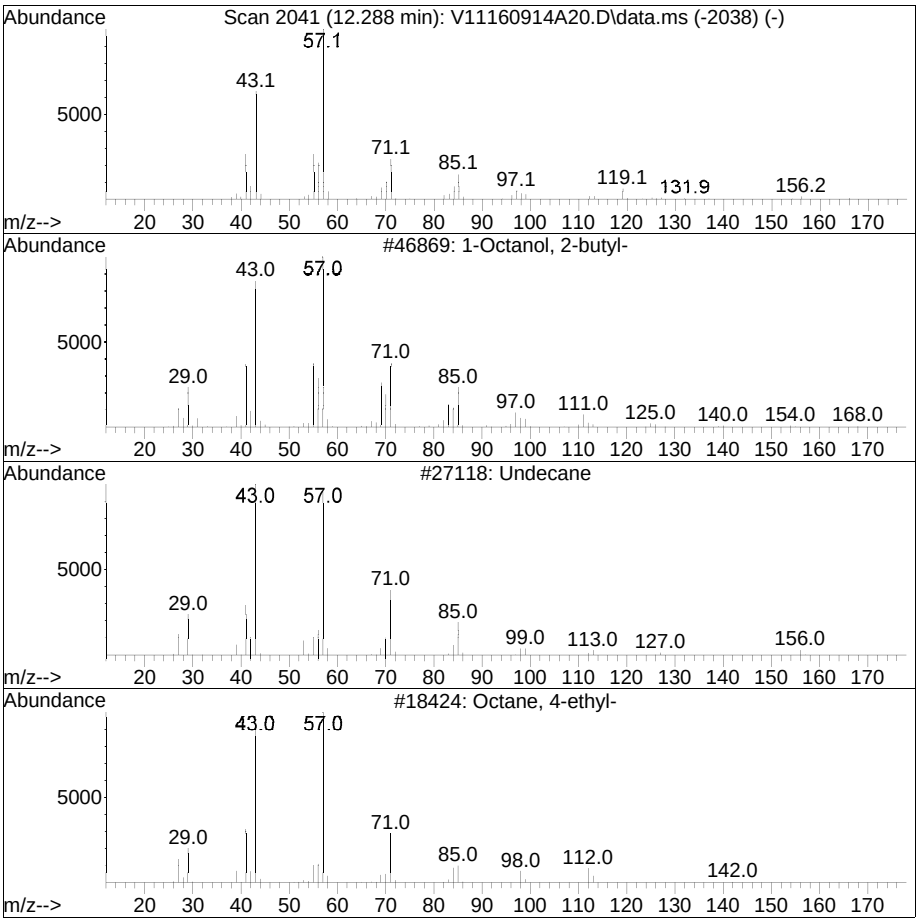
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

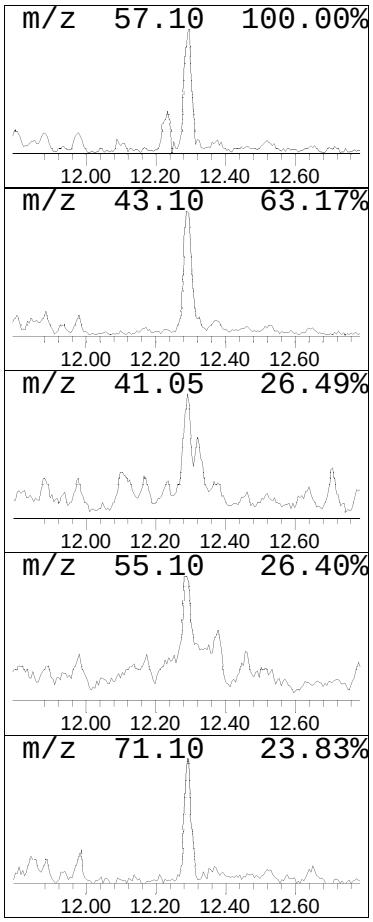
****

Peak Number 9 Unknown 3 Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.288	17.06 ug/L	292456	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Octanol, 2-butyl-	186	C12H26O	003913-02-8	64
2	Undecane	156	C11H24	001120-21-4	53
3	Octane, 4-ethyl-	142	C10H22	015869-86-0	50
4	Decane	142	C10H22	000124-18-5	50
5	Octane, 2,5,6-trimethyl-	156	C11H24	062016-14-2	50





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A20.D
Acq On : 14 Sep 2016 15:48
Operator : VOA111:MS
Sample : l1628787-01,31H,2.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 20 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

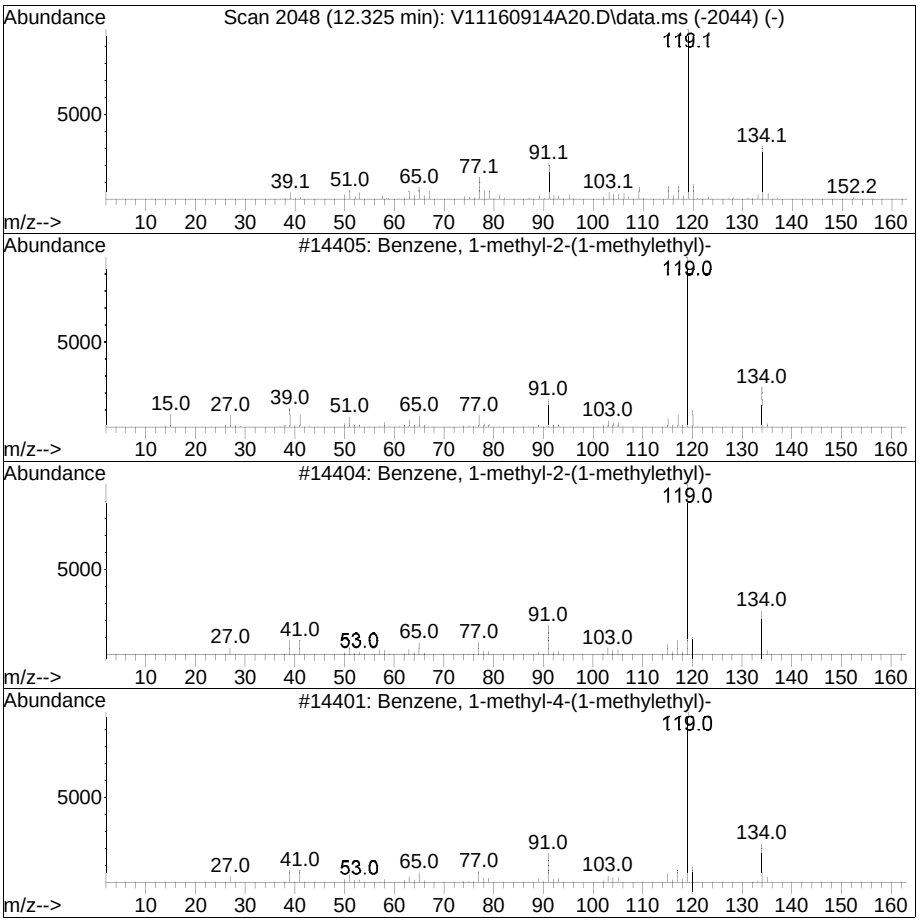
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

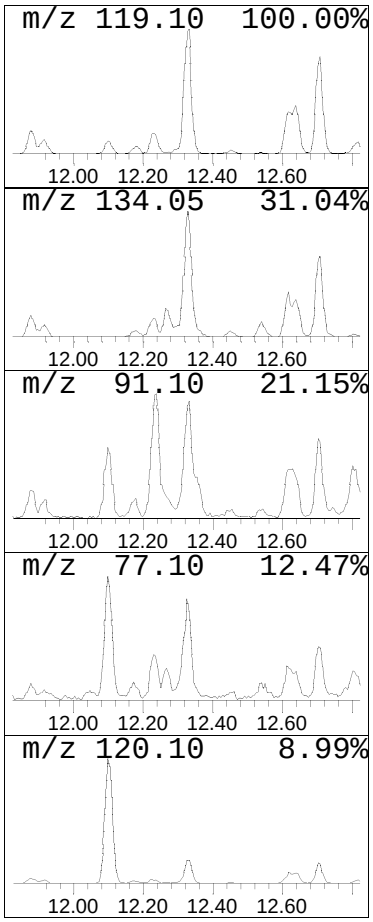
****

Peak Number 10 Unknown Aromatic G Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.325	43.70 ug/L	749159	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	95
2	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	95
3	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	95
4	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	95
5	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	94





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A20.D
Acq On : 14 Sep 2016 15:48
Operator : VOA111:MS
Sample : l1628787-01,31H,2.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 20 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

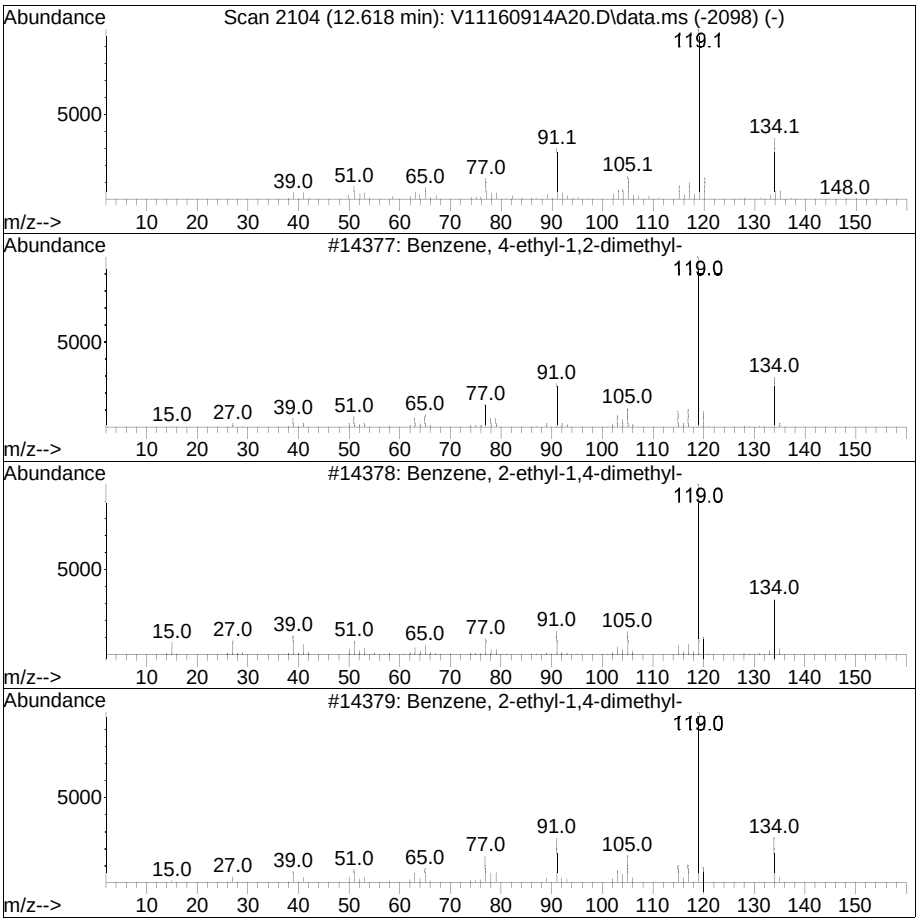
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

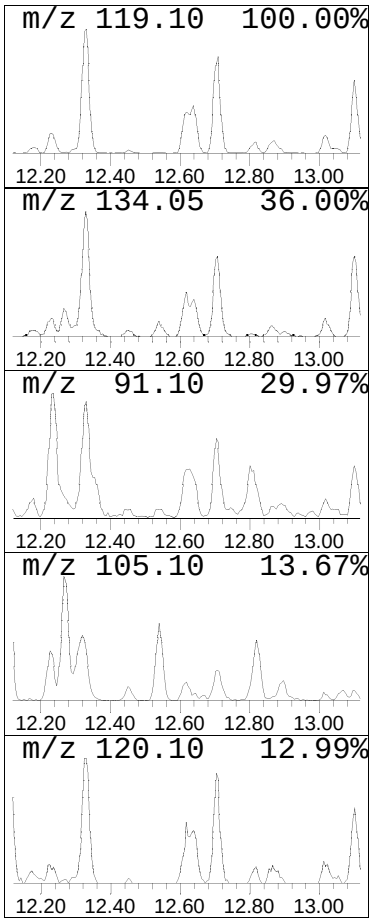
****

Peak Number 11 Unknown Aromatic H Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.618	10.76 ug/L	184431	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	96
2	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	95
3	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	95
4	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	95
5	Benzene, 2-ethyl-1,3-dimethyl-	134	C10H14	002870-04-4	95





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A20.D
Acq On : 14 Sep 2016 15:48
Operator : VOA111:MS
Sample : l1628787-01,31H,2.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 20 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

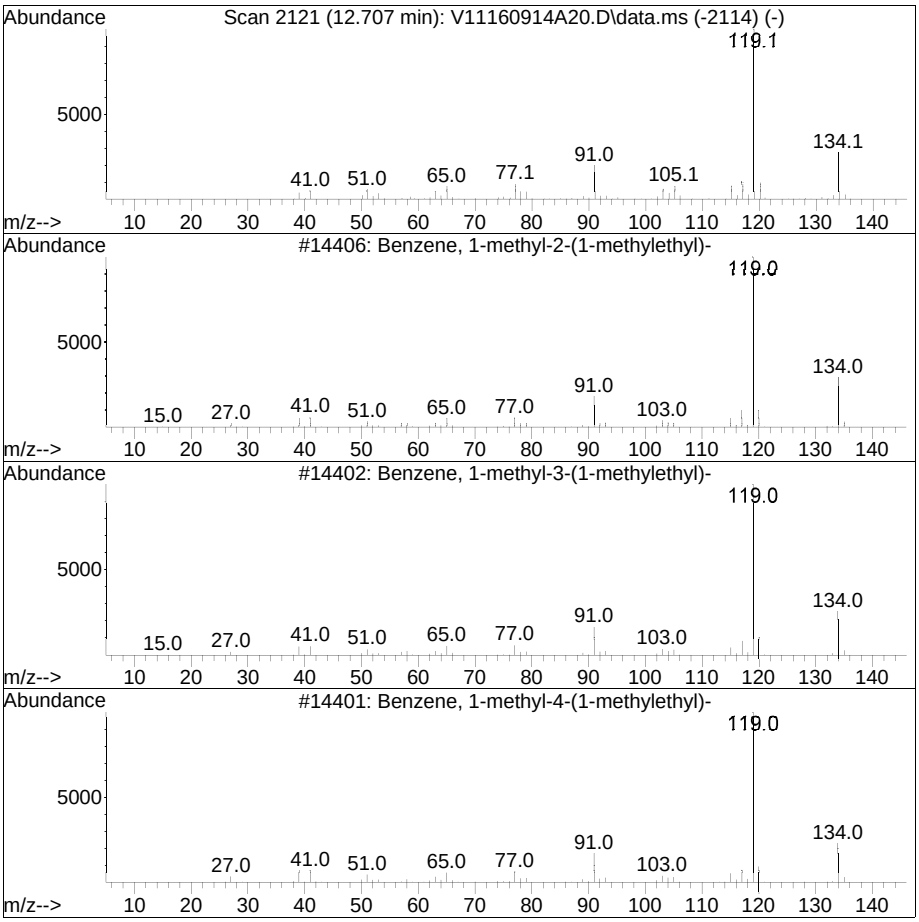
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

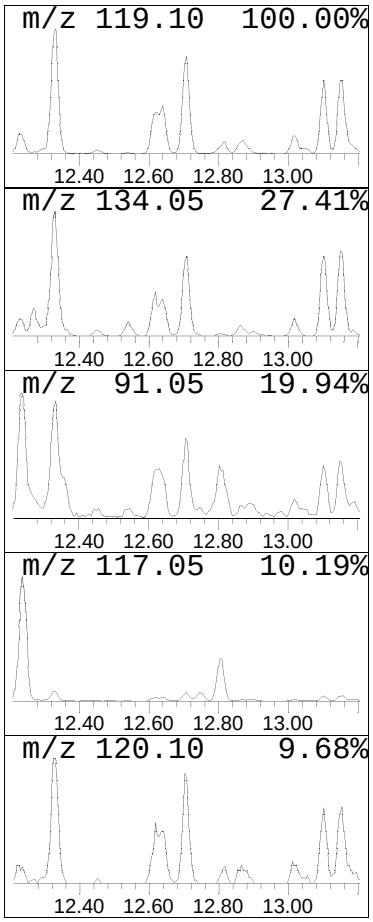
****

Peak Number 12 Unknown Aromatic I Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.707	22.63 ug/L	387909	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	97
2	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	97
3	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	97
4	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	97
5	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	97





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A20.D
Acq On : 14 Sep 2016 15:48
Operator : VOA111:MS
Sample : l1628787-01,31H,2.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 20 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

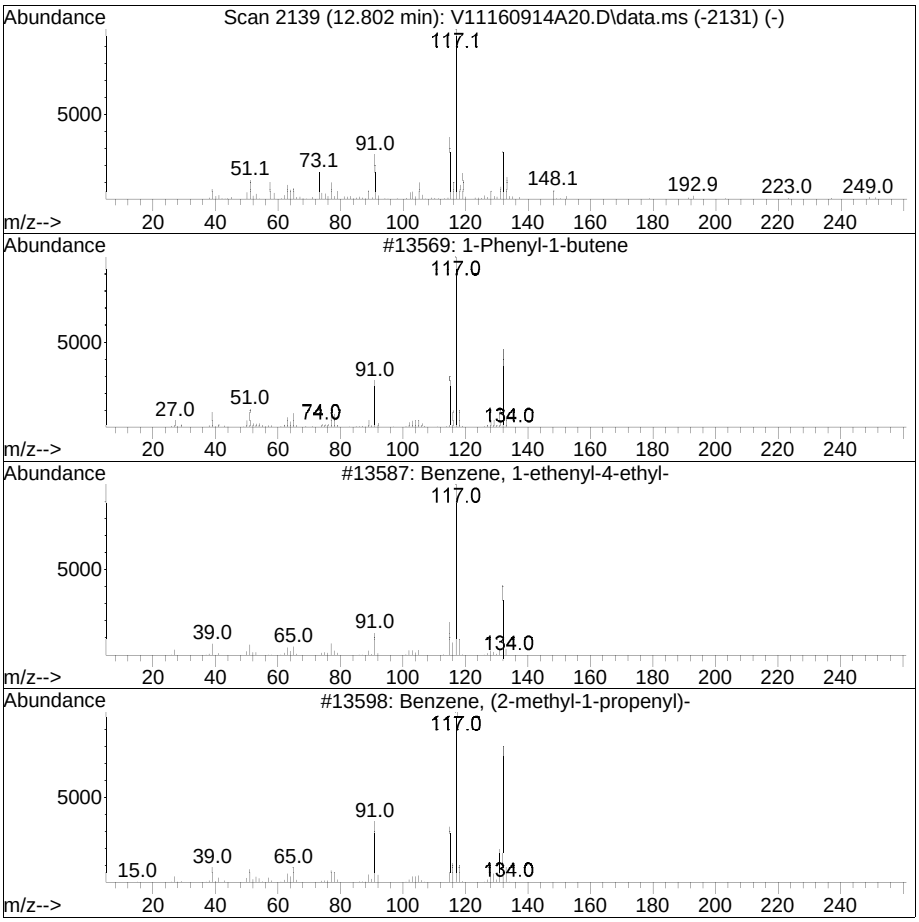
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

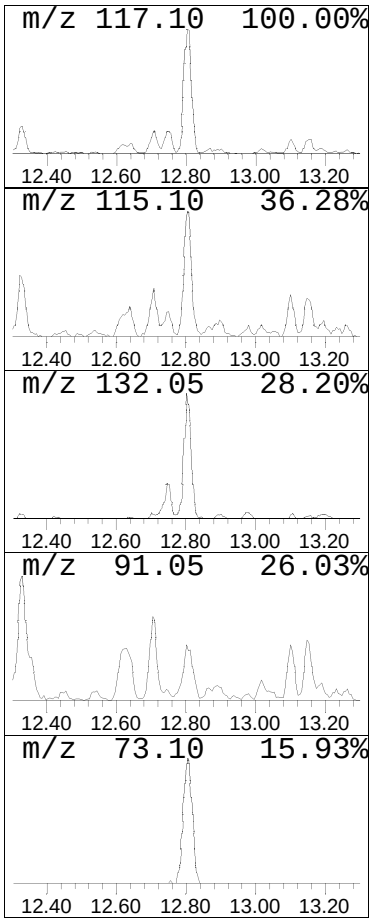
****

Peak Number 13 Unknown Aromatic J Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.802	22.48 ug/L	385272	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Phenyl-1-butene	132	C10H12	000824-90-8	76
2	Benzene, 1-ethenyl-4-ethyl-	132	C10H12	003454-07-7	70
3	Benzene, (2-methyl-1-propenyl)-	132	C10H12	000768-49-0	68
4	Benzene, 1-butenyl-, (E)-	132	C10H12	001005-64-7	68
5	3-Phenylbut-1-ene	132	C10H12	000934-10-1	68





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A20.D
Acq On : 14 Sep 2016 15:48
Operator : VOA111:MS
Sample : l1628787-01,31H,2.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 20 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

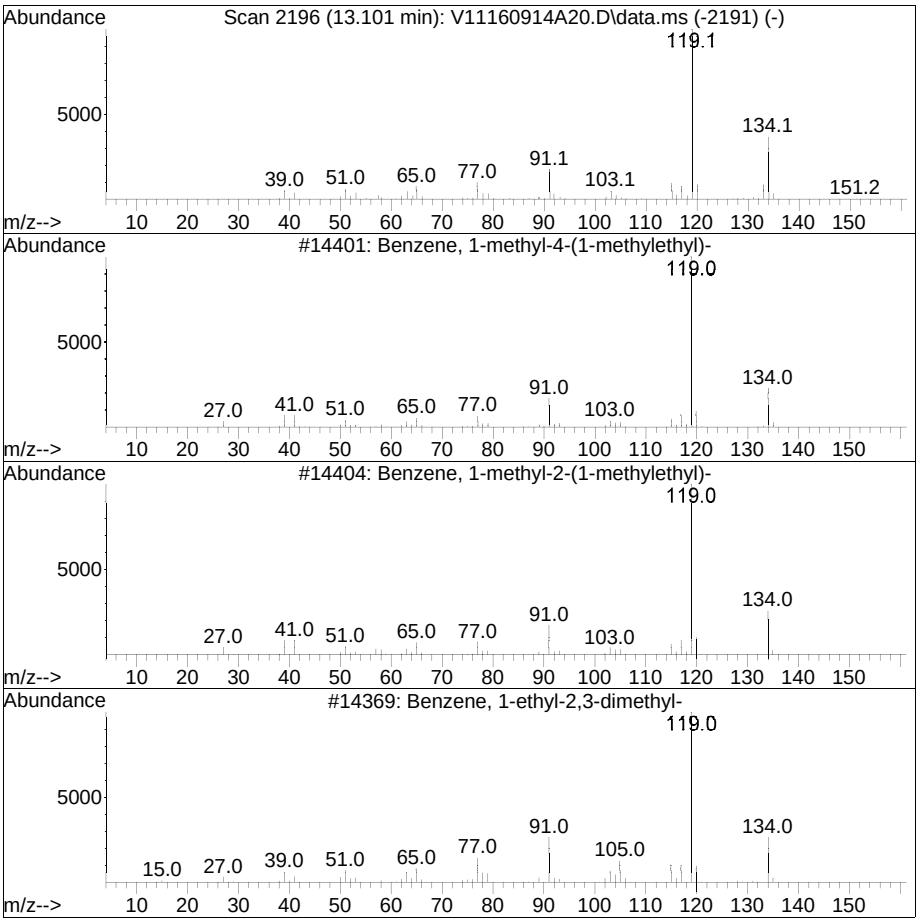
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

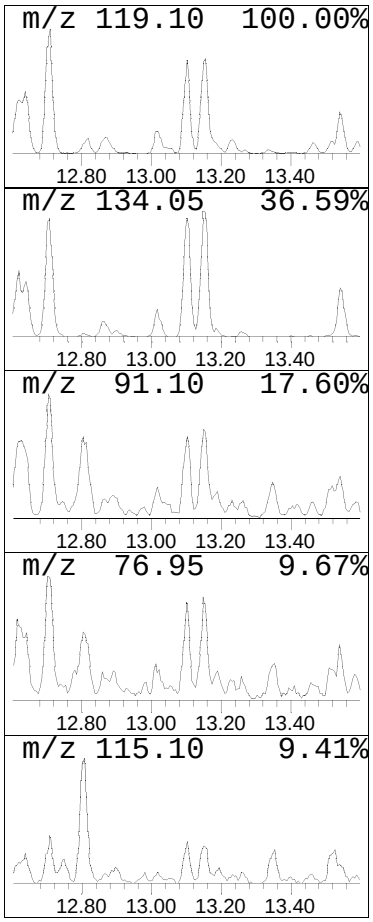
****

Peak Number 14 Unknown Aromatic K Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.101	12.35 ug/L	211707	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	94
2	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	94
3	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	91
4	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	91
5	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	91





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A20.D
Acq On : 14 Sep 2016 15:48
Operator : VOA111:MS
Sample : l1628787-01,31H,2.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 20 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

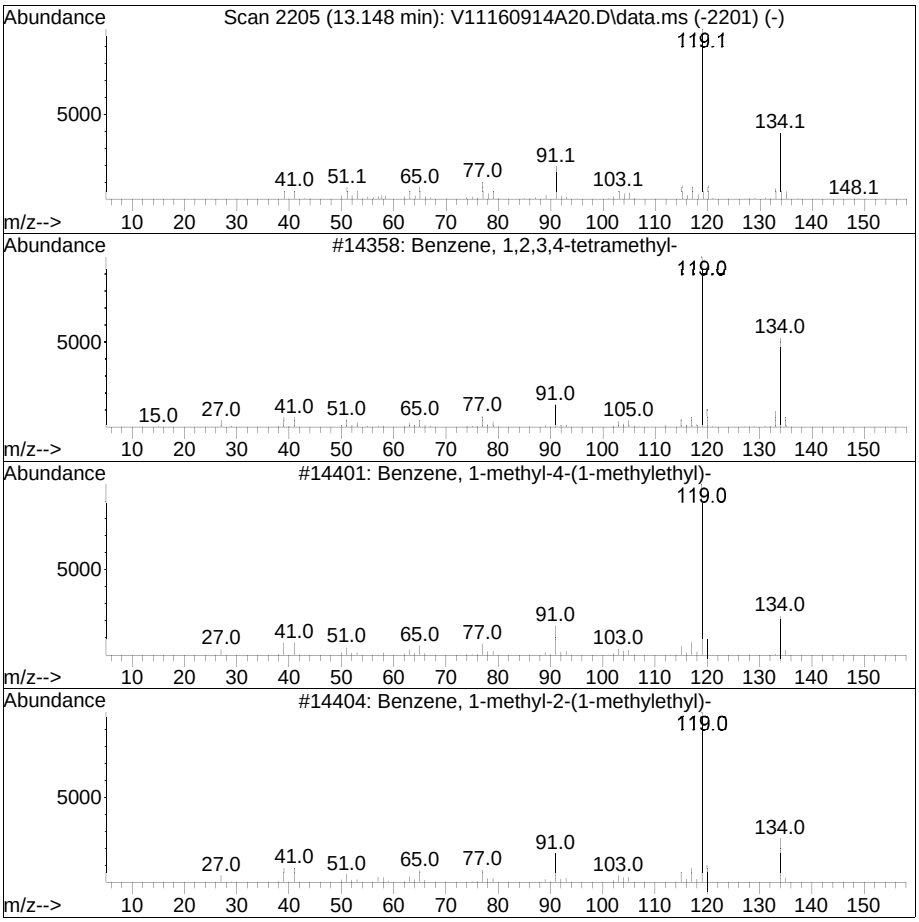
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

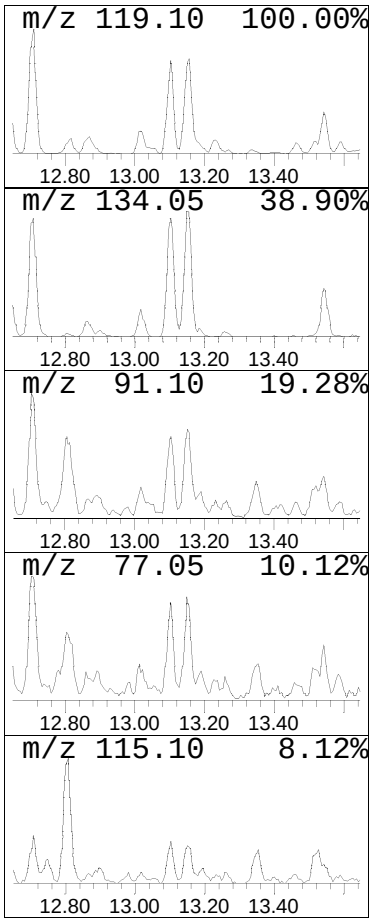
****

Peak Number 15 Unknown Aromatic L Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.148	14.81 ug/L	253947	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
2	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	95
3	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	95
4	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	95
5	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	94





Tentatively Identified Compound (LSC) summary

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A20.D
Acq On : 14 Sep 2016 15:48
Operator : VOA111:MS
Sample : l1628787-01,31H,2.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 20 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

					Internal Standard		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Unknown 1	10.946	22.3	ug/L	381599	3	12.052	342833	20.0
Unknown 2	10.988	16.1	ug/L	276761	3	12.052	342833	20.0
Unknown Aromatic A	11.092	14.9	ug/L	255831	3	12.052	342833	20.0
Unknown Aromatic B	11.213	37.8	ug/L	647628	3	12.052	342833	20.0
Unknown Aromatic C	11.438	11.6	ug/L	198212	3	12.052	342833	20.0
Unknown Aromatic D	11.638	66.1	ug/L	1133220	3	12.052	342833	20.0
Unknown Aromatic E	11.748	10.0	ug/L	170679	3	12.052	342833	20.0
Unknown Aromatic F	12.236	49.1	ug/L	842171	3	12.052	342833	20.0
Unknown 3	12.288	17.1	ug/L	292456	3	12.052	342833	20.0
Unknown Aromatic G	12.325	43.7	ug/L	749159	3	12.052	342833	20.0
Unknown Aromatic H	12.618	10.8	ug/L	184431	3	12.052	342833	20.0
Unknown Aromatic I	12.707	22.6	ug/L	387909	3	12.052	342833	20.0
Unknown Aromatic J	12.802	22.5	ug/L	385272	3	12.052	342833	20.0
Unknown Aromatic K	13.101	12.4	ug/L	211707	3	12.052	342833	20.0
Unknown Aromatic L	13.148	14.8	ug/L	253947	3	12.052	342833	20.0

Quantitation Report (QT/LSC Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A21.D
Acq On : 14 Sep 2016 16:14
Operator : VOA111:MS
Sample : l1628787-03,31H,4.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 14 16:40:19 2016
Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA111\2016\160914A\V11160914A02.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.786	96	125510	20.000	ug/L	0.00
Standard Area 1 = 144511			Recovery = 86.85%			
59) Chlorobenzene-d5	9.284	117	96543	20.000	ug/L	0.00
Standard Area 1 = 111926			Recovery = 86.26%			
79) 1,4-Dichlorobenzene-d4	12.052	152	50911	20.000	ug/L	0.00
Standard Area 1 = 58934			Recovery = 86.39%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.989	113	31175	21.949	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 109.75%			
43) 1,2-Dichloroethane-d4	5.503	65	47480	22.974	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 114.87%			
60) Toluene-d8	7.454	98	125705	19.110	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 95.55%			
83) 4-Bromofluorobenzene	10.809	95	55720	20.150	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 100.75%			
Target Compounds						Qvalue
4) Vinyl chloride	1.854	62	6048	3.483	ug/L	94

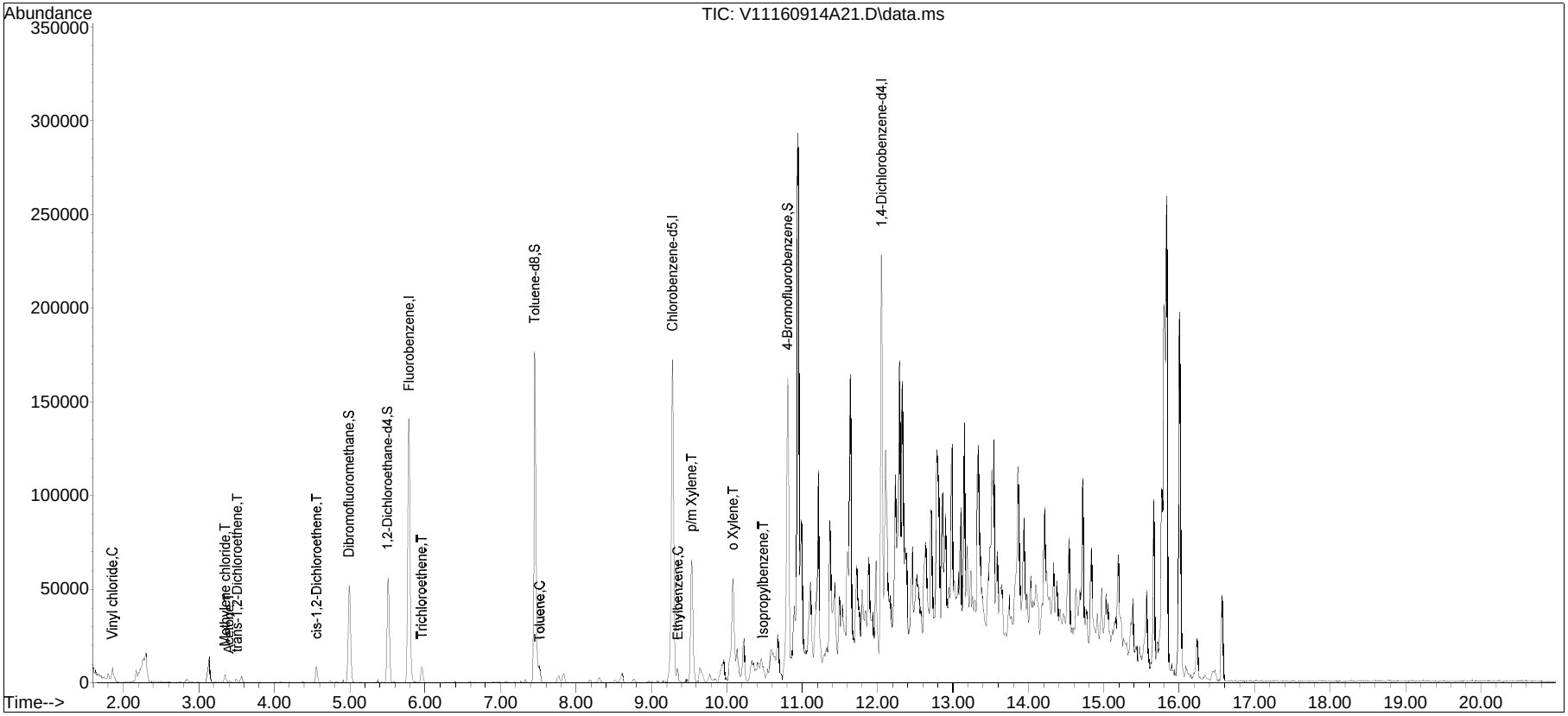
(#) = qualifier out of range (m) = manual integration (+) = signals summed

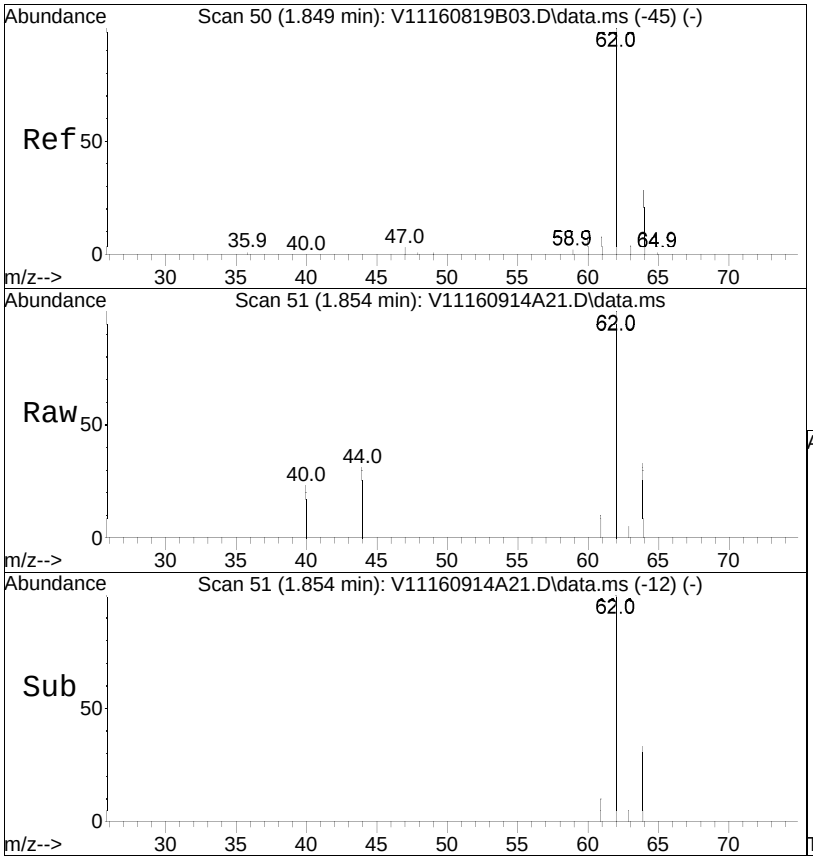
Quantitation Report (QT/LSC Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A21.D
Acq On : 14 Sep 2016 16:14
Operator : VOA111:MS
Sample : l1628787-03,31H,4.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 14 16:40:19 2016
Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist914A\V11160914A02.D•

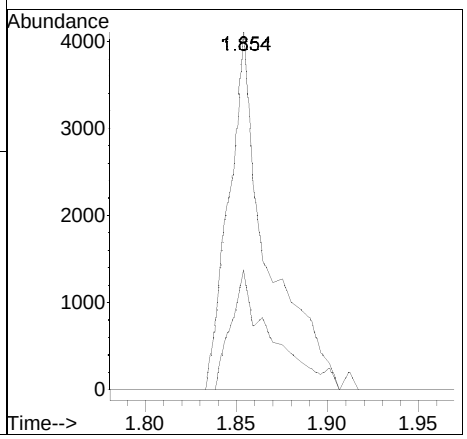




#4
Vinyl chloride
Concen: 3.48 ug/L
RT: 1.854 min Scan# 51
Delta R.T. 0.005 min
Lab File: V11160914A21.D
Acq: 14 Sep 2016 16:14

Tgt Ion: 62 Resp: 6048

Ion	Ratio	Lower	Upper
62	100		
64	35.1	11.9	51.9



Manual Integration Report

Data Path	: I:\VOLATILES\VOA111\2016\1Q	Method	: V111_160819_8260.m
Data File	: V11160914A21.D	Operator	: VOA111:MS
Date Inj'd	: 9/14/2016 16:14	Instrument	: VOA111
Sample	: l1628787-03,31H,4.6,5,0.10	Quant Date	: 9/14/2016 4:39 pm

There are no manual integrations or false positives in this file.

LSC Area Percent Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A21.D
Acq On : 14 Sep 2016 16:14
Operator : VOA111:MS
Sample : l1628787-03,31H,4.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 21 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Title : VOLATILES BY GC/MS

Signal : TIC: V11160914A21.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.268	118	130	132	rBV4	9327	25517	4.80%	0.254%
2	2.305	132	137	146	rVB2	15417	36570	6.88%	0.364%
3	3.133	281	295	304	rBB4	13684	25719	4.84%	0.256%
4	4.565	557	568	575	rBV2	8636	17699	3.33%	0.176%
5	4.989	641	649	667	rBB2	52035	103826	19.54%	1.034%
6	5.503	736	747	761	rBV2	55925	111482	20.98%	1.111%
7	5.781	791	800	820	rBV	141135	279625	52.63%	2.786%
8	5.959	826	834	842	rBV4	8438	16259	3.06%	0.162%
9	7.454	1110	1119	1128	rBV	176985	349014	65.69%	3.477%
10	9.284	1454	1468	1476	rBV	172748	361695	68.07%	3.603%
11	9.535	1508	1516	1528	rBV2	65120	129511	24.38%	1.290%
12	9.651	1528	1538	1552	rVB5	7695	21530	4.05%	0.214%
13	9.955	1582	1596	1606	rBV6	11785	39524	7.44%	0.394%
14	10.081	1606	1620	1626	rBV2	54960	139157	26.19%	1.386%
15	10.138	1627	1631	1640	rVB3	15599	30101	5.67%	0.300%
16	10.227	1640	1648	1656	rVB3	22408	46097	8.68%	0.459%
17	10.332	1658	1668	1676	rBV8	10696	37138	6.99%	0.370%
18	10.458	1688	1692	1701	rVB9	10593	24066	4.53%	0.240%
19	10.589	1710	1717	1720	rBV5	12148	26772	5.04%	0.267%
20	10.673	1728	1733	1745	rVB4	23962	58303	10.97%	0.581%
21	10.809	1745	1759	1769	rBV2	161117	359740	67.71%	3.584%
22	10.888	1769	1774	1778	rVV5	31023	60054	11.30%	0.598%
23	10.946	1778	1785	1790	rVV2	280599	531320	100.00%	5.293%
24	10.988	1791	1793	1802	rVB2	71402	107626	20.26%	1.072%
25	11.103	1809	1815	1824	rVB8	39331	87833	16.53%	0.875%
26	11.213	1824	1836	1846	rVB2	102109	231635	43.60%	2.308%
27	11.365	1859	1865	1872	rBV4	70213	146106	27.50%	1.456%
28	11.491	1885	1889	1893	rBV4	31061	50298	9.47%	0.501%

LSC Area Percent Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A21.D
Acq On : 14 Sep 2016 16:14
Operator : VOA111:MS
Sample : l1628787-03,31H,4.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 21 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Title : VOLATILES BY GC/MS

29	11.533	1893	1897	1905	rVV6	23507	55932	10.53%	0.557%
30	11.601	1905	1910	1913	rVV4	49149	88750	16.70%	0.884%
31	11.638	1913	1917	1927	rVB2	143533	227874	42.89%	2.270%
32	11.722	1927	1933	1944	rBV8	41551	102764	19.34%	1.024%
33	11.800	1944	1948	1954	rBV6	24861	46015	8.66%	0.458%
34	11.884	1959	1964	1970	rBV5	37404	59336	11.17%	0.591%
35	11.979	1977	1982	1989	rVB3	49859	88301	16.62%	0.880%
36	12.047	1989	1995	2001	rBV	213197	355935	66.99%	3.546%
37	12.104	2001	2006	2016	rVB3	83761	196856	37.05%	1.961%
38	12.235	2024	2031	2035	rBV2	78789	149285	28.10%	1.487%
39	12.293	2036	2042	2045	rVV3	122491	196375	36.96%	1.956%
40	12.330	2045	2049	2055	rVB	99416	151744	28.56%	1.512%
41	12.461	2066	2074	2078	rBV5	43963	85331	16.06%	0.850%
42	12.524	2079	2086	2093	rVV7	19836	55842	10.51%	0.556%
43	12.634	2100	2107	2116	rBV7	48947	140119	26.37%	1.396%
44	12.707	2116	2121	2130	rVV3	60761	113975	21.45%	1.135%
45	12.786	2130	2136	2146	rVB7	89704	245918	46.28%	2.450%
46	12.859	2146	2150	2154	rBV3	67012	98762	18.59%	0.984%
47	12.896	2154	2157	2163	rVB3	49762	70095	13.19%	0.698%
48	12.985	2169	2174	2179	rBV4	82258	110982	20.89%	1.106%
49	13.101	2192	2196	2200	rVB2	55264	68428	12.88%	0.682%
50	13.148	2200	2205	2210	rBV	100183	137605	25.90%	1.371%
51	13.190	2210	2213	2217	rVV2	33988	35255	6.64%	0.351%
52	13.232	2217	2221	2224	rVV2	19668	23525	4.43%	0.234%
53	13.331	2235	2240	2260	rVB5	96319	250867	47.22%	2.499%
54	13.515	2261	2275	2277	rVV7	86319	227461	42.81%	2.266%
55	13.541	2278	2280	2284	rVV	102941	121945	22.95%	1.215%
56	13.588	2285	2289	2293	rVV5	43403	71936	13.54%	0.717%
57	13.646	2294	2300	2307	rVB9	26757	69269	13.04%	0.690%
58	13.745	2312	2319	2327	rBV9	21883	53250	10.02%	0.531%
59	13.861	2328	2341	2349	rBV10	83741	224503	42.25%	2.237%
60	13.939	2351	2356	2363	rVB6	49533	81398	15.32%	0.811%

LSC Area Percent Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A21.D
Acq On : 14 Sep 2016 16:14
Operator : VOA111:MS
Sample : l1628787-03,31H,4.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 21 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Title : VOLATILES BY GC/MS

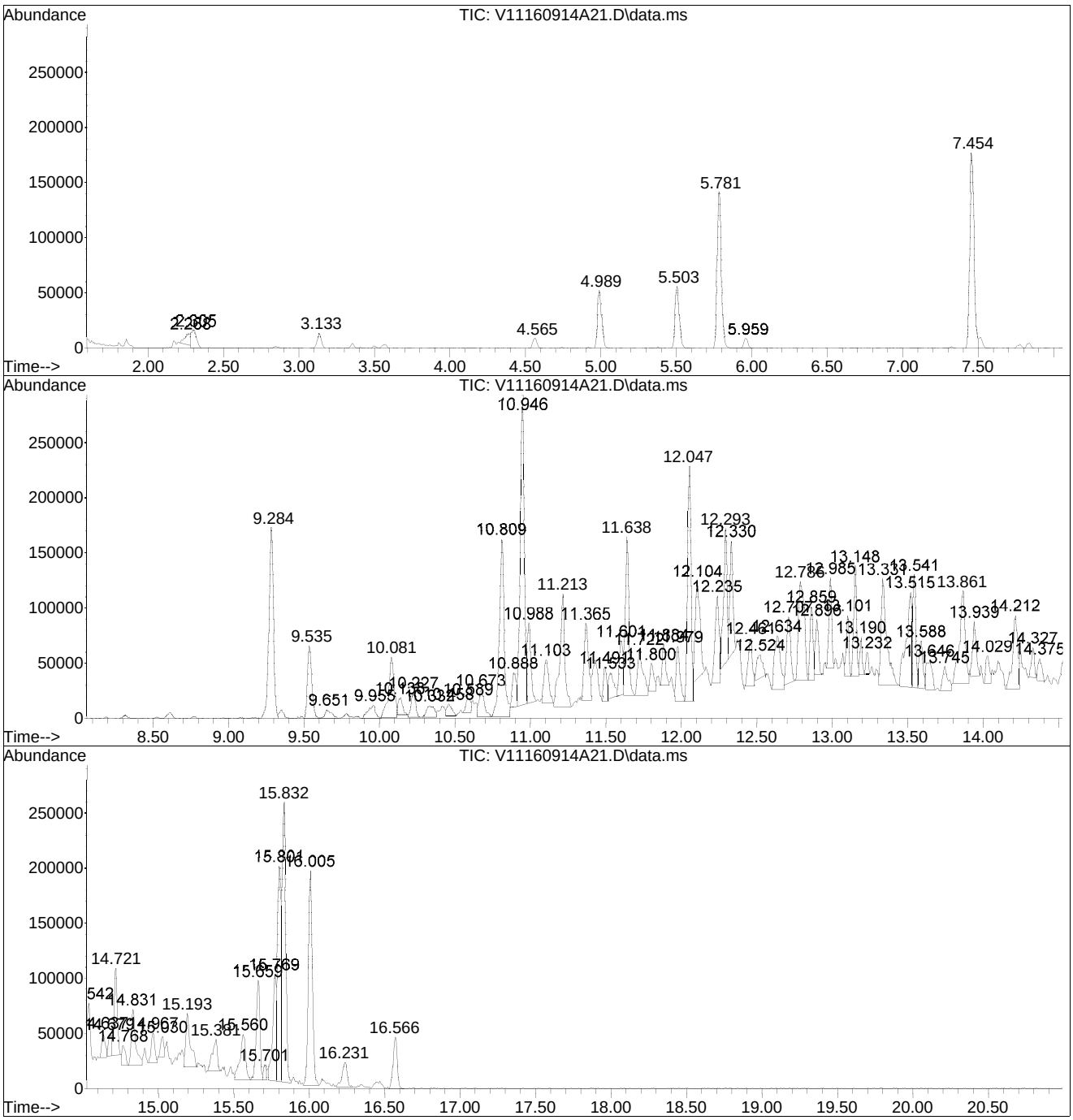
61	14.029	2368	2373	2377	rBV7	24950	43712	8.23%	0.435%
62	14.212	2396	2408	2413	rBV6	66924	163971	30.86%	1.634%
63	14.327	2425	2430	2434	rVV6	26742	37974	7.15%	0.378%
64	14.375	2435	2439	2445	rVB6	19945	33583	6.32%	0.335%
65	14.542	2465	2471	2476	rVB5	51167	83614	15.74%	0.833%
66	14.637	2484	2489	2493	rBV8	22385	35127	6.61%	0.350%
67	14.679	2494	2497	2500	rVV5	20285	30343	5.71%	0.302%
68	14.721	2500	2505	2511	rVB3	79060	115164	21.68%	1.147%
69	14.768	2512	2514	2521	rVB6	18020	27042	5.09%	0.269%
70	14.831	2521	2526	2538	rBV7	50787	103554	19.49%	1.032%
71	14.967	2546	2552	2557	rBV8	27012	44819	8.44%	0.447%
72	15.030	2559	2564	2566	rBV6	18322	26924	5.07%	0.268%
73	15.193	2591	2595	2607	rVB10	49075	102731	19.34%	1.023%
74	15.381	2621	2631	2638	rBV10	29048	67152	12.64%	0.669%
75	15.560	2655	2665	2675	rVB7	41521	108256	20.37%	1.078%
76	15.659	2675	2684	2690	rBV2	90284	156111	29.38%	1.555%
77	15.701	2690	2692	2695	rVV4	13794	17589	3.31%	0.175%
78	15.769	2697	2705	2707	rVV3	97060	165113	31.08%	1.645%
79	15.801	2707	2711	2714	rVV2	195735	347041	65.32%	3.457%
80	15.832	2714	2717	2726	rVV2	254775	376226	70.81%	3.748%
81	16.005	2741	2750	2761	rVB2	194800	354730	66.76%	3.534%
82	16.231	2783	2793	2804	rVB8	22032	50857	9.57%	0.507%
83	16.566	2849	2857	2869	rBV2	46297	86164	16.22%	0.858%

Sum of corrected areas: 10037647

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A21.D
Acq On : 14 Sep 2016 16:14
Operator : VOA111:MS
Sample : l1628787-03,31H,4.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 21 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p



Library Search Compound Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A21.D
Acq On : 14 Sep 2016 16:14
Operator : VOA111:MS
Sample : l1628787-03,31H,4.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 21 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

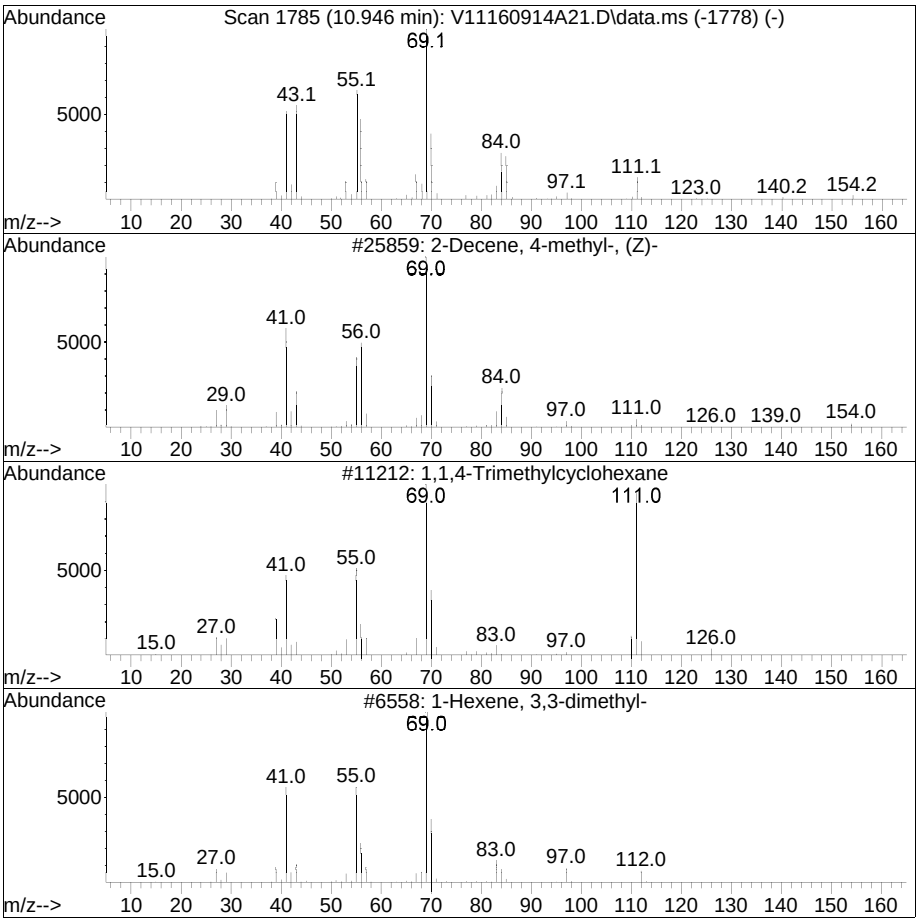
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

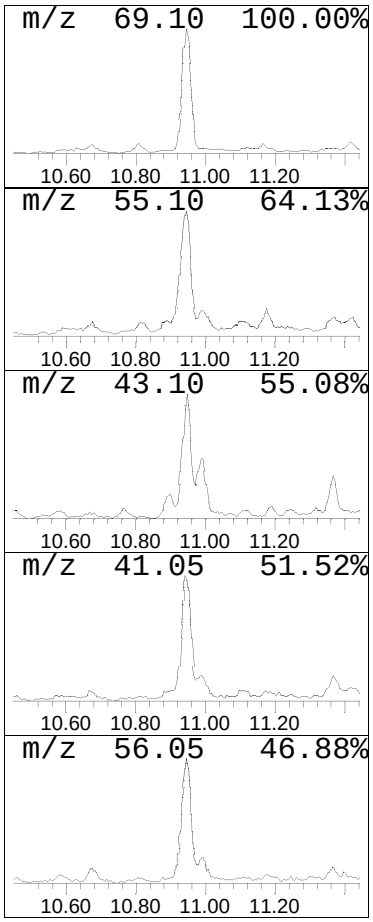
****

Peak Number 1 Unknown 1 Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.946	29.85 ug/L	531320	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Decene, 4-methyl-, (Z)-	154	C11H22	074630-30-1	81
2	1,1,4-Trimethylcyclohexane	126	C9H18	007094-27-1	59
3	1-Hexene, 3,3-dimethyl-	112	C8H16	003404-77-1	50
4	2-Heptene, 4-methyl-, (E)-	112	C8H16	066225-17-0	47
5	4-Methyl-2-heptene	112	C8H16	003404-56-6	47





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A21.D
Acq On : 14 Sep 2016 16:14
Operator : VOA111:MS
Sample : l1628787-03,31H,4.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 21 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

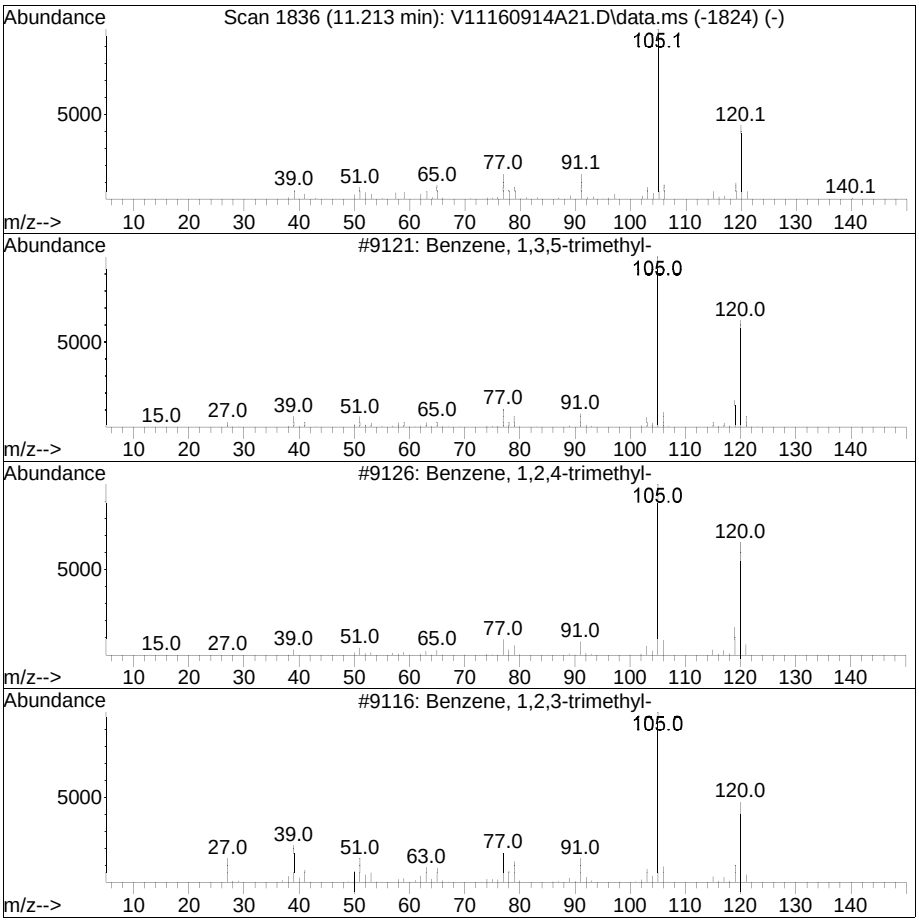
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

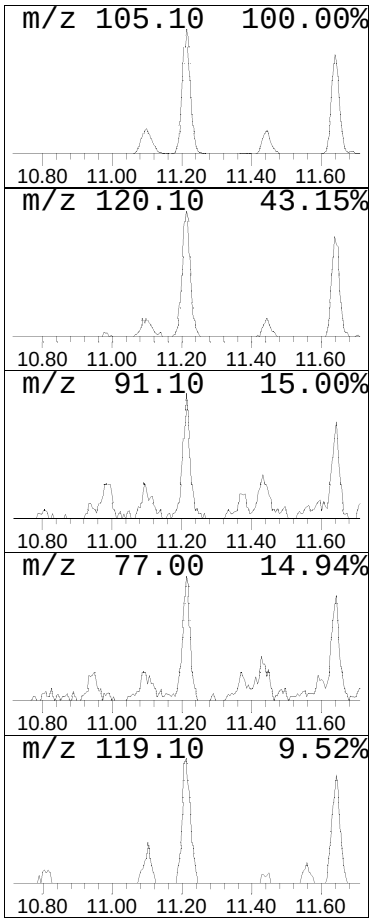
****

Peak Number 2 Unknown Aromatic A Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.213	13.02 ug/L	231635	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	94
2	Benzene, 1,2,4-trimethyl-	120	C9H12	000095-63-6	94
3	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	91
4	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	91
5	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	91





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A21.D
Acq On : 14 Sep 2016 16:14
Operator : VOA111:MS
Sample : l1628787-03,31H,4.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 21 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

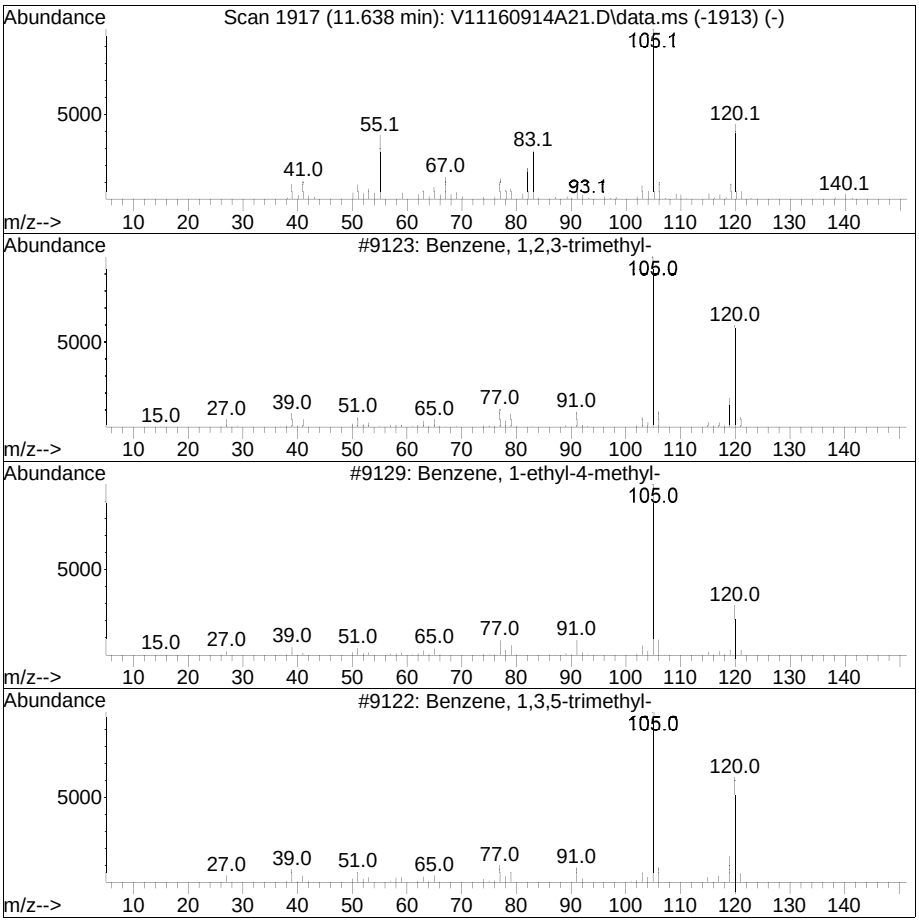
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

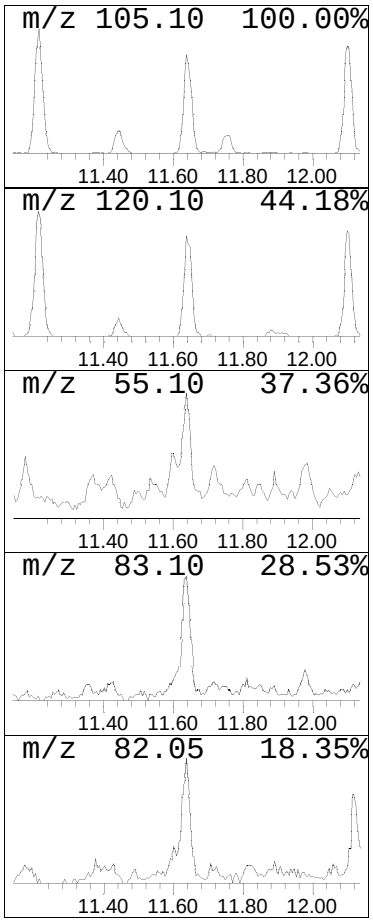
****

Peak Number 3 Unknown Aromatic B Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.638	12.80 ug/L	227874	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	94
2	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	93
3	Benzene, 1,3,5-trimethyl-	120	C9H12	000108-67-8	89
4	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	89
5	Benzene, 1,2,4-trimethyl-	120	C9H12	000095-63-6	89





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A21.D
Acq On : 14 Sep 2016 16:14
Operator : VOA111:MS
Sample : l1628787-03,31H,4.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 21 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

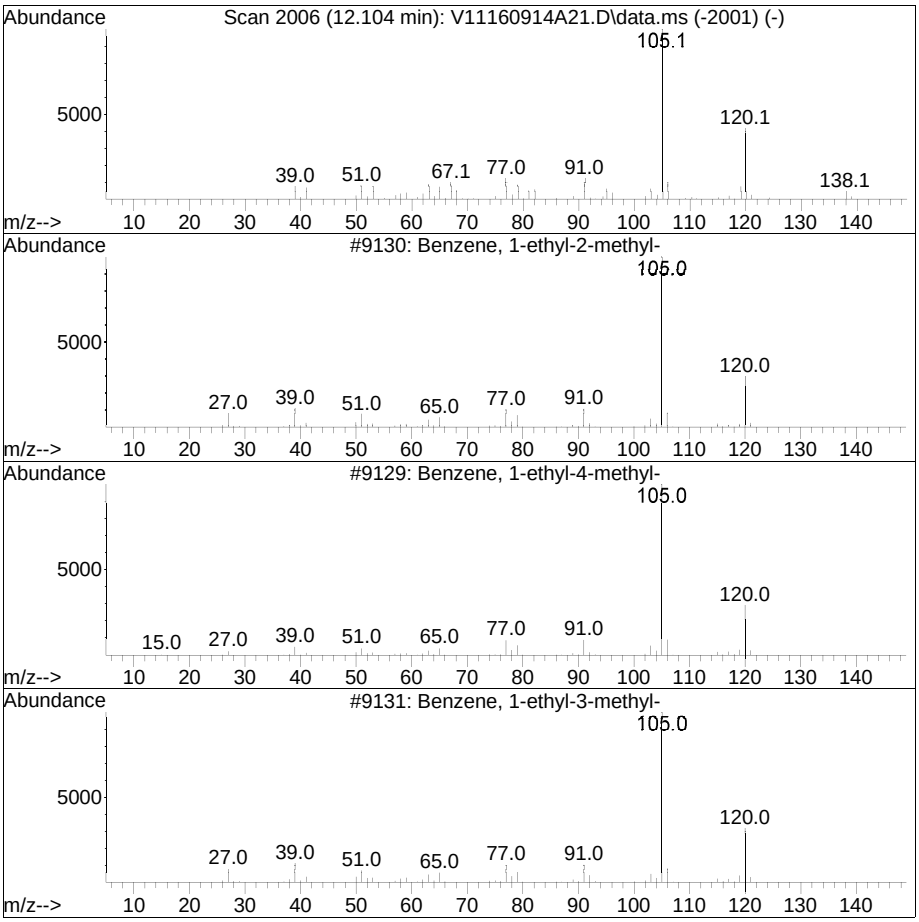
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

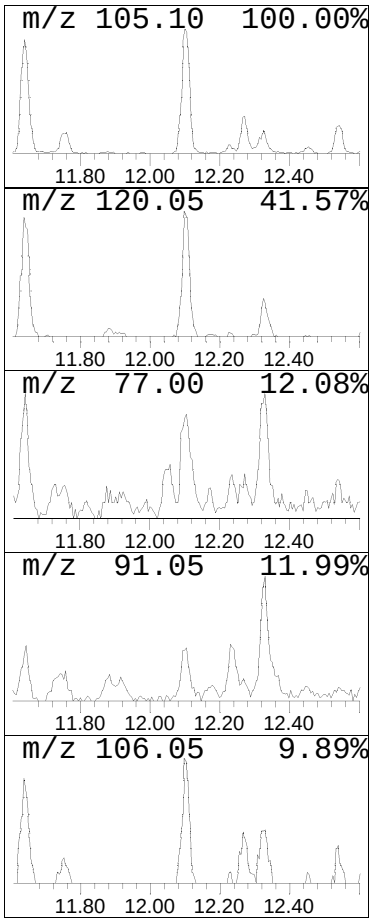
****

Peak Number 4 Unknown Aromatic C Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.104	11.06 ug/L	196856	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	87
2	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	87
3	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	87
4	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	83
5	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	83





Library Search Compound Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A21.D
Acq On : 14 Sep 2016 16:14
Operator : VOA111:MS
Sample : l1628787-03,31H,4.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 21 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

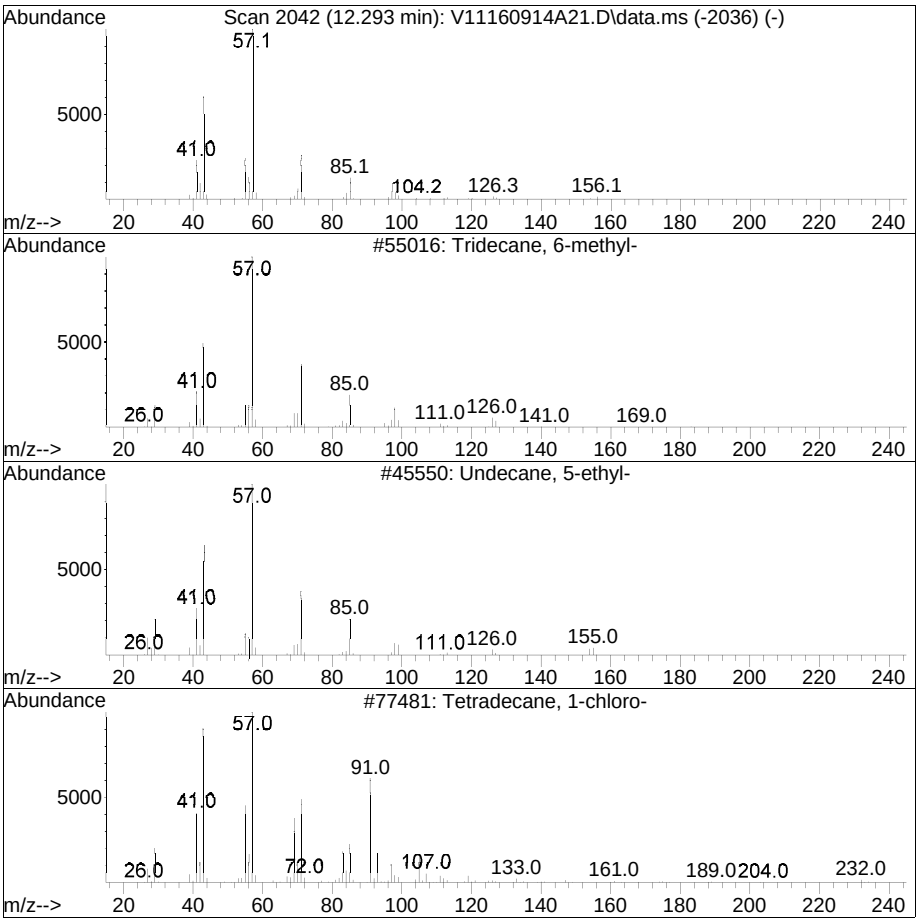
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

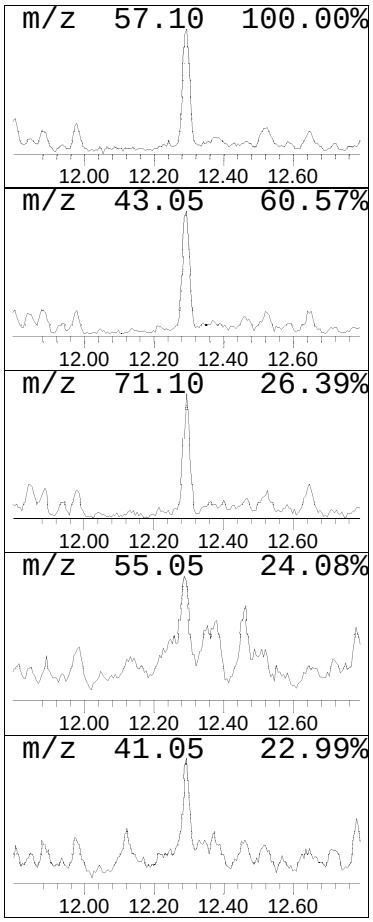
****

Peak Number 5 Unknown 2 Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.293	11.03 ug/L	196375	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tridecane, 6-methyl-	198	C14H30	013287-21-3	53
2	Undecane, 5-ethyl-	184	C13H28	017453-94-0	53
3	Tetradecane, 1-chloro-	232	C14H29Cl	002425-54-9	53
4	Decane, 2,5,9-trimethyl-	184	C13H28	062108-22-9	50
5	Octane, 2,4,6-trimethyl-	156	C11H24	062016-37-9	50





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A21.D
Acq On : 14 Sep 2016 16:14
Operator : VOA111:MS
Sample : l1628787-03,31H,4.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 21 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

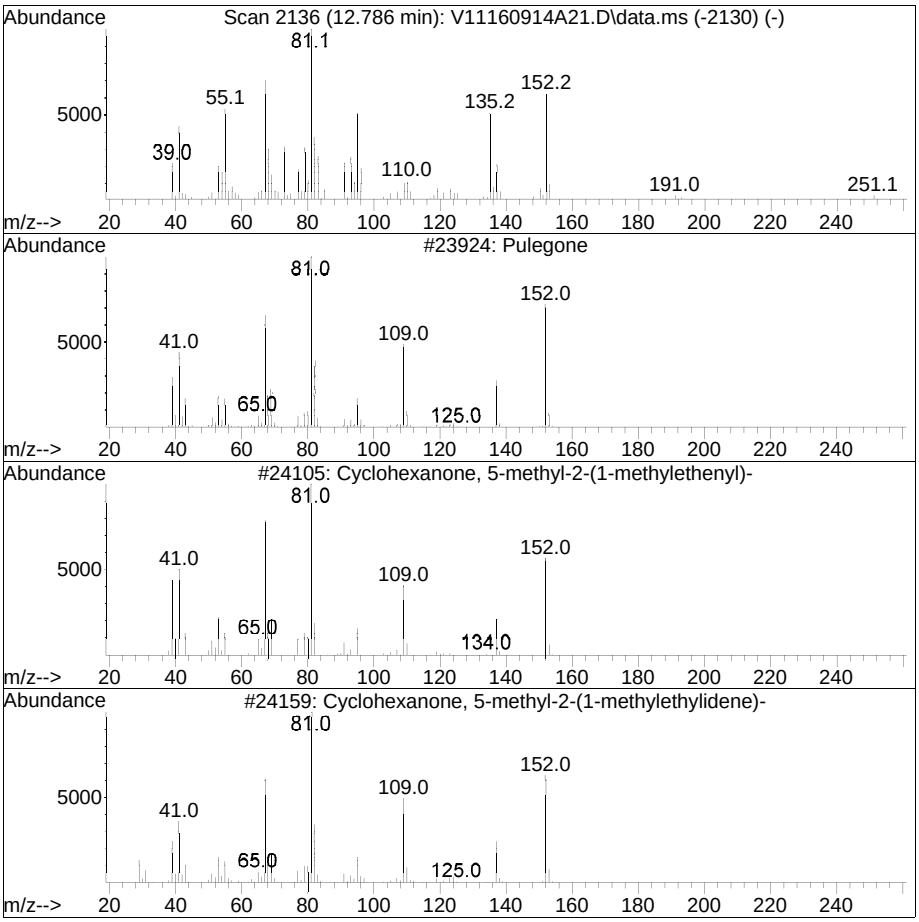
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

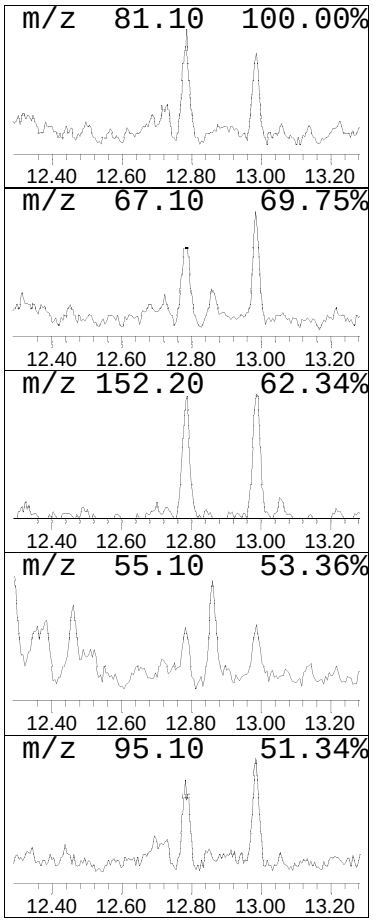
****

Peak Number 6 Unknown 3 Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.786	13.82 ug/L	245918	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pulegone	152	C10H16O	000089-82-7	64
2	Cyclohexanone, 5-methyl-2-(1-met...	152	C10H16O	000529-00-0	64
3	Cyclohexanone, 5-methyl-2-(1-met...	152	C10H16O	015932-80-6	64
4	Pulegone	152	C10H16O	000089-82-7	64
5	Pulegone	152	C10H16O	000089-82-7	58





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A21.D
Acq On : 14 Sep 2016 16:14
Operator : VOA111:MS
Sample : l1628787-03,31H,4.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 21 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

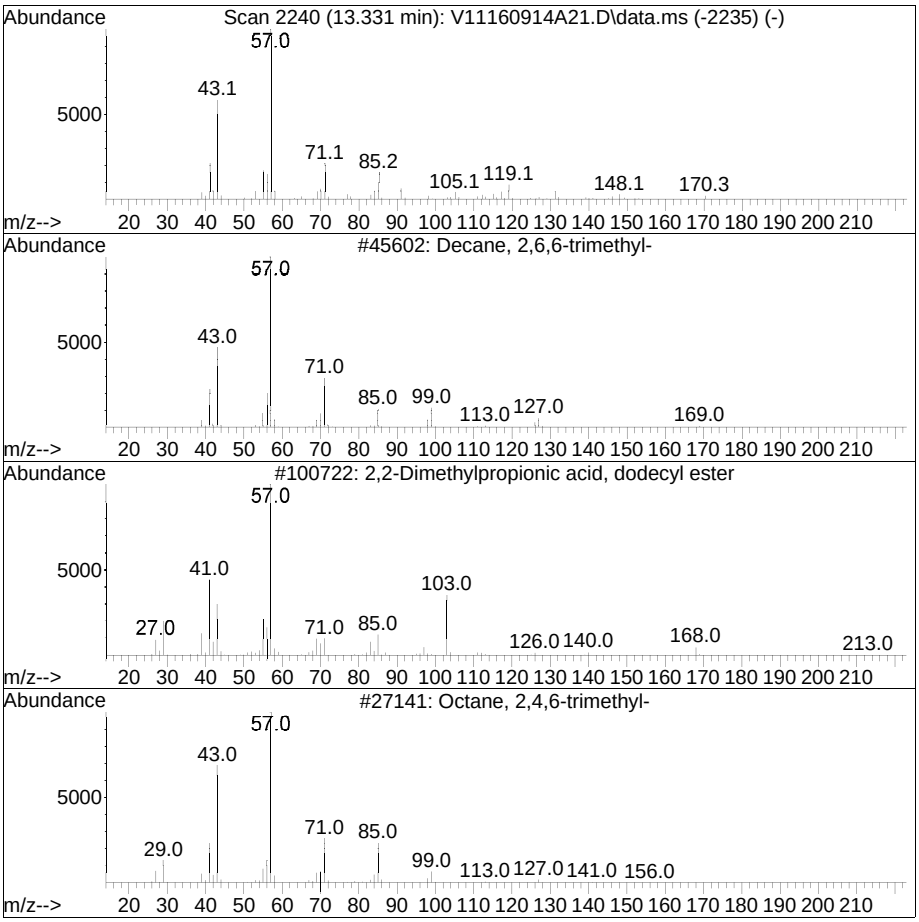
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

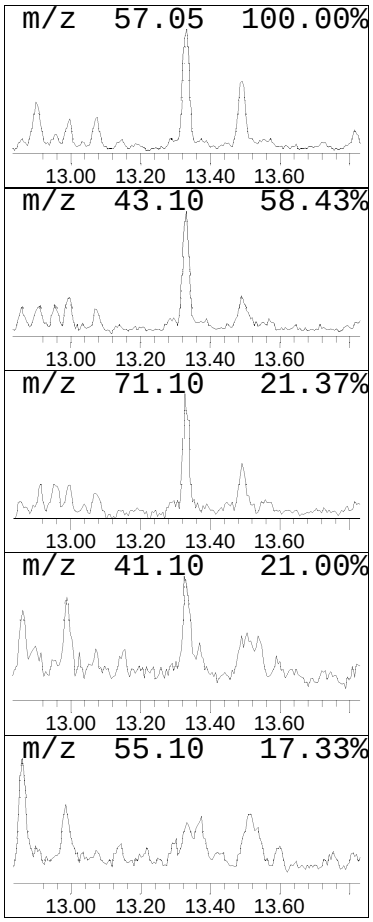
****

Peak Number 7 Unknown 4 Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.331	14.10 ug/L	250867	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 2,6,6-trimethyl-	184	C13H28	062108-24-1	50
2	2,2-Dimethylpropionic acid, dode...	270	C17H34O2	131141-69-0	50
3	Octane, 2,4,6-trimethyl-	156	C11H24	062016-37-9	50
4	Dodecane	170	C12H26	000112-40-3	49
5	Decane, 2,5,9-trimethyl-	184	C13H28	062108-22-9	47





Library Search Compound Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A21.D
Acq On : 14 Sep 2016 16:14
Operator : VOA111:MS
Sample : l1628787-03,31H,4.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 21 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

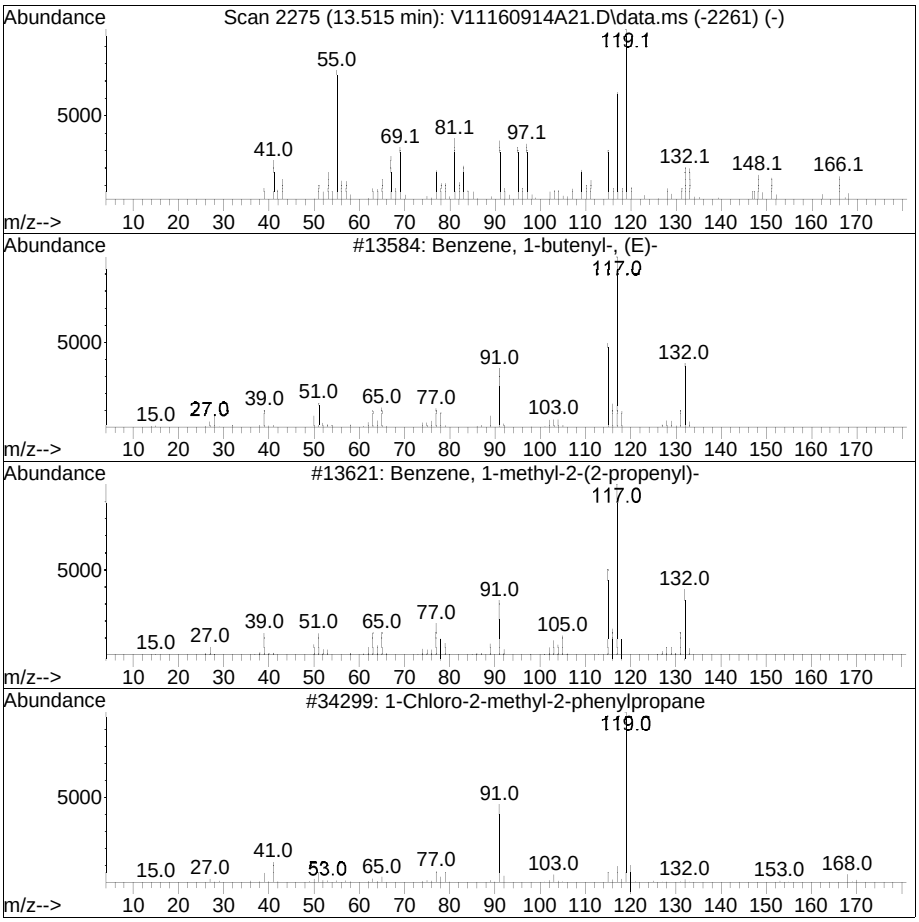
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

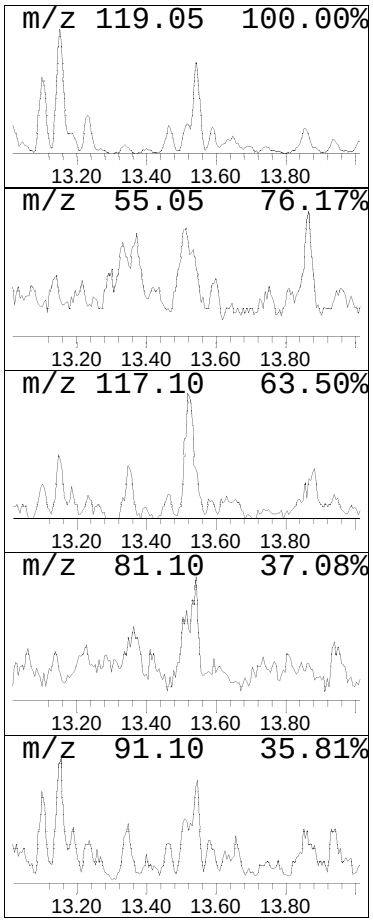
****

Peak Number 8 Unknown Aromatic D Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.515	12.78 ug/L	227461	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-butenyl-, (E)-	132	C10H12	001005-64-7	25
2	Benzene, 1-methyl-2-(2-propenyl)-	132	C10H12	001587-04-8	25
3	1-Chloro-2-methyl-2-phenylpropane	168	C10H13Cl	000515-40-2	25
4	Benzene, (1,1,2-trimethylpropyl)-	162	C12H18	026356-11-6	25
5	Benzonitrile, 4-ethoxy-	147	C9H9NO	025117-74-2	22





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A21.D
Acq On : 14 Sep 2016 16:14
Operator : VOA111:MS
Sample : l1628787-03,31H,4.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 21 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

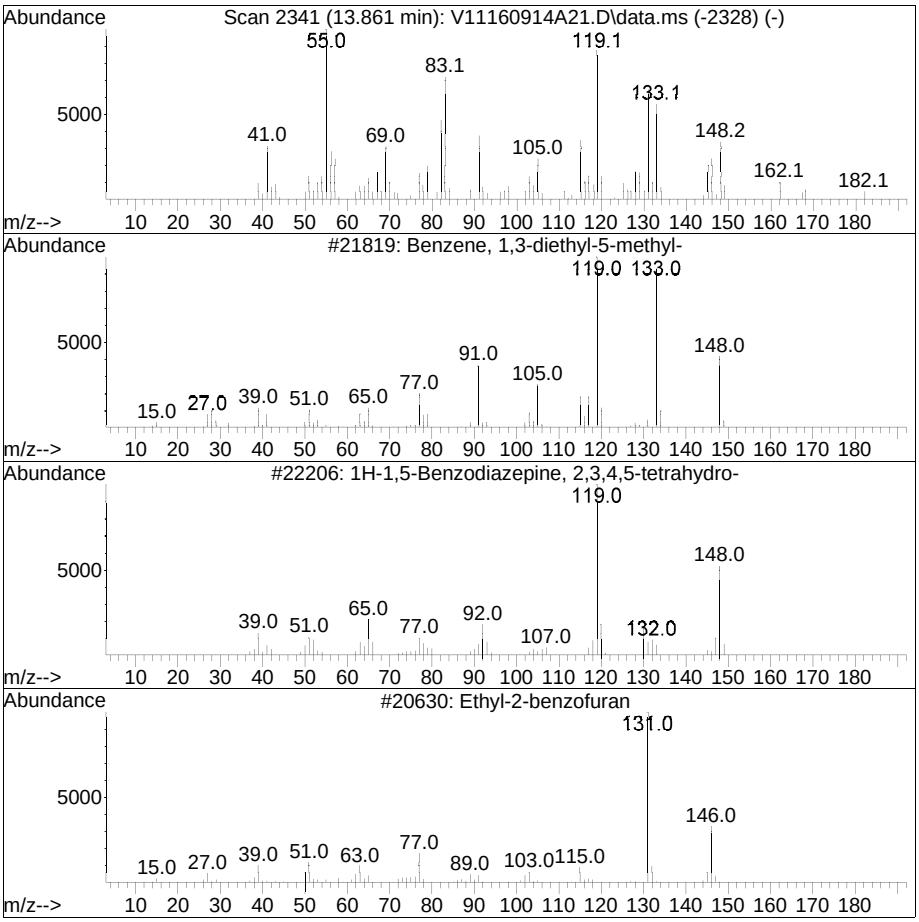
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

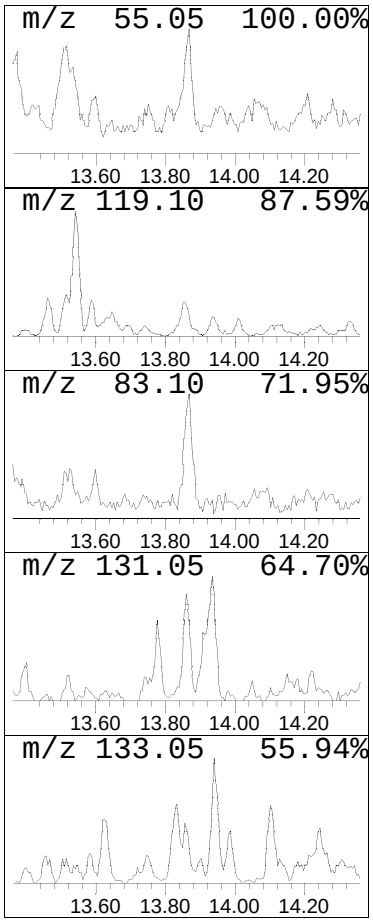
****

Peak Number 9 Unknown Aromatic E Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.861	12.61 ug/L	224503	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,3-diethyl-5-methyl-	148	C11H16	002050-24-0	41
2	1H-1,5-Benzodiazepine, 2,3,4,5-t...	148	C9H12N2	006516-89-8	25
3	Ethyl-2-benzofuran	146	C10H10O	003131-63-3	25
4	Bicyclo[4.2.0]octa-1,3,5-triene,...	146	C11H14	027087-54-3	25
5	Benzene, (2-methyl-1-butenyl)-	146	C11H14	056253-64-6	25





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A21.D
Acq On : 14 Sep 2016 16:14
Operator : VOA111:MS
Sample : l1628787-03,31H,4.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 21 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

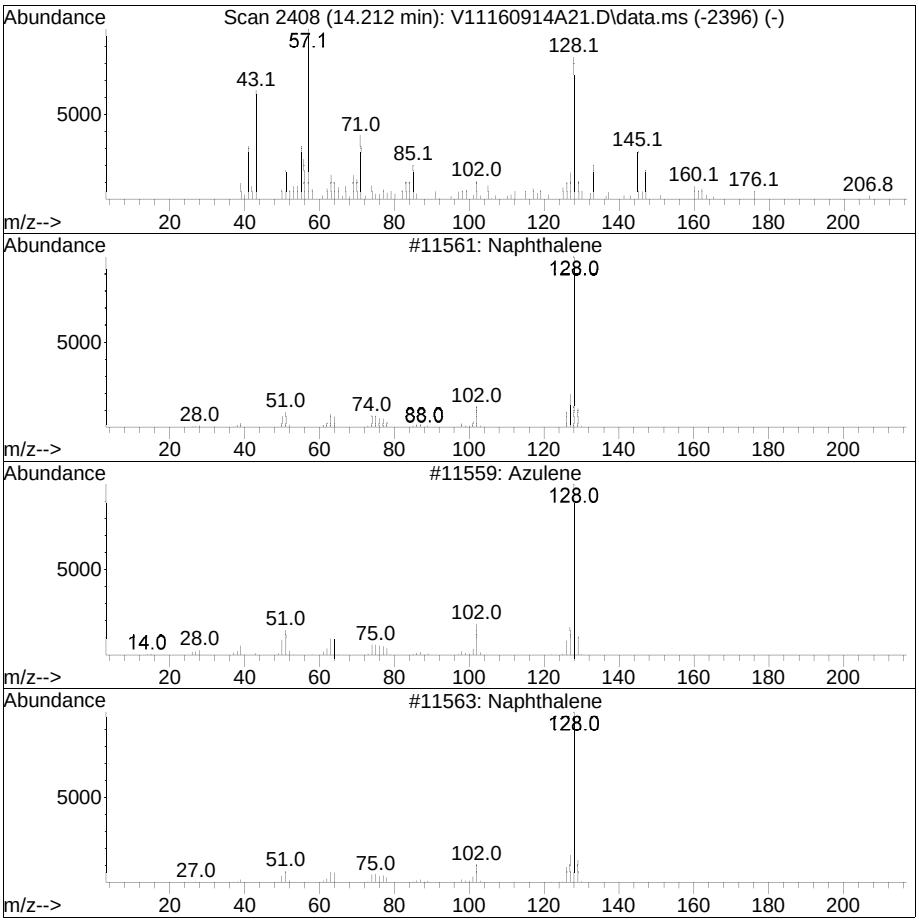
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

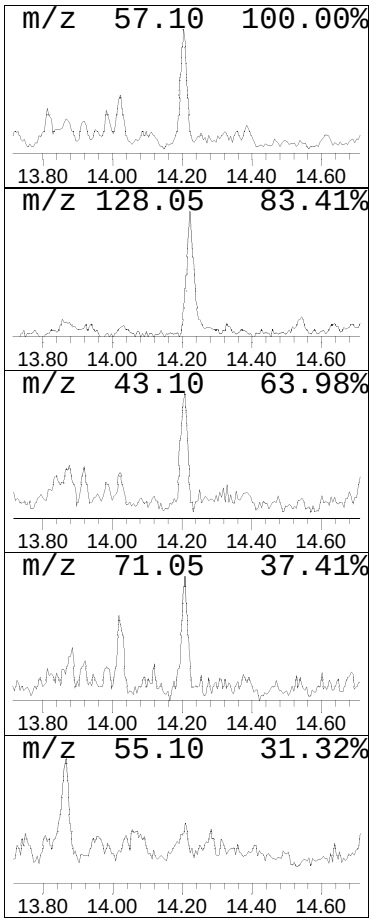
****

Peak Number 10 Unknown Aromatic F Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.212	9.21 ug/L	163971	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene	128	C10H8	000091-20-3	53
2	Azulene	128	C10H8	000275-51-4	49
3	Naphthalene	128	C10H8	000091-20-3	49
4	Naphthalene	128	C10H8	000091-20-3	49
5	1H-Indene, 1-methylene-	128	C10H8	002471-84-3	49





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A21.D
Acq On : 14 Sep 2016 16:14
Operator : VOA111:MS
Sample : l1628787-03,31H,4.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 21 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

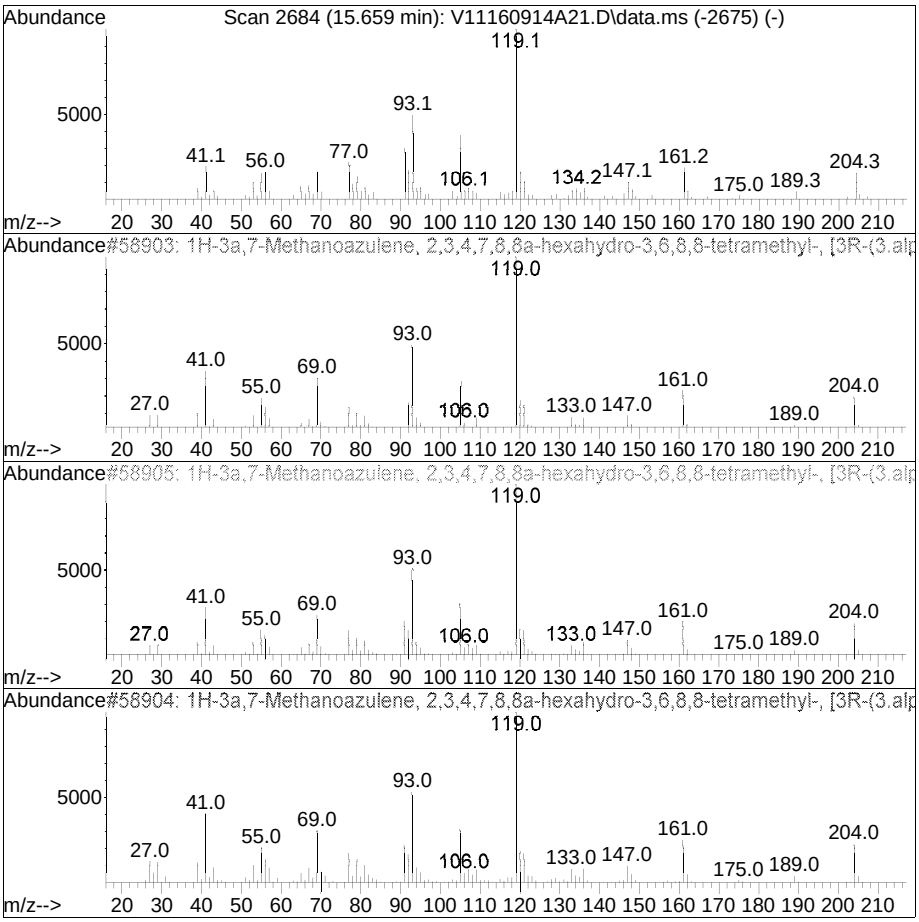
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

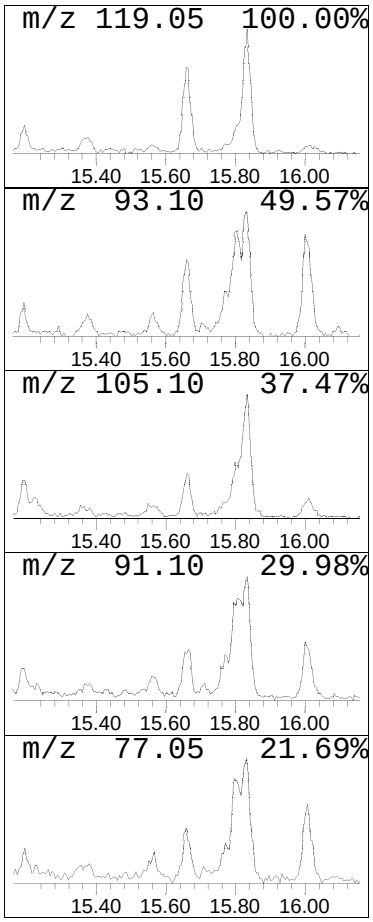
****

Peak Number 11 Unknown 5 Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.659	8.77 ug/L	156111	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-3a,7-Methanoazulene, 2,3,4,7,...	204	C15H24	000469-61-4	93
2	1H-3a,7-Methanoazulene, 2,3,4,7,...	204	C15H24	000469-61-4	91
3	1H-3a,7-Methanoazulene, 2,3,4,7,...	204	C15H24	000469-61-4	91
4	1H-3a,7-Methanoazulene, 2,3,4,7,...	204	C15H24	000469-61-4	87
5	Di-epi-.alpha.-cedrene	204	C15H24	1000156-13-3	62





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A21.D
Acq On : 14 Sep 2016 16:14
Operator : VOA111:MS
Sample : l1628787-03,31H,4.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 21 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

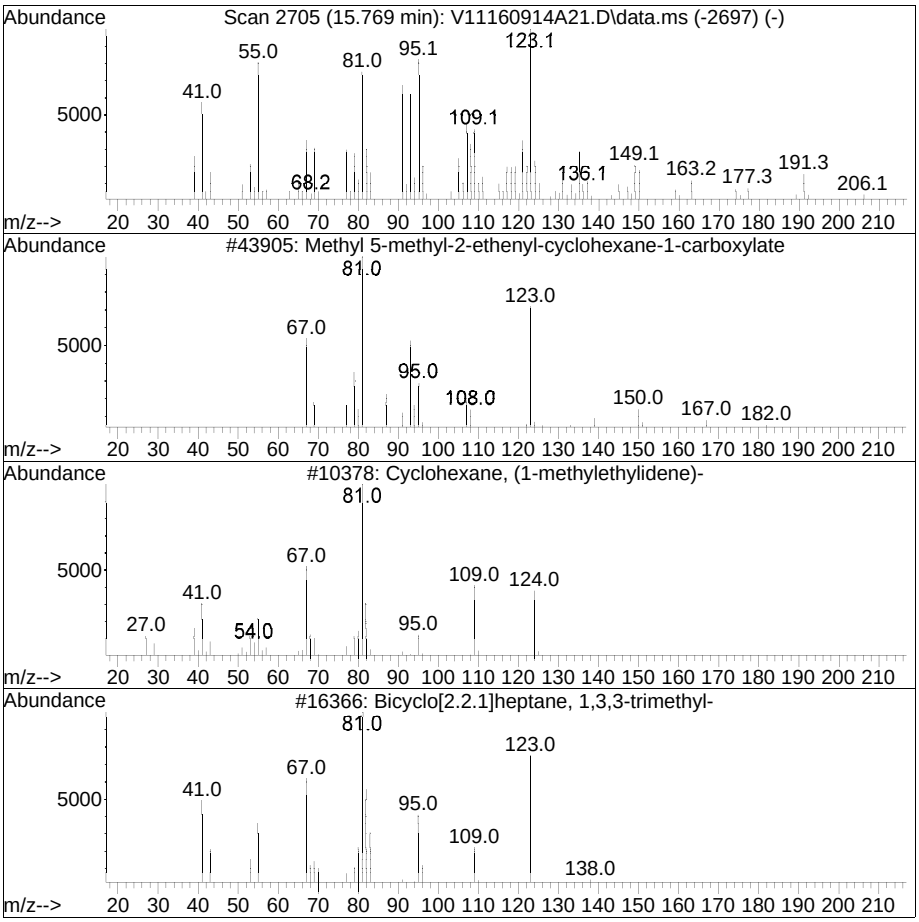
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

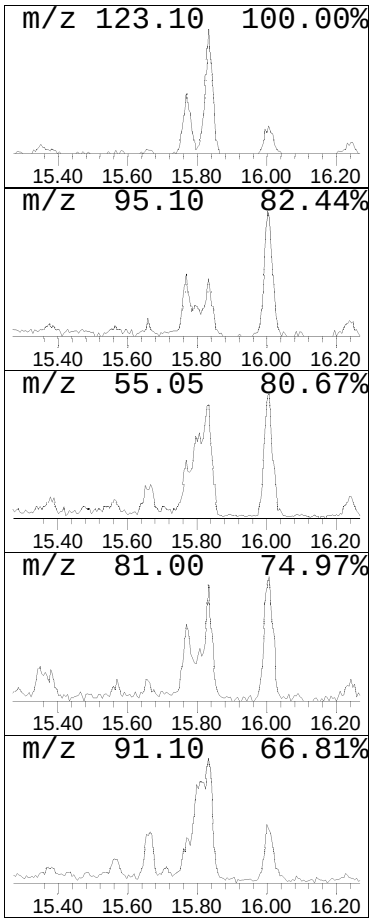
****

Peak Number 12 Unknown 6 Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.769	9.28 ug/L	165113	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Methyl 5-methyl-2-ethenyl-cycloh...	182	C11H18O2	1000144-54-1	35
2	Cyclohexane, (1-methylethylidene)-	124	C9H16	005749-72-4	22
3	Bicyclo[2.2.1]heptane, 1,3,3-tri...	138	C10H18	006248-88-0	18
4	Ethanone, 1-(1-cyclohexen-1-yl)-	124	C8H12O	000932-66-1	18
5	2,5-Octadiene, 3,4,5,6-tetramethyl-	166	C12H22	247797-85-9	14





Library Search Compound Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A21.D
Acq On : 14 Sep 2016 16:14
Operator : VOA111:MS
Sample : l1628787-03,31H,4.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 21 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

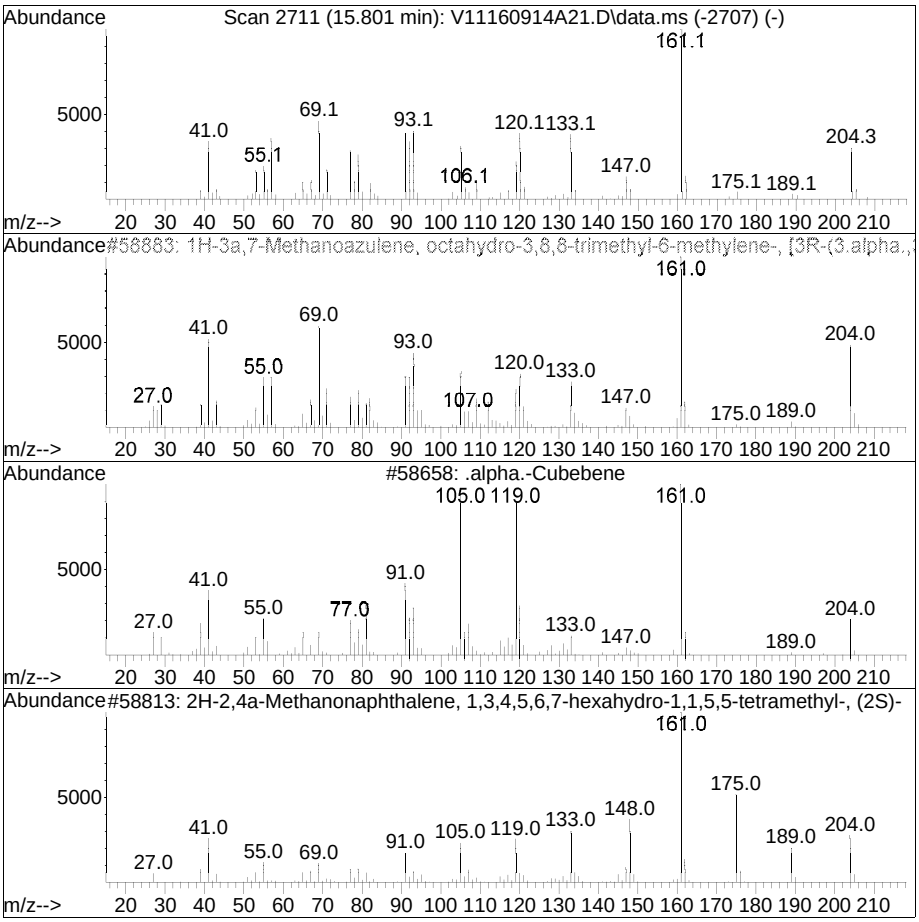
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

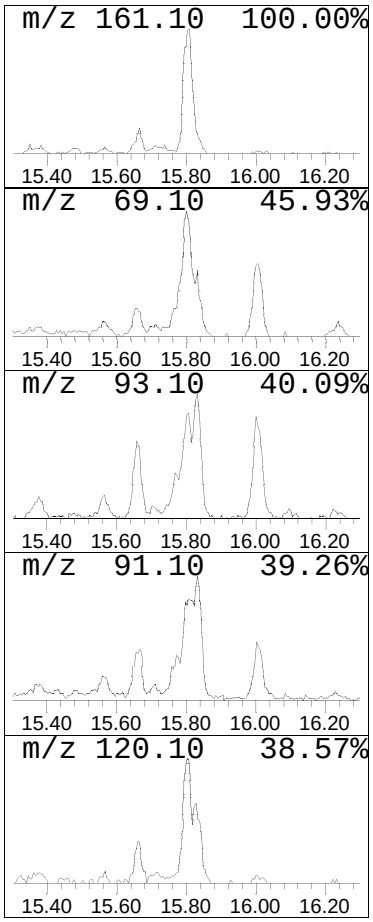
****

Peak Number 13 Unknown 7 Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.801	19.50 ug/L	347041	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-3a,7-Methanoazulene, octahydr...	204	C15H24	000546-28-1	91
2	.alpha.-Cubebene	204	C15H24	017699-14-8	59
3	2H-2,4a-Methanonaphthalene, 1,3,...	204	C15H24	001135-66-6	55
4	.beta.-Panasinsene	204	C15H24	1000159-39-0	50
5	Bicyclo[4.4.0]dec-1-ene, 2-isopr...	204	C15H24	150320-52-8	46





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A21.D
Acq On : 14 Sep 2016 16:14
Operator : VOA111:MS
Sample : l1628787-03,31H,4.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 21 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

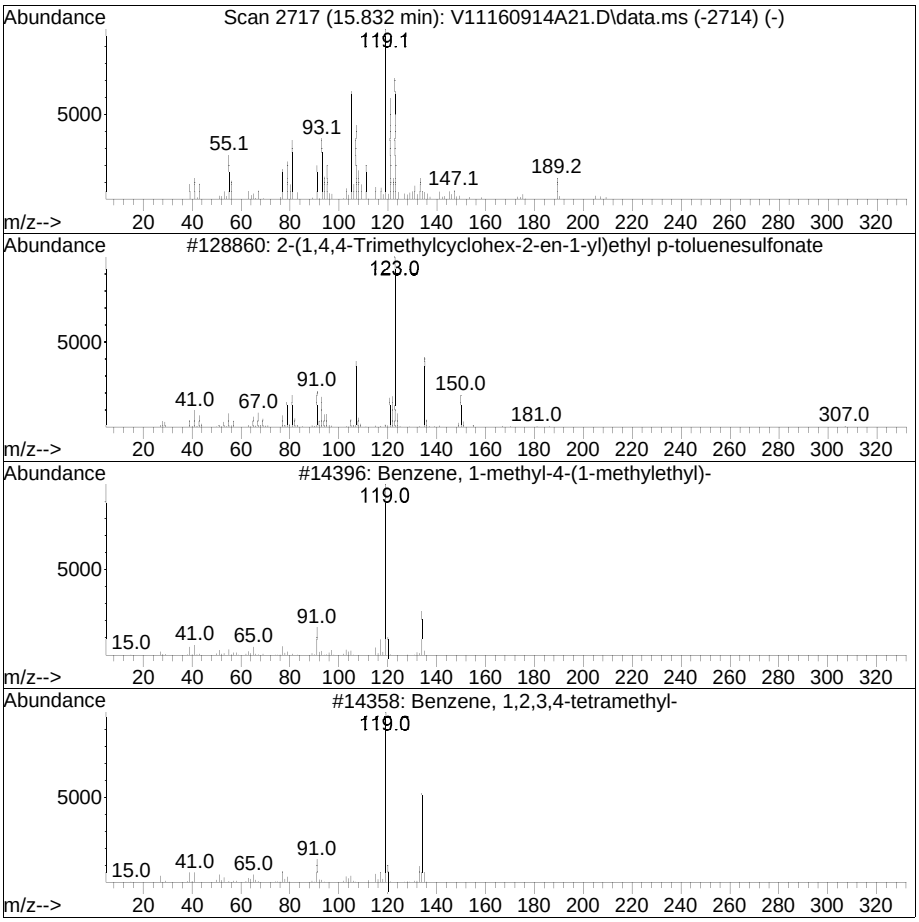
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

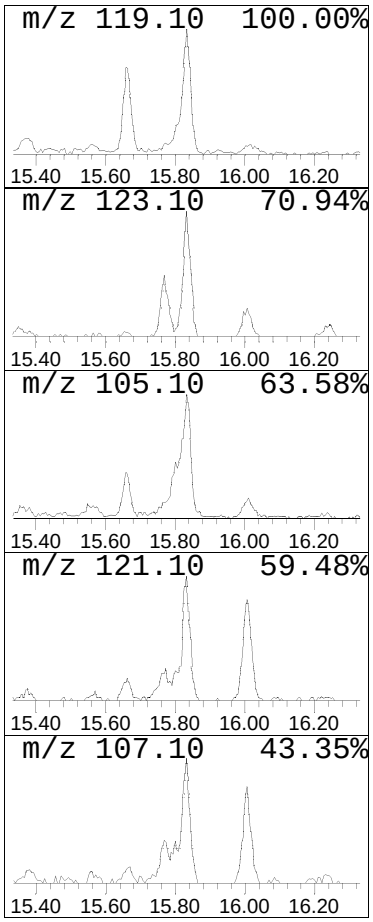
****

Peak Number 14 Unknown Aromatic G Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.832	21.14 ug/L	376226	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-(1,4,4-Trimethylcyclohex-2-en-...	322	C18H26O3S	1000195-70-2	35
2	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	18
3	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	14
4	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	14
5	Bromoacetyl chloride	156	C2H2BrClO	022118-09-8	14





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A21.D
Acq On : 14 Sep 2016 16:14
Operator : VOA111:MS
Sample : l1628787-03,31H,4.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 21 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

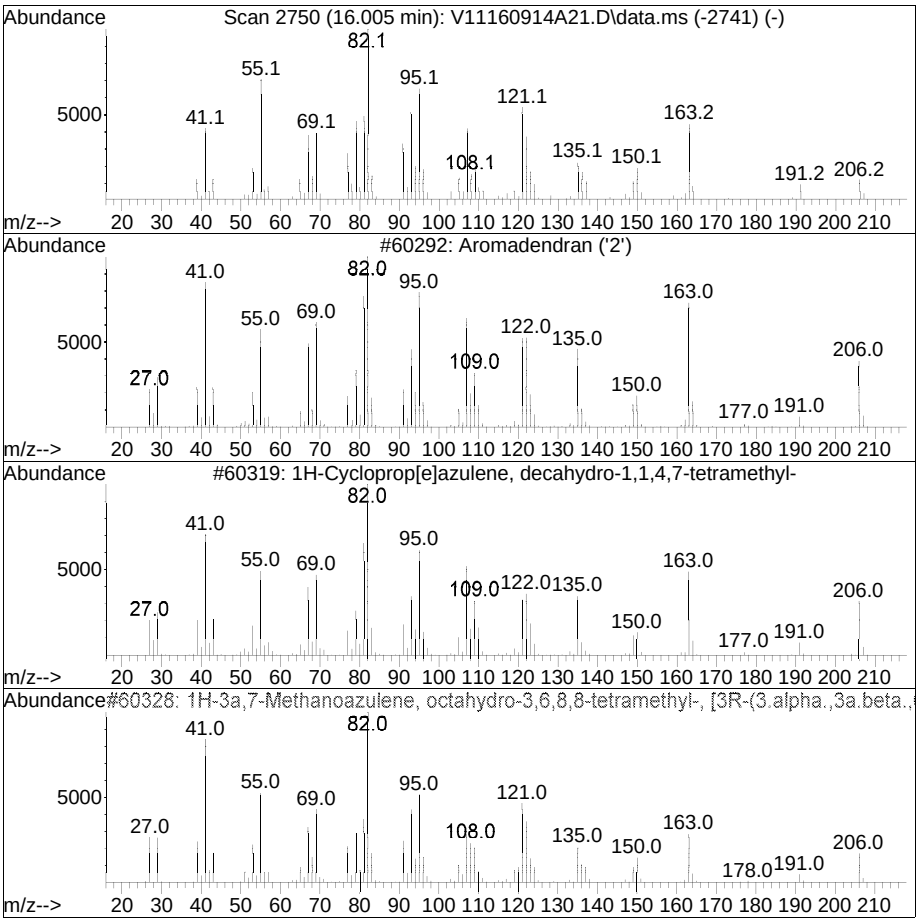
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

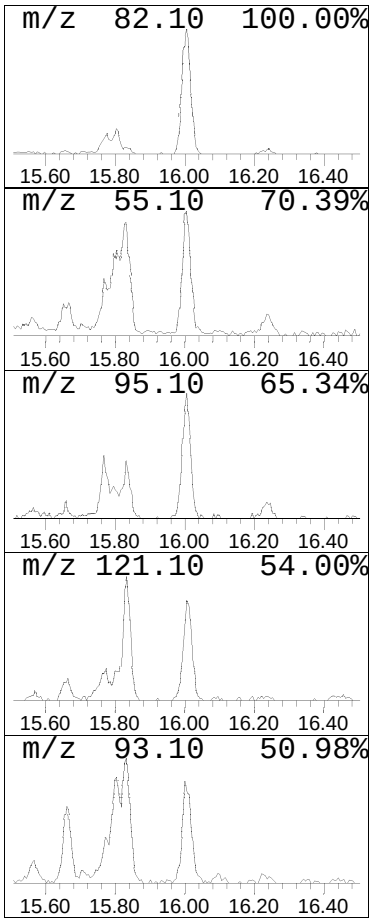
****

Peak Number 15 Unknown 8 Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.005	19.93 ug/L	354730	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Aromadendran ('2')	206	C15H26	110769-62-5	96
2	1H-Cycloprop[e]azulene, decahydr...	206	C15H26	006790-78-9	64
3	1H-3a,7-Methanoazulene, octahydr...	206	C15H26	013567-54-9	49
4	Cyclopentanol, 3-methyl-2-(2-pen...	168	C11H20O	137303-64-1	47
5	Cyclopentane, 2-methyl-1-methyle...	136	C10H16	056710-83-9	38





Tentatively Identified Compound (LSC) summary

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A21.D
Acq On : 14 Sep 2016 16:14
Operator : VOA111:MS
Sample : l1628787-03,31H,4.6,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 21 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Unknown 1	10.946	29.9	ug/L	531320	3	12.052	355935	20.0
Unknown Aromatic A	11.213	13.0	ug/L	231635	3	12.052	355935	20.0
Unknown Aromatic B	11.638	12.8	ug/L	227874	3	12.052	355935	20.0
Unknown Aromatic C	12.104	11.1	ug/L	196856	3	12.052	355935	20.0
Unknown 2	12.293	11.0	ug/L	196375	3	12.052	355935	20.0
Unknown 3	12.786	13.8	ug/L	245918	3	12.052	355935	20.0
Unknown 4	13.331	14.1	ug/L	250867	3	12.052	355935	20.0
Unknown Aromatic D	13.515	12.8	ug/L	227461	3	12.052	355935	20.0
Unknown Aromatic E	13.861	12.6	ug/L	224503	3	12.052	355935	20.0
Unknown Aromatic F	14.212	9.2	ug/L	163971	3	12.052	355935	20.0
Unknown 5	15.659	8.8	ug/L	156111	3	12.052	355935	20.0
Unknown 6	15.769	9.3	ug/L	165113	3	12.052	355935	20.0
Unknown 7	15.801	19.5	ug/L	347041	3	12.052	355935	20.0
Unknown Aromatic G	15.832	21.1	ug/L	376226	3	12.052	355935	20.0
Unknown 8	16.005	19.9	ug/L	354730	3	12.052	355935	20.0

Quantitation Report (LSC Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A22.D
Acq On : 14 Sep 2016 16:39
Operator : VOA111:MS
Sample : l1628787-10,31H,2.5,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 14 17:14:47 2016
Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA111\2016\160914A\V11160914A02.D
Sub List : 8260-CurveSoil - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.781	96	127993	20.000	ug/L	0.00
Standard Area 1 = 144511			Recovery = 88.57%			
59) Chlorobenzene-d5	9.284	117	98382	20.000	ug/L	0.00
Standard Area 1 = 111926			Recovery = 87.90%			
79) 1,4-Dichlorobenzene-d4	12.052	152	51325	20.000	ug/L	0.00
Standard Area 1 = 58934			Recovery = 87.09%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.990	113	33032	22.805	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 114.03%			
43) 1,2-Dichloroethane-d4	5.503	65	49114	23.304	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 116.52%			
60) Toluene-d8	7.459	98	130318	19.441	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 97.20%			
83) 4-Bromofluorobenzene	10.809	95	55751	19.998	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 99.99%			
Target Compounds						Qvalue
4) Vinyl chloride	1.844	62	870	0.491	ug/L	96

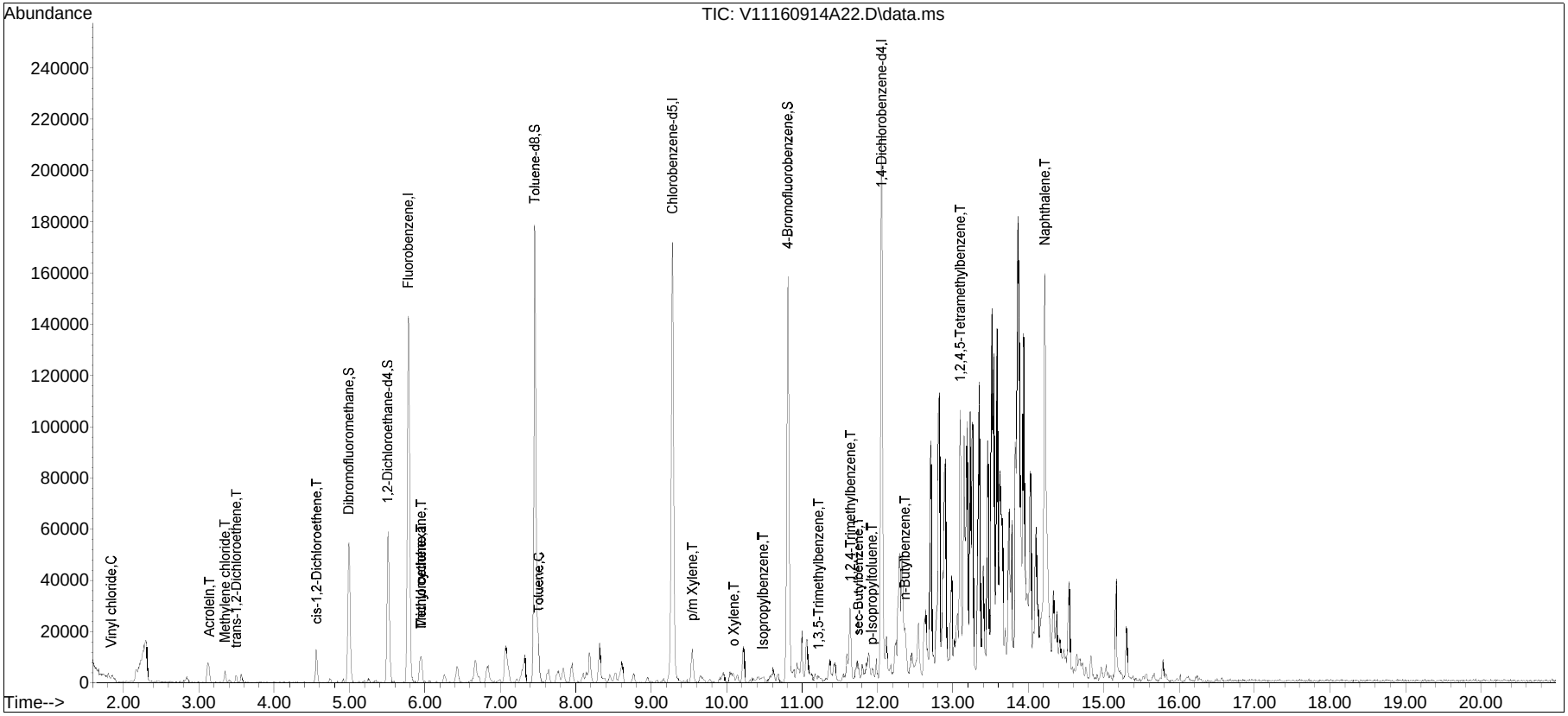
(#) = qualifier out of range (m) = manual integration (+) = signals summed

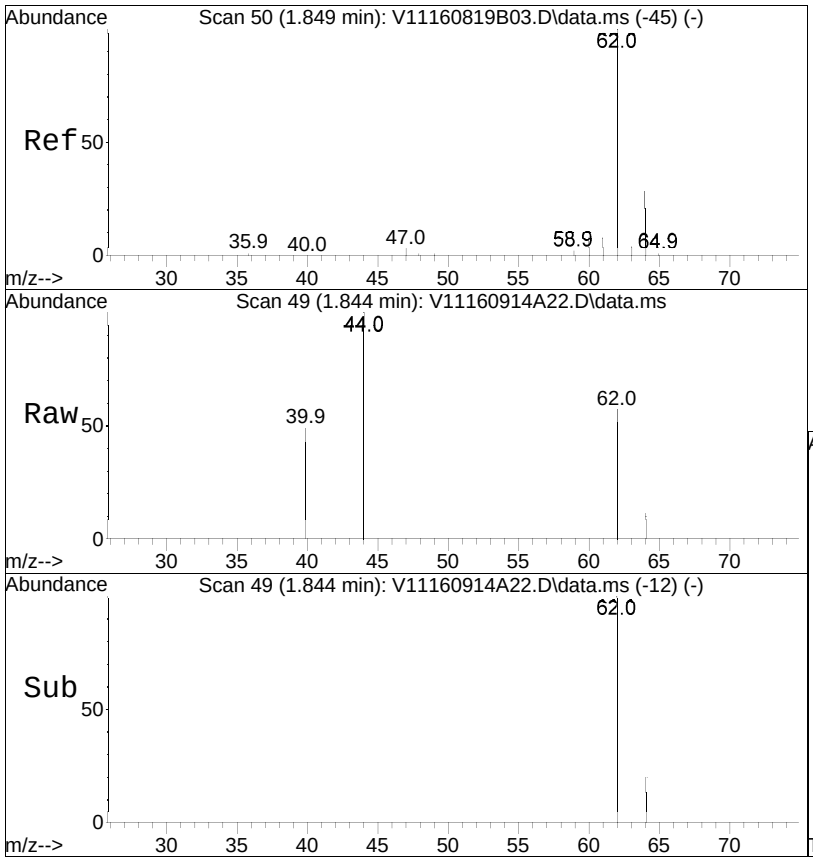
Quantitation Report (LSC Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A22.D
Acq On : 14 Sep 2016 16:39
Operator : VOA111:MS
Sample : l1628787-10,31H,2.5,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 14 17:14:47 2016
Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

Sub List : 8260-CurveSoil - Megamix plus Diox4A\V11160914A02.D•

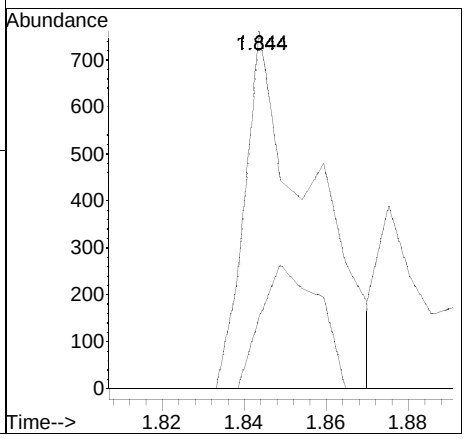




#4
Vinyl chloride
Concen: 0.49 ug/L
RT: 1.844 min Scan# 49
Delta R.T. -0.005 min
Lab File: V11160914A22.D
Acq: 14 Sep 2016 16:39

Tgt Ion: 62 Resp: 870

Ion	Ratio	Lower	Upper
62	100		
64	29.8	11.9	51.9



Manual Integration Report

Data Path	: I:\VOLATILES\VOA111\2016\1Q	Method	: V111_160819_8260.m
Data File	: V11160914A22.D	Operator	: VOA111:MS
Date Inj'd	: 9/14/2016 16:39	Instrument	: VOA111
Sample	: l1628787-10,31H,2.5,5,0.10	Quant Date	: 9/14/2016 5:12 pm

There are no manual integrations or false positives in this file.

LSC Area Percent Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A22.D
Acq On : 14 Sep 2016 16:39
Operator : VOA111:MS
Sample : l1628787-10,31H,2.5,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 22 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Title : VOLATILES BY GC/MS

Signal : TIC: V11160914A22.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.300	115	136	147	rVB5	15945	83036	19.80%	1.193%
2	3.128	286	294	305	rBB3	7969	16555	3.95%	0.238%
3	4.560	559	567	577	rBB3	13080	24411	5.82%	0.351%
4	4.990	641	649	663	rBB2	54708	109088	26.01%	1.567%
5	5.503	737	747	761	rBB	59176	115465	27.53%	1.659%
6	5.781	791	800	819	rBB	143059	286315	68.28%	4.114%
7	5.949	822	832	839	rBV5	10353	24962	5.95%	0.359%
8	6.426	915	923	931	rBV4	6313	13121	3.13%	0.189%
9	6.662	961	968	984	rVB5	8561	23317	5.56%	0.335%
10	6.840	991	1002	1012	rBV4	6749	17155	4.09%	0.246%
11	7.071	1037	1046	1062	rBB4	14255	44601	10.64%	0.641%
12	7.323	1080	1094	1104	rVB5	10821	29503	7.04%	0.424%
13	7.454	1107	1119	1140	rBV	178824	396471	94.54%	5.697%
14	7.952	1204	1214	1222	rBB3	7895	13460	3.21%	0.193%
15	8.183	1253	1258	1268	rVB3	11665	22834	5.45%	0.328%
16	8.308	1269	1282	1293	rBV4	15442	37888	9.03%	0.544%
17	8.607	1330	1339	1349	rVB4	8254	21515	5.13%	0.309%
18	9.284	1453	1468	1486	rBV	172171	368523	87.88%	5.295%
19	9.541	1509	1517	1526	rBV2	13348	24232	5.78%	0.348%
20	10.222	1639	1647	1658	rVB4	14017	29163	6.95%	0.419%
21	10.809	1748	1759	1770	rBV	158594	305982	72.97%	4.396%
22	10.993	1788	1794	1801	rVB3	17730	30221	7.21%	0.434%
23	11.056	1801	1806	1816	rBV6	14335	30283	7.22%	0.435%
24	11.370	1860	1866	1870	rBV3	7730	12878	3.07%	0.185%
25	11.428	1872	1877	1888	rVB3	7089	17395	4.15%	0.250%
26	11.601	1903	1910	1913	rBV4	9437	15328	3.66%	0.220%
27	11.638	1913	1917	1926	rVB5	27609	44113	10.52%	0.634%
28	11.722	1926	1933	1943	rBV9	7082	18514	4.41%	0.266%

LSC Area Percent Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A22.D
Acq On : 14 Sep 2016 16:39
Operator : VOA111:MS
Sample : l1628787-10,31H,2.5,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 22 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Title : VOLATILES BY GC/MS

29	11.879	1954	1963	1969	rVB9	8668	20892	4.98%	0.300%
30	12.052	1988	1996	2004	rBV	212892	350569	83.60%	5.037%
31	12.120	2004	2009	2016	rVB7	14127	27090	6.46%	0.389%
32	12.241	2024	2032	2034	rBV5	13281	23517	5.61%	0.338%
33	12.293	2034	2042	2045	rVV3	46394	104244	24.86%	1.498%
34	12.330	2045	2049	2065	rVB2	47602	113488	27.06%	1.631%
35	12.456	2065	2073	2078	rBV7	8304	18681	4.45%	0.268%
36	12.545	2080	2090	2099	rVB2	20537	45554	10.86%	0.655%
37	12.639	2099	2108	2115	rBV4	25698	75012	17.89%	1.078%
38	12.707	2115	2121	2131	rVB	86669	127114	30.31%	1.826%
39	12.818	2131	2142	2147	rBV4	105523	222435	53.04%	3.196%
40	12.865	2147	2151	2152	rVV2	29886	33942	8.09%	0.488%
41	12.896	2152	2157	2167	rVB3	78215	139292	33.22%	2.001%
42	12.980	2167	2173	2178	rBV3	32764	51139	12.19%	0.735%
43	13.069	2183	2190	2192	rBV3	13194	22621	5.39%	0.325%
44	13.101	2192	2196	2200	rBV	89158	108007	25.76%	1.552%
45	13.148	2200	2205	2209	rBV2	78138	122443	29.20%	1.759%
46	13.190	2209	2213	2217	rVV3	82416	116642	27.82%	1.676%
47	13.232	2217	2221	2224	rVV	85157	116808	27.85%	1.678%
48	13.258	2224	2226	2235	rVB2	96544	121348	28.94%	1.744%
49	13.347	2235	2243	2249	rBV5	112338	200562	47.83%	2.882%
50	13.400	2249	2253	2259	rVB2	34361	50072	11.94%	0.719%
51	13.462	2260	2265	2270	rBV2	83923	130372	31.09%	1.873%
52	13.515	2270	2275	2278	rBV2	127134	193948	46.25%	2.787%
53	13.541	2278	2280	2284	rVV	102637	109299	26.06%	1.570%
54	13.583	2284	2288	2293	rVV2	111716	162870	38.84%	2.340%
55	13.625	2293	2296	2306	rVB5	68279	172107	41.04%	2.473%
56	13.740	2312	2318	2322	rBV3	56760	88017	20.99%	1.265%
57	13.777	2322	2325	2330	rVB2	49650	57433	13.70%	0.825%
58	13.829	2330	2335	2337	rBV	80541	114009	27.19%	1.638%
59	13.861	2337	2341	2351	rVV6	150352	355162	84.69%	5.103%
60	13.934	2351	2355	2363	rVB5	103597	152423	36.35%	2.190%

LSC Area Percent Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A22.D
Acq On : 14 Sep 2016 16:39
Operator : VOA111:MS
Sample : l1628787-10,31H,2.5,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 22 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Title : VOLATILES BY GC/MS

61	14.029	2368	2373	2378	rVV2	77721	137544	32.80%	1.976%
62	14.102	2378	2387	2395	rVV5	56009	144838	34.54%	2.081%
63	14.217	2396	2409	2426	rVV2	154968	419347	100.00%	6.025%
64	14.333	2426	2431	2434	rVV4	31068	48377	11.54%	0.695%
65	14.370	2435	2438	2444	rVV5	22702	42398	10.11%	0.609%
66	14.417	2444	2447	2454	rVV7	12485	24747	5.90%	0.356%
67	14.469	2454	2457	2463	rVV7	7906	15302	3.65%	0.220%
68	14.543	2463	2471	2477	rVB5	34290	62066	14.80%	0.892%
69	14.836	2521	2527	2535	rVB3	9121	15557	3.71%	0.224%
70	15.161	2580	2589	2609	rBV2	39503	79902	19.05%	1.148%
71	15.298	2609	2615	2626	rVV2	20290	32294	7.70%	0.464%
72	15.780	2702	2707	2713	rBV5	7502	13925	3.32%	0.200%

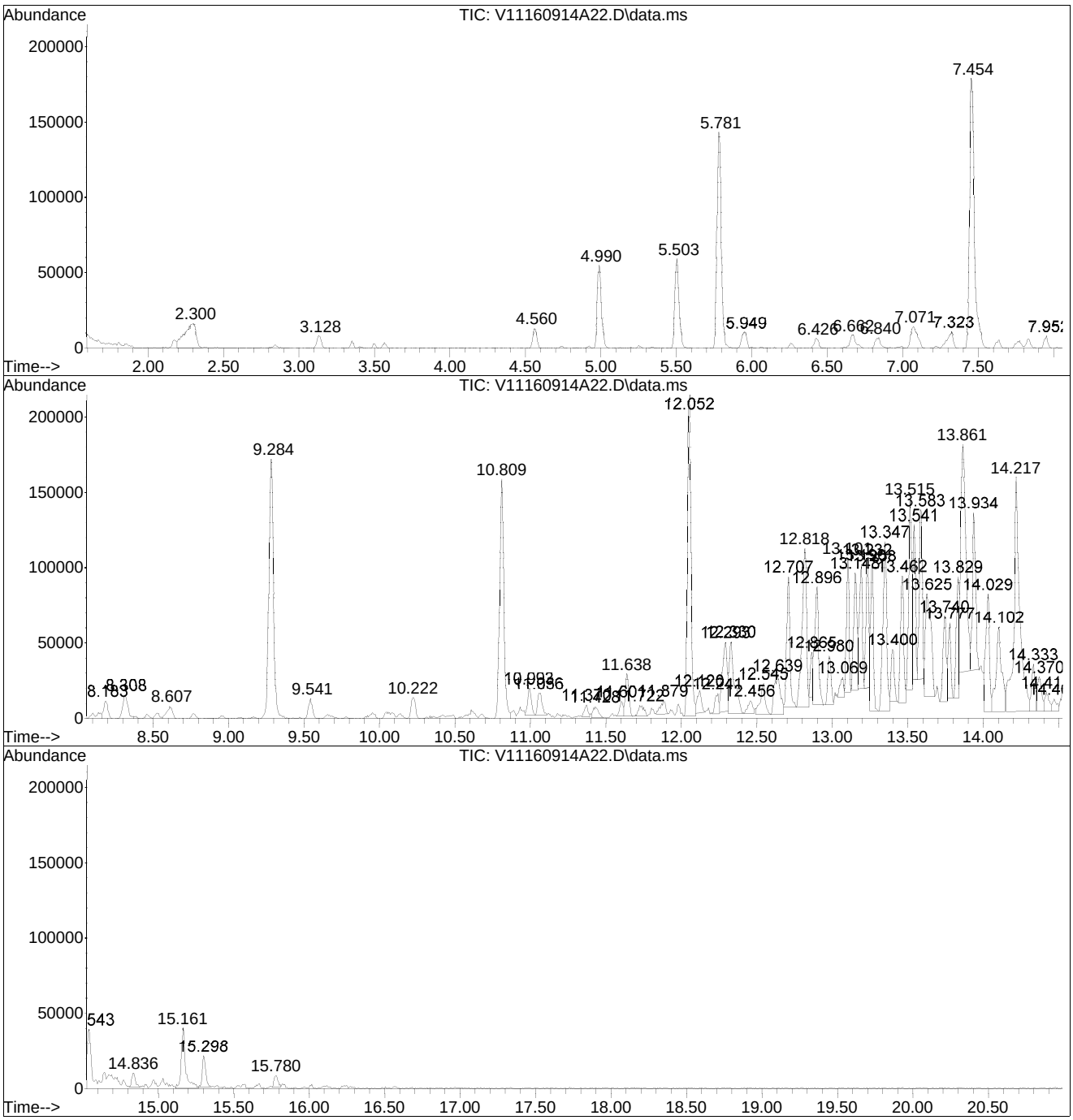
Sum of corrected areas: 6959738

LSC Report - Integrated Chromatogram

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A22.D
Acq On : 14 Sep 2016 16:39
Operator : VOA111:MS
Sample : l1628787-10,31H,2.5,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p



Library Search Compound Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A22.D
Acq On : 14 Sep 2016 16:39
Operator : VOA111:MS
Sample : l1628787-10,31H,2.5,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

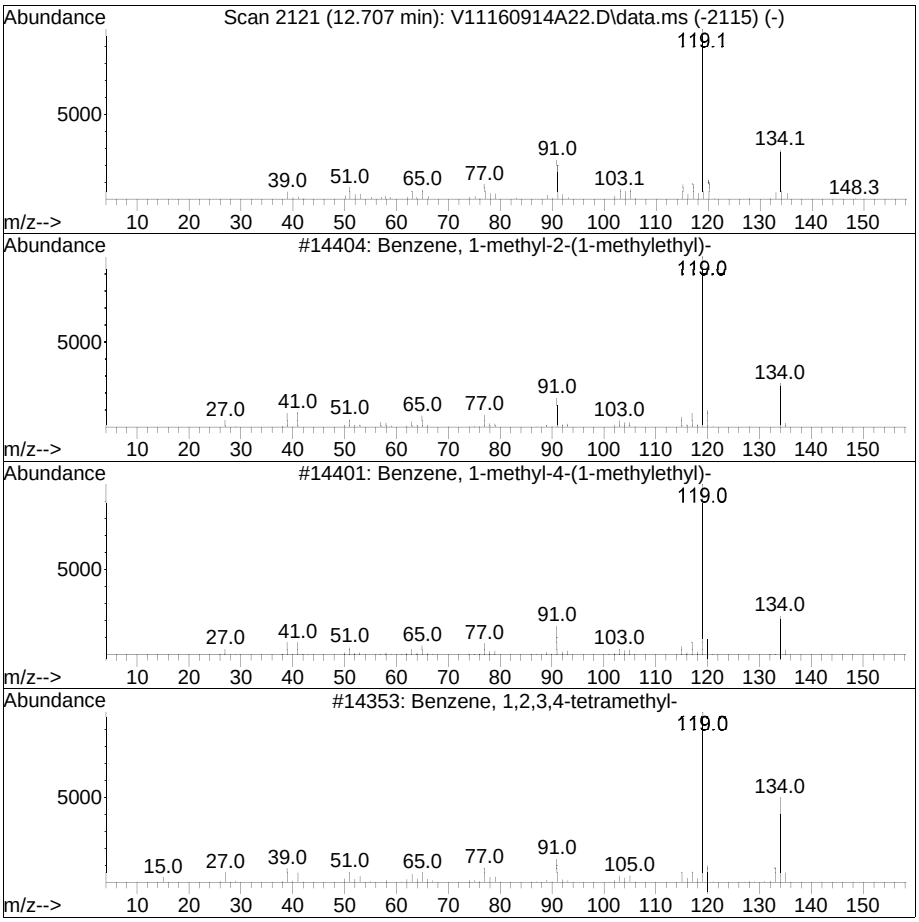
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

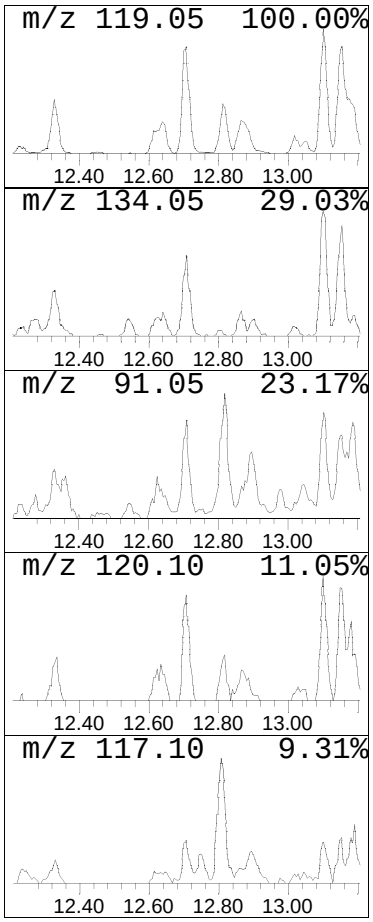
****

Peak Number 1 Unknown Aromatic A Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.707	7.25 ug/L	127114	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	97
2	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	97
3	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
4	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	94
5	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	94





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A22.D
Acq On : 14 Sep 2016 16:39
Operator : VOA111:MS
Sample : l1628787-10,31H,2.5,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

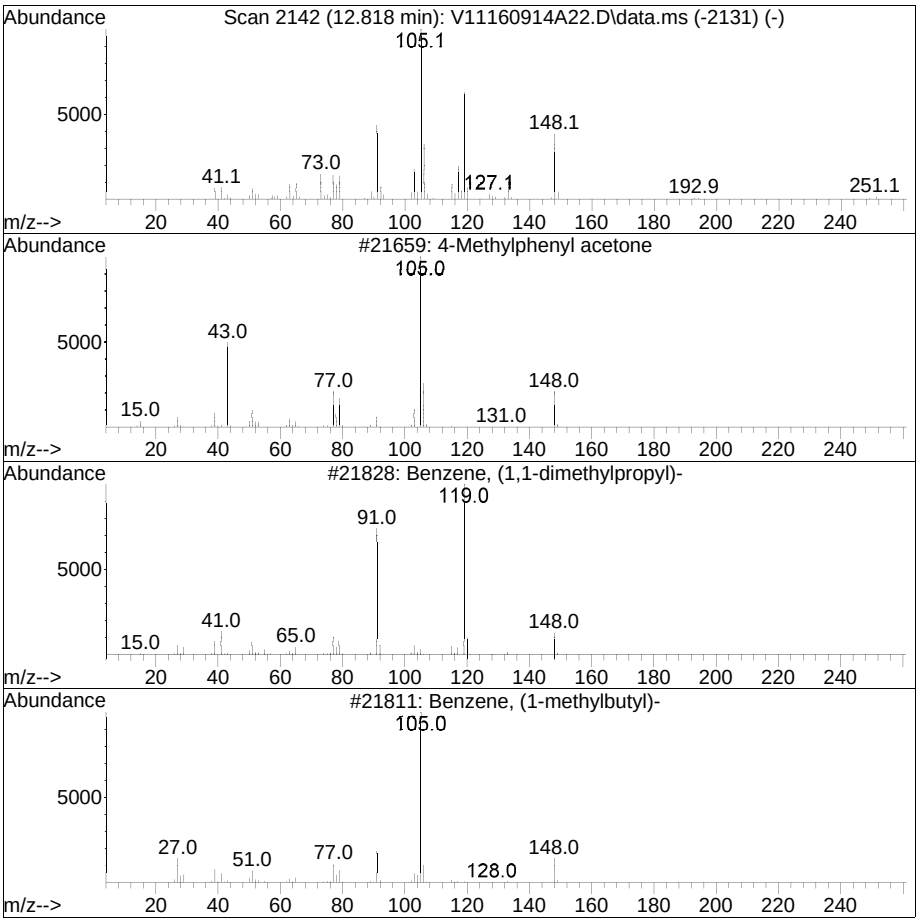
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

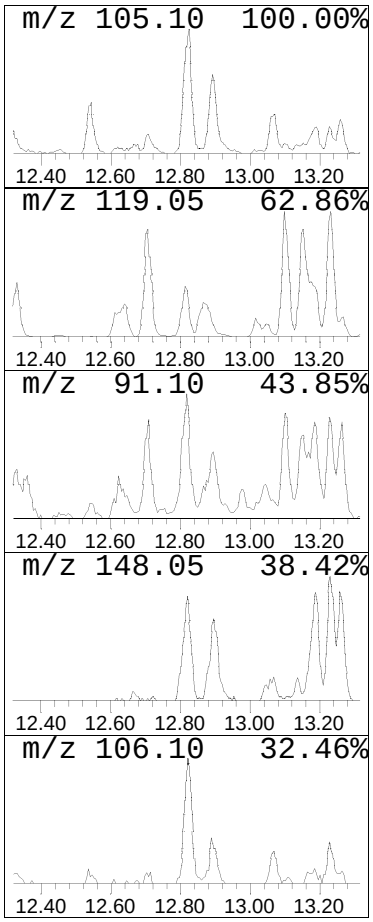
****

Peak Number 2 Unknown Aromatic B Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.818	12.69 ug/L	222435	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4-Methylphenyl acetone	148	C10H12O	002096-86-8	43
2	Benzene, (1,1-dimethylpropyl)-	148	C11H16	002049-95-8	38
3	Benzene, (1-methylbutyl)-	148	C11H16	002719-52-0	35
4	Benzene, (1-methylbutyl)-	148	C11H16	002719-52-0	30
5	Benzene, (1,1-dimethylpropyl)-	148	C11H16	002049-95-8	27





Library Search Compound Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A22.D
Acq On : 14 Sep 2016 16:39
Operator : VOA111:MS
Sample : l1628787-10,31H,2.5,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

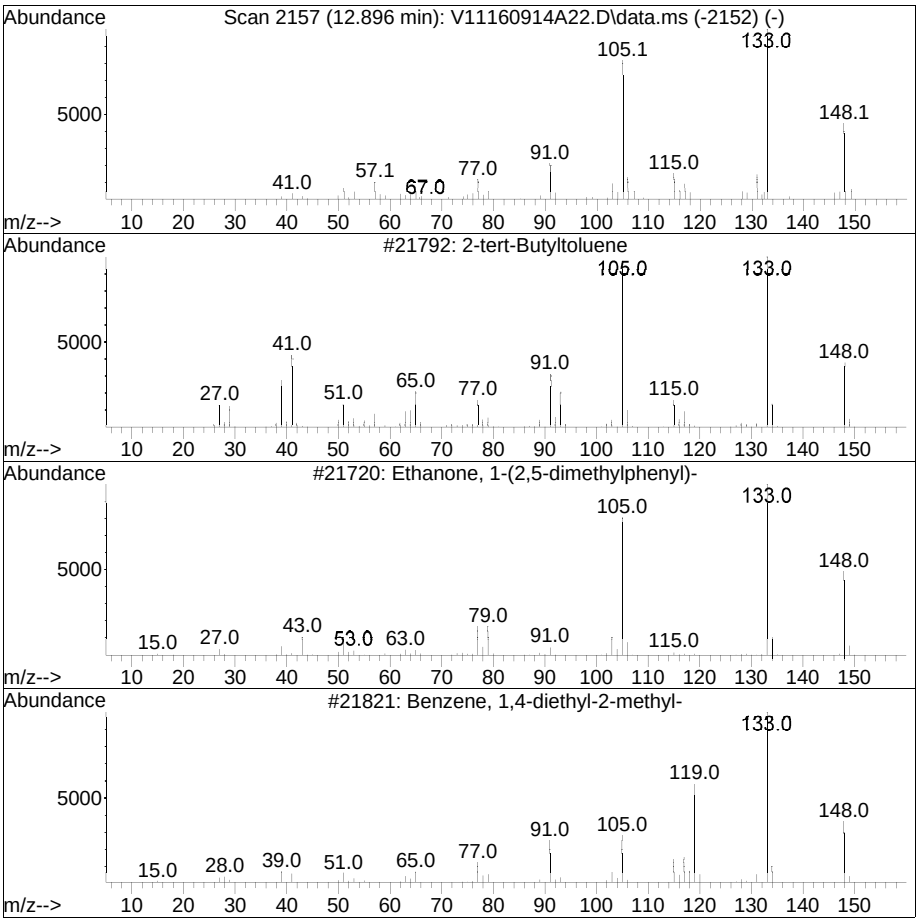
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

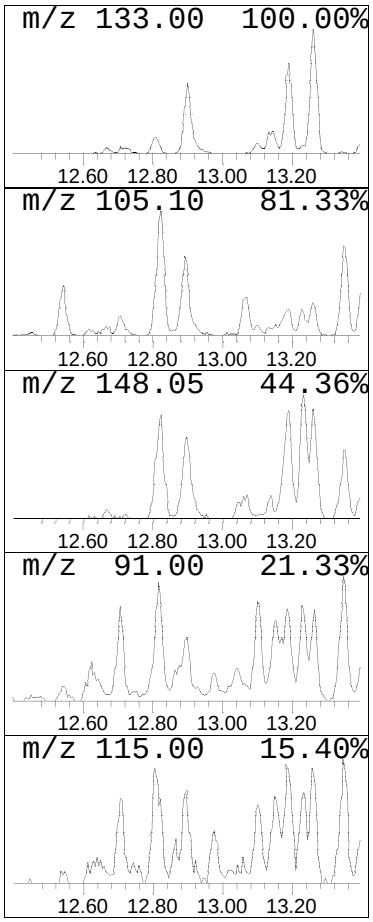
****

Peak Number 3 Unknown 1 Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.896	7.95 ug/L	139292	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-tert-Butyltoluene	148	C11H16	001074-92-6	81
2	Ethanone, 1-(2,5-dimethylphenyl)-	148	C10H12O	002142-73-6	80
3	Benzene, 1,4-diethyl-2-methyl-	148	C11H16	013632-94-5	80
4	Ethanone, 1-(2,4-dimethylphenyl)-	148	C10H12O	000089-74-7	80
5	Benzene, 1,3-diethyl-5-methyl-	148	C11H16	002050-24-0	80





V111_160819_8260.m Wed Sep 14 17:21:10 2016 SVOA-INSTRUMENT Page: 7

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A22.D
Acq On : 14 Sep 2016 16:39
Operator : VOA111:MS
Sample : l1628787-10,31H,2.5,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

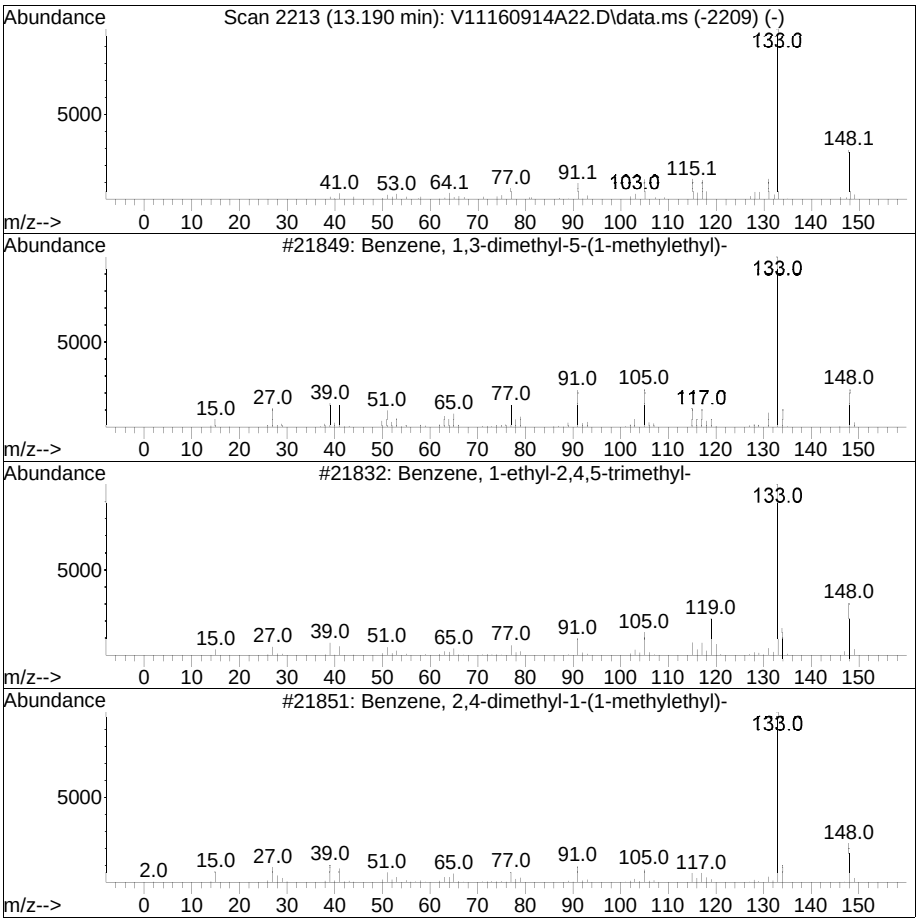
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

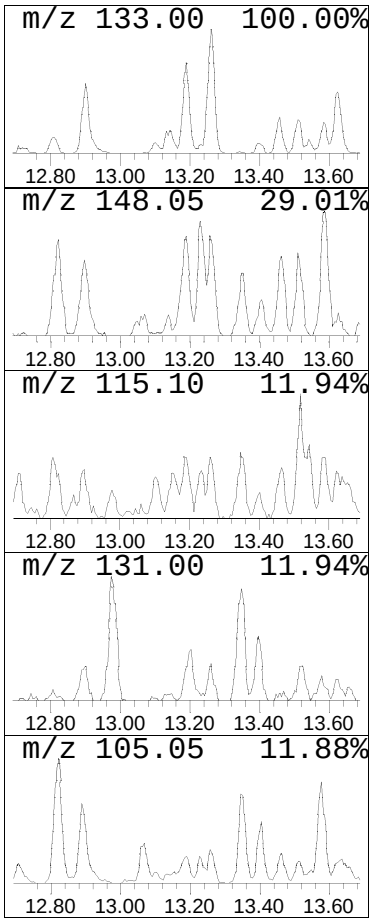
****

Peak Number 4 Unknown Aromatic C Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.190	6.65 ug/L	116642	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,3-dimethyl-5-(1-methy...	148	C11H16	004706-90-5	86
2	Benzene, 1-ethyl-2,4,5-trimethyl-	148	C11H16	017851-27-3	83
3	Benzene, 2,4-dimethyl-1-(1-methy...	148	C11H16	004706-89-2	80
4	Benzene, pentamethyl-	148	C11H16	000700-12-9	78
5	Benzene, pentamethyl-	148	C11H16	000700-12-9	78





Library Search Compound Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A22.D
Acq On : 14 Sep 2016 16:39
Operator : VOA111:MS
Sample : l1628787-10,31H,2.5,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

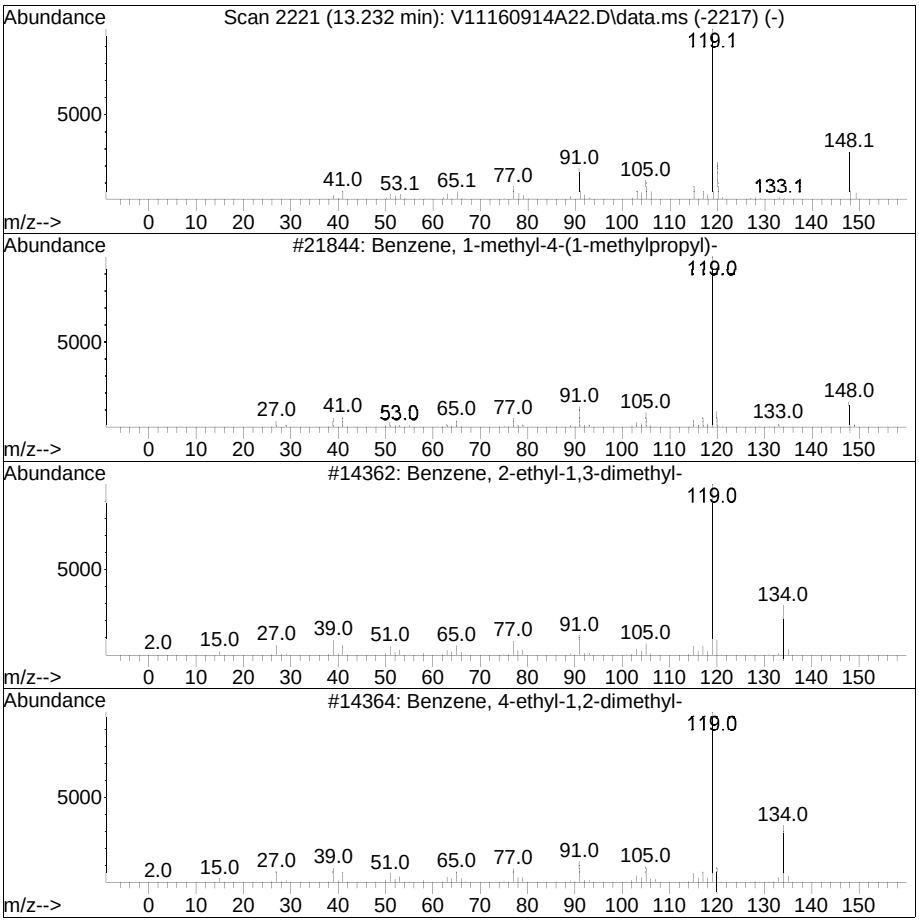
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

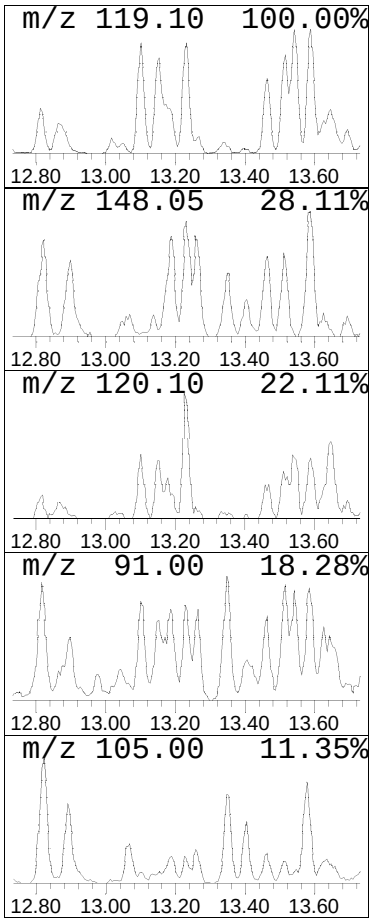
****

Peak Number 5 Unknown Aromatic D Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.232	6.66 ug/L	116808	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-4-(1-methylpro...	148	C11H16	001595-16-0	87
2	Benzene, 2-ethyl-1,3-dimethyl-	134	C10H14	002870-04-4	68
3	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	59
4	Benzene, 2-ethyl-1,3-dimethyl-	134	C10H14	002870-04-4	59
5	Benzene, 1-ethyl-2,4-dimethyl-	134	C10H14	000874-41-9	58





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A22.D
Acq On : 14 Sep 2016 16:39
Operator : VOA111:MS
Sample : l1628787-10,31H,2.5,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

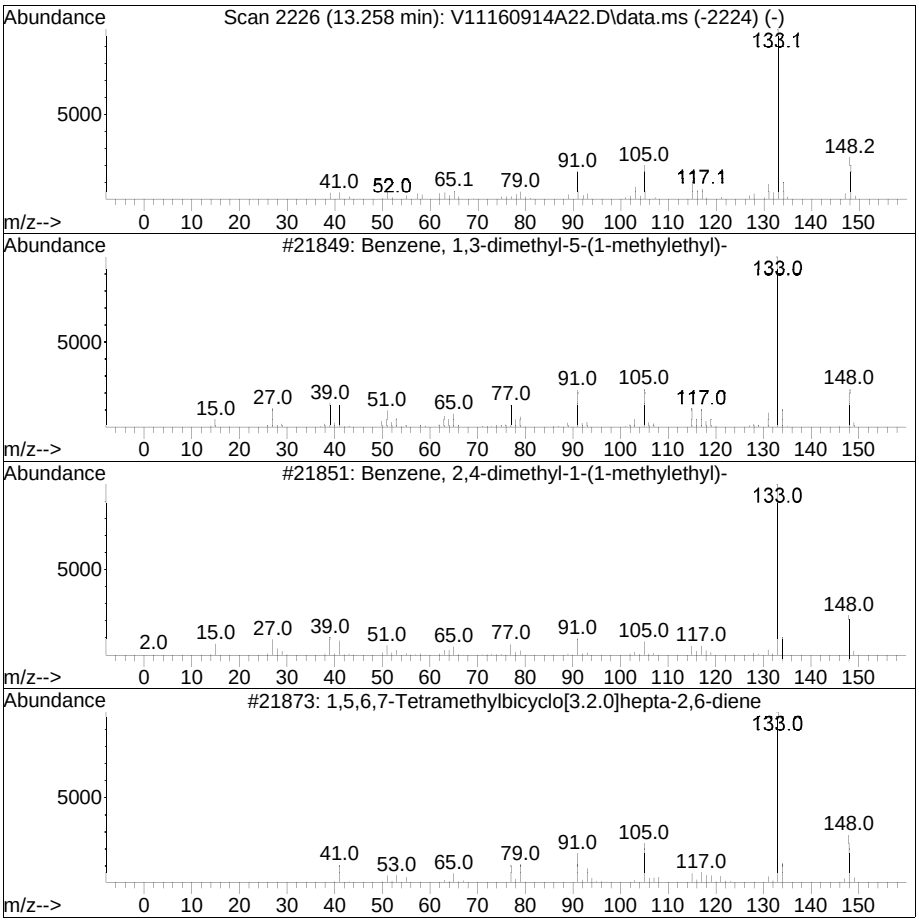
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

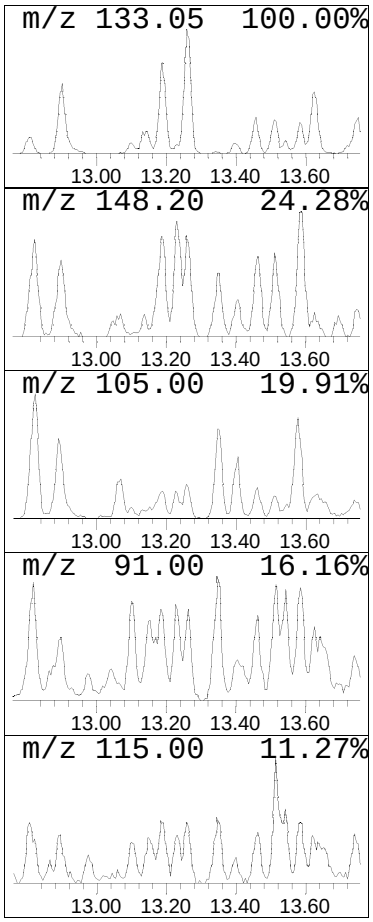
****

Peak Number 6 Unknown 2 Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.258	6.92 ug/L	121348	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,3-dimethyl-5-(1-methy...	148	C11H16	004706-90-5	86
2	Benzene, 2,4-dimethyl-1-(1-methy...	148	C11H16	004706-89-2	80
3	1,5,6,7-Tetramethylbicyclo[3.2.0...	148	C11H16	134329-46-7	72
4	4-tert-Butyltoluene	148	C11H16	000098-51-1	72
5	Benzene, 1-(1,1-dimethylethyl)-3...	148	C11H16	001075-38-3	72





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A22.D
Acq On : 14 Sep 2016 16:39
Operator : VOA111:MS
Sample : l1628787-10,31H,2.5,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

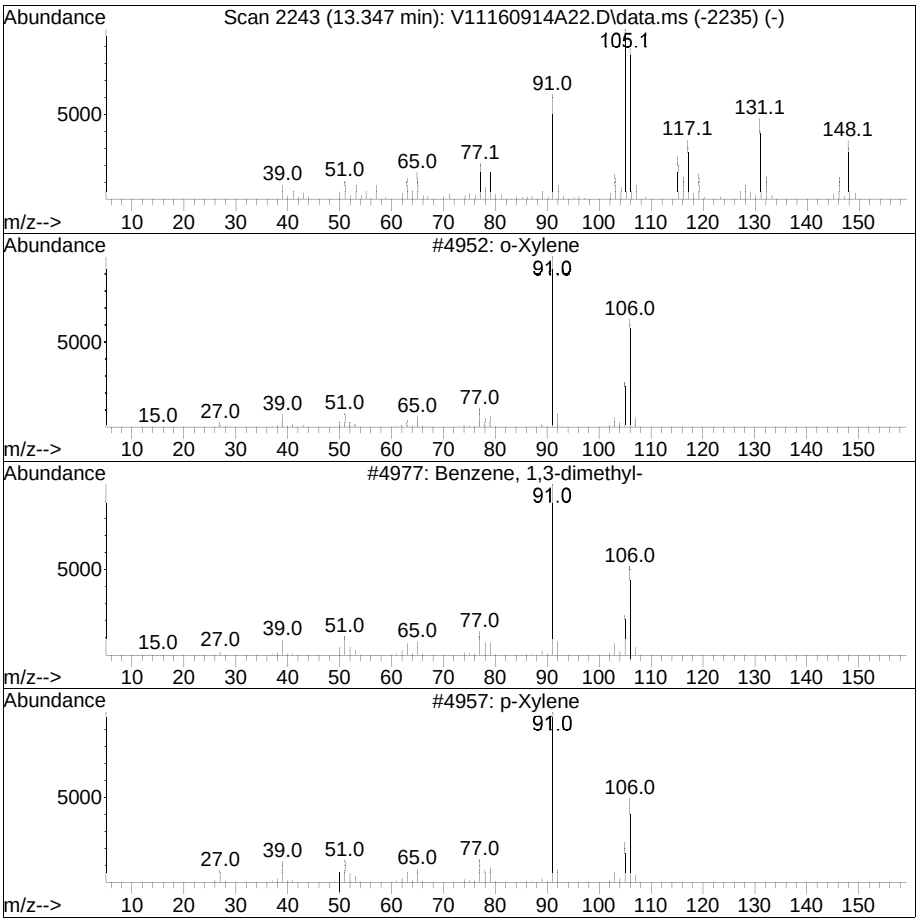
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

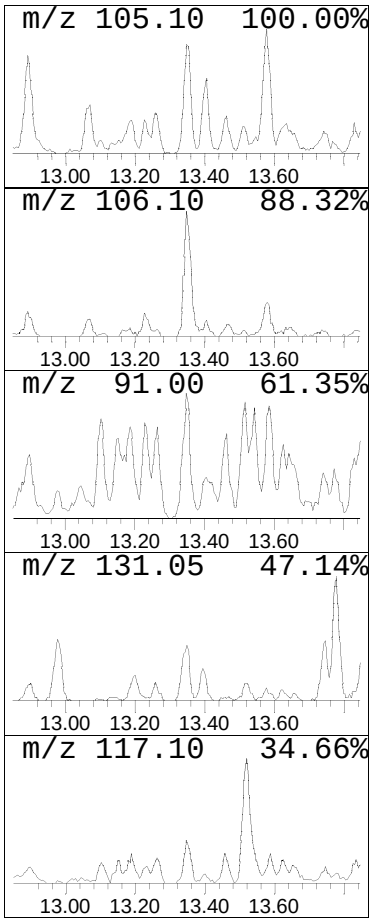
****

Peak Number 7 Unknown Aromatic E Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.347	11.44 ug/L	200562	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	o-Xylene	106	C8H10	000095-47-6	42
2	Benzene, 1,3-dimethyl-	106	C8H10	000108-38-3	38
3	p-Xylene	106	C8H10	000106-42-3	38
4	o-Xylene	106	C8H10	000095-47-6	38
5	Propanenitrile, 3-(phenylamino)-	146	C9H10N2	001075-76-9	30





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A22.D
Acq On : 14 Sep 2016 16:39
Operator : VOA111:MS
Sample : l1628787-10,31H,2.5,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

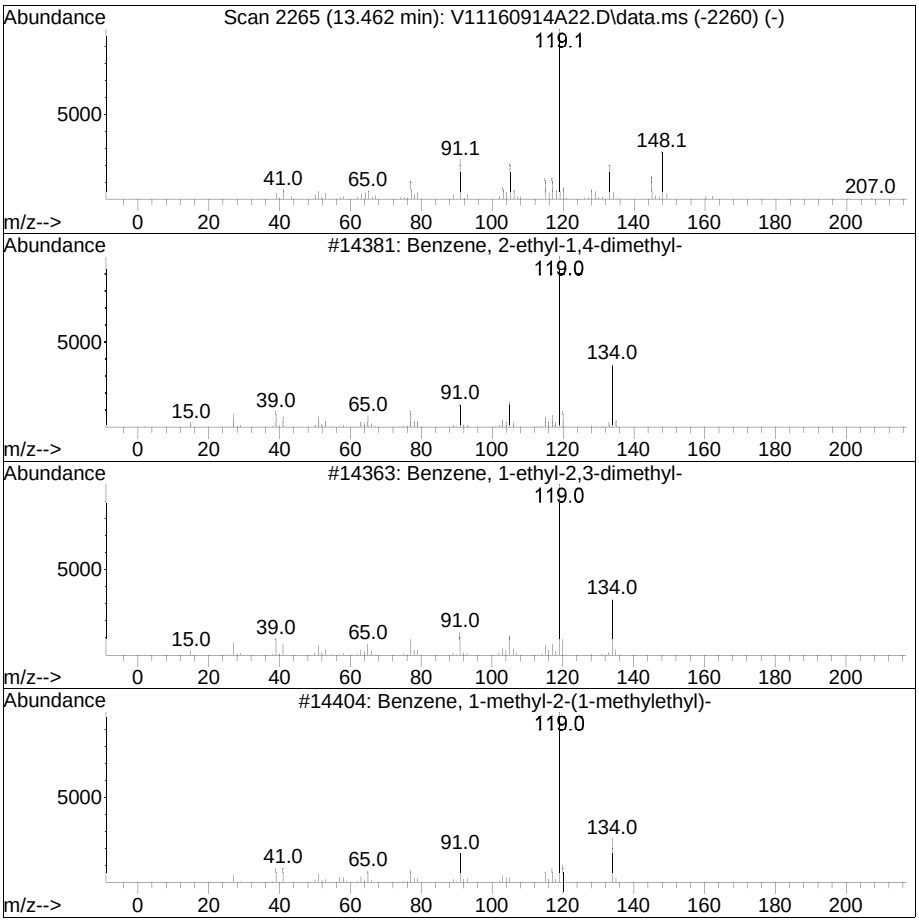
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

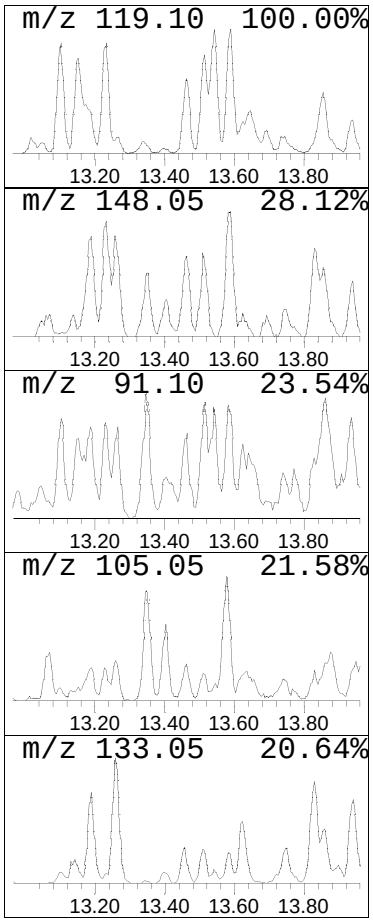
****

Peak Number 8 Unknown Aromatic F Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.463	7.44 ug/L	130372	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	64
2	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	64
3	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	55
4	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	53
5	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	49





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A22.D
Acq On : 14 Sep 2016 16:39
Operator : VOA111:MS
Sample : l1628787-10,31H,2.5,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

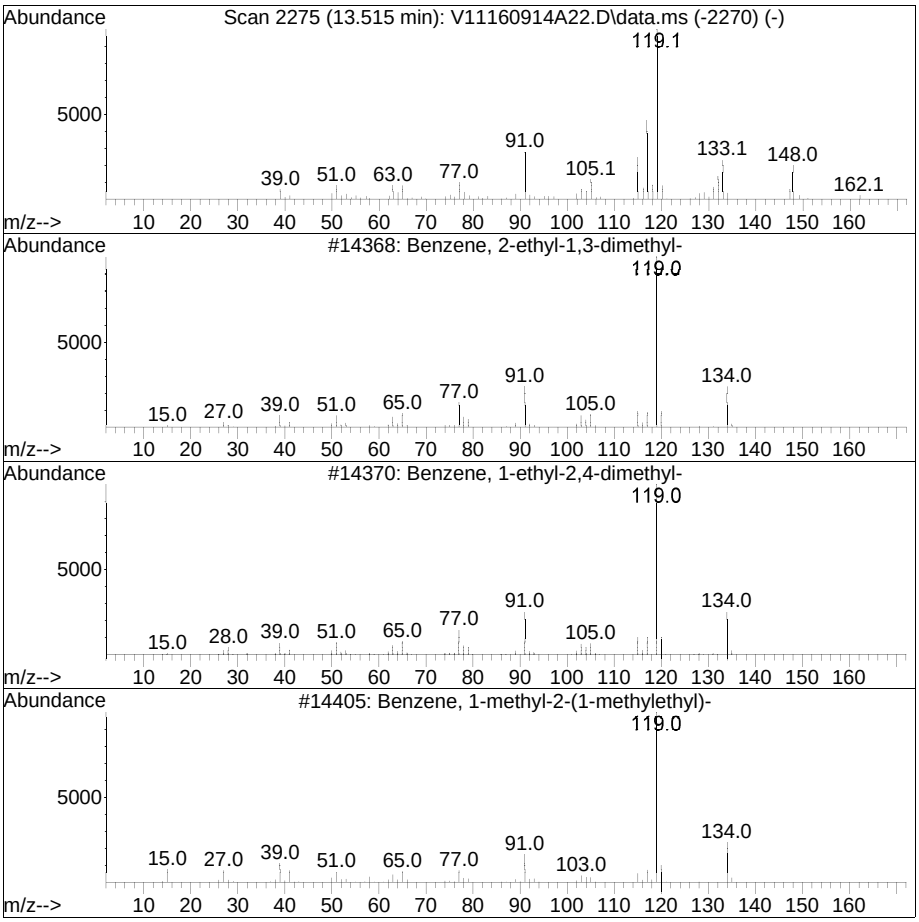
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

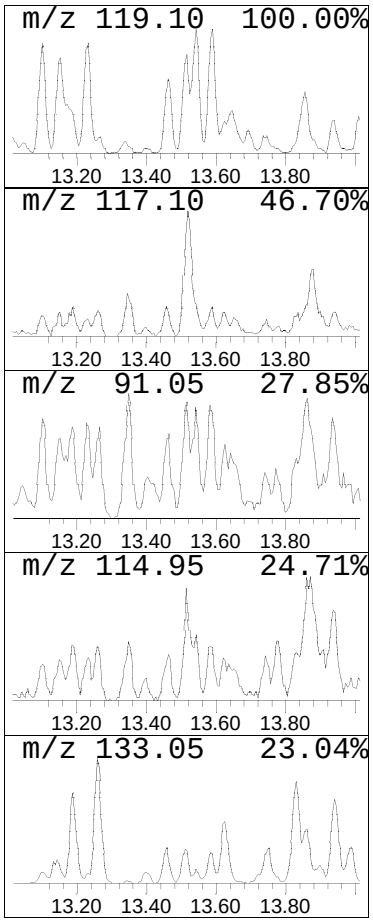
****

Peak Number 9 Unknown Aromatic G Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.515	11.06 ug/L	193948	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 2-ethyl-1,3-dimethyl-	134	C10H14	002870-04-4	41
2	Benzene, 1-ethyl-2,4-dimethyl-	134	C10H14	000874-41-9	41
3	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	38
4	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	38
5	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	38





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A22.D
Acq On : 14 Sep 2016 16:39
Operator : VOA111:MS
Sample : l1628787-10,31H,2.5,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

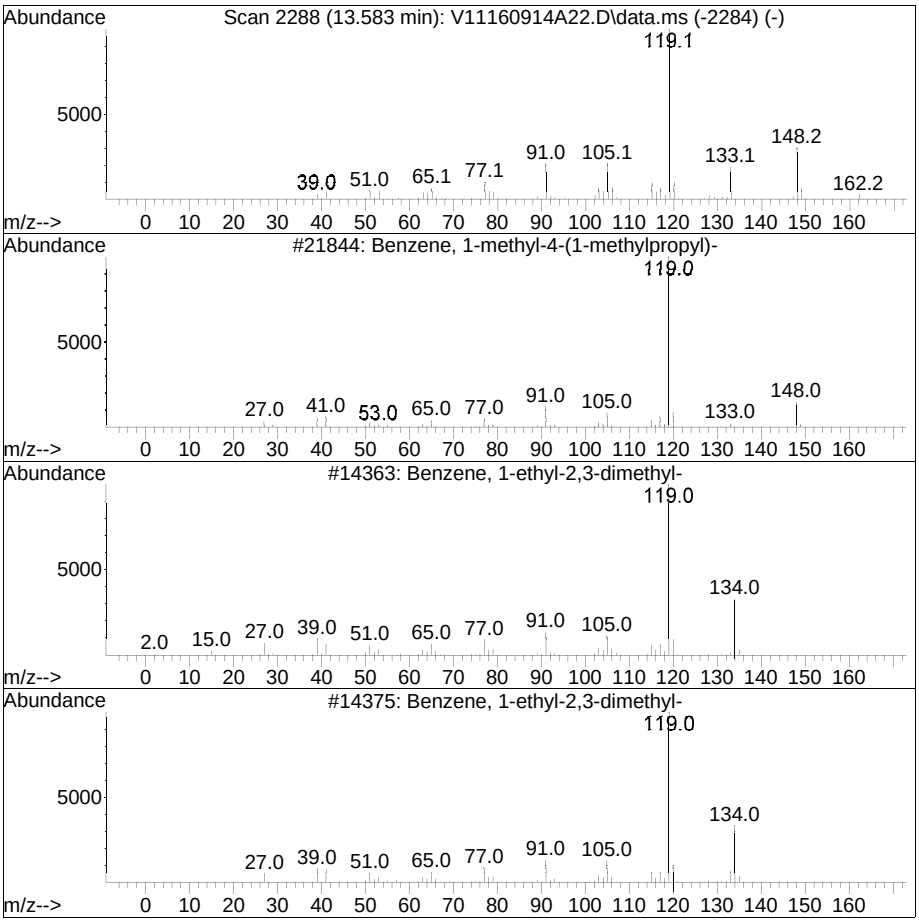
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

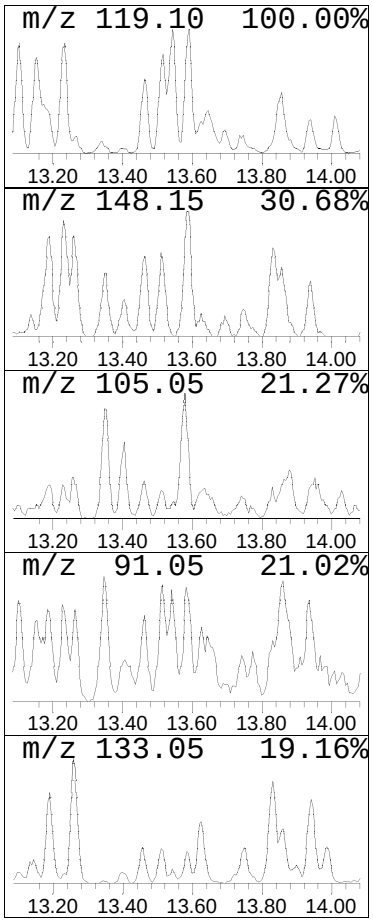
****

Peak Number 10 Unknown Aromatic H Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.583	9.29 ug/L	162870	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-4-(1-methylpro...	148	C11H16	001595-16-0	68
2	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	64
3	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	59
4	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	59
5	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	59





Library Search Compound Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A22.D
Acq On : 14 Sep 2016 16:39
Operator : VOA111:MS
Sample : l1628787-10,31H,2.5,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

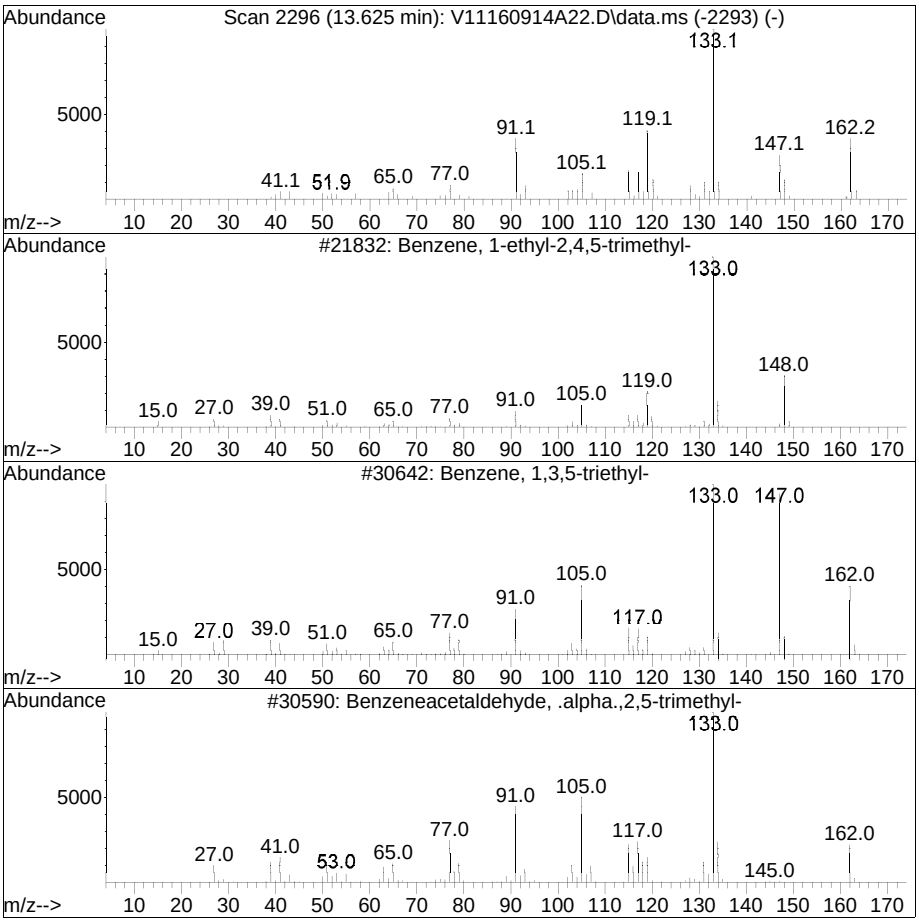
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

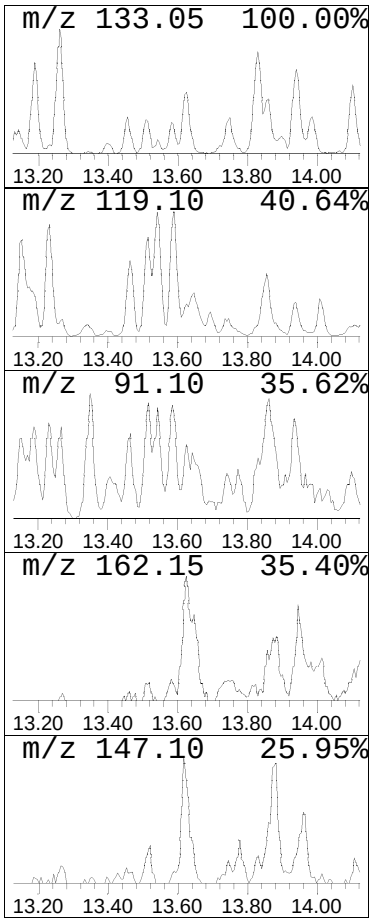
****

Peak Number 11 Unknown Aromatic I Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.625	9.82 ug/L	172107	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2,4,5-trimethyl-	148	C11H16	017851-27-3	62
2	Benzene, 1,3,5-triethyl-	162	C12H18	000102-25-0	50
3	Benzeneacetaldehyde, .alpha.,2,5...	162	C11H14O	052417-50-2	46
4	1,3-2H-Isobenzofuran0ne, 4,7-dim...	162	C10H10O2	054598-91-3	43
5	Benzene, pentamethyl-	148	C11H16	000700-12-9	43





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A22.D
Acq On : 14 Sep 2016 16:39
Operator : VOA111:MS
Sample : l1628787-10,31H,2.5,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

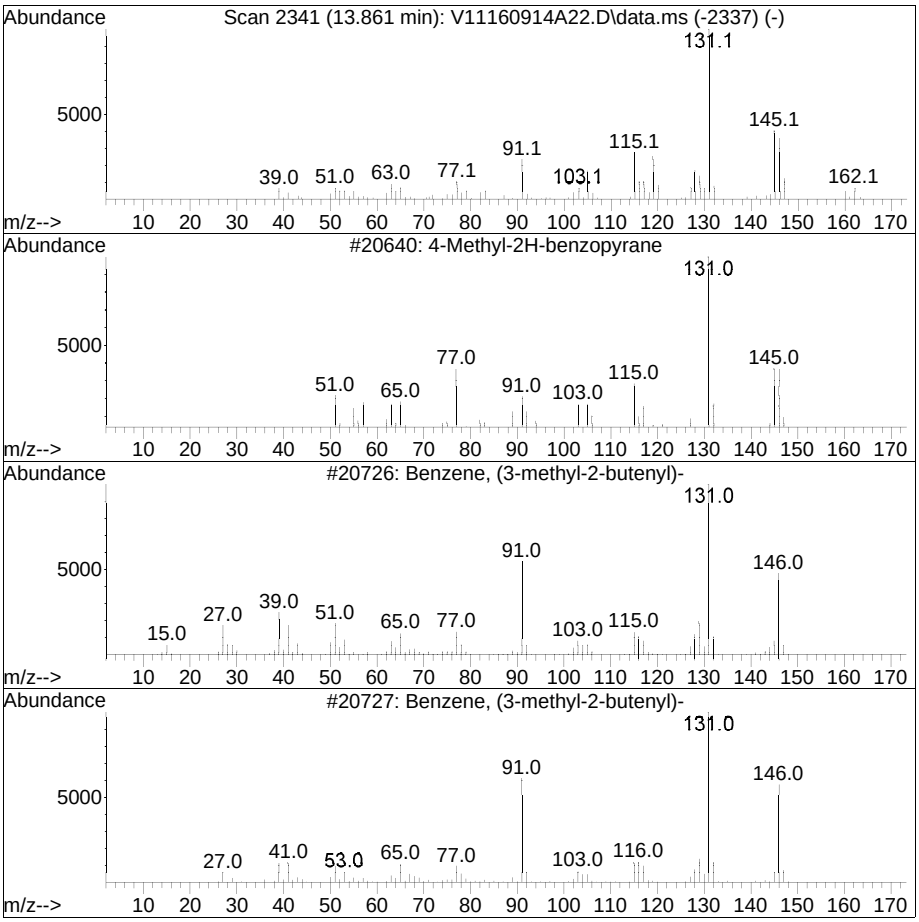
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

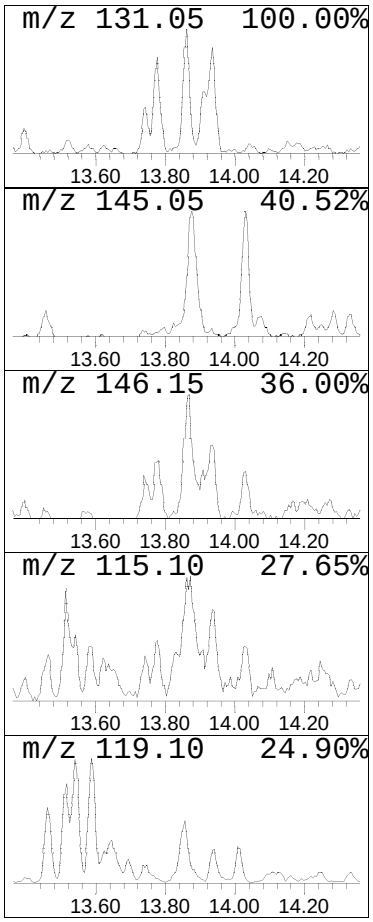
****

Peak Number 12 Unknown Aromatic J Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.861	20.26 ug/L	355162	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4-Methyl-2H-benzopyrane	146	C10H10O	021776-94-3	64
2	Benzene, (3-methyl-2-butenyl)-	146	C11H14	004489-84-3	64
3	Benzene, (3-methyl-2-butenyl)-	146	C11H14	004489-84-3	60
4	Benzene, (3-methyl-2-butenyl)-	146	C11H14	004489-84-3	58
5	1H-Indene, 2,3-dihydro-4,6-dimet...	146	C11H14	001685-82-1	58





Library Search Compound Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A22.D
Acq On : 14 Sep 2016 16:39
Operator : VOA111:MS
Sample : l1628787-10,31H,2.5,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

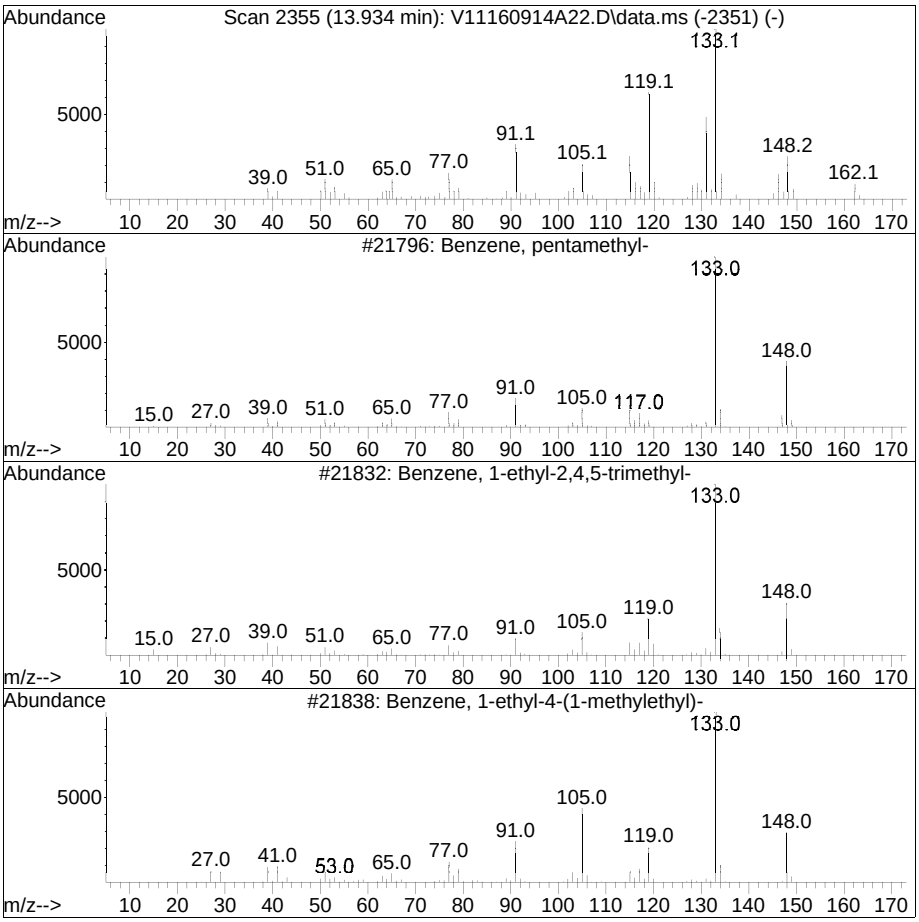
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

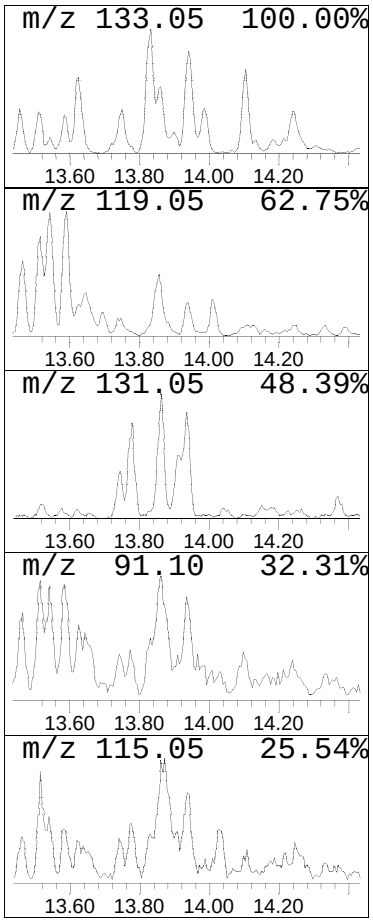
****

Peak Number 13 Unknown 3 Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.934	8.70 ug/L	152423	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, pentamethyl-	148	C11H16	000700-12-9	46
2	Benzene, 1-ethyl-2,4,5-trimethyl-	148	C11H16	017851-27-3	46
3	Benzene, 1-ethyl-4-(1-methylethyl)-	148	C11H16	004218-48-8	43
4	Benzene, 1,3-dimethyl-5-(1-methy...	148	C11H16	004706-90-5	43
5	Ethanone, 1-(4-ethylphenyl)-	148	C10H12O	000937-30-4	38





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A22.D
Acq On : 14 Sep 2016 16:39
Operator : VOA111:MS
Sample : l1628787-10,31H,2.5,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

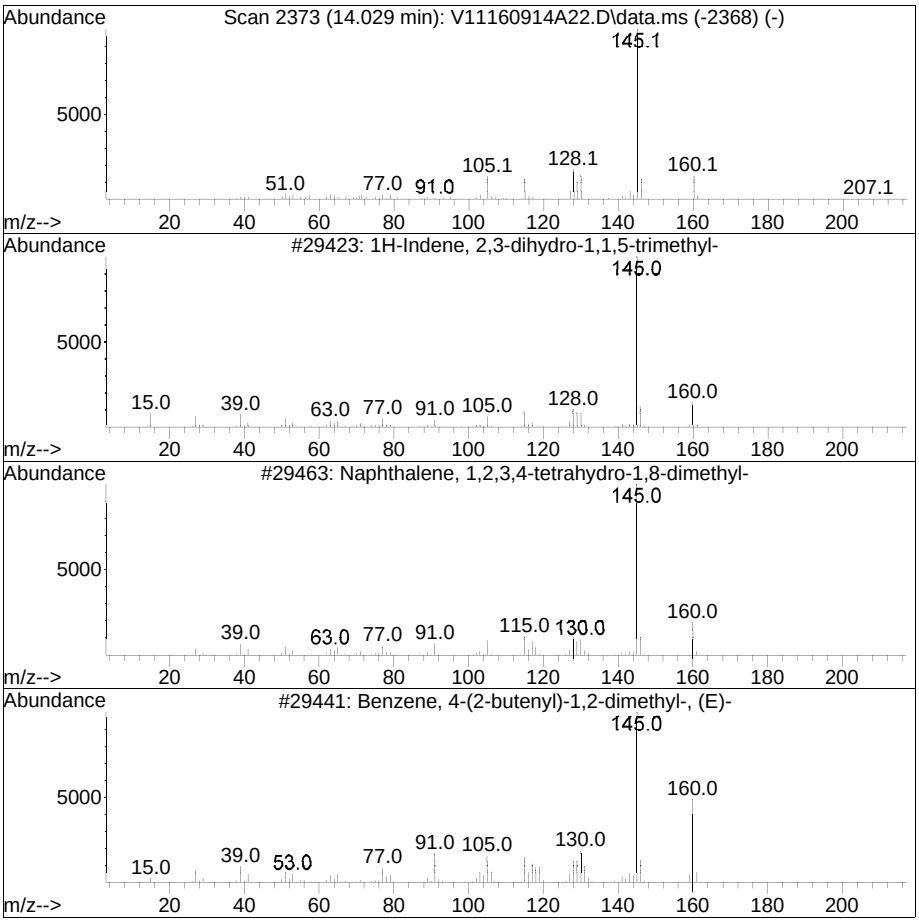
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

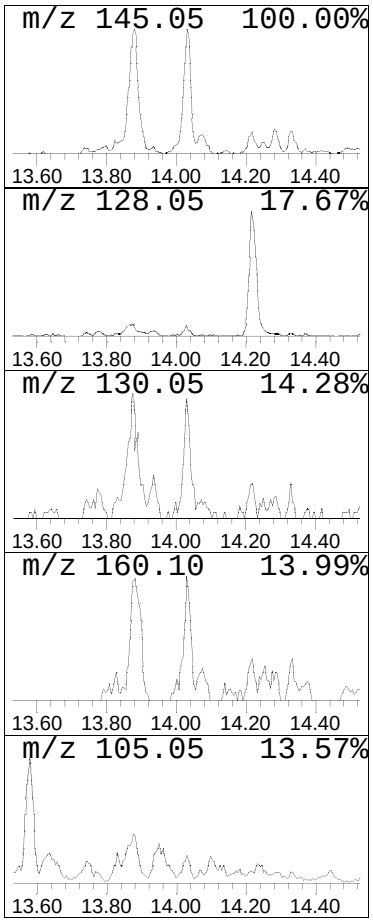
****

Peak Number 14 Unknown Aromatic K Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.029	7.85 ug/L	137544	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Indene, 2,3-dihydro-1,1,5-tri...	160	C12H16	040650-41-7	90
2	Naphthalene, 1,2,3,4-tetrahydro-...	160	C12H16	025419-33-4	87
3	Benzene, 4-(2-butenyl)-1,2-dimet...	160	C12H16	054340-86-2	87
4	1H-Indene, 2,3-dihydro-1,1,6-tri...	160	C12H16	014276-95-0	83
5	Naphthalene, 1,2,3,4-tetrahydro-...	160	C12H16	001985-59-7	80





Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A22.D
Acq On : 14 Sep 2016 16:39
Operator : VOA111:MS
Sample : l1628787-10,31H,2.5,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

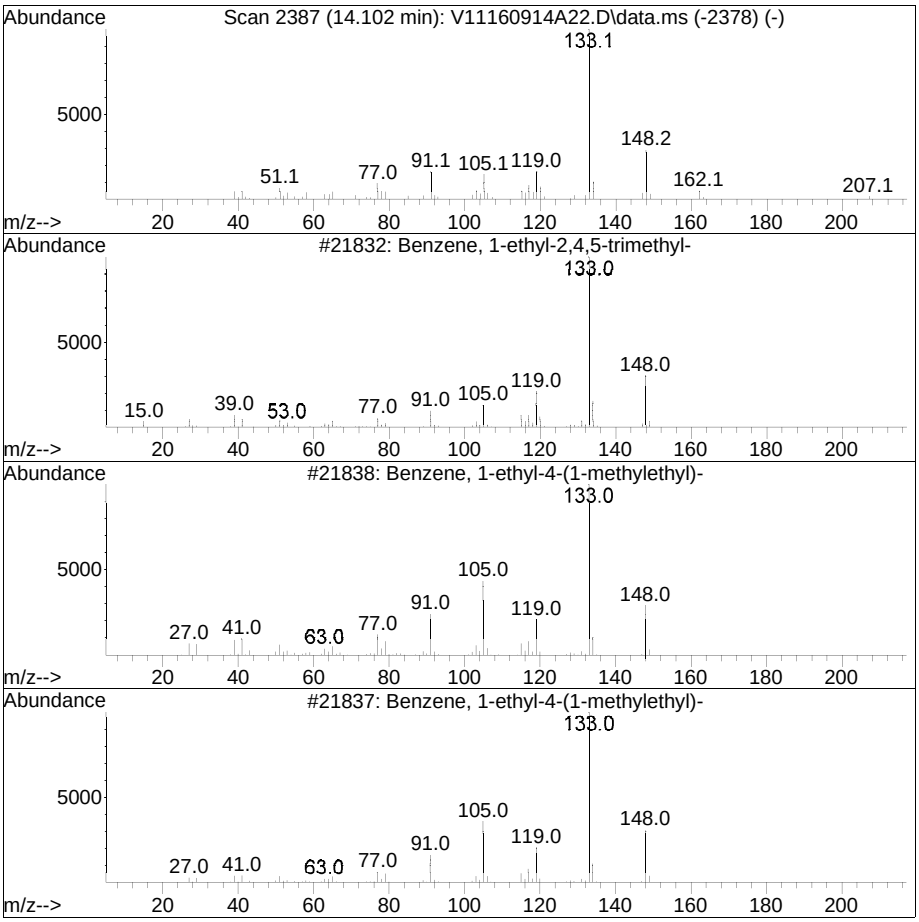
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

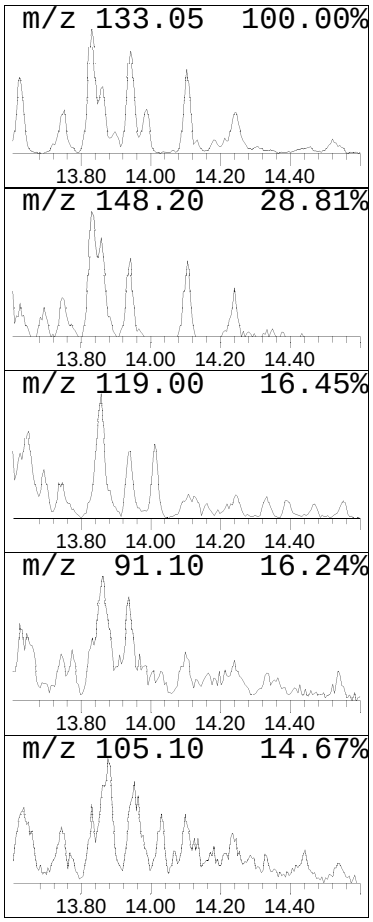
****

Peak Number 15 Unknown Aromatic L Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.102	8.26 ug/L	144838	1,4-Dichlorobenzene-d4	12.052

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2,4,5-trimethyl-	148	C11H16	017851-27-3	95
2	Benzene, 1-ethyl-4-(1-methylethyl)-	148	C11H16	004218-48-8	90
3	Benzene, 1-ethyl-4-(1-methylethyl)-	148	C11H16	004218-48-8	87
4	Benzene, 2,4-dimethyl-1-(1-methy...	148	C11H16	004706-89-2	87
5	Benzene, 1,4-dimethyl-2-(1-methy...	148	C11H16	004132-72-3	87





Tentatively Identified Compound (LSC) summary

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A22.D
Acq On : 14 Sep 2016 16:39
Operator : VOA111:MS
Sample : l1628787-10,31H,2.5,5,0.100,,x
Misc : WG931936,ICAL12787
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Unknown Aromatic A	12.707	7.3	ug/L	127114	3	12.052	350569	20.0
Unknown Aromatic B	12.818	12.7	ug/L	222435	3	12.052	350569	20.0
Unknown 1	12.896	7.9	ug/L	139292	3	12.052	350569	20.0
Unknown Aromatic C	13.190	6.7	ug/L	116642	3	12.052	350569	20.0
Unknown Aromatic D	13.232	6.7	ug/L	116808	3	12.052	350569	20.0
Unknown 2	13.258	6.9	ug/L	121348	3	12.052	350569	20.0
Unknown Aromatic E	13.347	11.4	ug/L	200562	3	12.052	350569	20.0
Unknown Aromatic F	13.463	7.4	ug/L	130372	3	12.052	350569	20.0
Unknown Aromatic G	13.515	11.1	ug/L	193948	3	12.052	350569	20.0
Unknown Aromatic H	13.583	9.3	ug/L	162870	3	12.052	350569	20.0
Unknown Aromatic I	13.625	9.8	ug/L	172107	3	12.052	350569	20.0
Unknown Aromatic J	13.861	20.3	ug/L	355162	3	12.052	350569	20.0
Unknown 3	13.934	8.7	ug/L	152423	3	12.052	350569	20.0
Unknown Aromatic K	14.029	7.8	ug/L	137544	3	12.052	350569	20.0
Unknown Aromatic L	14.102	8.3	ug/L	144838	3	12.052	350569	20.0

Method Blank
Raw Data

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A06.D
Acq On : 14 Sep 2016 09:48 am
Operator : VOA111:BD
Sample : wg931857-5,31,5,5,,
Misc : WG931857,ICAL12787
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 14 12:30:03 2016
Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA111\2016\160914A\V11160914A02.D
Sub List : 8260-CurveSoil - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.787	96	136135	20.000	ug/L	0.00
Standard Area 1 = 144511			Recovery = 94.20%			
59) Chlorobenzene-d5	9.284	117	107179	20.000	ug/L	0.00
Standard Area 1 = 111926			Recovery = 95.76%			
79) 1,4-Dichlorobenzene-d4	12.052	152	51549	20.000	ug/L	0.00
Standard Area 1 = 58934			Recovery = 87.47%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.995	113	35777	23.223	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 116.11%			
43) 1,2-Dichloroethane-d4	5.509	65	52821	23.564	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 117.82%			
60) Toluene-d8	7.459	98	138455	18.960	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 94.80%			
83) 4-Bromofluorobenzene	10.809	95	57854	20.662	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 103.31%			
Target Compounds						Qvalue
4) Vinyl chloride	0.000		0	N.D.		
48) Trichloroethene	0.000		0	N.D.		

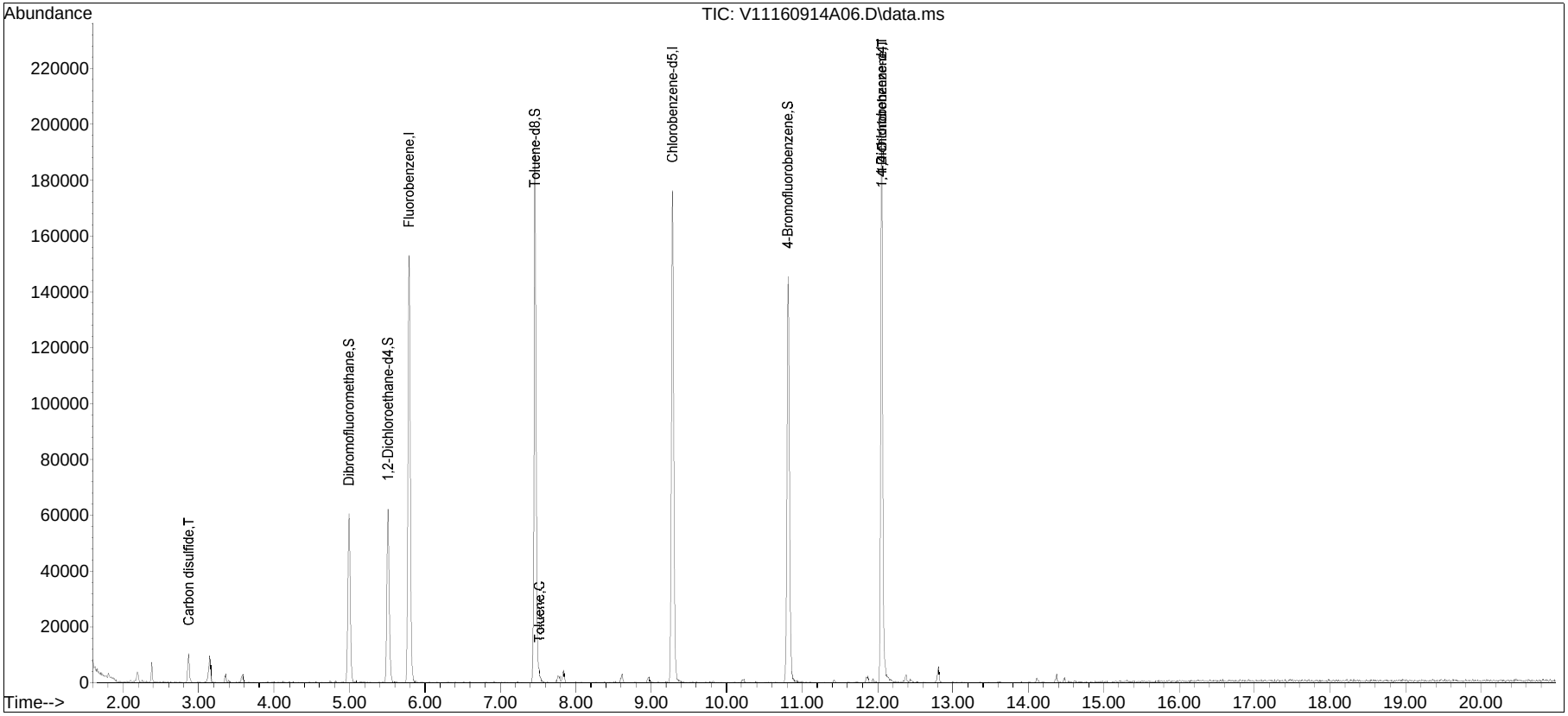
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A06.D
Acq On : 14 Sep 2016 09:48 am
Operator : VOA111:BD
Sample : wg931857-5,31,5,5,,
Misc : WG931857,ICAL12787
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 14 12:30:03 2016
Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

Sub List : 8260-CurveSoil - Megamix plus Diox4A\V11160914A02.D•



V111_160819_8260.m Wed Sep 14 12:50:12 2016 Page 2 : 4

Manual Integration Report

Data Path	: I:\VOLATILES\VOA111\2016\1	QMethod	: V111_160819_8260.m
Data File	: V11160914A06.D	Operator	: VOA111:BD
Date Inj'd	: 9/14/2016 9:48 am	Instrument	: VOA111
Sample	: wg931857-5,31,5,5,,	Quant Date	: 9/14/2016 12:27 pm

There are no manual integrations or false positives in this file.

LSC Area Percent Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A06.D
Acq On : 14 Sep 2016 09:48 am
Operator : VOA111:BD
Sample : wg931857-5,31,5,5,,
Misc : WG931857,ICAL12787
ALS Vial : 6 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Title : VOLATILES BY GC/MS

Signal : TIC: V11160914A06.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.384	144	152	157	rBV4	7256	11588	3.01%	0.586%
2	2.866	237	244	256	rBB	10580	15413	4.00%	0.779%
3	3.144	288	297	305	rBB2	9405	17798	4.62%	0.900%
4	4.995	640	650	663	rBV2	60511	117504	30.52%	5.942%
5	5.509	740	748	762	rBB	62166	120168	31.22%	6.076%
6	5.787	792	801	817	rBV2	153145	303938	78.96%	15.369%
7	7.459	1110	1120	1140	rBB	190517	384949	100.00%	19.466%
8	9.284	1458	1468	1488	rBB2	176326	362123	94.07%	18.311%
9	10.809	1749	1759	1775	rBV2	145486	293793	76.32%	14.856%
10	12.052	1989	1996	2018	rBV	196883	350313	91.00%	17.714%

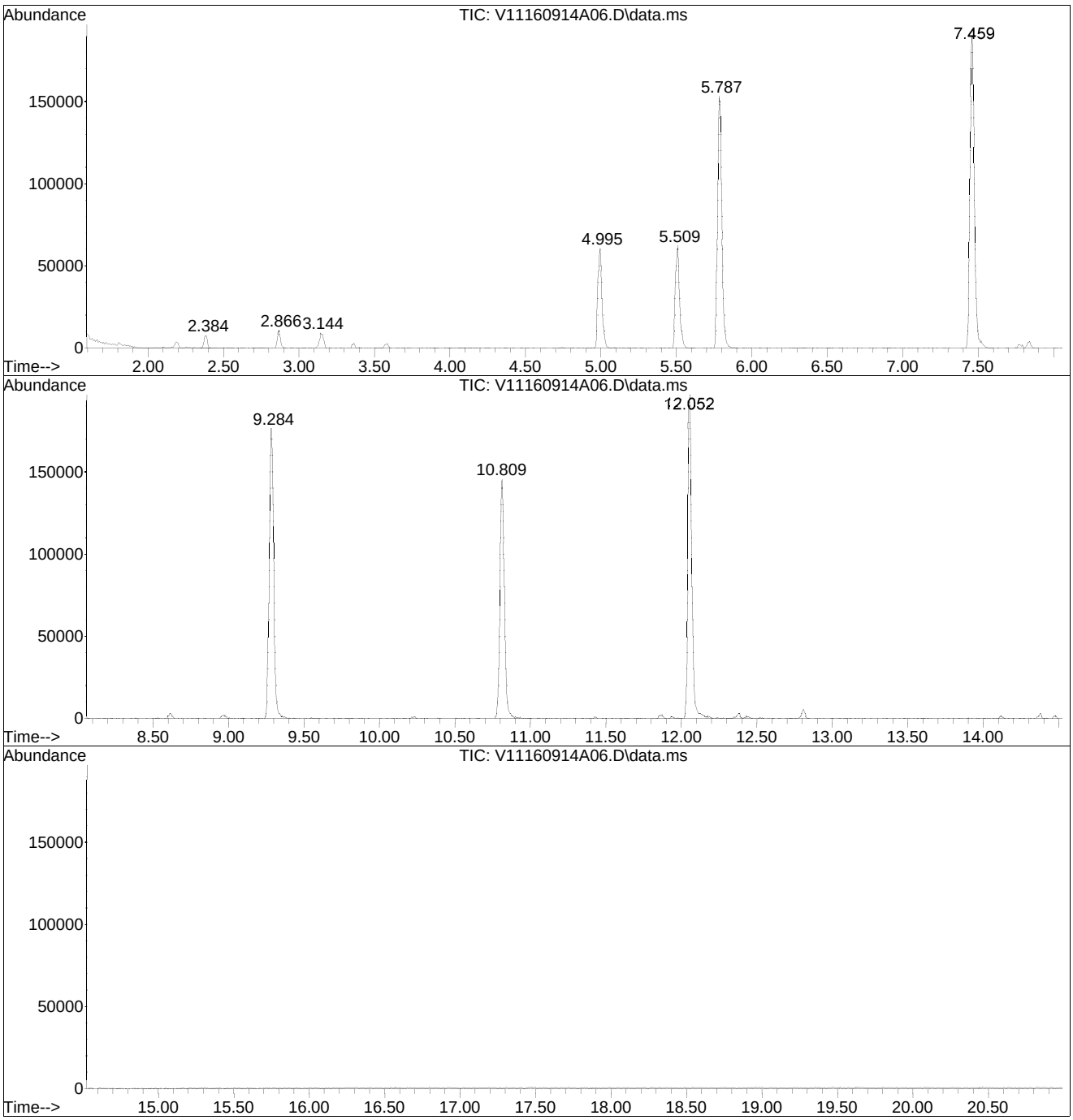
Sum of corrected areas: 1977587

LSC Report - Integrated Chromatogram

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A06.D
Acq On : 14 Sep 2016 09:48 am
Operator : VOA111:BD
Sample : wg931857-5,31,5,5,,
Misc : WG931857,ICAL12787
ALS Vial : 6 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p



Library Search Compound Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A06.D
Acq On : 14 Sep 2016 09:48 am
Operator : VOA111:BD
Sample : wg931857-5,31,5,5,,
Misc : WG931857,ICAL12787
ALS Vial : 6 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A06.D
Acq On : 14 Sep 2016 09:48 am
Operator : VOA111:BD
Sample : wg931857-5,31,5,5,,
Misc : WG931857,ICAL12787
ALS Vial : 6 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A06.D
Acq On : 14 Sep 2016 09:48
Operator : VOA111:BD
Sample : WG931936-5,31H,5,5,0.1
Misc : WG931936,ICAL12787
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 14 12:30:03 2016
Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA111\2016\160914A\V11160914A02.D
Sub List : 8260-CurveSoil - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.787	96	136135	20.000	ug/L	0.00
Standard Area 1 = 144511			Recovery = 94.20%			
59) Chlorobenzene-d5	9.284	117	107179	20.000	ug/L	0.00
Standard Area 1 = 111926			Recovery = 95.76%			
79) 1,4-Dichlorobenzene-d4	12.052	152	51549	20.000	ug/L	0.00
Standard Area 1 = 58934			Recovery = 87.47%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.995	113	35777	23.223	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 116.11%			
43) 1,2-Dichloroethane-d4	5.509	65	52821	23.564	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 117.82%			
60) Toluene-d8	7.459	98	138455	18.960	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 94.80%			
83) 4-Bromofluorobenzene	10.809	95	57854	20.662	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 103.31%			
Target Compounds						Qvalue
4) Vinyl chloride	0.000		0	N.D.		

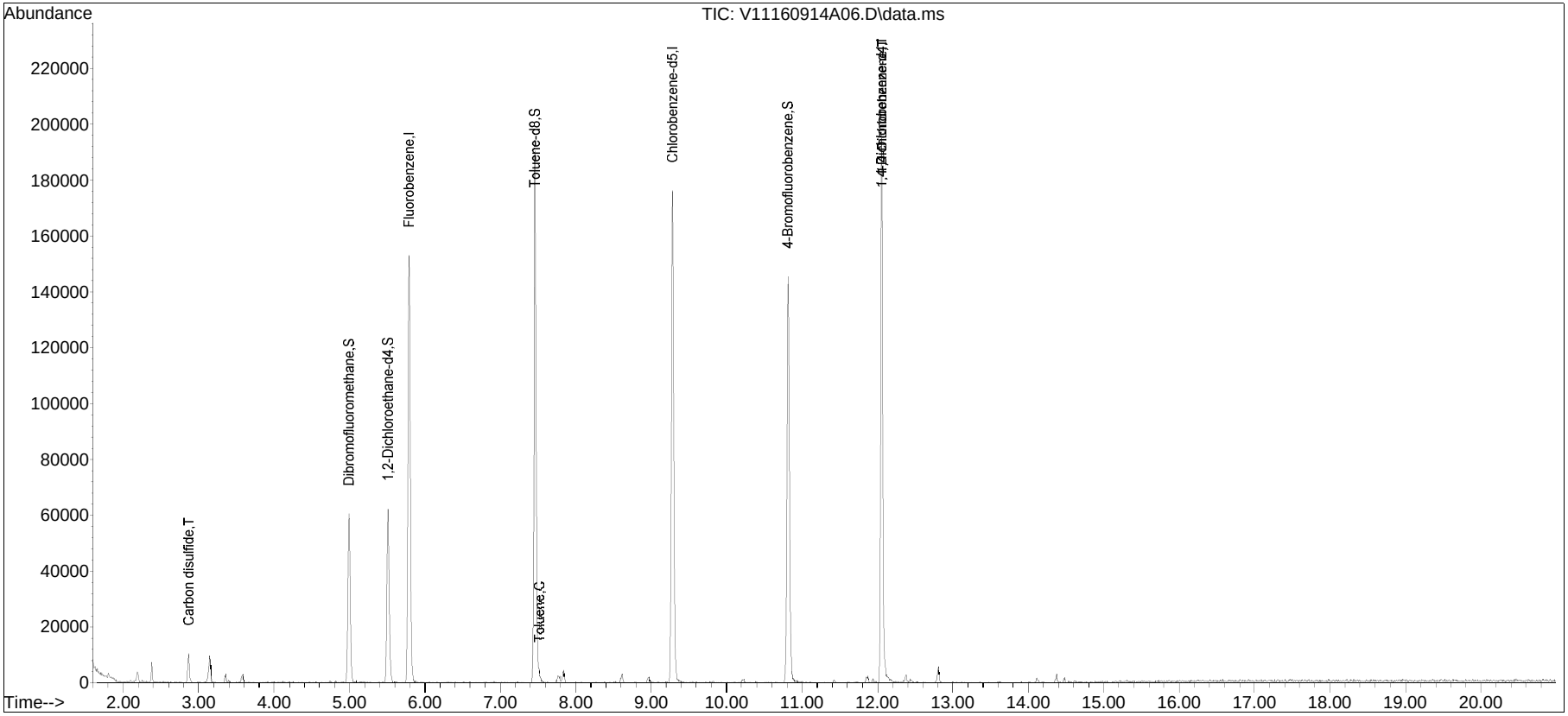
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A06.D
Acq On : 14 Sep 2016 09:48
Operator : VOA111:BD
Sample : WG931936-5,31H,5,5,0.1
Misc : WG931936,ICAL12787
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 14 12:30:03 2016
Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

Sub List : 8260-CurveSoil - Megamix plus Diox4A\V11160914A02.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA111\2016\1	QMethod	: V111_160819_8260.m
Data File	: V11160914A06.D	Operator	: VOA111:BD
Date Inj'd	: 9/14/2016 9:48	Instrument	: VOA111
Sample	: WG931936-5,31H,5,5,0.1	Quant Date	: 9/14/2016 12:27 pm

There are no manual integrations or false positives in this file.

LSC Area Percent Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A06.D
Acq On : 14 Sep 2016 09:48
Operator : VOA111:BD
Sample : WG931936-5,31H,5,5,0.1
Misc : WG931936,ICAL12787
ALS Vial : 6 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Title : VOLATILES BY GC/MS

Signal : TIC: V11160914A06.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.384	144	152	157	rBV4	7256	11588	3.01%	0.586%
2	2.866	237	244	256	rBB	10580	15413	4.00%	0.779%
3	3.144	288	297	305	rBB2	9405	17798	4.62%	0.900%
4	4.995	640	650	663	rBV2	60511	117504	30.52%	5.942%
5	5.509	740	748	762	rBB	62166	120168	31.22%	6.076%
6	5.787	792	801	817	rBV2	153145	303938	78.96%	15.369%
7	7.459	1110	1120	1140	rBB	190517	384949	100.00%	19.466%
8	9.284	1458	1468	1488	rBB2	176326	362123	94.07%	18.311%
9	10.809	1749	1759	1775	rBV2	145486	293793	76.32%	14.856%
10	12.052	1989	1996	2018	rBV	196883	350313	91.00%	17.714%

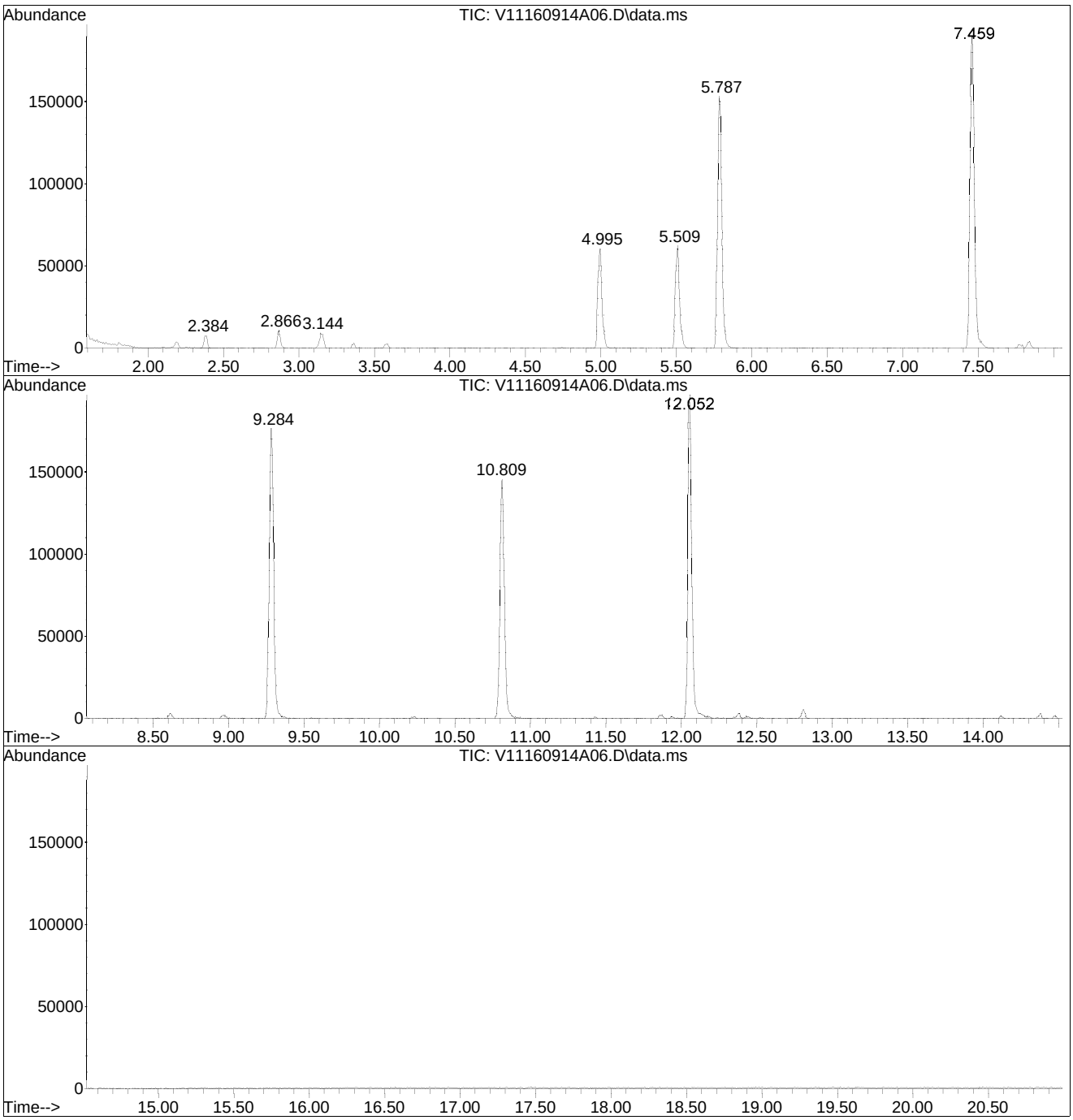
Sum of corrected areas: 1977587

LSC Report - Integrated Chromatogram

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A06.D
Acq On : 14 Sep 2016 09:48
Operator : VOA111:BD
Sample : WG931936-5,31H,5,5,0.1
Misc : WG931936,ICAL12787
ALS Vial : 6 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p



V111_160819_8260.m Wed Sep 14 16:58:00 2016 SVOA-INSTRUMENT Page: 2

Library Search Compound Report

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A06.D
Acq On : 14 Sep 2016 09:48
Operator : VOA111:BD
Sample : WG931936-5,31H,5,5,0.1
Misc : WG931936,ICAL12787
ALS Vial : 6 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : I:\VOLATILES\VOA111\2016\160914A\
Data File : V11160914A06.D
Acq On : 14 Sep 2016 09:48
Operator : VOA111:BD
Sample : WG931936-5,31H,5,5,0.1
Misc : WG931936,ICAL12787
ALS Vial : 6 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA111\2016\160914A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

						Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

Metals

Inorganic Data
(ICP Analysis)

Sample Results Summary

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-04	**Date Collected**	: 09/13/16 09:40
Client ID	: 4479-091316-0940	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 10:21
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG931679.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.265g	**%Solids**	: 85
Digestion Method	: EPA 3050B	**Date Digested**	: 09/14/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	7.0	0.47	0.15	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-05	**Date Collected**	: 09/13/16 10:10
Client ID	: 4479-091316-1010	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 10:25
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG931679.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.286g	**%Solids**	: 80
Digestion Method	: EPA 3050B	**Date Digested**	: 09/14/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	46	0.49	0.16	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: L1628787-06	Date Collected	: 09/13/16 11:15
Client ID	: 4479-091316-1115	Date Received	: 09/13/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/14/16 10:49
Sample Matrix	: SOIL	Dilution Factor	: 2
Analytical Method	: 1,6010C	Analyst	: PS
Lab File ID	: WG931679.pdf	Instrument ID	: TRACE7
Sample Amount	: 1.27g	%Solids	: 60
Digestion Method	: EPA 3050B	Date Digested	: 09/14/16

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-02-0	Nickel, Total	2300	3.3	0.53	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-07	**Date Collected**	: 09/13/16 11:20
Client ID	: 4479-091316-1120	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 10:33
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG931679.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.302g	**%Solids**	: 71
Digestion Method	: EPA 3050B	**Date Digested**	: 09/14/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, Total	630	1.3	0.22	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-08	**Date Collected**	: 09/13/16 12:00
Client ID	: 4479-091316-1200	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 10:37
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG931679.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.256g	**%Solids**	: 84
Digestion Method	: EPA 3050B	**Date Digested**	: 09/14/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	45	0.47	0.16	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-12	**Date Collected**	: 09/13/16 15:00
Client ID	: 4479-091316-1500	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 10:45
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG931679.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.274g	**%Solids**	: 91
Digestion Method	: EPA 3050B	**Date Digested**	: 09/14/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, Total	92	1.1	0.17	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: WG931636-1	Date Collected	: NA
Client ID	: WG931636-1BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 09/14/16 09:18
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,6010C	Analyst	: PS
Lab File ID	: WG931679.pdf	Instrument ID	: TRACE7
Sample Amount	: 1.25g	%Solids	: NA
Digestion Method	: EPA 3050B	Date Digested	: 09/14/16

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-38-2	Arsenic, Total	ND	0.40	0.13	U
7440-02-0	Nickel, Total	ND	1.0	0.16	U

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-02	**Date Collected**	: 09/13/16 09:15
Client ID	: 4479-091316-0915	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/22/16 10:06
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG934593.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.269g	**%Solids**	: 86
Digestion Method	: EPA 3050B	**Date Digested**	: 09/22/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, Total	720	1.1	0.18	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: L1628787-09	Date Collected	: 09/13/16 12:25
Client ID	: 4479-091316-1225	Date Received	: 09/13/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/22/16 10:21
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,6010C	Analyst	: PS
Lab File ID	: WG934593.pdf	Instrument ID	: TRACE7
Sample Amount	: 1.264g	%Solids	: 79
Digestion Method	: EPA 3050B	Date Digested	: 09/22/16

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-38-2	Arsenic, Total	62	0.50	0.16	
7440-02-0	Nickel, Total	190	1.2	0.20	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: WG934545-1	Date Collected	: NA
Client ID	: WG934545-1BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 09/22/16 09:57
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,6010C	Analyst	: PS
Lab File ID	: WG934593.pdf	Instrument ID	: TRACE7
Sample Amount	: 1.25g	%Solids	: NA
Digestion Method	: EPA 3050B	Date Digested	: 09/22/16

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-38-2	Arsenic, Total	ND	0.40	0.13	U
7440-02-0	Nickel, Total	ND	1.0	0.16	U

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: WG934545-3	**Date Collected**	: 09/13/16 09:15
Client ID	: 4479-091316-0915DUP	**Date Received**	: 09/13/16
Sample Location	:	**Date Analyzed**	: 09/22/16 10:09
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG934593.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.268g	**%Solids**	: 86
Digestion Method	: EPA 3050B	**Date Digested**	: 09/22/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, Total	510	1.1	0.18	

Blank Results Summary

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: TRACE7		

		Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID	:	R900103-4		R900103-9		R900103-11		R900103-15		WG931636-1	
Date Analyzed	:	09/14/16 07:55		09/14/16 08:32		09/14/16 08:41		09/14/16 10:02		09/14/16 09:18	
Parameter		mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q	mg/kg	Q
Arsenic		0.00330	U	0.00330	U	0.00330	U	0.00330	U	0.13	U
Nickel		0.00400	U	0.00400	U	0.00400	U	0.00400	U	0.16	U

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: TRACE7		

		Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID	:	R900103-13		R900103-17		R900103-19					
Date Analyzed	:	09/14/16 09:13		09/14/16 10:17		09/14/16 11:06					
Parameter		mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Arsenic		0.00330	U	0.00330	U	0.00330	U				
Nickel		0.00400	U	0.00400	U	0.00400	U				

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: TRACE7		

		Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID	:	R902766-2		R902766-7		R902766-10		R902766-12		WG934545-1	
Date Analyzed	:	09/22/16 08:05		09/22/16 08:38		09/22/16 09:53		09/22/16 10:41		09/22/16 09:57	
Parameter		mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q	mg/kg	Q
Arsenic		0.00330	U	0.00330	U	0.00330	U	0.00330	U	0.13	U
Nickel		0.00400	U	0.00400	U	0.00400	U	0.00400	U	0.16	U

Calibration Summary

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: TRACE7	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R900103-3			R900103-8			R900103-10			
Date Analyzed :	09/14/16 07:51			09/14/16 08:28			09/14/16 08:37			
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic	0.5000	0.5080	102.	0.5000	0.5040	101.	0.4900	98.		
Nickel	0.5000	0.4920	98.	0.5000	0.4900	98.	0.4780	96.		

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: TRACE7	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R900103-12			R900103-14			R900103-16		R900103-18	
Date Analyzed :	09/14/16 09:09			09/14/16 09:58			09/14/16 10:13		09/14/16 11:01	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic	0.5000	0.5020	100.	0.5000	0.5080	102.	0.5000	100	0.5160	103.
Nickel	0.5000	0.4850	97.	0.5000	0.4890	98.	0.4820	96.	0.4960	99.

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: TRACE7	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R902766-1			R902766-6			R902766-9		R902766-11	
Date Analyzed :	09/22/16 08:01			09/22/16 08:34			09/22/16 09:49		09/22/16 10:37	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic	0.5000	0.5090	102.	0.5000	0.5120	102.	0.5170	103.	0.5260	105.
Nickel	0.5000	0.4950	99.	0.5000	0.4930	98.	0.4850	97.	0.4900	98.

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2B
CRI Check Standard

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: TRACE7	**Units**	: mg/L

		Initial	Final
Lab ID	:	R900103-7	
Date Analyzed	:	09/14/16 08:24	

Parameter	True	Found	%R	Found	%R
Arsenic	0.020	0.020	101		
Nickel	0.080	0.081	102		

Acceptance Criteria: Methods 200.7, 6010

CRI: 70-130%

Form 2B
CRI Check Standard

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: TRACE7	**Units**	: mg/L

		Initial	Final
Lab ID	:	R902766-5	
Date Analyzed	:	09/22/16 08:30	

Parameter	True	Found	%R	Found	%R
Arsenic	0.020	0.019	97		
Nickel	0.080	0.082	102		

Acceptance Criteria: Methods 200.7, 6010

CRI: 70-130%

ICP Interference Check Sample Results Summary

Form 4a
Interference Check Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: TRACE7	**Concentration Units**	: mg/L

	True		Initial Found				Final Found			
Lab ID :			R900103-5		R900103-6					
Analysis Date :			09/14/16 08:16		09/14/16 08:20					
	Sol.	Sol.	Sol.		Sol.		Sol.		Sol.	
Analyte	A	AB	A	%R	AB	%R	A	%R	AB	%R
Arsenic		1	-0.00310		0.981	98				
Nickel		0.3	-0.00110		0.282	94				

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

Form 4a
Interference Check Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: TRACE7	**Concentration Units**	: mg/L

	True		Initial Found				Final Found			
Lab ID :			R902766-3		R902766-4		R902766-8			
Analysis Date :			09/22/16 08:22		09/22/16 08:26		09/22/16 08:47			
Analyte	**Sol. A**	**Sol. AB**	**Sol. A**	**%R**	**Sol. AB**	**%R**	**Sol. A**	**%R**	**Sol. AB**	**%R**
Arsenic		1	-0.00750		1.00	100	-0.00510			
Nickel		0.3	-0.00110		0.288	96	-0.00100			

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

Spike Sample Results

Form 5a
Matrix Spike

Client	: Haley & Aldrich, Inc.		**Lab Number**	:	L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	:	70614-814
Client Sample ID	: NA		**Matrix**	:	SOIL
Lab Sample ID	: L1628787-02				
Matrix Spike	: WG931636-4		**MS Analysis Date**	:	09/14/16 09:35
Matrix Spike Dup	:		**MSD Analysis Date**	:	

		Matrix Spike Sample				Matrix Spike Duplicate					
Parameter	**Sample Conc. (mg/kg)**	**Spike Added (mg/kg)**	**Spike Conc. (mg/kg)**	**%R**		**Spike Added (mg/kg)**	**Spike Conc. (mg/kg)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Arsenic, Total	46.	10.9	16.	0	Q					75-125	20
Nickel, Total	660	45.3	840	398	Q					75-125	20

Form 5a
Matrix Spike

Client	: Haley & Aldrich, Inc.		**Lab Number**	:	L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	:	70614-814
Client Sample ID	: 4479-091316-0915		**Matrix**	:	SOIL
Lab Sample ID	: L1628787-02				
Matrix Spike	: WG934545-4		**MS Analysis Date**	:	09/22/16 10:13
Matrix Spike Dup	:		**MSD Analysis Date**	:	

		Matrix Spike Sample				Matrix Spike Duplicate					
Parameter	**Sample Conc. (mg/kg)**	**Spike Added (mg/kg)**	**Spike Conc. (mg/kg)**	**%R**		**Spike Added (mg/kg)**	**Spike Conc. (mg/kg)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Arsenic, Total	8.1	10.8	20.	110						75-125	20
Nickel, Total	720	45.2	750	66	Q					75-125	20

Duplicate Sample Results Summary

Form 6
Lab Duplicates

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Client Sample ID	: 4479-091316-0915	**Matrix**	: SOIL
Lab Sample ID	: L1628787-02	**Analysis Date**	: 09/14/16 09:27
Dup Sample ID	: WG931636-3	**DUP Analysis Date**	: 09/14/16 09:31

Parameter	Sample Concentration (mg/kg)	Duplicate Concentration (mg/kg)	RPD	RPD Limit
Nickel, Total	660	470	34 Q	20

LCS Sample Results Summary

Form 7
Laboratory Control Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Client Sample ID	: NA	**Matrix**	: SOIL
Lab Sample ID	: WG931636-2	**LCS Analysis Date**	: 09/14/16 09:23
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
Arsenic, Total	145.	160.	110.					80-121	20
Nickel, Total	129.	130.	101.					83-117	20

Form 7
Laboratory Control Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Client Sample ID	: NA	**Matrix**	: SOIL
Lab Sample ID	: WG934545-2	**LCS Analysis Date**	: 09/22/16 10:02
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
Arsenic, Total	145.	160.	110.					80-121	20
Nickel, Total	129.	130.	101.					83-117	20

Serial Dilution Summary

Form 8
Serial Dilutions

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Client Sample ID	: 4479-091316-0915	**Matrix**	: SOIL
Lab Sample ID	: L1628787-02	**Analysis Date**	: 09/14/16 09:27
Serial Dilution ID	: WG931636-6	**Analysis Date**	: 09/14/16 09:54

Parameter	Initial Sample Result (mg/kg)	Serial Dilution Result (mg/kg)	% Difference	%D Limit
Nickel, Total	660	890	35*	10

Form 8
Serial Dilutions

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Client Sample ID	: 4479-091316-0915	**Matrix**	: SOIL
Lab Sample ID	: L1628787-02	**Analysis Date**	: 09/22/16 10:06
Serial Dilution ID	: WG934545-6	**Analysis Date**	: 09/22/16 10:33

Parameter	Initial Sample Result (mg/kg)	Serial Dilution Result (mg/kg)	% Difference	%D Limit
Nickel, Total	720	940	31*	10

Run Logs

Form 13
Analysis Run Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: TRACE7	**Analysis Method**	: 1,6010C
Start Date	: 09/14/16 07:51	**End Date**	: 09/14/16 11:06

Sample Number	Dilution Factor	Analysis Time	Arsenic, Total	Nickel, Total
R900103-3 ICV	1	07:51:00	X	X
R900103-4 ICB	1	07:55:00	X	X
R900103-5 ICSA	1	08:16:00	X	X
R900103-6 ICSAB	1	08:20:00	X	X
R900103-7 CRI	1	08:24:00	X	X
R900103-8 CCV	1	08:28:00	X	X
R900103-9 CCB	1	08:32:00	X	X
R900103-10 CCV	1	08:37:00	X	X
R900103-11 CCB	1	08:41:00	X	X
R900103-12 ICV	1	09:09:00	X	X
R900103-13 ICB	1	09:13:00	X	X
WG931636-1 BLANK	1	09:18:00	X	X
WG931636-2 LCS	8	09:23:00	X	X
WG931636-4 MS	1	09:35:00	X	X
R900103-14 CCV	1	09:58:00	X	X
R900103-15 CCB	1	10:02:00	X	X
R900103-16 CCV	1	10:13:00	X	X
R900103-17 CCB	1	10:17:00	X	X
L1628787-04	1	10:21:00	X	
L1628787-05	1	10:25:00	X	
L1628787-07	1	10:33:00		X
L1628787-08	1	10:37:00	X	
L1628787-12	1	10:45:00		X
L1628787-06	2	10:49:00		X
R900103-18 CCV	1	11:01:00	X	X
R900103-19 CCB	1	11:06:00	X	X

Form 13
Analysis Run Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: TRACE7	**Analysis Method**	: 1,6010C
Start Date	: 09/22/16 08:01	**End Date**	: 09/22/16 10:41

Sample Number	Dilution Factor	Analysis Time	Arsenic, Total	Nickel, Total
R902766-1 ICV	1	08:01:00	X	X
R902766-2 ICB	1	08:05:00	X	X
R902766-3 ICSA	1	08:22:00	X	X
R902766-4 ICSAB	1	08:26:00	X	X
R902766-5 CRI	1	08:30:00	X	X
R902766-6 CCV	1	08:34:00	X	X
R902766-7 CCB	1	08:38:00	X	X
R902766-8 ICSA	1	08:47:00	X	X
R902766-9 CCV	1	09:49:00	X	X
R902766-10 CCB	1	09:53:00	X	X
WG934545-1 BLANK	1	09:57:00	X	X
WG934545-2 LCS	8	10:02:00	X	X
L1628787-02	1	10:06:00		X
WG934545-3 DUP	1	10:09:00		X
WG934545-4 MS	1	10:13:00	X	X
L1628787-09	1	10:21:00	X	X
WG934545-6 SERDIL	5	10:33:00		X
R902766-11 CCV	1	10:37:00	X	X
R902766-12 CCB	1	10:41:00	X	X

Digestion Logs
ICP

Form 12
Preparation Log

Client	:	**Haley & Aldrich, Inc.**	**Lab Number**	:	**L1628787**
Project Name	:	**EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	:	**70614-814**
Matrix	:	**SOIL**	**Prep Method**	:	**EPA 3050B**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L1628787-04	09/14/16 05:23	1.26	-
L1628787-05	09/14/16 05:23	1.29	-
L1628787-06	09/14/16 05:23	1.27	-
L1628787-07	09/14/16 05:23	1.30	-
L1628787-08	09/14/16 05:23	1.26	-
L1628787-12	09/14/16 05:23	1.27	-
WG931636-1	09/14/16 05:23	1.25	-
WG931636-2	09/14/16 05:23	0.39	-
WG931636-4	09/14/16 05:23	1.28	-

Form 12
Preparation Log

Client	:	**Haley & Aldrich, Inc.**	**Lab Number**	:	**L1628787**
Project Name	:	**EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	:	**70614-814**
Matrix	:	**SOIL**	**Prep Method**	:	**EPA 3050B**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L1628787-02	09/22/16 04:20	1.27	-
L1628787-09	09/22/16 04:20	1.26	-
WG934545-1	09/22/16 04:20	1.25	-
WG934545-2	09/22/16 04:20	0.39	-
WG934545-3	09/22/16 04:20	1.27	-
WG934545-4	09/22/16 04:20	1.28	-
WG934545-6	09/22/16 04:20	1.27	-

Inorganic Data
(ICPMS Analysis)

Sample Results Summary

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-02	**Date Collected**	: 09/13/16 09:15
Client ID	: 4479-091316-0915	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/20/16 09:18
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,6020A	**Analyst**	: AM
Lab File ID	: WG933699.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: 86
Digestion Method	: EPA 3005A	**Date Digested**	: 09/20/16

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, SPLP	12.1	10.0	0.865	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-05	**Date Collected**	: 09/13/16 10:10
Client ID	: 4479-091316-1010	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/20/16 09:21
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,6020A	**Analyst**	: AM
Lab File ID	: WG933699.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: 80
Digestion Method	: EPA 3005A	**Date Digested**	: 09/20/16

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, SPLP	10.8	5.00	1.23	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-06	**Date Collected**	: 09/13/16 11:15
Client ID	: 4479-091316-1115	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/20/16 09:39
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,6020A	**Analyst**	: AM
Lab File ID	: WG933699.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: 60
Digestion Method	: EPA 3005A	**Date Digested**	: 09/20/16

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, SPLP	ND	10.0	0.865	U

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: L1628787-07	Date Collected	: 09/13/16 11:20
Client ID	: 4479-091316-1120	Date Received	: 09/13/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/20/16 09:37
Sample Matrix	: SOIL	Dilution Factor	: 10
Analytical Method	: 1,6020A	Analyst	: AM
Lab File ID	: WG933699.pdf	Instrument ID	: ICPMSQ2
Sample Amount	: 50ml	%Solids	: 71
Digestion Method	: EPA 3005A	Date Digested	: 09/20/16

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-02-0	Nickel, SPLP	1.05	10.0	0.865	J

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-08	**Date Collected**	: 09/13/16 12:00
Client ID	: 4479-091316-1200	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/20/16 09:42
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,6020A	**Analyst**	: AM
Lab File ID	: WG933699.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: 84
Digestion Method	: EPA 3005A	**Date Digested**	: 09/20/16

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, SPLP	11.6	5.00	1.23	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: L1628787-09	Date Collected	: 09/13/16 12:25
Client ID	: 4479-091316-1225	Date Received	: 09/13/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/20/16 09:45
Sample Matrix	: SOIL	Dilution Factor	: 10
Analytical Method	: 1,6020A	Analyst	: AM
Lab File ID	: WG933699.pdf	Instrument ID	: ICPMSQ2
Sample Amount	: 50ml	%Solids	: 79
Digestion Method	: EPA 3005A	Date Digested	: 09/20/16

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-38-2	Arsenic, SPLP	13.0	5.00	1.23	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: WG933648-1	Date Collected	: NA
Client ID	: WG933648-1BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 09/20/16 08:58
Sample Matrix	: SOIL	Dilution Factor	: 10
Analytical Method	: 1,6020A	Analyst	: AM
Lab File ID	: WG933699.pdf	Instrument ID	: ICPMSQ2
Sample Amount	: 50ml	%Solids	: NA
Digestion Method	: EPA 3005A	Date Digested	: 09/20/16

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-38-2	Arsenic, SPLP	ND	5.00	1.23	U
7440-02-0	Nickel, SPLP	ND	10.0	0.865	U

Blank Results Summary

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R901942-3		R901942-7		R901942-9		R901942-11		WG933648-1	
Date Analyzed :	09/20/16 08:38		09/20/16 08:56		09/20/16 09:31		09/20/16 10:05		09/20/16 08:58	
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q
Arsenic	0.123	U	0.123	U	0.123	U	0.123	U	1.23	U
Nickel	0.0865	U	0.0865	U	0.0865	U	0.0865	U	0.865	U

Calibration Summary

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: ICPMSQ2	**Units**	: ug/l

		Initial Calibration			Continuing Calibration(s)						
Lab ID	:	R901942-1			R901942-6			R901942-8		R901942-10	
Date Analyzed	:	09/20/16 08:30			09/20/16 08:52			09/20/16 09:26		09/20/16 10:02	
Parameter		**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic		100.0000	95.5000	96	100.0000	95.6000	96	100.0000	100	96.8000	97
Nickel		100.0000	105.0000	105	100.0000	103.0000	103	110.0000	110	104.0000	104

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

ICP Interference Check Sample Results Summary

Form 4a
Interference Check Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: ICPMSQ2	**Concentration Units**	: ug/l

	True		Initial Found				Final Found			
Lab ID :			R901942-4		R901942-5					
Analysis Date :			09/20/16 08:44		09/20/16 08:47					
Analyte	**Sol. A**	**Sol. AB**	**Sol. A**	**%R**	**Sol. AB**	**%R**	**Sol. A**	**%R**	**Sol. AB**	**%R**
Arsenic		20	0.0106		20.4	102				
Nickel		40	0.761		43.8	110				

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

LCS Sample Results Summary

Form 7
Laboratory Control Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Client Sample ID	: NA	**Matrix**	: SOIL
Lab Sample ID	: WG933648-2	**LCS Analysis Date**	: 09/20/16 09:01
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Arsenic, SPLP	120.	116.	97.					80-120	20
Nickel, SPLP	500.	543.	109.					80-120	20

Internal Standard Summary

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: ICPMSQ2	**Analysis Method**	: 1,6020A
Start Date	: 09/20/16	**End Date**	: 09/20/16

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R901942-1 ICV	08:30:41	99	100	100	97	99
R901942-3 ICB	08:38:33	98	97	98	98	102
R901942-4 ICSA	08:44:16	94	96	93	93	89
R901942-5 ICSAB	08:47:06	93	95	97	92	88
R901942-6 CCV	08:52:44	99	108	106	97	95
R901942-7 CCB	08:56:04	97	105	101	99	101
WG933648-1 BLANK	08:58:56	97	96	93	90	93
WG933648-2 LCS	09:01:43	98	104	99	95	97
L1628787-02	09:18:32	98	102	97	96	98
L1628787-05	09:21:21	98	96	97	93	96
R901942-8 CCV	09:26:57	97	93	93	90	90
R901942-9 CCB	09:31:22	96	100	98	95	93
L1628787-07	09:37:01	94	100	98	90	94
L1628787-06	09:39:51	94	92	88	87	92
L1628787-08	09:42:41	93	92	86	86	90
L1628787-09	09:45:31	93	93	93	90	94
R901942-10 CCV	10:02:16	95	98	95	91	92
R901942-11 CCB	10:05:32	96	85	89	82	85

Run Logs

Form 13
Analysis Run Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Instrument ID	: ICPMSQ2	**Analysis Method**	: 1,6020A
Start Date	: 09/20/16 07:43	**End Date**	: 09/20/16 10:05

Sample Number	Dilution Factor	Analysis Time	Arsenic, SPLP	Nickel, SPLP
R901942-16 TUNE		07:43:00		
R901942-1 ICV	1	08:30:41	X	X
R901942-3 ICB	1	08:38:33	X	X
R901942-4 ICSA	1	08:44:16	X	X
R901942-5 ICSAB	1	08:47:06	X	X
R901942-6 CCV	1	08:52:44	X	X
R901942-7 CCB	1	08:56:04	X	X
WG933648-1 BLANK	10	08:58:56	X	X
WG933648-2 LCS	10	09:01:43	X	X
L1628787-02	10	09:18:32		X
L1628787-05	10	09:21:21	X	
R901942-8 CCV	1	09:26:57	X	X
R901942-9 CCB	1	09:31:22	X	X
L1628787-07	10	09:37:01		X
L1628787-06	10	09:39:51		X
L1628787-08	10	09:42:41	X	
L1628787-09	10	09:45:31	X	
R901942-10 CCV	1	10:02:16	X	X
R901942-11 CCB	1	10:05:32	X	X

Digestion Logs
ICPMS

Form 12
Preparation Log

Client	:	**Haley & Aldrich, Inc.**	**Lab Number**	:	**L1628787**
Project Name	:	**EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	:	**70614-814**
Matrix	:	**SOIL**	**Prep Method**	:	**EPA 3005A**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L1628787-02	09/20/16 05:48	-	50
L1628787-05	09/20/16 05:48	-	50
L1628787-06	09/20/16 05:48	-	50
L1628787-07	09/20/16 05:48	-	50
L1628787-08	09/20/16 05:48	-	50
L1628787-09	09/20/16 05:48	-	50
WG933648-1	09/20/16 05:48	-	50
WG933648-2	09/20/16 05:48	-	50

Wet Chemistry

Total Solids / Percent Moisture Analysis

Results Summary

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: WG931634-1	**Date Collected**	: 09/13/16 08:50
Client ID	: 4479-091316-0850DUP	**Date Received**	: 09/13/16
Sample Location	:	**Date Analyzed**	: 09/14/16 03:25
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG931634.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 76
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**70.5**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-01	**Date Collected**	: 09/13/16 08:50
Client ID	: 4479-091316-0850	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 03:25
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG931634.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 76
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**75.7**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-02	**Date Collected**	: 09/13/16 09:15
Client ID	: 4479-091316-0915	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 03:25
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG931634.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 86
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**86.4**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-03	**Date Collected**	: 09/13/16 09:30
Client ID	: 4479-091316-0930	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 03:25
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG931634.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 75
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**75.2**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-04	**Date Collected**	: 09/13/16 09:40
Client ID	: 4479-091316-0940	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 03:25
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG931634.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 85
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**84.5**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-05	**Date Collected**	: 09/13/16 10:10
Client ID	: 4479-091316-1010	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 03:25
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG931634.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 80
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**80.0**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-06	**Date Collected**	: 09/13/16 11:15
Client ID	: 4479-091316-1115	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 03:25
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG931634.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 60
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	% RL	% MDL	Qualifier
NONE	Solids, Total	59.6	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-07	**Date Collected**	: 09/13/16 11:20
Client ID	: 4479-091316-1120	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 03:25
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG931634.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 71
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	71.2	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-08	**Date Collected**	: 09/13/16 12:00
Client ID	: 4479-091316-1200	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 03:25
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG931634.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 84
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**84.2**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70614-814
Lab ID	: L1628787-09	Date Collected	: 09/13/16 12:25
Client ID	: 4479-091316-1225	Date Received	: 09/13/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/14/16 03:25
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 121,2540G	Analyst	: VB
Lab File ID	: WG931634.csv	Instrument ID	:
Sample Amount	:	%Solids	: 79
Digestion Method	:	Date Digested	:

		%			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Solids, Total	79.2	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-10	**Date Collected**	: 09/13/16 14:10
Client ID	: 4479-091316-1410	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 03:25
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG931634.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 87
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**86.5**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-11	**Date Collected**	: 09/13/16 14:35
Client ID	: 4479-091316-1435	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 03:25
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG931634.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 76
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	76.1	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-12	**Date Collected**	: 09/13/16 15:00
Client ID	: 4479-091316-1500	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 03:25
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG931634.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 91
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**90.5**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Lab ID	: L1628787-13	**Date Collected**	: 09/13/16 15:25
Client ID	: 4479-091316-1525	**Date Received**	: 09/13/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/14/16 03:25
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG931634.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 86
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	86.1	0.100	NA	

Duplicate Sample Results Summary

Form 6
Lab Duplicates

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628787
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70614-814
Client Sample ID	: 4479-091316-0850	**Matrix**	: SOIL
Lab Sample ID	: L1628787-01	**Analysis Date**	: 09/14/16 03:25
Dup Sample ID	: WG931634-1	**DUP Analysis Date**	: 09/14/16 03:25

Parameter	Sample Concentration (%)	Duplicate Concentration (%)	RPD	RPD Limit
Solids, Total	75.7	70.5	7	20

ALPHA ANALYTICAL

World Class Chemistry

www.alphalab.com

Lab Number: L1628990

Client: Haley & Aldrich, Inc.

ATTN: Dimitri Quafisi

Project Name: EWING TOWNSHIP INDUSTRIAL

Project Number: 70613-814

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

ANALYTICAL DATA PACKAGE FOR THE
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
TRENTON NEW JERSEY 08625

Agency/Division:	**Bureau/Office:**
Project No: 70613-814	**Contract No:**
Laboratory: Alpha Analytical	**Laboratory Location:** Westborough, Ma.
	Laboratory Phone Number: (508) 898-9220
SDG No: L1628990	**NJDEP Certification #:** MA015/MA935
Date of First Sample Receipt: 09/14/2016	**Date of Last Sample Receipt:** 09/14/2016

Agency Sample Number	Laboratory Sample Number	Sample Location	Date/Time of Collection
4479-091416-0840	L1628990-01	EWING TOWNSHIP INDUS	09/14/2016 08:40
4479-091416-0850	L1628990-02	EWING TOWNSHIP INDUS	09/14/2016 08:50
4479-091416-0920	L1628990-03	EWING TOWNSHIP INDUS	09/14/2016 09:20
4479-091416-1000	L1628990-04	EWING TOWNSHIP INDUS	09/14/2016 10:00
4479-091416-1055	L1628990-05	EWING TOWNSHIP INDUS	09/14/2016 10:55
4479-091416-1130	L1628990-06	EWING TOWNSHIP INDUS	09/14/2016 11:30
4479-091416-1145	L1628990-07	EWING TOWNSHIP INDUS	09/14/2016 11:45
4479-091416-1210	L1628990-08	EWING TOWNSHIP INDUS	09/14/2016 12:10
4479-091416-1215	L1628990-09	EWING TOWNSHIP INDUS	09/14/2016 12:15
4479-091416-1340	L1628990-10	EWING TOWNSHIP INDUS	09/14/2016 13:40
4479-091416-1410	L1628990-11	EWING TOWNSHIP INDUS	09/14/2016 14:10
4479-091416-1420	L1628990-12	EWING TOWNSHIP INDUS	09/14/2016 14:20
4479-091416-1500	L1628990-13	EWING TOWNSHIP INDUS	09/14/2016 15:00

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on disk or electronically has been authorized by the laboratory director or his/her designee, as verified by the following signature.

Technical Director/Representative (Typed)	Melissa Cripps	09/25/16
Technical Director/Representative (Signature)	Melissa Cripps Melissa Cripps	

Table of Contents

New Jersey Reduced Data Deliverable Package 1
- Title Page 2
- Table of Contents 3
- Chain of Custody 6
  - External Chain of Custody 7
  - Lims COC (LN01) 9
  - Sample Receipt Tracking Report 11
- Methodology Review 33
  - Method References 34
- Laboratory Chronicle 35
  - Sample Receipt and Container Information 36
- NJ DEP DKQP Summary Questionnaire 41
  - DKQP Summary Questionnaire 42
- Conformance/Non-Conformance (Reliability) Summary 43
  - Conformance/Non-Conformance (Reliability) Report 44
- Glossary 47
  - Glossary Report 48
- SPLP Extraction Data 50
  - SPLP ZHE Extraction Data 51
    - Form 1 - Organics 52
  - SPLP Extraction Data - NonCLP 59
    - Form 1 - Organics 60
- Organics Analysis 64
  - GCMS 8260 Analysis 65
    - Sample Results Summary 66
      - Form 1 - Organics 67
    - Tune Results Summary 88
      - Form 5 - Organics 89
    - Blank Results Summary 95
      - Form 4 - Organics 96
    - Standards Data Summary 99
      - Form 6 - Organics 100
      - Form 7 - Organics 109
    - Surrogate Summary 116
      - Form 2 - Organics 117
    - Batch QC Summary 119
      - Form 3 - Organics 120
    - Internal Standard Summary 129
      - Form 8 - Organics 130
    - Chromatograms 133
      - Sample Raw Data 134
        - 4479-091416-1000 (L1628990-04) Analyzed: 09/15/16 16:46 135
        - 4479-091416-1055 (L1628990-05) Analyzed: 09/15/16 17:11 138
        - 4479-091416-1130 (L1628990-06) Analyzed: 09/15/16 17:37 141
        - 4479-091416-0920 (L1628990-03) Analyzed: 09/15/16 17:57 144
        - 4479-091416-1145 (L1628990-07) Analyzed: 09/15/16 18:02 148
        - 4479-091416-1410 (L1628990-11) Analyzed: 09/15/16 18:23 152
        - 4479-091416-1210 (L1628990-08) Analyzed: 09/15/16 18:28 156
        - 4479-091416-1215 (L1628990-09) Analyzed: 09/15/16 18:53 159
        - 4479-091416-1420 (L1628990-12) Analyzed: 09/15/16 19:17 163

Table of Contents

4479-091416-1340 (L1628990-10) Analyzed: 09/15/16 19:19 167
4479-091416-1500 (L1628990-13) Analyzed: 09/15/16 19:44 171
4479-091416-1055 (L1628990-05) Analyzed: 09/23/16 17:46 175
4479-091416-1130 (L1628990-06) Analyzed: 09/23/16 18:19 179
4479-091416-1210 (L1628990-08) Analyzed: 09/23/16 18:52 183
4479-091416-1215 (L1628990-09) Analyzed: 09/23/16 19:25 187
4479-091416-1145 (L1628990-07) Analyzed: 09/23/16 19:59 191
4479-091416-1340 (L1628990-10) Analyzed: 09/23/16 20:32 195
4479-091416-1500 (L1628990-13) Analyzed: 09/23/16 21:05 199
Method Blank Raw Data 203
Laboratory Method Bl (WG932329-5) Analyzed: 09/15/16 11:44 204
Laboratory Method Bl (WG932471-5) Analyzed: 09/15/16 12:04 207
Laboratory Method Bl (WG935468-5) Analyzed: 09/23/16 17:12 210
Metals Analysis 214
Inorganic Data (ICP Analysis) 215
Sample Results Summary 216
Form 1 - Inorganics 217
Blank Results Summary 224
Form 3 - Inorganics 225
Calibration Summary 226
Form 2A - Inorganics 227
Form 2B - Inorganics 228
ICP Interference Check Sample Results Summary 229
Form 4A - Inorganics 230
LCS Sample Results Summary 231
Form 7 - Inorganics 232
Sample Run Logs 233
Form 13 - Inorganics 234
ICP Digestion 235
Form 12 - Inorganics 236
Inorganic Data (ICPMS Analysis) 237
Sample Results Summary 238
Form 1 - Inorganics 239
Blank Results Summary 244
Form 3 - Inorganics 245
Calibration Summary 247
Form 2A - Inorganics 248
ICP Interference Check Sample Results Summary 250
Form 4A - Inorganics 251
LCS Sample Results Summary 252
Form 7 - Inorganics 253
Internal Standard Summary 254
Form 15 - Inorganics 255
Sample Run Logs 256
Form 13 - Inorganics 257
ICPMS Digestion 258
Form 12 - Inorganics 259
Wet Chemistry Analysis 260
Total Solids Analysis 261
Results Summary 262

Table of Contents

Form 1 - Inorganics 263

Chain of Custody

CHAIN OF CUSTODY

ALPHA ANALYTICAL — Westborough, MA 01581, 8 Walkup Dr., TEL: 508-898-9220, FAX: 508-898-9193; Mansfield, MA 02048, 320 Forbes Blvd, TEL: 508-822-9300, FAX: 508-822-3288

Service Centers
Brewer, ME 04412 Portsmouth, NH 03801 Mahwah, NJ 07430
Albany, NY 12205
Tonawanda, NY 14150 Holmes, PA 19043

Page 1 of 2

Date Rec'd in Lab: 9/14/16

ALPHA Job #: L1628990

Project Information
- Project Name: Ewing Township Industrial Land
- Project Location: Ewing, NJ
- Project #: 70613-814
- (Use Project name as Project #): ☐
- Project Manager: Dan Putz
- ALPHAQuote #:

Turn-Around Time
- Standard ☐ Due Date:
- Rush (only if pre approved) ☒ # of Days:

H&A Information
- H&A Client: RACER
- H&A Address: 6500 Rockside Rd Cleveland, OH 44131
- H&A Phone: 216-706-1314
- H&A Fax:
- H&A Email: dputz@haleyaldrich.com

Deliverables
- ☒ Email ☐ Fax
- ☐ EQuIS (1 File) ☐ EQuIS (4 File)
- ☐ Other:

Billing Information
- ☐ Same as Client Info
- PO #

Regulatory Requirements (Program/Criteria)
Note: Select State from menu & identify criteria.

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility: ☐ NJ ☐ NY ☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:
Rush Totals
Hold SPLP pending Totals analysis

Please specify Metals or TAL.

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Vinyl Chloride Total & SPLP	Total & SPLP Chlorobenzene	Total & SPLP TCE	Total & SPLP Nickel	Total Bottles
28990-01	4479-091416-0840	9/14/16	0840	Soil	TMD				X	
-02	4479-091416-0850	9/14/16	0850	Soil	TMD				X	
-03	4479-091416-0920	9/14/16	0920	Soil	TMD	X				
-04	4479-091416-1000	9/14/16	1000	Soil	TMD		X		X	
-05	4479-091416-1055	9/14/16	1055	Soil	TMD			X	X	
-06	4479-091416-1130	9/14/16	1130	Soil	TMD		X			
-07	4479-091416-1145	9/14/16	1145	Soil	TMD		X	X		
-08	4479-091416-1210	9/14/16	1210	Soil	TMD		X			
-09	4479-091416-1215	9/14/16	1215	Soil	TMD		X			
-10	4479-091416-1340	9/14/16	1340	Soil	TMD		X			
	Container Type					E	E	E	A	
	Preservative					A	A	A	A	

Sample Filtration
☐ Done ☐ Lab to do
Preservation ☐ Lab to do
(Please Specify below)

Sample Specific Comments

Preservative Code: A = None; B = HCl; C = HNO_3; D = H_2SO_4; E = NaOH; F = MeOH; G = $NaHSO_4$; H = $Na_2S_2O_3$; K/E = Zn Ac/NaOH; O = Other

Container Code: P = Plastic; A = Amber Glass; V = Vial; G = Glass; B = Bacteria Cup; C = Cube; O = Other; E = Encore; D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	9/14/16 1710	Dave	9/14/16 1710
Dave 9/14/16	1950	Tom Tobin	9-14-16 1950
Tom Tobin	9-14-16 2350		9/14/16 2350

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. Alpha Analytical's services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement# 2015-18-Alpha Analytical by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Alpha Analytical.

Document ID: 20455 Rev 1 (1/28/2016)

CHAIN OF CUSTODY

ALPHA ANALYTICAL — Advancing Data Quality

Westborough, MA 01581 — 8 Walkup Dr. — TEL: 508-898-9220 — FAX: 508-898-9193

Mansfield, MA 02048 — 320 Forbes Blvd — TEL: 508-822-9300 — FAX: 508-822-3288

Service Centers
Brewer, ME 04412 — Portsmouth, NH 03801 — Mahwah, NJ 07430
Albany, NY 12205
Tonawanda, NY 14150 — Holmes, PA 19043

Page 2 of 2

Date Rec'd in Lab: 9/14/16

ALPHA Job #: L1628890

Project Information
- Project Name: Ewing Township Industrial Land
- Project Location: Ewing, NJ
- Project #: 70613-814
- (Use Project name as Project #): ☐
- Project Manager: Dan Putz
- ALPHAQuote #:

Turn-Around Time
- Standard ☐ — Due Date:
- Rush (only if pre approved) ☒ — # of Days:

Deliverables
- ☒ Email ☐ Fax
- ☐ EQuIS (1 File) ☐ EQuIS (4 File)
- ☐ Other:

Billing Information
- ☐ Same as Client Info
- PO #

H&A Information
- H&A Client: RACER
- H&A Address: 6500 Rockside Rd, Cleveland, OH 44131
- H&A Phone: 216-706-1314
- H&A Fax:
- H&A Email: dputz@haleyaldrich.com

Regulatory Requirements (Program/Criteria)
Note: Select State from menu & identify criteria.

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
- ☐ NJ ☐ NY
- ☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Rush Totals
Hold SPLP pending Totals analysis

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
- ☐ Done
- ☐ Lab to do

Preservation
- ☐ Lab to do

(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Total + SPLP Chlorobenzene	Total + SPLP Nitrobenzene	Sample Specific Comments	Total Bottles
28890-11	4479-091416-1410	9/14/16	1410	Soil	TMD	X	X		
-12	4479-091416-1420	9/14/16	1420	Soil	TMD	X	X		
-13	4479-091416-1500	9/14/16	1500	Soil	TMD	X			

Container Type: E A
Preservative: A A

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	9/14/16 1710	Dave Hunt ACT	9/14/16 1710
Dave Hunt	9/14/16 1950		9-14-16 1950
	9-14-16 2355		9/14/16 2355

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. Alpha Analytical's services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement# 2015-18-Alpha Analytical by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Alpha Analytical.

Document ID: 20455 Rev 1 (1/28/2016)

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Sep 27 2016, 03:02 pm

Login Number: L1628990
Account: HALEY-OH2 Haley & Aldrich, Inc.Project: 70613-814
Received: 14SEP16 Due Date: 23SEP16

Sample #	Client ID	Mat	PR	Collected	Container
L1628990-01	4479-091416-0840	3	S0	14SEP16 08:40	1-Glass-A.25,1-SGlass-A.06

Final 9/23 NJ-RED Package Due Date: 09/23/16

HOLD-CONTINGENCY,NI-TI,NJ-RED,NJDEP,PREPT,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1628990-02	4479-091416-0850	3	S0	14SEP16 08:50	1-EPlastic-C.120,1-Glass-A.25,1-SGlass-A.06,1-Tumble Vessel

PREPP: Metals only Final 9/23 Package Due Date: 09/23/16

NI-TI,NJ-SPLPEXT-DATA,PREPP,PREPT,SPLP-NI-6020T-PPB,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1628990-03	4479-091416-0920	3	S0	14SEP16 09:20	2-Encore-25,3-Encore-5,1-Plastic-A-TS,1-SVial-F,4-SVial-W

8260: chlorobenzene only Final 9/23 Package Due Date: 09/23/16

ENCORE,HOLD-8260HLW,NJ-8260HLW,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1628990-04	4479-091416-1000	3	S0	14SEP16 10:00	1-EPlastic-C.120,2-Encore-25,3-Encore-5,1-Glass-A.25,1-Plastic-A-TS,1-SVial-F,4-

8260: Chlorobenzene only PREPP: Metals only Final 9/23 Package Due Date: 09/23/16

ENCORE,HOLD-8260HLW,NI-TI,NJ-8260HLW,NJ-SPLPEXT-DATA,PREPP,PREPT,SPLP-NI-6020T-PPB,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1628990-05	4479-091416-1055	3	S0	14SEP16 10:55	1-EPlastic-C.120,2-EVial-A,2-Encore-25,3-Encore-5,1-Glass-A.25,1-Plastic-A-TS,1-

8260 total/SPLP: TCE only PREPP: Metals only Final 9/23 Package Due Date: 09/23/16

ENCORE,NI-TI,NJ-8260HLW,NJ-SPLP-8260,NJ-SPLP-VOA,NJ-SPLPZHEEXT-DATA,SPLP-EXT-ZHE,NJ-SPLPEXT-DATA,
PREPP,PREPT,SPLP-NI-6020T-PPB,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1628990-06	4479-091416-1130	3	S0	14SEP16 11:30	2-EVial-A,2-Encore-25,3-Encore-5,1-Plastic-A-TS,1-SVial-F,4-SVial-W

8260 total/SPLP: Chlorobenzene only Final 9/23 Package Due Date: 09/23/16

ENCORE,NJ-8260HLW,NJ-SPLP-8260,NJ-SPLP-VOA,NJ-SPLPZHEEXT-DATA,SPLP-EXT-ZHE,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1628990-07	4479-091416-1145	3	S0	14SEP16 11:45	2-EVial-A,2-Encore-25,3-Encore-5,1-Plastic-A-TS,1-SVial-F,4-SVial-W

8260: Chlorobenzene and TCE only 8260 SPLP: Chlorobenzene only Final 9/23 Package Due Date: 09/23/16

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Sep 27 2016, 03:02 pm

Login Number: L1628990
Account: HALEY-OH2 Haley & Aldrich, Inc.Project: 70613-814
Received: 14SEP16 Due Date: 23SEP16

Sample #	Client ID	Mat	PR	Collected	Container

ENCORE,NJ-8260HLW,NJ-SPLP-8260,NJ-SPLP-VOA,NJ-SPLPZHEEXT-DATA,SPLP-EXT-ZHE,TS

L1628990-08 4479-091416-1210 3 S0 14SEP16 12:10 2-EVial-A,2-Encore-25,3-Encore-5,1-Plastic-A-TS,1-SVial-F,4-SVial-W
8260 total/SPLP: Chlorobenzene only Final 9/23 Package Due Date: 09/23/16

ENCORE,NJ-8260HLW,NJ-SPLP-8260,NJ-SPLP-VOA,NJ-SPLPZHEEXT-DATA,SPLP-EXT-ZHE,TS

L1628990-09 4479-091416-1215 3 S0 14SEP16 12:15 2-EVial-A,2-Encore-25,3-Encore-5,1-Plastic-A-TS,1-SVial-F,4-SVial-W
8260 total/SPLP: Chlorobenzene only Final 9/23 Package Due Date: 09/23/16

ENCORE,NJ-8260HLW,NJ-SPLP-8260,NJ-SPLP-VOA,NJ-SPLPZHEEXT-DATA,SPLP-EXT-ZHE,TS

L1628990-10 4479-091416-1340 3 S0 14SEP16 13:40 2-EVial-A,2-Encore-25,3-Encore-5,1-Plastic-A-TS,1-SVial-F,4-SVial-W
8260 total/SPLP: Chlorobenzene only Final 9/23 Package Due Date: 09/23/16

ENCORE,NJ-8260HLW,NJ-SPLP-8260,NJ-SPLP-VOA,NJ-SPLPZHEEXT-DATA,SPLP-EXT-ZHE,TS

L1628990-11 4479-091416-1410 3 S0 14SEP16 14:10 2-Encore-25,3-Encore-5,1-Glass-A.25,1-Plastic-A-TS,1-SVial-F,4-SVial-W
8260: Chlorobenzene only Final 9/23 Package Due Date: 09/23/16

ENCORE,HOLD-8260HLW,HOLD-CONTINGENCY,NI-TI,NJ-8260HLW,PREPT,TS

L1628990-12 4479-091416-1420 3 S0 14SEP16 14:20 1-EPlastic-C.120,2-Encore-25,3-Encore-5,1-Glass-A.25,1-Plastic-A-TS,1-SVial-F,4-
8260: Chlorobenzene only PREPP: Metals only Final 9/23 Package Due Date: 09/23/16

ENCORE,HOLD-8260HLW,NI-TI,NJ-8260HLW,NJ-SPLPEXT-DATA,PREPP,PREPT,SPLP-NI-6020T-PPB,TS

L1628990-13 4479-091416-1500 3 S0 14SEP16 15:00 2-EVial-A,2-Encore-25,3-Encore-5,1-Plastic-A-TS,1-SVial-F,4-SVial-W
8260 total/SPLP: Chlorobenzene only Final 9/23 Package Due Date: 09/23/16

ENCORE,NJ-8260HLW,NJ-SPLP-8260,NJ-SPLP-VOA,NJ-SPLPZHEEXT-DATA,SPLP-EXT-ZHE,TS

Logged By: Kristen Simonis

ALPHA ANALYTICAL LABORATORIES
Container Tracking Report

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1628990-01A	SGlass-A.06	INTACT	15-SEP-16	CUSTODY	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET3-S3	A2-CUSTODY-MET3-S3	Rexford Bempong
L1628990-01A	SGlass-A.06	INTACT	15-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1628990-01A	SGlass-A.06	INTACT	15-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	Ryan Morrissey	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628990-01A	SGlass-A.06	INTACT	15-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Ryan Morrissey	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	S
L1628990-01A	SGlass-A.06	INTACT	15-SEP-16		CUSTODY	Ryan Morrissey	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Ryan Morrissey
L1628990-01A	SGlass-A.06	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-01B	Glass-A.25	INTACT	15-SEP-16	W2-S4-C CUSTODY	RETURN WALK-IN CUSTODY	Emily Keith	W21-S3-A CUSTODY	W21-S3-A CUSTODY	Emily Keith
L1628990-01B	Glass-A.25	INTACT	15-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628990-01B	Glass-A.25	INTACT	15-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1628990-01B	Glass-A.25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-02A	SGlass-A.06	INTACT	15-SEP-16	CUSTODY	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET3-S3	A2-CUSTODY-MET3-S3	Rexford Bempong
L1628990-02A	SGlass-A.06	INTACT	15-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1628990-02A	SGlass-A.06	INTACT	15-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	Ryan Morrissey	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628990-02A	SGlass-A.06	INTACT	15-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Ryan Morrissey	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	S
L1628990-02A	SGlass-A.06	INTACT	15-SEP-16		CUSTODY	Ryan Morrissey	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Ryan Morrissey
L1628990-02A	SGlass-A.06	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-02B	Glass-A.25	INTACT	20-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	W3-S4-D CUSTODY	W3-S4-D CUSTODY	Emily Keith
L1628990-02B	Glass-A.25	INTACT	20-SEP-16	ORGPREP	ORGPREP	Lily Boateng	CUSTODY	RETURN WALK-IN CUSTODY	Lily Boateng
L1628990-02B	Glass-A.25	INTACT	19-SEP-16	ORGPREP	W21-S3-A CUSTODY	Lily Boateng	ORGPREP	ORGPREP	Lily Boateng
L1628990-02B	Glass-A.25	INTACT	15-SEP-16	W2-S4-C CUSTODY	RETURN WALK-IN CUSTODY	Emily Keith	W21-S3-A CUSTODY	W21-S3-A CUSTODY	Emily Keith
L1628990-02B	Glass-A.25	INTACT	15-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628990-02B	Glass-A.25	INTACT	15-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1628990-02B	Glass-A.25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-02W	EPlastic-C.120	INTACT	22-SEP-16	CUSTODY	A2-CUSTODY	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1628990-02W	EPlastic-C.120	INTACT	21-SEP-16	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	A2-CUSTODY	A2-CUSTODY	John Figueroa

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628990-02W	EPlastic-C.120	INTACT	21-SEP-16	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSF	
L1628990-02W	EPlastic-C.120	INTACT	21-SEP-16		CUSTODY	Lily Boateng	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boate
L1628990-02W	EPlastic-C.120	INTACT	16-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-03A	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-03A	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-03A	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-03B	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-03B	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-03B	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-03C	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-03C	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-03C	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-03D	Encore-25	EMPTY	15-SEP-16		GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1628990-03D	Encore-25	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1628990-03D	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-03E	Encore-25	EMPTY	15-SEP-16		GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1628990-03E	Encore-25	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1628990-03E	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-03F	Plastic-A-TS	INTACT	16-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Fred Ababio
L1628990-03F	Plastic-A-TS	INTACT	15-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628990-03F	Plastic-A-TS	INTACT	15-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1628990-03F	Plastic-A-TS	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-03U	SVial-W	INTACT	15-SEP-16	GC	GC	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1628990-03U	SVial-W	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC	GC	Andrew Schult
L1628990-03U	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628990-03V	SVial-W	INTACT	15-SEP-16	GC	GC	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1628990-03V	SVial-W	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC	GC	Andrew Schult
L1628990-03V	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-03X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-03X	SVial-F	INTACT	15-SEP-16	GC/MS	VOA CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-03X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-03X	SVial-F	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-03X	SVial-F	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-03Y	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628990-03Y	SVial-W	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-03Y	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-03Z	SVial-W	BROKEN	15-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA DEAD FRIDGE	CUSTODY Kevin Deppel
L1628990-03Z	SVial-W	INTACT	15-SEP-16	GC/MS	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1628990-03Z	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628990-03Z	SVial-W	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-03Z	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-04A	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-04A	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-04A	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-04B	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-04B	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-04B	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-04C	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-04C	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-04C	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628990-04D	Encore-25	EMPTY	15-SEP-16		GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1628990-04D	Encore-25	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1628990-04D	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-04E	Encore-25	EMPTY	15-SEP-16		GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1628990-04E	Encore-25	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1628990-04E	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-04F	Plastic-A-TS	INTACT	15-SEP-16	CUSTODY	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET3-S3	A2-CUSTODY-MET3-S3	Rexford Bempong
L1628990-04F	Plastic-A-TS	INTACT	15-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1628990-04F	Plastic-A-TS	INTACT	15-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	Ryan Morrissey	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628990-04F	Plastic-A-TS	INTACT	15-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Ryan Morrissey	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	
L1628990-04F	Plastic-A-TS	INTACT	15-SEP-16		CUSTODY	Ryan Morrissey	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Ryan Morrisse
L1628990-04F	Plastic-A-TS	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-04G	Glass-A.25	INTACT	20-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	W3-S4-D CUSTODY	W3-S4-D CUSTODY	Emily Keith
L1628990-04G	Glass-A.25	INTACT	20-SEP-16	ORGPREP	ORGPREP	Lily Boateng	CUSTODY	RETURN WALK-IN CUSTODY	Lily Boateng
L1628990-04G	Glass-A.25	INTACT	19-SEP-16	ORGPREP	W21-S3-A CUSTODY	Lily Boateng	ORGPREP	ORGPREP	Lily Boateng
L1628990-04G	Glass-A.25	INTACT	15-SEP-16	W2-S4-C CUSTODY	RETURN WALK-IN CUSTODY	Emily Keith	W21-S3-A CUSTODY	W21-S3-A CUSTODY	Emily Keith
L1628990-04G	Glass-A.25	INTACT	15-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628990-04G	Glass-A.25	INTACT	15-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1628990-04G	Glass-A.25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-04U	SVial-W	INTACT	15-SEP-16	GC	GC	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1628990-04U	SVial-W	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC	GC	Andrew Schult
L1628990-04U	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-04V	SVial-W	INTACT	15-SEP-16	GC	GC	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1628990-04V	SVial-W	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC	GC	Andrew Schult
L1628990-04V	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628990-04W	EPlastic-C.120	INTACT	22-SEP-16	CUSTODY	A2-CUSTODY	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1628990-04W	EPlastic-C.120	INTACT	21-SEP-16	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	A2-CUSTODY	A2-CUSTODY	John Figueroa
L1628990-04W	EPlastic-C.120	INTACT	21-SEP-16	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSF	
L1628990-04W	EPlastic-C.120	INTACT	21-SEP-16		CUSTODY	Lily Boateng	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boater
L1628990-04W	EPlastic-C.120	INTACT	16-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-04X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA CUSTODY	Kevin Deppel
L1628990-04X	SVial-F	INTACT	15-SEP-16		VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1628990-04X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-04X	SVial-F	INTACT	15-SEP-16	GC/MS	VOA CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-04X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-04X	SVial-F	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-04X	SVial-F	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-04Y	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628990-04Y	SVial-W	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-04Y	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-04Z	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628990-04Z	SVial-W	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-04Z	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-05A	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-05A	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-05A	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-05B	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-05B	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-05B	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-05C	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628990-05C	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-05C	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-05D	Encore-25	EMPTY	15-SEP-16		GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1628990-05D	Encore-25	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1628990-05D	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-05E	Encore-25	EMPTY	15-SEP-16		GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1628990-05E	Encore-25	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1628990-05E	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-05F	Plastic-A-TS	INTACT	15-SEP-16	CUSTODY	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET3-S3	A2-CUSTODY-MET3-S3	Rexford Bempong
L1628990-05F	Plastic-A-TS	INTACT	15-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1628990-05F	Plastic-A-TS	INTACT	15-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	Ryan Morrissey	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628990-05F	Plastic-A-TS	INTACT	15-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Ryan Morrissey	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	
L1628990-05F	Plastic-A-TS	INTACT	15-SEP-16		CUSTODY	Ryan Morrissey	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Ryan Morrisse
L1628990-05F	Plastic-A-TS	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-05G	Glass-A.25	INTACT	20-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	W3-S4-D CUSTODY	W3-S4-D CUSTODY	Emily Keith
L1628990-05G	Glass-A.25	INTACT	20-SEP-16	ORGPREP	ORGPREP	Lily Boateng	CUSTODY	RETURN WALK-IN CUSTODY	Lily Boateng
L1628990-05G	Glass-A.25	INTACT	19-SEP-16	ORGPREP	W21-S3-A CUSTODY	Lily Boateng	ORGPREP	ORGPREP	Lily Boateng
L1628990-05G	Glass-A.25	INTACT	15-SEP-16	W2-S4-C CUSTODY	RETURN WALK-IN CUSTODY	Emily Keith	W21-S3-A CUSTODY	W21-S3-A CUSTODY	Emily Keith
L1628990-05G	Glass-A.25	INTACT	15-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628990-05G	Glass-A.25	INTACT	15-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1628990-05G	Glass-A.25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-05T	EVial-A	INTACT	24-SEP-16	GC/MS	GC/MS	Briana Dolbec	CUSTODY	VOA DEAD FRIDGE CUSTODY	Briana Dolbec
L1628990-05T	EVial-A	INTACT	24-SEP-16	CUSTODY	CUSTODY	Briana Dolbec	GC/MS	GC/MS	Briana Dolbec
L1628990-05T	EVial-A	INTACT	16-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-05U	SVial-W	INTACT	24-SEP-16	GC/MS	F-VOA CUSTODY	Briana Dolbec	CUSTODY	VOA DEAD FRIDGE CUSTODY	Briana Dolbec

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628990-05U	SVial-W	INTACT	15-SEP-16	GC	GC	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1628990-05U	SVial-W	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC	GC	Andrew Schult
L1628990-05U	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-05V	SVial-W	EMPTY	22-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA CUSTODY	Kevin Deppel
L1628990-05V	SVial-W	INTACT	22-SEP-16		F-VOA CUSTODY	Przemyslaw Kaczorows	GC/MS	GC/MS	Przemyslaw Kaczorows
L1628990-05V	SVial-W	INTACT	15-SEP-16	GC	GC	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1628990-05V	SVial-W	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC	GC	Andrew Schult
L1628990-05V	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-05W	EPlastic-C.120	INTACT	22-SEP-16	CUSTODY	A2-CUSTODY	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1628990-05W	EPlastic-C.120	INTACT	21-SEP-16	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	A2-CUSTODY	A2-CUSTODY	John Figueroa
L1628990-05W	EPlastic-C.120	INTACT	21-SEP-16	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSF	
L1628990-05W	EPlastic-C.120	INTACT	21-SEP-16		CUSTODY	Lily Boateng	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boater
L1628990-05W	EPlastic-C.120	INTACT	16-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-05X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA CUSTODY	Kevin Deppel
L1628990-05X	SVial-F	INTACT	15-SEP-16		VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1628990-05X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-05X	SVial-F	INTACT	15-SEP-16	GC/MS	VOA CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-05X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-05X	SVial-F	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-05X	SVial-F	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-05Y	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628990-05Y	SVial-W	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-05Y	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-05Z	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628990-05Z	SVial-W	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628990-05Z	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-06A	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-06A	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-06A	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-06B	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-06B	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-06B	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-06C	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-06C	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-06C	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-06D	Encore-25	EMPTY	15-SEP-16		GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1628990-06D	Encore-25	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1628990-06D	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-06E	Encore-25	EMPTY	15-SEP-16		GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1628990-06E	Encore-25	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1628990-06E	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-06F	Plastic-A-TS	INTACT	16-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Fred Ababio
L1628990-06F	Plastic-A-TS	INTACT	15-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628990-06F	Plastic-A-TS	INTACT	15-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1628990-06F	Plastic-A-TS	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-06U	SVial-W	EMPTY	22-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA CUSTODY	Kevin Deppel
L1628990-06U	SVial-W	INTACT	22-SEP-16		F-VOA CUSTODY	Przemyslaw Kaczorows	GC/MS	GC/MS	Przemyslaw Kaczorows
L1628990-06U	SVial-W	INTACT	15-SEP-16	GC	GC	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1628990-06U	SVial-W	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC	GC	Andrew Schult
L1628990-06U	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628990-06V	SVial-W	INTACT	15-SEP-16	GC	GC	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1628990-06V	SVial-W	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC	GC	Andrew Schult
L1628990-06V	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-06X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA CUSTODY	Kevin Deppel
L1628990-06X	SVial-F	INTACT	15-SEP-16		VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1628990-06X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-06X	SVial-F	INTACT	15-SEP-16	GC/MS	VOA CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-06X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-06X	SVial-F	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-06X	SVial-F	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-06Y	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628990-06Y	SVial-W	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-06Y	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-06Z	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628990-06Z	SVial-W	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-06Z	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-07A	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-07A	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-07A	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-07B	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-07B	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-07B	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-07C	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-07C	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-07C	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628990-07D	Encore-25	EMPTY	15-SEP-16		GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1628990-07D	Encore-25	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1628990-07D	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-07E	Encore-25	EMPTY	15-SEP-16		GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1628990-07E	Encore-25	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1628990-07E	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-07F	Plastic-A-TS	INTACT	16-SEP-16		RETURN WALK-IN	CUSTODY Fred Ababio	RETURN WALK-IN	CUSTODY	RETURN WALK-IN CUSTODY Fred Ababio
L1628990-07F	Plastic-A-TS	INTACT	15-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY		RETURN WALK-IN CUSTODY Vivian Boahen
L1628990-07F	Plastic-A-TS	INTACT	15-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1628990-07F	Plastic-A-TS	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-07T	EVial-A	INTACT	24-SEP-16	GC/MS	GC/MS	Briana Dolbec	CUSTODY	VOA DEAD FRIDGE	CUSTODY Briana Dolbec
L1628990-07T	EVial-A	INTACT	24-SEP-16	CUSTODY	CUSTODY	Briana Dolbec	GC/MS	GC/MS	Briana Dolbec
L1628990-07T	EVial-A	INTACT	16-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-07U	SVial-W	INTACT	24-SEP-16	GC/MS	F-VOA CUSTODY	Briana Dolbec	CUSTODY	VOA DEAD FRIDGE	CUSTODY Briana Dolbec
L1628990-07U	SVial-W	INTACT	15-SEP-16	GC	GC	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1628990-07U	SVial-W	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC	GC	Andrew Schult
L1628990-07U	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-07V	SVial-W	EMPTY	22-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA CUSTODY	Kevin Deppel
L1628990-07V	SVial-W	INTACT	22-SEP-16		F-VOA CUSTODY	Przemyslaw Kaczorows	GC/MS	GC/MS	Przemyslaw Kaczorows
L1628990-07V	SVial-W	INTACT	15-SEP-16	GC	GC	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1628990-07V	SVial-W	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC	GC	Andrew Schult
L1628990-07V	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-07X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA CUSTODY	Kevin Deppel
L1628990-07X	SVial-F	INTACT	15-SEP-16		VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1628990-07X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628990-07X	SVial-F	INTACT	15-SEP-16	GC/MS	VOA CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-07X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-07X	SVial-F	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-07X	SVial-F	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-07Y	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628990-07Y	SVial-W	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-07Y	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-07Z	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628990-07Z	SVial-W	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-07Z	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-08A	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-08A	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-08A	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-08B	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-08B	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-08B	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-08C	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-08C	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-08C	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-08D	Encore-25	EMPTY	15-SEP-16		GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1628990-08D	Encore-25	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1628990-08D	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-08E	Encore-25	EMPTY	15-SEP-16		GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1628990-08E	Encore-25	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1628990-08E	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628990-08F	Plastic-A-TS	INTACT	16-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Fred Ababio
L1628990-08F	Plastic-A-TS	INTACT	15-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628990-08F	Plastic-A-TS	INTACT	15-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1628990-08F	Plastic-A-TS	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-08T	EVial-A	INTACT	24-SEP-16	GC/MS	GC/MS	Briana Dolbec	CUSTODY	VOA DEAD FRIDGE	CUSTODY Briana Dolbec
L1628990-08T	EVial-A	INTACT	24-SEP-16	CUSTODY	CUSTODY	Briana Dolbec	GC/MS	GC/MS	Briana Dolbec
L1628990-08T	EVial-A	INTACT	16-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-08U	SVial-W	EMPTY	22-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA CUSTODY	Kevin Deppel
L1628990-08U	SVial-W	INTACT	22-SEP-16		F-VOA CUSTODY	Przemyslaw Kaczorows	GC/MS	GC/MS	Przemyslaw Kaczorows
L1628990-08U	SVial-W	INTACT	15-SEP-16	GC	GC	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1628990-08U	SVial-W	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC	GC	Andrew Schult
L1628990-08U	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-08V	SVial-W	INTACT	15-SEP-16	GC	GC	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1628990-08V	SVial-W	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC	GC	Andrew Schult
L1628990-08V	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-08X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA CUSTODY	Kevin Deppel
L1628990-08X	SVial-F	INTACT	15-SEP-16		VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1628990-08X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-08X	SVial-F	INTACT	15-SEP-16	GC/MS	VOA CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-08X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-08X	SVial-F	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-08X	SVial-F	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-08Y	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628990-08Y	SVial-W	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-08Y	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628990-08Z	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628990-08Z	SVial-W	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-08Z	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-09A	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-09A	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-09A	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-09B	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-09B	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-09B	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-09C	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-09C	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-09C	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-09D	Encore-25	EMPTY	15-SEP-16		GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1628990-09D	Encore-25	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1628990-09D	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-09E	Encore-25	EMPTY	15-SEP-16		GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1628990-09E	Encore-25	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1628990-09E	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-09F	Plastic-A-TS	INTACT	16-SEP-16		RETURN WALK-IN	CUSTODY Fred Ababio	RETURN WALK-IN	CUSTODY	RETURN WALK-IN CUSTODY Fred Ababio
L1628990-09F	Plastic-A-TS	INTACT	15-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN	CUSTODY	RETURN WALK-IN CUSTODY Vivian Boahen
L1628990-09F	Plastic-A-TS	INTACT	15-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1628990-09F	Plastic-A-TS	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-09T	EVial-A	INTACT	24-SEP-16	GC/MS	GC/MS	Briana Dolbec	CUSTODY	VOA DEAD FRIDGE	CUSTODY Briana Dolbec
L1628990-09T	EVial-A	INTACT	24-SEP-16	CUSTODY	CUSTODY	Briana Dolbec	GC/MS	GC/MS	Briana Dolbec
L1628990-09T	EVial-A	INTACT	16-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628990-09U	SVial-W	INTACT	24-SEP-16	GC/MS	GC/MS	Briana Dolbec	CUSTODY	VOA DEAD FRIDGE	CUSTODY Briana Dolbec
L1628990-09U	SVial-W	INTACT	24-SEP-16	CUSTODY	F-VOA CUSTODY	Briana Dolbec	GC/MS	GC/MS	Briana Dolbec
L1628990-09U	SVial-W	INTACT	15-SEP-16	GC	GC	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1628990-09U	SVial-W	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC	GC	Andrew Schult
L1628990-09U	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-09V	SVial-W	EMPTY	22-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA CUSTODY	Kevin Deppel
L1628990-09V	SVial-W	INTACT	22-SEP-16		F-VOA CUSTODY	Przemyslaw Kaczorows	GC/MS	GC/MS	Przemyslaw Kaczorows
L1628990-09V	SVial-W	INTACT	15-SEP-16	GC	GC	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1628990-09V	SVial-W	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC	GC	Andrew Schult
L1628990-09V	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-09X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA CUSTODY	Kevin Deppel
L1628990-09X	SVial-F	INTACT	15-SEP-16		VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1628990-09X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-09X	SVial-F	INTACT	15-SEP-16	GC/MS	VOA CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-09X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-09X	SVial-F	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-09X	SVial-F	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-09Y	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628990-09Y	SVial-W	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-09Y	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-09Z	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628990-09Z	SVial-W	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-09Z	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-10A	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-10A	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628990-10A	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-10B	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-10B	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-10B	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-10C	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-10C	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-10C	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-10D	Encore-25	EMPTY	15-SEP-16		GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1628990-10D	Encore-25	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1628990-10D	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-10E	Encore-25	EMPTY	15-SEP-16		GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1628990-10E	Encore-25	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1628990-10E	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-10F	Plastic-A-TS	INTACT	16-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Fred Ababio
L1628990-10F	Plastic-A-TS	INTACT	15-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628990-10F	Plastic-A-TS	INTACT	15-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1628990-10F	Plastic-A-TS	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-10T	EVial-A	INTACT	24-SEP-16	GC/MS	GC/MS	Briana Dolbec	CUSTODY	VOA DEAD FRIDGE	CUSTODY Briana Dolbec
L1628990-10T	EVial-A	INTACT	24-SEP-16	CUSTODY	CUSTODY	Briana Dolbec	GC/MS	GC/MS	Briana Dolbec
L1628990-10T	EVial-A	INTACT	16-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-10U	SVial-W	INTACT	24-SEP-16	GC/MS	GC/MS	Briana Dolbec	CUSTODY	VOA DEAD FRIDGE	CUSTODY Briana Dolbec
L1628990-10U	SVial-W	INTACT	24-SEP-16	CUSTODY	F-VOA CUSTODY	Briana Dolbec	GC/MS	GC/MS	Briana Dolbec
L1628990-10U	SVial-W	INTACT	15-SEP-16	GC	GC	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1628990-10U	SVial-W	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC	GC	Andrew Schult
L1628990-10U	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628990-10V	SVial-W	EMPTY	22-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA CUSTODY	Kevin Deppel
L1628990-10V	SVial-W	INTACT	22-SEP-16		F-VOA CUSTODY	Przemyslaw Kaczorows	GC/MS	GC/MS	Przemyslaw Kaczorows
L1628990-10V	SVial-W	INTACT	15-SEP-16	GC	GC	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1628990-10V	SVial-W	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC	GC	Andrew Schult
L1628990-10V	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-10X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA CUSTODY	Kevin Deppel
L1628990-10X	SVial-F	INTACT	15-SEP-16		VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1628990-10X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-10X	SVial-F	INTACT	15-SEP-16	GC/MS	VOA CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-10X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-10X	SVial-F	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-10X	SVial-F	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-10Y	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628990-10Y	SVial-W	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-10Y	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-10Z	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628990-10Z	SVial-W	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-10Z	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-11A	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-11A	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-11A	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-11B	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-11B	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-11B	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-11C	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628990-11C	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-11C	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-11D	Encore-25	EMPTY	15-SEP-16		GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1628990-11D	Encore-25	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1628990-11D	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-11E	Encore-25	EMPTY	15-SEP-16		GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1628990-11E	Encore-25	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1628990-11E	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-11F	Plastic-A-TS	INTACT	15-SEP-16	CUSTODY	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET3-S3	A2-CUSTODY-MET3-S3	Rexford Bempong
L1628990-11F	Plastic-A-TS	INTACT	15-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1628990-11F	Plastic-A-TS	INTACT	15-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	Ryan Morrissey	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628990-11F	Plastic-A-TS	INTACT	15-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Ryan Morrissey	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	
L1628990-11F	Plastic-A-TS	INTACT	15-SEP-16		CUSTODY	Ryan Morrissey	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Ryan Morrisse
L1628990-11F	Plastic-A-TS	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-11G	Glass-A.25	INTACT	15-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	W3-S2-D CUSTODY	W3-S2-D CUSTODY	Fred Ababio
L1628990-11G	Glass-A.25	INTACT	15-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628990-11G	Glass-A.25	INTACT	15-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1628990-11G	Glass-A.25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-11U	SVial-W	INTACT	15-SEP-16	GC	GC	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1628990-11U	SVial-W	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC	GC	Andrew Schult
L1628990-11U	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-11V	SVial-W	INTACT	15-SEP-16	GC	GC	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1628990-11V	SVial-W	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC	GC	Andrew Schult
L1628990-11V	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-11X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628990-11X	SVial-F	INTACT	15-SEP-16	GC/MS	VOA CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-11X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-11X	SVial-F	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-11X	SVial-F	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-11Y	SVial-W	BROKEN	15-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA DEAD FRIDGE	CUSTODY Kevin Deppel
L1628990-11Y	SVial-W	INTACT	15-SEP-16	GC/MS	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1628990-11Y	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628990-11Y	SVial-W	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-11Y	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-11Z	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA DEAD FRIDGE	CUSTODY Kevin Deppel
L1628990-11Z	SVial-W	INTACT	15-SEP-16	GC/MS	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1628990-11Z	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628990-11Z	SVial-W	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-11Z	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-12A	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-12A	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-12A	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-12B	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-12B	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-12B	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-12C	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-12C	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-12C	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-12D	Encore-25	EMPTY	15-SEP-16		GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1628990-12D	Encore-25	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628990-12D	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-12E	Encore-25	EMPTY	15-SEP-16		GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1628990-12E	Encore-25	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1628990-12E	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-12F	Plastic-A-TS	INTACT	15-SEP-16	CUSTODY	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET3-S3	A2-CUSTODY-MET3-S3	Rexford Bempong
L1628990-12F	Plastic-A-TS	INTACT	15-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1628990-12F	Plastic-A-TS	INTACT	15-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	Ryan Morrissey	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1628990-12F	Plastic-A-TS	INTACT	15-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Ryan Morrissey	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	
L1628990-12F	Plastic-A-TS	INTACT	15-SEP-16		CUSTODY	Ryan Morrissey	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Ryan Morrisse
L1628990-12F	Plastic-A-TS	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-12G	Glass-A.25	INTACT	20-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	W3-S4-D CUSTODY	W3-S4-D CUSTODY	Emily Keith
L1628990-12G	Glass-A.25	INTACT	20-SEP-16	ORGPREP	ORGPREP	Lily Boateng	CUSTODY	RETURN WALK-IN CUSTODY	Lily Boateng
L1628990-12G	Glass-A.25	INTACT	19-SEP-16	ORGPREP	W14-S4-B CUSTODY	Lily Boateng	ORGPREP	ORGPREP	Lily Boateng
L1628990-12G	Glass-A.25	INTACT	15-SEP-16		RETURN WALK-IN CUSTODY	Sam Bardsley	W14-S4-B CUSTODY	W14-S4-B CUSTODY	Sam Bardsley
L1628990-12G	Glass-A.25	INTACT	15-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628990-12G	Glass-A.25	INTACT	15-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1628990-12G	Glass-A.25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-12U	SVial-W	INTACT	15-SEP-16	GC	GC	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1628990-12U	SVial-W	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC	GC	Andrew Schult
L1628990-12U	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-12V	SVial-W	INTACT	15-SEP-16	GC	GC	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1628990-12V	SVial-W	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC	GC	Andrew Schult
L1628990-12V	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-12W	EPlastic-C.120	INTACT	22-SEP-16	CUSTODY	A2-CUSTODY	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1628990-12W	EPlastic-C.120	INTACT	21-SEP-16	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	A2-CUSTODY	A2-CUSTODY	John Figueroa

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628990-12W	EPlastic-C.120	INTACT	21-SEP-16	COOLER23-TRANSFER_TO_MANSFIELD		COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSF
L1628990-12W	EPlastic-C.120	INTACT	21-SEP-16		CUSTODY	Lily Boateng	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boater
L1628990-12W	EPlastic-C.120	INTACT	16-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-12X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-12X	SVial-F	INTACT	15-SEP-16	GC/MS	VOA CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-12X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-12X	SVial-F	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-12X	SVial-F	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-12Y	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA DEAD FRIDGE	CUSTODY Kevin Deppel
L1628990-12Y	SVial-W	INTACT	15-SEP-16	GC/MS	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1628990-12Y	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628990-12Y	SVial-W	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-12Y	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-12Z	SVial-W	BROKEN	15-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA DEAD FRIDGE	CUSTODY Kevin Deppel
L1628990-12Z	SVial-W	INTACT	15-SEP-16	GC/MS	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1628990-12Z	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628990-12Z	SVial-W	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-12Z	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-13A	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-13A	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-13A	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-13B	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-13B	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-13B	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-13C	Encore-5	EMPTY	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628990-13C	Encore-5	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-13C	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-13D	Encore-25	EMPTY	15-SEP-16		GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1628990-13D	Encore-25	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1628990-13D	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-13E	Encore-25	EMPTY	15-SEP-16		GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1628990-13E	Encore-25	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1628990-13E	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-13F	Plastic-A-TS	INTACT	16-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Fred Ababio
L1628990-13F	Plastic-A-TS	INTACT	15-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1628990-13F	Plastic-A-TS	INTACT	15-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1628990-13F	Plastic-A-TS	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-13T	EVial-A	INTACT	24-SEP-16	GC/MS	GC/MS	Briana Dolbec	CUSTODY	VOA DEAD FRIDGE	CUSTODY Briana Dolbec
L1628990-13T	EVial-A	INTACT	24-SEP-16	CUSTODY	CUSTODY	Briana Dolbec	GC/MS	GC/MS	Briana Dolbec
L1628990-13T	EVial-A	INTACT	16-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-13U	SVial-W	EMPTY	22-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA CUSTODY	Kevin Deppel
L1628990-13U	SVial-W	INTACT	22-SEP-16	GC/MS	F-VOA CUSTODY	Kevin Deppel	GC/MS	GC/MS	Kevin Deppel
L1628990-13U	SVial-W	INTACT	15-SEP-16	GC	GC	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1628990-13U	SVial-W	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC	GC	Andrew Schult
L1628990-13U	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-13V	SVial-W	INTACT	15-SEP-16	GC	GC	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1628990-13V	SVial-W	INTACT	15-SEP-16		CUSTODY	Andrew Schult	GC	GC	Andrew Schult
L1628990-13V	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-13X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Kevin Deppel	CUSTODY	VOA CUSTODY	Kevin Deppel
L1628990-13X	SVial-F	INTACT	15-SEP-16		VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1628990-13X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-13X	SVial-F	INTACT	15-SEP-16	GC/MS	VOA CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-13X	SVial-F	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1628990-13X	SVial-F	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-13X	SVial-F	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-13Y	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628990-13Y	SVial-W	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-13Y	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1628990-13Z	SVial-W	INTACT	15-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1628990-13Z	SVial-W	INTACT	15-SEP-16	GC/MS	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1628990-13Z	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis

Methodology Review

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Laboratory Chronicle

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: 15-SEP-16 16:49

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1628990-01A	Glass 60ml unpreserved split	A	N/A	2.5	Y	Absent	NI-TI(180)
L1628990-01B	Glass 250ml/8oz unpreserved	A	N/A	2.5	Y	Absent	HOLD-CONTINGENCY(14),TS(7)
L1628990-02A	Glass 60ml unpreserved split	A	N/A	2.5	Y	Absent	NI-TI(180)
L1628990-02B	Glass 250ml/8oz unpreserved	A	N/A	2.5	Y	Absent	TS(7)
L1628990-02W	Plastic 120ml HNO3 preserved Ext	A	<2	2.5	Y	Absent	SPLP-NI-6020T-PPB(180)
L1628990-02W9	Tumble Vessel	A	N/A	2.5	Y	Absent	-
L1628990-03A	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-03B	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-03C	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-03D	25 gram Encore Sampler	A	N/A	2.5	Y	Absent	HOLD-8260HLW(2)
L1628990-03E	25 gram Encore Sampler	A	N/A	2.5	Y	Absent	HOLD-8260HLW(2)
L1628990-03F	Plastic 2oz unpreserved for TS	A	N/A	2.5	Y	Absent	TS(7)
L1628990-03U	Vial Water preserved split	A	N/A	2.5	Y	Absent	HOLD-8260HLW(14)
L1628990-03V	Vial Water preserved split	A	N/A	2.5	Y	Absent	HOLD-8260HLW(14)
L1628990-03X	Vial MeOH preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-03Y	Vial Water preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-03Z	Vial Water preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-04A	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-04B	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-04C	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-04D	25 gram Encore Sampler	A	N/A	2.5	Y	Absent	HOLD-8260HLW(2)
L1628990-04E	25 gram Encore Sampler	A	N/A	2.5	Y	Absent	HOLD-8260HLW(2)
L1628990-04F	Plastic 2oz unpreserved for TS	A	N/A	2.5	Y	Absent	NI-TI(180)
L1628990-04G	Glass 250ml/8oz unpreserved	A	N/A	2.5	Y	Absent	TS(7)
L1628990-04U	Vial Water preserved split	A	N/A	2.5	Y	Absent	HOLD-8260HLW(14)
L1628990-04V	Vial Water preserved split	A	N/A	2.5	Y	Absent	HOLD-8260HLW(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1628990-04W	Plastic 120ml HNO3 preserved Ext	A	<2	2.5	Y	Absent	SPLP-NI-6020T-PPB(180)
L1628990-04W9	Tumble Vessel	A	N/A	2.5	Y	Absent	-
L1628990-04X	Vial MeOH preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-04Y	Vial Water preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-04Z	Vial Water preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-05A	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-05B	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-05C	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-05D	25 gram Encore Sampler	A	N/A	2.5	Y	Absent	SPLP-EXT-ZHE(14)
L1628990-05E	25 gram Encore Sampler	A	N/A	2.5	Y	Absent	SPLP-EXT-ZHE(14)
L1628990-05F	Plastic 2oz unpreserved for TS	A	N/A	2.5	Y	Absent	NI-TI(180)
L1628990-05G	Glass 250ml/8oz unpreserved	A	N/A	2.5	Y	Absent	TS(7)
L1628990-05S	Vial unpreserved Extracts	A	N/A	2.5	Y	Absent	NJ-SPLP-VOA(14)
L1628990-05T	Vial unpreserved Extracts	A	N/A	2.5	Y	Absent	NJ-SPLP-VOA(14)
L1628990-05U	Vial Water preserved split	A	N/A	2.5	Y	Absent	SPLP-EXT-ZHE(14)
L1628990-05V	Vial Water preserved split	A	N/A	2.5	Y	Absent	SPLP-EXT-ZHE(14)
L1628990-05W	Plastic 120ml HNO3 preserved Ext	A	<2	2.5	Y	Absent	SPLP-NI-6020T-PPB(180)
L1628990-05W9	Tumble Vessel	A	N/A	2.5	Y	Absent	-
L1628990-05X	Vial MeOH preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-05Y	Vial Water preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-05Z	Vial Water preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-06A	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-06B	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-06C	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-06D	25 gram Encore Sampler	A	N/A	2.5	Y	Absent	SPLP-EXT-ZHE(14)
L1628990-06E	25 gram Encore Sampler	A	N/A	2.5	Y	Absent	SPLP-EXT-ZHE(14)
L1628990-06F	Plastic 2oz unpreserved for TS	A	N/A	2.5	Y	Absent	TS(7)
L1628990-06S	Vial unpreserved Extracts	A	N/A	2.5	Y	Absent	NJ-SPLP-VOA(14)
L1628990-06T	Vial unpreserved Extracts	A	N/A	2.5	Y	Absent	NJ-SPLP-VOA(14)
L1628990-06U	Vial Water preserved split	A	N/A	2.5	Y	Absent	SPLP-EXT-ZHE(14)
L1628990-06V	Vial Water preserved split	A	N/A	2.5	Y	Absent	SPLP-EXT-ZHE(14)
L1628990-06X	Vial MeOH preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-06Y	Vial Water preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-06Z	Vial Water preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-07A	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-07B	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1628990-07C	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-07D	25 gram Encore Sampler	A	N/A	2.5	Y	Absent	SPLP-EXT-ZHE(14)
L1628990-07E	25 gram Encore Sampler	A	N/A	2.5	Y	Absent	SPLP-EXT-ZHE(14)
L1628990-07F	Plastic 2oz unpreserved for TS	A	N/A	2.5	Y	Absent	TS(7)
L1628990-07S	Vial unpreserved Extracts	A	N/A	2.5	Y	Absent	NJ-SPLP-VOA(14)
L1628990-07T	Vial unpreserved Extracts	A	N/A	2.5	Y	Absent	NJ-SPLP-VOA(14)
L1628990-07U	Vial Water preserved split	A	N/A	2.5	Y	Absent	SPLP-EXT-ZHE(14)
L1628990-07V	Vial Water preserved split	A	N/A	2.5	Y	Absent	SPLP-EXT-ZHE(14)
L1628990-07X	Vial MeOH preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-07Y	Vial Water preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-07Z	Vial Water preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-08A	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-08B	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-08C	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-08D	25 gram Encore Sampler	A	N/A	2.5	Y	Absent	SPLP-EXT-ZHE(14)
L1628990-08E	25 gram Encore Sampler	A	N/A	2.5	Y	Absent	SPLP-EXT-ZHE(14)
L1628990-08F	Plastic 2oz unpreserved for TS	A	N/A	2.5	Y	Absent	TS(7)
L1628990-08S	Vial unpreserved Extracts	A	N/A	2.5	Y	Absent	NJ-SPLP-VOA(14)
L1628990-08T	Vial unpreserved Extracts	A	N/A	2.5	Y	Absent	NJ-SPLP-VOA(14)
L1628990-08U	Vial Water preserved split	A	N/A	2.5	Y	Absent	SPLP-EXT-ZHE(14)
L1628990-08V	Vial Water preserved split	A	N/A	2.5	Y	Absent	SPLP-EXT-ZHE(14)
L1628990-08X	Vial MeOH preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-08Y	Vial Water preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-08Z	Vial Water preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-09A	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-09B	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-09C	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-09D	25 gram Encore Sampler	A	N/A	2.5	Y	Absent	SPLP-EXT-ZHE(14)
L1628990-09E	25 gram Encore Sampler	A	N/A	2.5	Y	Absent	SPLP-EXT-ZHE(14)
L1628990-09F	Plastic 2oz unpreserved for TS	A	N/A	2.5	Y	Absent	TS(7)
L1628990-09S	Vial unpreserved Extracts	A	N/A	2.5	Y	Absent	NJ-SPLP-VOA(14)
L1628990-09T	Vial unpreserved Extracts	A	N/A	2.5	Y	Absent	NJ-SPLP-VOA(14)
L1628990-09U	Vial Water preserved split	A	N/A	2.5	Y	Absent	SPLP-EXT-ZHE(14)
L1628990-09V	Vial Water preserved split	A	N/A	2.5	Y	Absent	SPLP-EXT-ZHE(14)
L1628990-09X	Vial MeOH preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-09Y	Vial Water preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1628990-09Z	Vial Water preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-10A	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-10B	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-10C	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-10D	25 gram Encore Sampler	A	N/A	2.5	Y	Absent	SPLP-EXT-ZHE(14)
L1628990-10E	25 gram Encore Sampler	A	N/A	2.5	Y	Absent	SPLP-EXT-ZHE(14)
L1628990-10F	Plastic 2oz unpreserved for TS	A	N/A	2.5	Y	Absent	TS(7)
L1628990-10S	Vial unpreserved Extracts	A	N/A	2.5	Y	Absent	NJ-SPLP-VOA(14)
L1628990-10T	Vial unpreserved Extracts	A	N/A	2.5	Y	Absent	NJ-SPLP-VOA(14)
L1628990-10U	Vial Water preserved split	A	N/A	2.5	Y	Absent	SPLP-EXT-ZHE(14)
L1628990-10V	Vial Water preserved split	A	N/A	2.5	Y	Absent	SPLP-EXT-ZHE(14)
L1628990-10X	Vial MeOH preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-10Y	Vial Water preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-10Z	Vial Water preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-11A	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-11B	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-11C	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-11D	25 gram Encore Sampler	A	N/A	2.5	Y	Absent	HOLD-8260HLW(2)
L1628990-11E	25 gram Encore Sampler	A	N/A	2.5	Y	Absent	HOLD-8260HLW(2)
L1628990-11F	Plastic 2oz unpreserved for TS	A	N/A	2.5	Y	Absent	NI-TI(180)
L1628990-11G	Glass 250ml/8oz unpreserved	A	N/A	2.5	Y	Absent	HOLD-CONTINGENCY(14),TS(7)
L1628990-11U	Vial Water preserved split	A	N/A	2.5	Y	Absent	HOLD-8260HLW(14)
L1628990-11V	Vial Water preserved split	A	N/A	2.5	Y	Absent	HOLD-8260HLW(14)
L1628990-11X	Vial MeOH preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-11Y	Vial Water preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-11Z	Vial Water preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-12A	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-12B	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-12C	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-12D	25 gram Encore Sampler	A	N/A	2.5	Y	Absent	HOLD-8260HLW(2)
L1628990-12E	25 gram Encore Sampler	A	N/A	2.5	Y	Absent	HOLD-8260HLW(2)
L1628990-12F	Plastic 2oz unpreserved for TS	A	N/A	2.5	Y	Absent	NI-TI(180)
L1628990-12G	Glass 250ml/8oz unpreserved	A	N/A	2.5	Y	Absent	TS(7)
L1628990-12U	Vial Water preserved split	A	N/A	2.5	Y	Absent	HOLD-8260HLW(14)
L1628990-12V	Vial Water preserved split	A	N/A	2.5	Y	Absent	HOLD-8260HLW(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1628990-12W	Plastic 120ml HNO3 preserved Ext	A	<2	2.5	Y	Absent	SPLP-NI-6020T-PPB(180)
L1628990-12W9	Tumble Vessel	A	N/A	2.5	Y	Absent	-
L1628990-12X	Vial MeOH preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-12Y	Vial Water preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-12Z	Vial Water preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-13A	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-13B	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-13C	5 gram Encore Sampler	A	N/A	2.5	Y	Absent	NJ-8260HLW(2)
L1628990-13D	25 gram Encore Sampler	A	N/A	2.5	Y	Absent	-
L1628990-13E	25 gram Encore Sampler	A	N/A	2.5	Y	Absent	-
L1628990-13F	Plastic 2oz unpreserved for TS	A	N/A	2.5	Y	Absent	TS(7)
L1628990-13S	Vial unpreserved Extracts	A	N/A	2.5	Y	Absent	NJ-SPLP-VOA(14)
L1628990-13T	Vial unpreserved Extracts	A	N/A	2.5	Y	Absent	NJ-SPLP-VOA(14)
L1628990-13U	Vial Water preserved split	A	N/A	2.5	Y	Absent	NJ-SPLP-VOA(14)
L1628990-13V	Vial Water preserved split	A	N/A	2.5	Y	Absent	NJ-SPLP-VOA(14)
L1628990-13X	Vial MeOH preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-13Y	Vial Water preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)
L1628990-13Z	Vial Water preserved split	A	N/A	2.5	Y	Absent	NJ-8260HLW(14)

*Values in parentheses indicate holding time in days

NJ DEP
Data of Known Quality Protocols
Conformance/Non-Conformance
Summary Questionnaire

NJ DEP Data of Known Quality Protocols
Conformance/Non-Conformance
Summary Questionnaire

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	YES
1a	Were the method specified handling, preservation, and holding time requirements met?	YES
1b	EPH Method: Was the EPH Method conducted without significant modifications (see Section 11.3 of respective DKQ methods)?	N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	YES
3	Were all samples received at an appropriate temperature (4 ± 2° C)?	YES
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	NO
5a	Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	YES
5b	Were these reporting limits met?	NO
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	NO
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	YES

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1a or #1b is "No", the data package does not meet the requirements for "Data of Known Quality".

Conformance/Non-Conformance Summary

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Case Narrative (continued)

Report Submission

This final report replaces the partial report issued September 16, 2016. At the client's request, the following analyses were performed:

SPLP Metals, Nickel only: L1628990-02 (4479-091416-0850), -04 (4479-091416-1000), -05 (4479-091416-1055), and -12 (4479-091416-1420);

SPLP Volatiles, Trichloroethene only: L1628990-05 (4479-091416-1055); and

SPLP Volatiles, Chlorobenzene only: L1628990-06 (4479-091416-1130), -07 (4479-091416-1145), -08 (4479-091416-1210), -09 (4479-091416-1215), -10 (4479-091416-1340), and -13 (4479-091416-1500).

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

DKQP Related Narratives

Volatile Organics

L1628990-04 through -10, and -13 (all samples except 4479-091416-0920, 4479-091416-1410, 4479-091416-1420): The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

In reference to question 5b:

L1628990-04 (4479-091416-1000) and -07 (4479-091416-1145): One or more of the target analytes did not achieve the requested regulatory limits.

In reference to question 4:

WG932329-7: One or more compounds failed to meet the DKQP recovery and/or RPD limits. Please refer to the QC section of the report for specific details.

In reference to question 6:

At the client's request, all submitted samples were not analyzed for the full DKQP list of constituents identified in the method specific analyte list presented in the DKQP documents.

SPLP Volatiles

Case Narrative (continued)

In reference to question 6:
At the client's request, all submitted samples were not analyzed for the full DKQP list of constituents identified in the method specific analyte list presented in the DKQP documents.

Total Metals
In reference to question 6:
At the client's request, all submitted samples were not analyzed for the full DKQP list of constituents identified in the method specific analyte list presented in the DKQP documents.

SPLP Metals
In reference to question 6:
At the client's request, all submitted samples were not analyzed for the full DKQP list of constituents identified in the method specific analyte list presented in the DKQP documents.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Melissa Cripps Melissa Cripps Report Date: 09/27/16

Title: Technical Director/Representative

Glossary

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the

Data Qualifiers

reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

SPLP Extraction Data

SPLP Extraction Data
Volatile Organics

Form 1
Volatile Organics

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1628990-05	Date Collected	: 09/14/16 10:55
Client ID	: 4479-091416-1055	Date Received	: 09/14/16
Sample Location	: EWING, NJ	Date Analyzed	:
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,1312	Analyst	: MS
Lab File ID	:	Instrument ID	:
Sample Amount	: 0.0	GC Column	:
Level	: LOW	%Solids	: 80
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Sample Weight	0.025	-	NA	
NONE	Leachate Volume	0.500	-	NA	
NONE	pH, Extraction Post-Filtration	8.11	-	NA	

Form 1
Volatile Organics

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-06	**Date Collected**	: 09/14/16 11:30
Client ID	: 4479-091416-1130	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	:
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: MS
Lab File ID	:	**Instrument ID**	:
Sample Amount	: 0.0	**GC Column**	:
Level	: LOW	**%Solids**	: 63
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

			kg		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Sample Weight	0.025	-	NA	
NONE	Leachate Volume	0.500	-	NA	
NONE	pH, Extraction Post-Filtration	8.11	-	NA	

Form 1
Volatile Organics

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-07	**Date Collected**	: 09/14/16 11:45
Client ID	: 4479-091416-1145	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	:
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: MS
Lab File ID	:	**Instrument ID**	:
Sample Amount	: 0.0	**GC Column**	:
Level	: LOW	**%Solids**	: 62
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Sample Weight	0.025	-	NA	
NONE	Leachate Volume	0.500	-	NA	
NONE	pH, Extraction Post-Filtration	7.63	-	NA	

Form 1
Volatile Organics

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-08	**Date Collected**	: 09/14/16 12:10
Client ID	: 4479-091416-1210	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	:
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: MS
Lab File ID	:	**Instrument ID**	:
Sample Amount	: 0.0	**GC Column**	:
Level	: LOW	**%Solids**	: 71
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

			kg		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Sample Weight	0.025	-	NA	
NONE	Leachate Volume	0.500	-	NA	
NONE	pH, Extraction Post-Filtration	8.17	-	NA	

Form 1
Volatile Organics

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1628990-09	Date Collected	: 09/14/16 12:15
Client ID	: 4479-091416-1215	Date Received	: 09/14/16
Sample Location	: EWING, NJ	Date Analyzed	:
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,1312	Analyst	: MS
Lab File ID	:	Instrument ID	:
Sample Amount	: 0.0	GC Column	:
Level	: LOW	%Solids	: 66
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Sample Weight	0.025	-	NA	
NONE	Leachate Volume	0.500	-	NA	
NONE	pH, Extraction Post-Filtration	7.38	-	NA	

Form 1
Volatile Organics

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-10	**Date Collected**	: 09/14/16 13:40
Client ID	: 4479-091416-1340	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	:
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: MS
Lab File ID	:	**Instrument ID**	:
Sample Amount	: 0.0	**GC Column**	:
Level	: LOW	**%Solids**	: 65
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Sample Weight	0.025	-	NA	
NONE	Leachate Volume	0.500	-	NA	
NONE	pH, Extraction Post-Filtration	7.95	-	NA	

Form 1
Volatile Organics

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-13	**Date Collected**	: 09/14/16 15:00
Client ID	: 4479-091416-1500	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	:
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: MS
Lab File ID	:	**Instrument ID**	:
Sample Amount	: 0.0	**GC Column**	:
Level	: LOW	**%Solids**	: 70
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Sample Weight	0.025	-	NA	
NONE	Leachate Volume	0.500	-	NA	
NONE	pH, Extraction Post-Filtration	7.34	-	NA	

SPLP Extraction Data
Non- Volatiles

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-02	**Date Collected**	: 09/14/16 08:50
Client ID	: 4479-091416-0850	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/20/16 16:13
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: LB
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 86

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	9.94	-	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-04	**Date Collected**	: 09/14/16 10:00
Client ID	: 4479-091416-1000	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/20/16 16:13
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: LB
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 78

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	7.27	-	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-05	**Date Collected**	: 09/14/16 10:55
Client ID	: 4479-091416-1055	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/20/16 16:13
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: LB
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 80

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	9.03	-	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-12	**Date Collected**	: 09/14/16 14:20
Client ID	: 4479-091416-1420	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/20/16 16:13
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: LB
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 79

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	9.82	-	NA	

Organics

GC/MS 8260
Analysis

Sample Results Summary

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-03	**Date Collected**	: 09/14/16 09:20
Client ID	: 4479-091416-0920	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 17:57
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: V00160915A18	**Instrument ID**	: VOA100
Sample Amount	: 4.4 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 93
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	0.0020	0.0012	0.00043	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1628990-04D	Date Collected	: 09/14/16 10:00
Client ID	: 4479-091416-1000	Date Received	: 09/14/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/15/16 16:46
Sample Matrix	: SOIL	Dilution Factor	: 100
Analytical Method	: 1,8260C	Analyst	: MS
Lab File ID	: V10160915A16	Instrument ID	: VOA110
Sample Amount	:	GC Column	: RTX-VMS
Level	: HIGH	%Solids	: 78
Extract Volume (MeOH)	: NA	Injection Volume	: 0.001 ml

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
108-90-7	Chlorobenzene	ND	8.5	3.0	U

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-05	**Date Collected**	: 09/14/16 10:55
Client ID	: 4479-091416-1055	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/23/16 17:46
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: PK
Lab File ID	: VJ160923P12	**Instrument ID**	: JACK
Sample Amount	: 10.0 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: 80
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
79-01-6	Trichloroethene	1.1	0.50	0.11	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-05D	**Date Collected**	: 09/14/16 10:55
Client ID	: 4479-091416-1055	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 17:11
Sample Matrix	: SOIL	**Dilution Factor**	: 2
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: V10160915A17	**Instrument ID**	: VOA110
Sample Amount	:	**GC Column**	: RTX-VMS
Level	: HIGH	**%Solids**	: 80
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.05 ml

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
79-01-6	Trichloroethene	0.13	0.16	0.020	J

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-06	**Date Collected**	: 09/14/16 11:30
Client ID	: 4479-091416-1130	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/23/16 18:19
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: PK
Lab File ID	: VJ160923P14	**Instrument ID**	: JACK
Sample Amount	: 10.0 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: 63
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	180	0.50	0.07	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-06D	**Date Collected**	: 09/14/16 11:30
Client ID	: 4479-091416-1130	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 17:37
Sample Matrix	: SOIL	**Dilution Factor**	: 100
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: V10160915A18	**Instrument ID**	: VOA110
Sample Amount	:	**GC Column**	: RTX-VMS
Level	: HIGH	**%Solids**	: 63
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.001 ml

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	22.	12	4.3	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1628990-07	Date Collected	: 09/14/16 11:45
Client ID	: 4479-091416-1145	Date Received	: 09/14/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/23/16 19:59
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: PK
Lab File ID	: VJ160923P20	Instrument ID	: JACK
Sample Amount	: 10.0 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: 62
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
108-90-7	Chlorobenzene	58	0.50	0.07	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-07D	**Date Collected**	: 09/14/16 11:45
Client ID	: 4479-091416-1145	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 18:02
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: V10160915A19	**Instrument ID**	: VOA110
Sample Amount	:	**GC Column**	: RTX-VMS
Level	: HIGH	**%Solids**	: 62
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.01 ml

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	6.9	1.5	0.52	
79-01-6	Trichloroethene	ND	1.5	0.19	U

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-08D	**Date Collected**	: 09/14/16 12:10
Client ID	: 4479-091416-1210	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 18:28
Sample Matrix	: SOIL	**Dilution Factor**	: 50
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: V10160915A20	**Instrument ID**	: VOA110
Sample Amount	:	**GC Column**	: RTX-VMS
Level	: HIGH	**%Solids**	: 71
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.002 ml

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	20.	6.2	2.1	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-08D	**Date Collected**	: 09/14/16 12:10
Client ID	: 4479-091416-1210	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/23/16 18:52
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,8260C	**Analyst**	: PK
Lab File ID	: VJ160923P16	**Instrument ID**	: JACK
Sample Amount	: 1.0 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: 71
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	460	5.0	0.70	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-09D	**Date Collected**	: 09/14/16 12:15
Client ID	: 4479-091416-1215	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/23/16 19:25
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,8260C	**Analyst**	: PK
Lab File ID	: VJ160923P18	**Instrument ID**	: JACK
Sample Amount	: 1.0 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: 66
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	130	5.0	0.70	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-09D	**Date Collected**	: 09/14/16 12:15
Client ID	: 4479-091416-1215	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 18:53
Sample Matrix	: SOIL	**Dilution Factor**	: 25
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: V10160915A21	**Instrument ID**	: VOA110
Sample Amount	:	**GC Column**	: RTX-VMS
Level	: HIGH	**%Solids**	: 66
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.004 ml

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	24.	3.5	1.2	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-10D	**Date Collected**	: 09/14/16 13:40
Client ID	: 4479-091416-1340	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 19:19
Sample Matrix	: SOIL	**Dilution Factor**	: 100
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: V10160915A22	**Instrument ID**	: VOA110
Sample Amount	:	**GC Column**	: RTX-VMS
Level	: HIGH	**%Solids**	: 65
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.001 ml

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	22.	14	4.8	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-10D	**Date Collected**	: 09/14/16 13:40
Client ID	: 4479-091416-1340	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/23/16 20:32
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,8260C	**Analyst**	: PK
Lab File ID	: VJ160923P22	**Instrument ID**	: JACK
Sample Amount	: 1.0 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: 65
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	270	5.0	0.70	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-11	**Date Collected**	: 09/14/16 14:10
Client ID	: 4479-091416-1410	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 18:23
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: V00160915A19	**Instrument ID**	: VOA100
Sample Amount	: 4.2 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 84
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	0.084	0.0014	0.00049	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-12	**Date Collected**	: 09/14/16 14:20
Client ID	: 4479-091416-1420	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 19:17
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: V00160915A21	**Instrument ID**	: VOA100
Sample Amount	: 3.6 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 79
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	0.0061	0.0018	0.00061	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-13D	**Date Collected**	: 09/14/16 15:00
Client ID	: 4479-091416-1500	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/23/16 21:05
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,8260C	**Analyst**	: PK
Lab File ID	: VJ160923P24	**Instrument ID**	: JACK
Sample Amount	: 1.0 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: 70
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	28	5.0	0.70	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-13D	**Date Collected**	: 09/14/16 15:00
Client ID	: 4479-091416-1500	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 19:44
Sample Matrix	: SOIL	**Dilution Factor**	: 50
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: V10160915A23	**Instrument ID**	: VOA110
Sample Amount	:	**GC Column**	: RTX-VMS
Level	: HIGH	**%Solids**	: 70
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.002 ml

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	5.7	5.0	1.7	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: WG932329-5	**Date Collected**	: NA
Client ID	: WG932329-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/15/16 11:44
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: JC
Lab File ID	: V00160915A04	**Instrument ID**	: VOA100
Sample Amount	: 5.0 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: NA
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	ND	0.0010	0.00035	U

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: WG932471-5	**Date Collected**	: NA
Client ID	: WG932471-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/15/16 12:04
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MV
Lab File ID	: V10160915A05	**Instrument ID**	: VOA110
Sample Amount	:	**GC Column**	: RTX-VMS
Level	: HIGH	**%Solids**	: NA
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.1 ml

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	ND	0.050	0.017	U
79-01-6	Trichloroethene	ND	0.050	0.0062	U

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: WG935468-5	**Date Collected**	: NA
Client ID	: WG935468-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/23/16 17:12
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: PK
Lab File ID	: VJ160923P10	**Instrument ID**	: JACK
Sample Amount	: 10.0 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: NA
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	ND	0.50	0.07	U
79-01-6	Trichloroethene	0.28	0.50	0.11	J

Tuning Results Summary

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: VOA100	**Analysis Date**	: 08/29/16 19:02
Tune Standard	: WG927151-1	**Tune File ID**	: V00160829NBF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	19.6
75	30.0 - 60.0% of mass 95	49
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	1.1 (1.1)1
174	Greater than 50.0 of mass 95	99.6
175	5.0 - 9.0% of mass 174	7.3 (7.3)1
176	95.0 - 101% of mass 174	95.9 (96.3)1
177	5.0 - 9.0% of mass 176	6.4 (6.7)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STDL1	R895883-1	V00160829N03	08/29/16 20:22
STDL2	R895883-2	V00160829N04	08/29/16 20:48
STDL3	R895883-3	V00160829N05	08/29/16 21:15
STDL4	R895883-4	V00160829N06	08/29/16 21:42
STDL5	R895883-5	V00160829N07	08/29/16 22:09
STDL6	R895883-6	V00160829N08	08/29/16 22:35
STDL7	R895883-7	V00160829N09	08/29/16 23:02
STDL8	R895883-8	V00160829N10	08/29/16 23:29
ICV Quant Report	R895883-9	V00160829N13	08/30/16 00:49

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: VOA100	**Analysis Date**	: 09/15/16 09:54
Tune Standard	: WG932329-1	**Tune File ID**	: V00160915BF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	21.4
75	30.0 - 60.0% of mass 95	48.5
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.5 (.5)1
174	Greater than 50.0 of mass 95	86.2
175	5.0 - 9.0% of mass 174	6.9 (8)1
176	95.0 - 101% of mass 174	83.4 (96.7)1
177	5.0 - 9.0% of mass 176	5.5 (6.6)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG932329-2CCAL	WG932329-2	V00160915A01	09/15/16 10:24
WG932329-3LCS	WG932329-3	V00160915A01	09/15/16 10:24
WG932329-4LCSD	WG932329-4	V00160915A02	09/15/16 10:51
WG932329-5BLANK	WG932329-5	V00160915A04	09/15/16 11:44
4479-091416-0920	L1628990-03	V00160915A18	09/15/16 17:57
4479-091416-1410	L1628990-11	V00160915A19	09/15/16 18:23
4479-091416-1420	L1628990-12	V00160915A21	09/15/16 19:17

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: VOA110	**Analysis Date**	: 08/19/16 08:55
Tune Standard	: WG924321-1	**Tune File ID**	: V10160819BF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	19.4
75	30.0 - 60.0% of mass 95	53.4
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0 (0)1
174	Greater than 50.0 of mass 95	70.3
175	5.0 - 9.0% of mass 174	5.5 (7.8)1
176	95.0 - 101% of mass 174	68.5 (97.3)1
177	5.0 - 9.0% of mass 176	4.5 (6.6)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STDIPAL1	R893395-1	V10160819A01	08/19/16 09:16
STDIPAL2	R893395-2	V10160819A02	08/19/16 09:41
STDIPAL3	R893395-3	V10160819A03	08/19/16 10:08
STDIPAL4	R893395-4	V10160819A04	08/19/16 10:34
STDIPAL5	R893395-5	V10160819A05	08/19/16 11:02
STDIPAL6	R893395-6	V10160819A06	08/19/16 11:28
STDIPAL7	R893395-7	V10160819A07	08/19/16 11:54
STDIPAL8	R893395-8	V10160819A08	08/19/16 12:21
ICV Quant Report	R893395-9	V10160819A11	08/19/16 13:39

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Instrument ID	: VOA110	Analysis Date	: 09/15/16 09:54
Tune Standard	: WG932471-1	Tune File ID	: V10160915BF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	21.2
75	30.0 - 60.0% of mass 95	51.8
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.2 (.3)1
174	Greater than 50.0 of mass 95	76.8
175	5.0 - 9.0% of mass 174	5.7 (7.4)1
176	95.0 - 101% of mass 174	73.8 (96.1)1
177	5.0 - 9.0% of mass 176	4.9 (6.7)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG932471-2CCAL	WG932471-2	V10160915A01	09/15/16 10:22
WG932471-3LCS	WG932471-3	V10160915A01	09/15/16 10:22
WG932471-4LCSD	WG932471-4	V10160915A02	09/15/16 10:47
WG932471-5BLANK	WG932471-5	V10160915A05	09/15/16 12:04
4479-091416-1000	L1628990-04D	V10160915A16	09/15/16 16:46
4479-091416-1055	L1628990-05D	V10160915A17	09/15/16 17:11
4479-091416-1130	L1628990-06D	V10160915A18	09/15/16 17:37
4479-091416-1145	L1628990-07D	V10160915A19	09/15/16 18:02
4479-091416-1210	L1628990-08D	V10160915A20	09/15/16 18:28
4479-091416-1215	L1628990-09D	V10160915A21	09/15/16 18:53
4479-091416-1340	L1628990-10D	V10160915A22	09/15/16 19:19
4479-091416-1500	L1628990-13D	V10160915A23	09/15/16 19:44

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Instrument ID	: JACK	Analysis Date	: 09/08/16 07:26
Tune Standard	: WG930839-1	Tune File ID	: VJ160908BF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	16
75	30.0 - 60.0% of mass 95	46.4
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.1
173	Less than 2.0% of mass 174	0.5 (.6)1
174	Greater than 50.0 of mass 95	87.5
175	5.0 - 9.0% of mass 174	4.5 (5.1)1
176	95.0 - 101% of mass 174	85.1 (97.3)1
177	5.0 - 9.0% of mass 176	5.2 (6.2)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STD11	R899300-1	VJ160908A06	09/08/16 09:03
STD1	R899300-2	VJ160908A08	09/08/16 09:37
STD2	R899300-3	VJ160908A10	09/08/16 10:10
STD3	R899300-4	VJ160908A12	09/08/16 10:43
STD4	R899300-6	VJ160908A14	09/08/16 11:17
STD6	R899300-5	VJ160908A16	09/08/16 11:50
STD8	R899300-7	VJ160908A18	09/08/16 12:23
STD10	R899300-8	VJ160908A20	09/08/16 12:57
ICV Quant Report	R899300-9	VJ160908A30	09/08/16 15:44

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: JACK	**Analysis Date**	: 09/23/16 14:34
Tune Standard	: WG935468-1	**Tune File ID**	: VJ160923BF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	15.5
75	30.0 - 60.0% of mass 95	42.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0 (0)1
174	Greater than 50.0 of mass 95	97.1
175	5.0 - 9.0% of mass 174	7.1 (7.3)1
176	95.0 - 101% of mass 174	94.2 (97)1
177	5.0 - 9.0% of mass 176	6.4 (6.8)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG935468-2CCAL	WG935468-2	VJ160923P02	09/23/16 14:59
WG935468-3LCS	WG935468-3	VJ160923P02	09/23/16 14:59
WG935468-4LCSD	WG935468-4	VJ160923P04	09/23/16 15:33
WG935468-5BLANK	WG935468-5	VJ160923P10	09/23/16 17:12
4479-091416-1055	L1628990-05	VJ160923P12	09/23/16 17:46
4479-091416-1130	L1628990-06	VJ160923P14	09/23/16 18:19
4479-091416-1210	L1628990-08D	VJ160923P16	09/23/16 18:52
4479-091416-1215	L1628990-09D	VJ160923P18	09/23/16 19:25
4479-091416-1145	L1628990-07	VJ160923P20	09/23/16 19:59
4479-091416-1340	L1628990-10D	VJ160923P22	09/23/16 20:32
4479-091416-1500	L1628990-13D	VJ160923P24	09/23/16 21:05

Blank Results Summary

Method Blank Summary
Form 4

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab Sample ID	: WG932329-5	**Lab File ID**	: V00160915A04
Instrument ID	: VOA100		
Matrix	: SOIL	**Analysis Date**	: 09/15/16 11:44

Client Sample No.	Lab Sample ID	Analysis Date
WG932329-3LCS	WG932329-3	09/15/16 10:24
WG932329-4LCSD	WG932329-4	09/15/16 10:51
4479-091416-0920	L1628990-03	09/15/16 17:57
4479-091416-1410	L1628990-11	09/15/16 18:23
4479-091416-1420	L1628990-12	09/15/16 19:17

Method Blank Summary
Form 4

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab Sample ID	: WG932471-5	**Lab File ID**	: V10160915A05
Instrument ID	: VOA110		
Matrix	: SOIL	**Analysis Date**	: 09/15/16 12:04

Client Sample No.	Lab Sample ID	Analysis Date
WG932471-3LCS	WG932471-3	09/15/16 10:22
WG932471-4LCSD	WG932471-4	09/15/16 10:47
4479-091416-1000	L1628990-04D	09/15/16 16:46
4479-091416-1055	L1628990-05D	09/15/16 17:11
4479-091416-1130	L1628990-06D	09/15/16 17:37
4479-091416-1145	L1628990-07D	09/15/16 18:02
4479-091416-1210	L1628990-08D	09/15/16 18:28
4479-091416-1215	L1628990-09D	09/15/16 18:53
4479-091416-1340	L1628990-10D	09/15/16 19:19
4479-091416-1500	L1628990-13D	09/15/16 19:44

Method Blank Summary
Form 4

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab Sample ID	: WG935468-5	**Lab File ID**	: VJ160923P10
Instrument ID	: JACK		
Matrix	: SOIL	**Analysis Date**	: 09/23/16 17:12

Client Sample No.	Lab Sample ID	Analysis Date
WG935468-3LCS	WG935468-3	09/23/16 14:59
WG935468-4LCSD	WG935468-4	09/23/16 15:33
4479-091416-1055	L1628990-05	09/23/16 17:46
4479-091416-1130	L1628990-06	09/23/16 18:19
4479-091416-1210	L1628990-08D	09/23/16 18:52
4479-091416-1215	L1628990-09D	09/23/16 19:25
4479-091416-1145	L1628990-07	09/23/16 19:59
4479-091416-1340	L1628990-10D	09/23/16 20:32
4479-091416-1500	L1628990-13D	09/23/16 21:05

Standards Data Summary

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1628990**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: VOA110**	**Ical Ref**	**: ICAL12786**
Calibration dates	**: 08/19/16 09:16 08/19/16 12:21**		

Calibration Files
L1 =V10160819A01.D L2 =V10160819A02.D L3 =V10160819A03.D L4 =V10160819A04.D L5 =V10160819A05.D
L6 =V10160819A06.D L7 =V10160819A07.D L8 =V10160819A08.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------									
2)	T	Dichlorodifluoromethane	0.355	0.314	0.283	0.275	0.237	0.276	0.260	0.231	0.279	14.51
3)	T	Chloromethane	0.361	0.298	0.253	0.247	0.227	0.255	0.243	0.226	*L	0.9977
4)	C	Vinyl chloride	0.288	0.281	0.255	0.256	0.233	0.272	0.263	0.236	0.260	7.61
5)	T	Bromomethane	0.239	0.200	0.147	0.135	0.128	0.146	0.144	0.119	*L	0.9914
6)	T	Chloroethane	0.154	0.163	0.127	0.126	0.109	0.117			*L	0.9956
7)	T	Trichlorofluoromethane	0.444	0.384	0.342	0.328	0.328	0.319	0.291		0.348	14.55
8)	T	Ethyl ether	0.162	0.172	0.164	0.173	0.168	0.177	0.174	0.168	0.170	3.09
10)	C	1,1-Dichloroethene	0.264	0.250	0.226	0.232	0.214	0.253	0.241	0.219	0.237	7.35
11)	T	Carbon disulfide	1.653	1.060	0.848	0.860	0.760	0.884	0.853	0.775	*L	0.9968
12)	T	Freon-113	0.275	0.266	0.238	0.236	0.208	0.247	0.228	0.209	0.238	10.14
14)	T	Acrolein	0.010	0.026	0.030	0.027	0.030	0.032	0.034	0.034	*L	0.9969
15)	T	Methylene chloride	0.372	0.341	0.286	0.286	0.265	0.287	0.275	0.262	0.297	13.07
16)	T	Isopropyl alcohol	0.012	0.013	0.012	0.014	0.015	0.014	0.016		0.014	10.59
17)	T	Acetone	0.176	0.089	0.069	0.066	0.070	0.063	0.063	0.064	*L	0.9993
18)	T	trans-1,2-Dichloroethene	0.268	0.276	0.257	0.260	0.242	0.279	0.269	0.245	0.262	5.14
19)	T	Methyl acetate	0.090	0.127	0.138	0.138	0.130	0.136	0.138	0.142	0.130	12.79
20)	T	Methyl tert-butyl ether	0.642	0.711	0.758	0.795	0.776	0.820	0.808	0.780	0.761	7.69
21)	T	tert-Butyl alcohol	0.036	0.026	0.027	0.027	0.028	0.028	0.029	0.030	0.029	10.86
22)	T	Diisopropyl ether	0.538	0.603	0.677	0.732	0.705	0.771	0.747	0.708	0.685	11.41
23)	T	1,1-Dichloroethane	0.542	0.530	0.487	0.474	0.439	0.487	0.462	0.420	0.480	8.64
24)	T	Halothane	0.160	0.175	0.166	0.168	0.154	0.178	0.173	0.159	0.166	5.13
25)	T	Acrylonitrile		0.044	0.064	0.070	0.071	0.074	0.076	0.078	*L	0.9993
26)	T	Ethyl tert-butyl ether	0.610	0.632	0.771	0.819	0.796	0.860	0.836	0.793	0.764	12.14
27)	T	Vinyl acetate	0.122	0.330	0.431	0.464	0.457	0.499	0.493	0.478	*L	0.9992
28)	T	cis-1,2-Dichloroethene	0.241	0.270	0.268	0.279	0.263	0.293	0.284	0.265	0.270	5.86
29)	T	2,2-Dichloropropane	0.446	0.473	0.428	0.428	0.397	0.451	0.424	0.376	0.428	7.18
30)	T	Bromochloromethane	0.101	0.130	0.123	0.121	0.115	0.121	0.117	0.110	0.117	7.56
31)	T	Cyclohexane	0.227	0.301	0.358	0.381	0.340	0.415	0.394	0.358	*L	0.9959
32)	C	Chloroform	0.578	0.589	0.534	0.513	0.466	0.508	0.480	0.435	0.513	10.40
33)	T	Ethyl acetate	0.144	0.162	0.195	0.241	0.200	0.213	0.223	0.215	*L	0.9981
34)	T	Carbon tetrachloride	0.415	0.430	0.364	0.376	0.338	0.388	0.366	0.325	0.375	9.49
35)	T	Tetrahydrofuran	0.009	0.050	0.053	0.062	0.059	0.059	0.059	0.061	*L	0.9995
36)	S	Dibromofluoromethane	0.281	0.286	0.273	0.270	0.266	0.263	0.254	0.251	0.268	4.48
37)	T	1,1,1-Trichloroethane	0.525	0.507	0.463	0.460	0.418	0.467	0.441	0.392	0.459	9.51
39)	T	2-Butanone		0.061	0.090	0.087	0.082	0.086	0.091	0.094	0.085	13.04
40)	T	1,1-Dichloropropene	0.253	0.324	0.331	0.353	0.323	0.375	0.357	0.321	0.330	11.14
41)	T	Benzene	1.015	1.034	1.016	1.032	0.960	1.070	1.031	0.947	1.013	3.99
42)	T	tert-Amyl methyl ether	0.516	0.551	0.666	0.722	0.706	0.758	0.752	0.731	0.675	13.69
43)	S	1,2-Dichloroethane-d4	0.381	0.364	0.345	0.334	0.323	0.310	0.297	0.290	0.330	9.67

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1628990**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: VOA110**	**Ical Ref**	**: ICAL12786**
Calibration dates	**: 08/19/16 09:16 08/19/16 12:21**		

Calibration Files

L1 =V10160819A01.D L2 =V10160819A02.D L3 =V10160819A03.D L4 =V10160819A04.D L5 =V10160819A05.D

L6 =V10160819A06.D L7 =V10160819A07.D L8 =V10160819A08.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
44)	T	1,2-Dichloroethane	0.457	0.457	0.413	0.400	0.371	0.384	0.359	0.333	0.397	11.25
47)	T	Methyl cyclohexane	0.323	0.339	0.370	0.399	0.362	0.442	0.422	0.391	0.381	10.60
48)	T	Trichloroethene	0.271	0.305	0.274	0.268	0.248	0.277	0.265	0.240	0.269	7.29
50)	T	Dibromomethane	0.141	0.154	0.151	0.154	0.145	0.152	0.149	0.144	0.149	3.29
51)	C	1,2-Dichloropropane	0.201	0.228	0.224	0.231	0.215	0.242	0.236	0.225	0.225	5.59
53)	T	2-Chloroethyl vinyl ether		0.064	0.103	0.124	0.129	0.143	0.150	0.152	*L	0.9971
54)	T	Bromodichloromethane	0.417	0.387	0.365	0.375	0.352	0.381	0.371	0.347	0.374	5.87
57)	T	1,4-Dioxane		0.002	0.002	0.003	0.003	0.003	0.003	0.003	*L	0.9967
58)	T	cis-1,3-Dichloropropene	0.290	0.320	0.391	0.420	0.402	0.447	0.441	0.420	0.391	14.52
59)	I	Chlorobenzene-d5	----------ISTD----------									
60)	S	Toluene-d8	1.355	1.399	1.359	1.345	1.337	1.325	1.303	1.310	1.342	2.27
61)	C	Toluene	1.004	0.960	0.894	0.875	0.803	0.916	0.869	0.809	0.891	7.76
62)	T	4-Methyl-2-pentanone		0.054	0.084	0.097	0.106	0.112	0.116	0.119	*L	0.9979
63)	T	Tetrachloroethene	0.362	0.363	0.346	0.337	0.310	0.364	0.345	0.318	0.343	5.98
65)	T	trans-1,3-Dichloropropene	0.429	0.454	0.512	0.528	0.515	0.563	0.550	0.529	0.510	9.02
67)	T	Ethyl methacrylate	0.155	0.211	0.342	0.391	0.401	0.449	0.450	0.451	*L	0.9970
68)	T	1,1,2-Trichloroethane	0.347	0.278	0.275	0.257	0.243	0.255	0.247	0.240	0.268	13.03
69)	T	Chlorodibromomethane	0.388	0.349	0.347	0.338	0.325	0.356	0.349	0.340	0.349	5.27
70)	T	1,3-Dichloropropane	0.635	0.554	0.558	0.553	0.525	0.568	0.543	0.527	0.558	6.19
71)	T	1,2-Dibromoethane	0.272	0.277	0.293	0.293	0.280	0.302	0.298	0.296	0.289	3.81
72)	T	2-Hexanone		0.056	0.116	0.132	0.148	0.171	0.180	0.186	*L	0.9943
73)	T	Chlorobenzene	1.132	1.011	0.927	0.915	0.849	0.963	0.923	0.869	0.949	9.46
74)	C	Ethylbenzene	1.494	1.484	1.667	1.671	1.550	1.775	1.687	1.549	1.610	6.51
75)	T	1,1,1,2-Tetrachloroethane	0.447	0.371	0.350	0.343	0.318	0.354	0.340	0.320	0.356	11.44
76)	T	p/m Xylene	0.452	0.545	0.632	0.628	0.591	0.680	0.641	0.592	0.595	11.85
77)	T	o Xylene	0.376	0.465	0.587	0.605	0.564	0.646	0.615	0.575	*L	0.9978
78)	T	Styrene	0.669	0.859	1.069	1.048	0.994	1.123	1.074	1.008	*L	0.9981
79)	I	1,4-Dichlorobenzene-d4	----------ISTD----------									
80)	T	Bromoform	0.505	0.373	0.387	0.389	0.390	0.421	0.417	0.424	0.413	10.07
82)	T	Isopropylbenzene	2.045	2.260	2.742	2.910	2.814	3.283	3.105	2.922	*L	0.9974
83)	S	4-Bromofluorobenzene	0.892	0.884	0.893	0.866	0.909	0.893	0.877	0.913	0.891	1.72
84)	T	Bromobenzene	0.921	0.703	0.683	0.672	0.662	0.739	0.709	0.688	0.722	11.60
85)	T	n-Propylbenzene	3.275	3.239	3.506	3.543	3.421	3.936	3.642	3.411	3.497	6.35
86)	T	1,4-Dichlorobutane	1.294	0.988	0.992	0.977	0.962	1.002	0.949	0.938	1.013	11.44
87)	T	1,1,2,2-Tetrachloroethane	1.298	0.828	0.732	0.709	0.708	0.726	0.708	0.710	*L	0.9999
88)	T	4-Ethyltoluene	2.807	2.765	3.152	3.179	3.077	3.529	3.283	3.095	3.111	7.91
89)	T	2-Chlorotoluene	2.975	2.399	2.282	2.216	2.125	2.361	2.202	2.059	2.327	12.25
90)	T	1,3,5-Trimethylbenzene	2.292	2.392	2.552	2.571	2.451	2.785	2.567	2.412	2.503	6.02
91)	T	1,2,3-Trichloropropane	1.040	0.755	0.653	0.629	0.597	0.618	0.580	0.574	*L	0.9991
92)	T	trans-1,4-Dichloro-2-b...	0.197	0.177	0.213	0.215	0.216	0.228	0.224	0.224	0.212	8.03

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1628990**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: VOA110**	**Ical Ref**	**: ICAL12786**
Calibration dates	**: 08/19/16 09:16 08/19/16 12:21**		

Calibration Files
L1 =V10160819A01.D L2 =V10160819A02.D L3 =V10160819A03.D L4 =V10160819A04.D L5 =V10160819A05.D
L6 =V10160819A06.D L7 =V10160819A07.D L8 =V10160819A08.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
93)	T	4-Chlorotoluene	2.289	2.143	2.270	2.225	2.169	2.422	2.268	2.132	2.240	4.25
94)	T	tert-Butylbenzene	1.478	1.624	1.992	2.052	1.991	2.326	2.172	2.045	1.960	14.19
97)	T	1,2,4-Trimethylbenzene	1.915	2.049	2.555	2.564	2.485	2.814	2.638	2.492	2.439	12.40
98)	T	sec-Butylbenzene	2.365	2.752	3.142	3.173	3.036	3.566	3.309	3.116	3.057	11.85
99)	T	p-Isopropyltoluene	1.661	2.040	2.519	2.607	2.562	2.990	2.790	2.632	*L	0.9973
100)	T	1,3-Dichlorobenzene	1.717	1.476	1.416	1.383	1.343	1.500	1.424	1.355	1.452	8.28
101)	T	1,4-Dichlorobenzene	2.155	1.576	1.396	1.378	1.360	1.495	1.420	1.357	*L	0.9987
102)	T	p-Diethylbenzene	1.196	1.198	1.552	1.633	1.637	1.909	1.793	1.686	*L	0.9970
103)	T	n-Butylbenzene	2.092	2.366	2.597	2.551	2.469	2.846	2.643	2.452	2.502	8.81
104)	T	1,2-Dichlorobenzene	1.645	1.289	1.276	1.257	1.237	1.375	1.319	1.276	1.334	9.93
105)	T	1,2,4,5-Tetramethylben...	1.458	1.314	2.135	2.397	2.453	2.875	2.746	2.640	*L	0.9964
106)	T	1,2-Dibromo-3-chloropr...		0.074	0.091	0.095	0.098	0.106	0.111	0.115	0.098	13.93
107)	T	1,3,5-Trichlorobenzene	1.048	0.981	1.009	0.989	0.993	1.115	1.054	1.009	1.025	4.40
108)	T	Hexachlorobutadiene	0.467	0.413	0.389	0.374	0.367	0.434	0.412	0.394	0.406	8.13
109)	T	1,2,4-Trichlorobenzene	0.748	0.635	0.735	0.771	0.815	0.937	0.893	0.872	0.801	12.31
110)	T	Naphthalene	1.371	1.093	1.559	1.766	1.900	2.117	2.128	2.200	*L	0.9951
111)	T	1,2,3-Trichlorobenzene	0.814	0.662	0.755	0.744	0.762	0.848	0.823	0.822	0.779	7.74

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1628990**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: VOA100**	**Ical Ref**	**: ICAL12815**
Calibration dates	**: 08/29/16 20:22 08/29/16 23:29**		

Calibration Files
L1 =V00160829N03.D L2 =V00160829N04.D L3 =V00160829N05.D L4 =V00160829N06.D L5 =V00160829N07.D
L6 =V00160829N08.D L7 =V00160829N09.D L8 =V00160829N10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------									
2)	T	Dichlorodifluoromethane		0.162	0.169	0.190	0.219	0.212	0.208	0.198	0.194	11.24
3)	T	Chloromethane	0.473	0.325	0.254	0.247	0.262	0.255	0.261	0.247	*L	0.9993
4)	C	Vinyl chloride	0.258	0.266	0.269	0.286	0.302	0.299	0.303	0.283	0.283	6.20
5)	T	Bromomethane	0.487	0.386	0.320	0.306	0.311	0.295	0.282		*L	0.9985
6)	T	Chloroethane	0.233	0.251	0.245	0.265	0.290	0.283	0.215	0.192	0.247	13.43
7)	T	Trichlorofluoromethane	0.347	0.441	0.443	0.512	0.586	0.612	0.633	0.567	*L	0.9951
8)	T	Ethyl ether	0.204	0.206	0.207	0.209	0.214	0.213	0.234	0.240	0.216	6.32
10)	C	1,1-Dichloroethene	0.178	0.196	0.196	0.211	0.231	0.230	0.239	0.233	0.214	10.42
11)	T	Carbon disulfide	2.375	1.228	0.737	0.743	0.807	0.808	0.809	0.785	*L	0.9985
12)	T	Freon-113	0.106	0.168	0.177	0.200	0.229	0.224	0.231	0.224	*L	0.9981
14)	T	Acrolein	0.028	0.044	0.049	0.049	0.052	0.052	0.058	0.057	*L	0.9974
15)	T	Methylene chloride	0.252	0.236	0.246	0.247	0.254	0.250	0.267	0.257	0.251	3.60
17)	T	Acetone	0.275	0.153	0.098	0.095	0.099	0.096	0.105	0.103	*L	0.9976
18)	T	trans-1,2-Dichloroethene	0.244	0.233	0.236	0.246	0.260	0.260	0.275	0.271	0.253	6.20
19)	T	Methyl acetate	0.264	0.249	0.228	0.226	0.236	0.230	0.256	0.254	0.243	5.99
20)	T	Methyl tert-butyl ether	0.722	0.731	0.760	0.773	0.815	0.806	0.890	0.883	0.798	7.96
21)	T	tert-Butyl alcohol	0.053	0.052	0.053	0.053	0.057	0.055	0.063	0.063	0.056	7.95
22)	T	Diisopropyl ether	0.715	0.717	0.760	0.774	0.813	0.804	0.878	0.869	0.791	7.83
23)	T	1,1-Dichloroethane	0.421	0.416	0.419	0.432	0.453	0.446	0.476	0.466	0.441	5.14
24)	T	Halothane	0.151	0.164	0.162	0.174	0.189	0.190	0.198	0.193	0.178	9.67
25)	T	Acrylonitrile	0.102	0.115	0.121	0.120	0.128	0.125	0.138	0.135	0.123	9.25
26)	T	Ethyl tert-butyl ether	0.675	0.712	0.782	0.797	0.841	0.838	0.936	0.942	0.815	11.66
27)	T	Vinyl acetate	0.475	0.536	0.625	0.649	0.693	0.701	0.792	0.803	*L	0.9950
28)	T	cis-1,2-Dichloroethene	0.257	0.260	0.270	0.276	0.292	0.289	0.309	0.301	0.282	6.75
29)	T	2,2-Dichloropropane	0.316	0.318	0.326	0.346	0.377	0.375	0.392	0.382	0.354	8.76
30)	T	Bromochloromethane	0.146	0.144	0.149	0.151	0.160	0.157	0.165	0.160	0.154	4.98
31)	T	Cyclohexane	0.199	0.268	0.293	0.340	0.395	0.393	0.404	0.391	*L	0.9973
32)	C	Chloroform	0.420	0.437	0.449	0.457	0.477	0.474	0.500	0.488	0.463	5.84
33)	T	Ethyl acetate	0.964	0.592	0.361	0.354	0.374	0.360	0.398	0.367	*L	0.9973
34)	T	Carbon tetrachloride	0.257	0.303	0.328	0.361	0.402	0.400	0.410	0.399	*L	0.9986
35)	T	Tetrahydrofuran	0.110	0.109	0.115	0.112	0.118	0.116	0.127	0.123	0.116	5.29
36)	S	Dibromofluoromethane	0.276	0.276	0.283	0.280	0.282	0.285	0.289	0.295	0.283	2.30
37)	T	1,1,1-Trichloroethane	0.340	0.351	0.356	0.380	0.412	0.409	0.424	0.411	0.385	8.51
39)	T	2-Butanone	0.161	0.164	0.158	0.158	0.168	0.165	0.183	0.180	0.167	5.77
40)	T	1,1-Dichloropropene	0.247	0.260	0.272	0.293	0.327	0.323	0.333	0.323	0.297	11.46
41)	T	Benzene	0.946	0.916	0.937	0.961	1.017	1.002	1.067	1.045	0.986	5.53
42)	T	tert-Amyl methyl ether	0.629	0.659	0.722	0.746	0.792	0.788	0.867	0.858	0.758	11.36
43)	S	1,2-Dichloroethane-d4	0.277	0.281	0.284	0.278	0.284	0.290	0.298	0.312	0.288	4.11
44)	T	1,2-Dichloroethane	0.339	0.339	0.350	0.350	0.366	0.360	0.386	0.377	0.358	4.76

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1628990**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: VOA100**	**Ical Ref**	**: ICAL12815**
Calibration dates	**: 08/29/16 20:22 08/29/16 23:29**		

Calibration Files
L1 =V00160829N03.D L2 =V00160829N04.D L3 =V00160829N05.D L4 =V00160829N06.D L5 =V00160829N07.D
L6 =V00160829N08.D L7 =V00160829N09.D L8 =V00160829N10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
47)	T	Methyl cyclohexane	0.184	0.274	0.295	0.347	0.412	0.407	0.421	0.411	*L	0.9968
48)	T	Trichloroethene	0.251	0.240	0.249	0.259	0.278	0.276	0.292	0.287	0.267	7.17
50)	T	Dibromomethane	0.163	0.175	0.182	0.182	0.190	0.189	0.204	0.198	0.185	6.97
51)	C	1,2-Dichloropropane	0.236	0.231	0.243	0.247	0.258	0.257	0.275	0.269	0.252	6.14
53)	T	2-Chloroethyl vinyl ether	0.023	0.044	0.053	0.046	0.056	0.046	0.043	0.039	*Q	0.9972
54)	T	Bromodichloromethane	0.318	0.333	0.351	0.355	0.371	0.366	0.395	0.385	0.359	7.09
57)	T	1,4-Dioxane	0.004	0.004	0.005	0.005	0.005	0.005	0.005	0.005	0.005	10.24
58)	T	cis-1,3-Dichloropropene	0.331	0.364	0.397	0.412	0.436	0.432	0.470	0.459	0.413	11.48
59)	I	Chlorobenzene-d5	----------ISTD----------									
60)	S	Toluene-d8	1.142	1.150	1.131	1.122	1.122	1.107	1.089	1.086	1.119	2.07
61)	C	Toluene	0.718	0.704	0.692	0.710	0.749	0.730	0.775	0.747	0.728	3.79
62)	T	4-Methyl-2-pentanone		0.131	0.149	0.153	0.167	0.164	0.182	0.178	0.161	11.02
63)	T	Tetrachloroethene	0.297	0.308	0.319	0.344	0.377	0.376	0.391	0.377	0.349	10.52
65)	T	trans-1,3-Dichloropropene	0.369	0.395	0.433	0.446	0.468	0.463	0.502	0.485	0.445	10.11
67)	T	Ethyl methacrylate	0.308	0.366	0.419	0.442	0.475	0.477	0.537	0.528	*L	0.9963
68)	T	1,1,2-Trichloroethane	0.209	0.232	0.234	0.236	0.245	0.240	0.262	0.256	0.239	6.71
69)	T	Chlorodibromomethane	0.304	0.347	0.361	0.365	0.386	0.376	0.404	0.386	0.366	8.33
70)	T	1,3-Dichloropropane	0.426	0.439	0.460	0.462	0.479	0.465	0.499	0.475	0.463	4.91
71)	T	1,2-Dibromoethane	0.259	0.282	0.298	0.307	0.317	0.311	0.333	0.317	0.303	7.75
72)	T	2-Hexanone	0.226	0.250	0.273	0.283	0.304	0.304	0.335	0.324	0.287	12.86
73)	T	Chlorobenzene	0.855	0.834	0.859	0.868	0.914	0.894	0.951	0.912	0.886	4.39
74)	C	Ethylbenzene	1.270	1.224	1.287	1.356	1.452	1.434	1.528	1.473	1.378	7.96
75)	T	1,1,1,2-Tetrachloroethane	0.305	0.322	0.330	0.340	0.354	0.345	0.367	0.347	0.339	5.69
76)	T	p/m Xylene	0.476	0.498	0.531	0.557	0.593	0.589	0.635	0.623	0.563	10.21
77)	T	o Xylene	0.455	0.480	0.529	0.552	0.585	0.582	0.640	0.630	0.557	11.88
78)	T	Styrene	0.716	0.825	0.928	0.972	1.043	1.057	1.181	1.155	*L	0.9965
79)	I	1,4-Dichlorobenzene-d4	----------ISTD----------									
80)	T	Bromoform	0.486	0.479	0.508	0.528	0.557	0.560	0.621	0.596	0.542	9.43
82)	T	Isopropylbenzene	1.873	1.990	2.098	2.238	2.433	2.446	2.609	2.495	2.273	11.64
83)	S	4-Bromofluorobenzene	0.791	0.782	0.771	0.761	0.753	0.758	0.756	0.743	0.764	2.07
84)	T	Bromobenzene	0.644	0.636	0.659	0.669	0.700	0.687	0.735	0.707	0.680	4.97
85)	T	n-Propylbenzene	2.350	2.342	2.455	2.601	2.831	2.846	3.063	2.983	2.684	10.62
86)	T	1,4-Dichlorobutane	0.784	0.825	0.825	0.840	0.883	0.893	0.987	0.949	0.873	7.84
87)	T	1,1,2,2-Tetrachloroethane	0.780	0.731	0.700	0.708	0.733	0.725	0.776	0.737	0.736	3.88
88)	T	4-Ethyltoluene	2.107	2.114	2.223	2.314	2.484	2.480	2.611	2.512	2.356	8.20
89)	T	2-Chlorotoluene	1.709	1.626	1.693	1.683	1.651	1.677	1.776	1.746	1.695	2.88
90)	T	1,3,5-Trimethylbenzene	1.730	1.778	1.870	1.927	2.066	2.062	2.230	2.190	1.981	9.32
91)	T	1,2,3-Trichloropropane	0.610	0.603	0.566	0.569	0.605	0.595	0.688	0.665	0.613	7.05
92)	T	trans-1,4-Dichloro-2-b...	0.179	0.213	0.222	0.230	0.245	0.246	0.267	0.254	0.232	11.95
93)	T	4-Chlorotoluene	1.479	1.493	1.548	1.588	1.670	1.659	1.753	1.702	1.612	6.20

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1628990**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: VOA100**	**Ical Ref**	**: ICAL12815**
Calibration dates	**: 08/29/16 20:22 08/29/16 23:29**		

Calibration Files

L1 =V00160829N03.D L2 =V00160829N04.D L3 =V00160829N05.D L4 =V00160829N06.D L5 =V00160829N07.D

L6 =V00160829N08.D L7 =V00160829N09.D L8 =V00160829N10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
94)	T	tert-Butylbenzene	1.401	1.471	1.557	1.657	1.794	1.775	1.889	1.812	1.670	10.60
97)	T	1,2,4-Trimethylbenzene	1.670	1.705	1.894	1.943	2.082	2.064	2.225	2.167	1.969	10.37
98)	T	sec-Butylbenzene	1.958	2.126	2.247	2.423	2.670	2.656	2.819	2.722	2.453	12.80
99)	T	p-Isopropyltoluene	1.652	1.762	1.991	2.117	2.321	2.303	2.467	2.409	2.128	14.23
100)	T	1,3-Dichlorobenzene	1.193	1.174	1.237	1.260	1.328	1.302	1.393	1.352	1.280	6.03
101)	T	1,4-Dichlorobenzene	1.386	1.232	1.263	1.265	1.333	1.297	1.383	1.345	1.313	4.39
102)	T	p-Diethylbenzene	1.061	1.087	1.225	1.298	1.414	1.401	1.513	1.495	1.312	13.31
103)	T	n-Butylbenzene	1.498	1.529	1.700	1.810	2.017	2.013	2.139	2.108	1.852	13.77
104)	T	1,2-Dichlorobenzene	1.117	1.138	1.191	1.200	1.256	1.238	1.340	1.303	1.223	6.29
105)	T	1,2,4,5-Tetramethylben...	1.500	1.644	1.973	2.032	2.202	2.211	2.491	2.424	*L	0.9964
106)	T	1,2-Dibromo-3-chloropr...	0.146	0.151	0.165	0.166	0.176	0.177	0.198	0.189	0.171	10.32
107)	T	1,3,5-Trichlorobenzene	0.863	0.931	0.973	0.972	1.052	1.028	1.109	1.076	1.000	8.13
108)	T	Hexachlorobutadiene	0.367	0.350	0.397	0.415	0.476	0.456	0.508	0.489	0.432	13.52
109)	T	1,2,4-Trichlorobenzene	0.788	0.777	0.851	0.858	0.920	0.913	0.990	0.962	0.882	8.75
110)	T	Naphthalene	1.933	1.993	2.220	2.251	2.377	2.413	2.701	2.638	2.316	11.87
111)	T	1,2,3-Trichlorobenzene	0.783	0.767	0.833	0.835	0.892	0.885	0.967	0.944	0.863	8.32

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1628990**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: JACK**	**Ical Ref**	**: ICAL12860**
Calibration dates	**: 09/08/16 09:03 09/08/16 12:57**		

Calibration Files
L11 =VJ160908A06.D L1 =VJ160908A08.D L2 =VJ160908A10.D L3 =VJ160908A12.D L4 =VJ160908A14.D
L6 =VJ160908A16.D L8 =VJ160908A18.D L10 =VJ160908A20.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------									
2)	TP	Dichlorodifluo			0.198	0.237	0.228	0.212	0.218	0.215	0.218	6.15
3)	TP	Chloromethane		0.246	0.266	0.266	0.259	0.247	0.252	0.250	0.255	3.30
4)	TP	Vinyl chloride	0.319	0.295	0.361	0.383	0.379	0.357	0.357	0.350	0.350	8.47
5)	TP	Bromomethane		0.094	0.213	0.188	0.178	0.172	0.174	0.163	*L	0.9981
6)	TP	Chloroethane		0.144	0.189	0.180	0.169	0.153	0.145		0.163	11.59
7)	TP	Trichlorofluor		0.402	0.431	0.462	0.465	0.437	0.443	0.409	0.436	5.53
8)	TP	Ethyl ether		0.134	0.166	0.158	0.164	0.152	0.154	0.150	0.154	6.87
10)	TP	1,1-Dichloroet		0.271	0.312	0.337	0.330	0.315	0.319	0.309	0.313	6.68
11)	TP	Carbon disulfide		1.017	1.019	1.050	1.045	0.999	1.009	0.844	0.997	7.02
12)	TP	Freon-113		0.276	0.308	0.322	0.312	0.285	0.292	0.282	0.297	5.82
13)	TP	Iodomethane			0.163	0.209	0.233	0.241	0.260	0.260	*L	0.9988
14)	TP	Acrolein			0.023	0.027	0.028	0.026	0.027	0.025	0.026#	7.50
15)	TP	Methylene chlo		0.269	0.287	0.286	0.282	0.257	0.257	0.248	0.269	5.92
17)	TP	Acetone			0.066	0.053	0.053	0.045	0.045	0.039	*L	0.9933
18)	TP	trans-1,2-Dich		0.359	0.352	0.355	0.363	0.342	0.352	0.336	0.351	2.65
19)	TP	Methyl acetate		0.169	0.156	0.136	0.131	0.120	0.123	0.121	0.137	13.73
20)	TP	Methyl tert butyl ether		0.634	0.660	0.677	0.673	0.620	0.641	0.625	0.647	3.53
21)	TP	tert-Butyl alc			0.012	0.011	0.011	0.010	0.010	0.009	0.011#	8.99
22)	TP	Diisopropyl ether		0.911	0.977	1.016	1.034	0.967	0.982	0.972	0.980	3.99
23)	TP	1,1-Dichloroet		0.575	0.648	0.631	0.636	0.600	0.620	0.603	0.616	4.04
24)	TP	Halothane		0.212	0.254	0.247	0.251	0.240	0.248	0.243	0.242	5.76
25)	TP	Acrylonitrile		0.049	0.071	0.068	0.070	0.063	0.058	0.054	*L	0.9929
26)	TP	Ethyl tert-but		0.728	0.783	0.844	0.862	0.794	0.820	0.799	0.804	5.45
27)	TP	Vinyl acetate		0.440	0.485	0.508	0.512	0.472	0.490	0.484	0.484	4.96
28)	TP	cis-1,2-Dichlo		0.336	0.371	0.372	0.378	0.355	0.360	0.353	0.361	3.96
29)	TP	2,2-Dichloropr		0.422	0.469	0.469	0.467	0.452	0.465	0.449	0.456	3.81
30)	TP	Bromochloromet		0.138	0.155	0.155	0.155	0.143	0.147	0.141	0.148	4.89
31)	TP	Cyclohexane		0.523	0.593	0.650	0.656	0.611	0.631	0.610	0.611	7.33
32)	TP	Chloroform		0.534	0.575	0.570	0.559	0.532	0.551	0.530	0.550	3.38
34)	TP	Ethyl acetate			0.206	0.175	0.179	0.153	0.156	0.151	0.170	12.42
35)	TP	Carbon tetrachloride	0.358	0.373	0.409	0.424	0.420	0.401	0.413	0.406	0.401	5.76
36)	TP	Tetrahydrofuran		0.046	0.056	0.057	0.061	0.051	0.052	0.050	*L	0.9975
37)	S	Dibromofluoromethane	0.228	0.222	0.221	0.220	0.222	0.215	0.216	0.213	0.220	2.20
38)	TP	1,1,1-Trichlor		0.411	0.463	0.484	0.490	0.471	0.481	0.461	0.466	5.72
40)	TP	2-Butanone		0.076	0.077	0.074	0.079	0.061	0.063	0.064	0.071#	10.71
41)	TP	1,1-Dichloropr		0.400	0.441	0.453	0.469	0.449	0.463	0.443	0.445	5.05
42)	TP	Benzene	1.511	1.367	1.469	1.475	1.487	1.408	1.440	1.386	1.443	3.57
43)	TP	Tertiary-Amyl Methyl Ether		0.587	0.667	0.688	0.714	0.656	0.667	0.647	0.661	5.94
44)	S	1,2-Dichloroethane-d4	0.218	0.217	0.227	0.217	0.225	0.219	0.226	0.236	0.223	3.03

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1628990**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: JACK**	**Ical Ref**	**: ICAL12860**
Calibration dates	**: 09/08/16 09:03 09/08/16 12:57**		

Calibration Files
L11 =VJ160908A06.D L1 =VJ160908A08.D L2 =VJ160908A10.D L3 =VJ160908A12.D L4 =VJ160908A14.D
L6 =VJ160908A16.D L8 =VJ160908A18.D L10 =VJ160908A20.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
45)	TP	1,2-Dichloroet		0.315	0.314	0.324	0.333	0.301	0.307	0.298	0.313	3.98
48)	TP	Methyl cyclohe		0.497	0.568	0.620	0.628	0.570	0.576	0.548	0.572	7.70
49)	TP	Trichloroethene	0.348	0.345	0.345	0.345	0.349	0.326	0.329	0.310	0.337	4.14
51)	TP	Dibromomethane		0.130	0.142	0.143	0.146	0.135	0.137	0.130	0.138	4.58
52)	TP	1,2-Dichloropr		0.319	0.334	0.332	0.340	0.318	0.318	0.298	0.323	4.38
54)	TP	2-Chloroethyl		0.102	0.136	0.133	0.136	0.118	0.115	0.101	0.120	12.69
55)	TP	Bromodichlorom		0.308	0.356	0.363	0.367	0.345	0.348	0.329	0.345	5.96
58)	TP	1,4-Dioxane		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001#	10.46
59)	TP	cis-1,3-Dichlo		0.363	0.421	0.463	0.483	0.454	0.457	0.424	0.438	9.03
60)	I	Chlorobenzene-d5	----------ISTD----------									
61)	S	Toluene-d8	1.615	1.603	1.639	1.662	1.651	1.804	1.875	1.884	1.717	6.86
62)	TP	Toluene		1.422	1.518	1.574	1.563	1.609	1.670	1.617	1.567	5.09
63)	TP	4-Methyl-2-pen		0.088	0.099	0.119	0.117	0.112	0.115	0.108	0.108	10.43
64)	TP	Tetrachloroethene		0.611	0.669	0.703	0.698	0.717	0.737	0.705	0.691	5.94
66)	TP	trans-1,3-Dich		0.535	0.595	0.653	0.690	0.712	0.737	0.713	0.662	11.08
68)	TP	Ethyl methacry		0.373	0.441	0.467	0.486	0.469	0.468	0.440	0.449	8.33
69)	TP	1,1,2-Trichlor		0.341	0.325	0.338	0.343	0.340	0.345	0.329	0.337	2.22
70)	TP	Chlorodibromom		0.301	0.374	0.413	0.410	0.420	0.427	0.406	0.393	11.16
71)	TP	1,3-Dichloropr		0.707	0.705	0.713	0.702	0.710	0.719	0.679	0.705	1.82
72)	TP	1,2-Dibromoethane		0.307	0.345	0.351	0.356	0.348	0.349	0.331	0.341	4.98
73)	TP	2-Hexanone		0.154	0.142	0.154	0.165	0.145	0.143	0.140	0.149	5.93
74)	T	Chlorobenzene		1.268	1.276	1.326	1.318	1.256	1.267	1.248	1.280	2.37
75)	TP	Ethylbenzene		1.914	2.141	2.244	2.224	2.094	2.119	2.184	2.131	5.18
76)	T	1,1,1,2-Tetrac		0.364	0.440	0.459	0.454	0.430	0.428	0.409	0.426	7.51
77)	TP	p/m Xylene		0.687	0.751	0.800	0.813	0.788	0.840	0.901	0.797	8.46
78)	TP	o Xylene		0.560	0.678	0.751	0.744	0.748	0.819		0.717	12.36
79)	TP	Styrene		0.941	1.111	1.218	1.226	1.234	1.361		1.182	12.03
80)	I	1,4-Dichlorobenzene-d4	----------ISTD----------									
81)	TP	Bromoform		0.302	0.389	0.368	0.375	0.298	0.286	0.285	0.329	13.96
83)	TP	Isopropylbenzene		3.912	4.405	4.441	4.298	3.473	3.547	3.563	3.948	10.90
84)	S	4-Bromofluorobenzene	0.833	0.827	0.861	0.816	0.791	0.700	0.746	0.732	0.788	7.17
85)	TP	Bromobenzene		0.705	0.985	0.923	0.895	0.781	0.819	0.839	0.849	11.02
86)	TP	n-Propylbenzene		3.870	4.675	4.820	4.844	4.366	4.601	4.510	4.527	7.40
87)	TP	1,4-Dichlorobu		1.117	1.099	1.057	0.990	0.716	0.720	0.732	*L	0.9908
88)	TP	1,1,2,2-Tetrac		0.468	0.582	0.553	0.544	0.468	0.476	0.470	0.509	9.67
89)	TP	4-Ethyltoluene		3.115	3.836	3.879	3.953	3.740	3.855	3.759	3.734	7.56
90)	TP	2-Chlorotoluene		2.541	3.340	3.050	3.055	2.758	2.815	2.764	2.903	9.06
91)	TP	1,3,5-Trimethy		2.449	3.011	3.082	3.133	3.036	3.124	3.109	2.992	8.14
92)	TP	1,2,3-Trichlor		0.387	0.428	0.463	0.442	0.355	0.364	0.390	0.404	10.10
93)	TP	trans-1,4-Dich			0.185	0.232	0.215	0.205	0.215	0.221	0.212	7.56

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1628990**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: JACK**	**Ical Ref**	**: ICAL12860**
Calibration dates	**: 09/08/16 09:03 09/08/16 12:57**		

Calibration Files
L11 =VJ160908A06.D L1 =VJ160908A08.D L2 =VJ160908A10.D L3 =VJ160908A12.D L4 =VJ160908A14.D
L6 =VJ160908A16.D L8 =VJ160908A18.D L10 =VJ160908A20.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
94) TP	4-Chlorotoluene		2.477	2.758	2.671	2.746	2.591	2.717	2.670	2.661	3.73
95) TP	tert-Butylbenzene		2.108	2.624	2.772	2.812	2.797	2.930	2.858	2.700	10.26
98) TP	1,2,4-Trimethy		2.145	2.640	2.797	2.872	2.838	2.960	2.916	2.738	10.27
99) TP	sec-Butylbenzene		3.052	3.953	4.090	4.256	4.223	4.392	4.220	4.027	11.21
100) TP	p-Isopropyltol		2.401	3.099	3.316	3.453	3.394	3.560	3.246	3.210	12.03
101) TP	1,3-Dichlorobe		1.840	2.013	2.029	2.044	1.933	1.963	1.779	1.943	5.17
102) TP	1,4-Dichlorobe		1.801	1.960	1.935	1.971	1.873	1.910	1.817	1.895	3.55
103) TP	p-Diethylbenzene			1.669	1.908	2.068	1.928	2.086	1.949	1.935	7.74
104) TP	n-Butylbenzene		1.861	2.738	3.148	3.311	3.037	3.293	3.090	*L	0.9988
105) TP	1,2-Dichlorobe		1.768	1.876	1.867	1.909	1.713	1.785	1.626	1.792	5.61
106) TP	1,2,4,5-Tetram		1.220	1.488	1.790	1.977	1.757	1.793	1.684	1.673	14.79
107) TP	1,2-Dibromo-3-			0.117	0.083	0.094	0.087	0.094	0.083	0.093	13.76
108) TP	1,3,5-Trichlor		0.822	0.984	1.098	1.157	1.096	1.100	1.007	1.038	10.83
109) TP	Hexachlorobuta		0.389	0.458	0.485	0.483	0.475	0.459	0.410	0.451	8.30
110) TP	1,2,4-Trichlor		0.488	0.593	0.746	0.813	0.790	0.799	0.741	*L	0.9985
111) TP	Naphthalene		0.395	0.646	0.911	1.103	1.043	1.064	1.034	*L	0.9992
112) TP	1,2,3-Trichlor			0.450	0.593	0.650	0.613	0.609	0.578	0.582	11.90

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628990	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814	
Instrument ID	: VOA110	Calibration Date	: 09/15/16 10:22	
Lab File ID	: V10160915A01	Init. Calib. Date(s)	: 08/19/16	08/19/16
Sample No	: WG932471-2	Init. Calib. Times	: 09:16	12:21
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	146	-.02
Dichlorodifluoromethane	0.279	0.18	-	35.5*	20	93	0
Chloromethane	20	21.097	-	-5.5	20	148	-.01
Vinyl chloride	0.26	0.253	-	2.7	20	145	-.01
Bromomethane	20	23.491	-	-17.5	20	160	0
Chloroethane	20	28.904	-	-44.5*	20	197	.02
Trichlorofluoromethane	0.348	0.37	-	-6.3	20	157	0
Ethyl ether	0.17	0.181	-	-6.5	20	161	-.02
1,1-Dichloroethene	0.237	0.189	-	20.3*	20	122	-.02
Carbon disulfide	20	15.976	-	20.1*	20	119	-.01
Freon-113	0.238	0.172	-	27.7*	20	105	-.01
Acrolein	20	22.467	-	-12.3	20	174	-.02
Methylene chloride	0.297	0.26	-	12.5	20	133	-.02
Acetone	20	28.92	-	-44.6*	20	206	-.02
trans-1,2-Dichloroethene	0.262	0.23	-	12.2	20	130	-.01
Methyl acetate	0.13	0.183	-	-40.8*	20	193	-.01
Methyl tert-butyl ether	0.761	0.803	-	-5.5	20	155	-.02
tert-Butyl alcohol	0.029	0.029	-	0	20	160	-.02
Diisopropyl ether	0.685	0.923	-	-34.7*	20	199	-.02
1,1-Dichloroethane	0.48	0.436	-	9.2	20	131	-.02
Halothane	0.166	0.14	-	15.7	20	123	-.02
Acrylonitrile	20	24.396	-	-22*	20	196	-.02
Ethyl tert-butyl ether	0.764	0.847	-	-10.9	20	160	-.02
Vinyl acetate	20	26.549	-	-32.7*	20	210	-.02
cis-1,2-Dichloroethene	0.27	0.263	-	2.6	20	143	-.02
2,2-Dichloropropane	0.428	0.309	-	27.8*	20	105	-.02
Bromochloromethane	0.117	0.129	-	-10.3	20	154	-.02
Cyclohexane	20	17.28	-	13.6	20	129	-.02
Chloroform	0.513	0.441	-	14	20	120	-.02
Ethyl acetate	20	24.989	-	-24.9*	20	200	-.02
Carbon tetrachloride	0.375	0.275	-	26.7*	20	110	-.01
Tetrahydrofuran	20	30.441	-	-52.2*	20	245	-.02
Dibromofluoromethane	0.268	0.266	-	0.7	20	142	-.02
1,1,1-Trichloroethane	0.459	0.339	-	26.1*	20	107	-.02
2-Butanone	0.085	0.107	-	-25.9*	20	173	-.02
1,1-Dichloropropene	0.33	0.283	-	14.2	20	125	-.02
Benzene	1.013	0.932	-	8	20	134	-.02
tert-Amyl methyl ether	0.675	0.728	-	-7.9	20	160	-.02
1,2-Dichloroethane-d4	0.33	0.284	-	13.9	20	120	-.02
1,2-Dichloroethane	0.397	0.373	-	6	20	132	-.02
Methyl cyclohexane	0.381	0.31	-	18.6	20	122	-.02
Trichloroethene	0.269	0.225	-	16.4	20	120	-.02
Dibromomethane	0.149	0.154	-	-3.4	20	148	-.02
1,2-Dichloropropane	0.225	0.242	-	-7.6	20	158	-.02
2-Chloroethyl vinyl ether	20	23.235	-	-16.2	20	211	-.02

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628990	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814	
Instrument ID	: VOA110	Calibration Date	: 09/15/16 10:22	
Lab File ID	: V10160915A01	Init. Calib. Date(s)	: 08/19/16	08/19/16
Sample No	: WG932471-2	Init. Calib. Times	: 09:16	12:21
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Bromodichloromethane	0.374	0.322	-	13.9	20	129	-.02
cis-1,3-Dichloropropene	0.391	0.371	-	5.1	20	138	-.02
Chlorobenzene-d5	1	1	-	0	20	163	-.02
Toluene-d8	1.342	1.272	-	5.2	20	152	-.02
Toluene	0.891	0.744	-	16.5	20	135	-.02
4-Methyl-2-pentanone	20	21.588	-	-7.9	20	208	-.02
Tetrachloroethene	0.343	0.266	-	22.4*	20	125	-.02
trans-1,3-Dichloropropene	0.51	0.412	-	19.2	20	131	-.02
Ethyl methacrylate	20	18.592	-	7	20	184	-.02
1,1,2-Trichloroethane	0.268	0.234	-	12.7	20	139	-.02
Chlorodibromomethane	0.349	0.292	-	16.3	20	137	-.02
1,3-Dichloropropane	0.558	0.487	-	12.7	20	142	-.02
1,2-Dibromoethane	0.289	0.269	-	6.9	20	149	-.02
2-Hexanone	20	26.885	-	-34.4*	20	286	-.02
Chlorobenzene	0.949	0.838	-	11.7	20	147	-.02
Ethylbenzene	1.61	1.335	-	17.1	20	130	-.02
1,1,1,2-Tetrachloroethane	0.356	0.28	-	21.3*	20	130	-.02
p/m Xylene	0.595	0.525	-	11.8	20	135	-.02
o Xylene	40	35.862	-	10.3	20	145	-.02
Styrene	40	34.418	-	14	20	134	-.02
1,4-Dichlorobenzene-d4	1	1	-	0	20	148	-.01
Bromoform	0.413	0.325	-	21.3*	20	124	-.02
Isopropylbenzene	20	17.375	-	13.1	20	137	-.02
4-Bromofluorobenzene	0.891	0.985	-	-10.5	20	163	-.01
Bromobenzene	0.722	0.66	-	8.6	20	143	-.02
n-Propylbenzene	3.497	3.022	-	13.6	20	127	-.02
1,4-Dichlorobutane	1.013	0.983	-	3	20	146	-.02
1,1,2,2-Tetrachloroethane	20	18.762	-	6.2	20	139	-.02
4-Ethyltoluene	3.111	2.651	-	14.8	20	124	-.02
2-Chlorotoluene	2.327	1.9	-	18.3	20	123	-.01
1,3,5-Trimethylbenzene	2.503	2.194	-	12.3	20	127	-.01
1,2,3-Trichloropropane	20	18.891	-	5.5	20	131	-.02
trans-1,4-Dichloro-2-buten	0.212	0.201	-	5.2	20	139	-.01
4-Chlorotoluene	2.24	1.953	-	12.8	20	127	-.02
tert-Butylbenzene	1.96	1.798	-	8.3	20	133	-.02
1,2,4-Trimethylbenzene	2.439	2.257	-	7.5	20	130	-.01
sec-Butylbenzene	3.057	2.691	-	12	20	126	-.02
p-Isopropyltoluene	20	17.351	-	13.2	20	134	-.01
1,3-Dichlorobenzene	1.452	1.272	-	12.4	20	133	-.01
1,4-Dichlorobenzene	20	17.961	-	10.2	20	136	-.02
p-Diethylbenzene	20	16.742	-	16.3	20	134	-.01
n-Butylbenzene	2.502	2.154	-	13.9	20	122	-.01
1,2-Dichlorobenzene	1.334	1.211	-	9.2	20	140	-.02
1,2,4,5-Tetramethylbenzene	20	17.92	-	10.4	20	157	-.02
1,2-Dibromo-3-chloropropan	0.098	0.09	-	8.2	20	146	-.01

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628990	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814	
Instrument ID	: VOA110	Calibration Date	: 09/15/16 10:22	
Lab File ID	: V10160915A01	Init. Calib. Date(s)	: 08/19/16	08/19/16
Sample No	: WG932471-2	Init. Calib. Times	: 09:16	12:21
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,3,5-Trichlorobenzene	1.025	0.932	-	9.1	20	136	-.01
Hexachlorobutadiene	0.406	0.34	-	16.3	20	129	-.01
1,2,4-Trichlorobenzene	0.801	0.834	-	-4.1	20	168	-.02
Naphthalene	20	19.991	-	0	20	191	-.01
1,2,3-Trichlorobenzene	0.779	0.774	-	0.6	20	151	-.01

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628990	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814	
Instrument ID	: VOA100	Calibration Date	: 09/15/16 10:24	
Lab File ID	: V00160915A01	Init. Calib. Date(s)	: 08/29/16	08/29/16
Sample No	: WG932329-2	Init. Calib. Times	: 20:22	23:29
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	137	0
Dichlorodifluoromethane	0.194	0.185	-	4.6	20	151	0
Chloromethane	20	19.949	-	0.3	20	142	0
Vinyl chloride	0.283	0.311	-	-9.9	20	159	0
Bromomethane	20	19.729	-	1.4	20	129	0
Chloroethane	0.247	0.246	-	0.4	20	138	0
Trichlorofluoromethane	20	15.715	-	21.4*	20	137	0
Ethyl ether	0.216	0.193	-	10.6	20	128	0
1,1-Dichloroethene	0.214	0.247	-	-15.4	20	173	0
Carbon disulfide	20	19.408	-	3	20	155	0
Freon-113	20	19.663	-	1.7	20	165	0
Acrolein	20	21.539	-	-7.7	20	163	0
Methylene chloride	0.251	0.257	-	-2.4	20	144	0
Acetone	20	24.543	-	-22.7*	20	184	0
trans-1,2-Dichloroethene	0.253	0.242	-	4.3	20	141	0
Methyl acetate	0.243	0.224	-	7.8	20	135	0
Methyl tert-butyl ether	0.798	0.749	-	6.1	20	135	0
tert-Butyl alcohol	0.056	0.054	-	3.6	20	140	0
Diisopropyl ether	0.791	0.778	-	1.6	20	141	0
1,1-Dichloroethane	0.441	0.461	-	-4.5	20	151	0
Halothane	0.178	0.163	-	8.4	20	138	0
Acrylonitrile	0.123	0.125	-	-1.6	20	143	0
Ethyl tert-butyl ether	0.815	0.827	-	-1.5	20	145	0
Vinyl acetate	20	17.939	-	10.3	20	145	0
cis-1,2-Dichloroethene	0.282	0.267	-	5.3	20	136	0
2,2-Dichloropropane	0.354	0.355	-	-0.3	20	149	0
Bromochloromethane	0.154	0.139	-	9.7	20	129	0
Cyclohexane	20	19.959	-	0.2	20	176	0
Chloroform	0.463	0.465	-	-0.4	20	142	0
Ethyl acetate	20	16.969	-	15.2	20	131	0
Carbon tetrachloride	20	17.609	-	12	20	142	0
Tetrahydrofuran	0.116	0.113	-	2.6	20	135	0
Dibromofluoromethane	0.283	0.276	-	2.5	20	134	0
1,1,1-Trichloroethane	0.385	0.377	-	2.1	20	146	0
2-Butanone	0.167	0.167	-	0	20	146	0
1,1-Dichloropropene	0.297	0.3	-	-1	20	152	0
Benzene	0.986	0.936	-	5.1	20	137	0
tert-Amyl methyl ether	0.758	0.702	-	7.4	20	134	0
1,2-Dichloroethane-d4	0.288	0.311	-	-8	20	151	0
1,2-Dichloroethane	0.358	0.377	-	-5.3	20	148	0
Methyl cyclohexane	20	18.142	-	9.3	20	164	0
Trichloroethene	0.267	0.257	-	3.7	20	142	0
Dibromomethane	0.185	0.172	-	7	20	130	0
1,2-Dichloropropane	0.252	0.264	-	-4.8	20	149	0
2-Chloroethyl vinyl ether	20	13.514	-	32.4*	20	88	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628990	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814	
Instrument ID	: VOA100	Calibration Date	: 09/15/16 10:24	
Lab File ID	: V00160915A01	Init. Calib. Date(s)	: 08/29/16	08/29/16
Sample No	: WG932329-2	Init. Calib. Times	: 20:22	23:29
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Bromodichloromethane	0.359	0.358	-	0.3	20	140	0
1,4-Dioxane	0.00474	0.00424	-	10.5	20	126	0
cis-1,3-Dichloropropene	0.413	0.401	-	2.9	20	139	0
Chlorobenzene-d5	1	1	-	0	20	127	0
Toluene-d8	1.119	1.218	-	-8.8	20	137	0
Toluene	0.728	0.745	-	-2.3	20	137	0
4-Methyl-2-pentanone	0.161	0.159	-	1.2	20	135	0
Tetrachloroethene	0.349	0.312	-	10.6	20	125	0
trans-1,3-Dichloropropene	0.445	0.473	-	-6.3	20	139	0
Ethyl methacrylate	20	17.535	-	12.3	20	130	0
1,1,2-Trichloroethane	0.239	0.254	-	-6.3	20	138	0
Chlorodibromomethane	0.366	0.359	-	1.9	20	126	0
1,3-Dichloropropane	0.463	0.491	-	-6	20	136	0
1,2-Dibromoethane	0.303	0.309	-	-2	20	132	0
2-Hexanone	0.287	0.294	-	-2.4	20	137	0
Chlorobenzene	0.886	0.869	-	1.9	20	129	0
Ethylbenzene	1.378	1.384	-	-0.4	20	137	0
1,1,1,2-Tetrachloroethane	0.339	0.336	-	0.9	20	129	0
p/m Xylene	0.563	0.56	-	0.5	20	134	0
o Xylene	0.557	0.536	-	3.8	20	129	0
Styrene	40	34.791	-	13	20	129	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	115	0
Bromoform	0.542	0.476	-	12.2	20	108	0
Isopropylbenzene	2.273	2.411	-	-6.1	20	132	0
4-Bromofluorobenzene	0.764	0.895	-	-17.1	20	133	0
Bromobenzene	0.68	0.678	-	0.3	20	118	0
n-Propylbenzene	2.684	3.018	-	-12.4	20	141	0
1,4-Dichlorobutane	0.873	1.086	-	-24.4*	20	151	0
1,1,2,2-Tetrachloroethane	0.736	0.817	-	-11	20	134	0
4-Ethyltoluene	2.356	2.594	-	-10.1	20	134	0
2-Chlorotoluene	1.695	1.549	-	8.6	20	105	0
1,3,5-Trimethylbenzene	1.981	2.159	-	-9	20	133	0
1,2,3-Trichloropropane	0.613	0.67	-	-9.3	20	136	0
trans-1,4-Dichloro-2-buten	0.232	0.286	-	-23.3*	20	148	0
4-Chlorotoluene	1.612	1.831	-	-13.6	20	136	0
tert-Butylbenzene	1.67	1.814	-	-8.6	20	134	0
1,2,4-Trimethylbenzene	1.969	2.157	-	-9.5	20	131	0
sec-Butylbenzene	2.453	2.72	-	-10.9	20	139	0
p-Isopropyltoluene	2.128	2.374	-	-11.6	20	137	0
1,3-Dichlorobenzene	1.28	1.301	-	-1.6	20	121	0
1,4-Dichlorobenzene	1.313	1.323	-	-0.8	20	120	0
p-Diethylbenzene	1.312	1.461	-	-11.4	20	137	0
n-Butylbenzene	1.852	2.231	-	-20.5*	20	151	0
1,2-Dichlorobenzene	1.223	1.242	-	-1.6	20	120	0
1,2,4,5-Tetramethylbenzene	20	19.417	-	2.9	20	129	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628990	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814	
Instrument ID	: VOA100	Calibration Date	: 09/15/16 10:24	
Lab File ID	: V00160915A01	Init. Calib. Date(s)	: 08/29/16	08/29/16
Sample No	: WG932329-2	Init. Calib. Times	: 20:22	23:29
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dibromo-3-chloropropan	0.171	0.157	-	8.2	20	109	0
1,3,5-Trichlorobenzene	1	1.003	-	-0.3	20	118	0
Hexachlorobutadiene	0.432	0.415	-	3.9	20	120	0
1,2,4-Trichlorobenzene	0.882	0.863	-	2.2	20	116	0
Naphthalene	2.316	2.301	-	0.6	20	119	0
1,2,3-Trichlorobenzene	0.863	0.827	-	4.2	20	114	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628990	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814	
Instrument ID	: JACK	Calibration Date	: 09/23/16 14:59	
Lab File ID	: VJ160923P02	Init. Calib. Date(s)	: 09/08/16	09/08/16
Sample No	: WG935468-2	Init. Calib. Times	: 09:03	12:57
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	76	0
Vinyl chloride	0.35	0.374	-	-6.9	20	75	0
1,1-Dichloroethene	0.313	0.347	-	-10.9	20	79	0
Methylene chloride	0.269	0.299	-	-11.2	20	80	0
Chloroform	0.55	0.558	-	-1.5	20	75	0
Carbon tetrachloride	0.401	0.416	-	-3.7	20	75	0
Dibromofluoromethane	0.22	0.224	-	-1.8	20	78	0
2-Butanone	0.071	0.061*	-	14.1	20	63	0
Benzene	1.443	1.439	-	0.3	20	74	0
1,2-Dichloroethane-d4	0.223	0.218	-	2.2	20	77	0
1,2-Dichloroethane	0.313	0.307	-	1.9	20	73	0
Trichloroethene	0.337	0.356	-	-5.6	20	79	0
Chlorobenzene-d5	1	1	-	0	20	80	0
Toluene-d8	1.717	1.499	-	12.7	20	72	0
Tetrachloroethene	0.691	0.706	-	-2.2	20	81	0
Chlorobenzene	1.28	1.182	-	7.7	20	72	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	83	0
4-Bromofluorobenzene	0.788	0.742	-	5.8	20	75	0
1,4-Dichlorobenzene	1.895	1.698	-	10.4	20	73	0

* Value outside of QC limits.

Surrogate Summary

Form 2
Surrogate Recovery
VOLATILES

Client: Haley & Aldrich, Inc.
Project Name: EWING TOWNSHIP INDUSTRIAL LAND

Lab Number: L1628990
Project Number: 70613-814
Matrix:

CLIENT ID (LAB SAMPLE NO.)	SMC1 TOL	SMC2 BFB	SMC3 DCA	SMC4 DBFM	TOT OUT
4479-091416-1055 (L1628990-05)	92	89	91	101	0
4479-091416-1130 (L1628990-06)	106	100	94	103	0
4479-091416-1145 (L1628990-07)	94	88	92	103	0
4479-091416-1210 (L1628990-08D)	98	84	90	101	0
4479-091416-1215 (L1628990-09D)	92	96	88	99	0
4479-091416-1340 (L1628990-10D)	96	86	90	100	0
4479-091416-1500 (L1628990-13D)	95	93	89	100	0
WG935468-4LCSD	90	99	98	103	0
WG935468-3LCS	87	94	98	102	0
WG935468-5BLANK	87	96	91	103	0

	QC LIMITS
TOL = TOLUENE-D8	(70-130)
BFB = 4-BROMOFLUOROBENZENE	(70-130)
DCA = 1,2-DICHLOROETHANE-D4	(70-130)
DBFM = DIBROMOFLUOROMETHANE)	(70-130)

* Values outside of QC limits

Form 2
Surrogate Recovery
VOLATILES

Client: Haley & Aldrich, Inc.
Project Name: EWING TOWNSHIP INDUSTRIAL LAND

Lab Number: L1628990
Project Number: 70613-814
Matrix:

CLIENT ID (LAB SAMPLE NO.)	SMC1 TOL	SMC2 BFB	SMC3 DCA	SMC4 DBFM	TOT OUT
4479-091416-0920 (L1628990-03)	106	122	104	96	0
4479-091416-1410 (L1628990-11)	104	119	103	95	0
4479-091416-1420 (L1628990-12)	108	119	104	95	0
WG932329-4LCSD	110	117	108	97	0
WG932329-3LCS	109	117	108	97	0
WG932329-5BLANK	109	122	108	93	0
4479-091416-1000 (L1628990-04D)	90	110	87	90	0
4479-091416-1055 (L1628990-05D)	91	109	85	86	0
4479-091416-1130 (L1628990-06D)	91	108	83	86	0
4479-091416-1145 (L1628990-07D)	92	111	84	86	0
4479-091416-1210 (L1628990-08D)	92	108	87	89	0
4479-091416-1215 (L1628990-09D)	91	111	85	87	0
4479-091416-1340 (L1628990-10D)	90	108	84	88	0
4479-091416-1500 (L1628990-13D)	91	109	86	88	0
WG932471-4LCSD	94	107	86	97	0
WG932471-3LCS	95	110	86	99	0
WG932471-5BLANK	92	106	86	89	0

	QC LIMITS
TOL = TOLUENE-D8	(70-130)
BFB = 4-BROMOFLUOROBENZENE	(70-130)
DCA = 1,2-DICHLOROETHANE-D4	(70-130)
DBFM = DIBROMOFLUOROMETHANE)	(70-130)

* Values outside of QC limits

FORM II

Batch QC Summary

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Matrix	: SOIL		
LCS Sample ID	: WG932329-3 **Analysis Date :** 09/15/16 10:24	**File ID**	: V00160915A01
LCSD Sample ID	: WG932329-4 **Analysis Date :** 09/15/16 10:51	**File ID**	: V00160915A02

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,2-Dibromo-3-chloropropane	0.02	0.018	92	0.02	0.019	96	4	40-160	30
1,4-Dioxane	1	0.89	89	1	0.99	99	11	40-160	30
1,2-Dibromoethane	0.02	0.020	102	0.02	0.020	102	0	70-130	30
Methylene chloride	0.02	0.020	102	0.02	0.020	99	3	70-130	30
1,1-Dichloroethane	0.02	0.021	104	0.02	0.021	105	1	70-130	30
Chloroform	0.02	0.020	100	0.02	0.020	99	1	70-130	30
Carbon tetrachloride	0.02	0.018	88	0.02	0.018	89	1	70-130	30
1,2-Dichloropropane	0.02	0.021	104	0.02	0.021	103	1	70-130	30
Dibromochloromethane	0.02	0.020	98	0.02	0.020	98	0	70-130	30
1,1,2-Trichloroethane	0.02	0.021	106	0.02	0.022	108	2	70-130	30
2-Chloroethylvinyl ether	0.02	0.014	68	0.02	0.014	72	6	40-160	30
Tetrachloroethene	0.02	0.018	90	0.02	0.018	89	1	70-130	30
Chlorobenzene	0.02	0.020	98	0.02	0.020	98	0	70-130	30
Trichlorofluoromethane	0.02	0.016	79	0.02	0.016	78	1	40-160	30
1,2-Dichloroethane	0.02	0.021	105	0.02	0.021	105	0	70-130	30
1,1,1-Trichloroethane	0.02	0.020	98	0.02	0.019	96	2	70-130	30
Bromodichloromethane	0.02	0.020	100	0.02	0.020	98	2	70-130	30
trans-1,3-Dichloropropene	0.02	0.021	106	0.02	0.021	107	1	70-130	30
cis-1,3-Dichloropropene	0.02	0.020	97	0.02	0.019	97	0	40-160	30
1,1-Dichloropropene	0.02	0.020	101	0.02	0.020	98	3	70-130	30
Bromoform	0.02	0.018	88	0.02	0.018	91	3	40-160	30
1,1,2,2-Tetrachloroethane	0.02	0.022	111	0.02	0.023	113	2	40-160	30
Benzene	0.02	0.019	95	0.02	0.019	94	1	70-130	30
Toluene	0.02	0.020	102	0.02	0.020	100	2	70-130	30
Ethylbenzene	0.02	0.020	100	0.02	0.020	100	0	70-130	30
Chloromethane	0.02	0.020	100	0.02	0.020	100	0	40-160	30
Bromomethane	0.02	0.020	99	0.02	0.018	93	6	40-160	30
Vinyl chloride	0.02	0.022	110	0.02	0.022	108	2	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1628990	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG932329-3	**Analysis Date :** 09/15/16 10:24	**File ID**	: V00160915A01	
LCSD Sample ID	: WG932329-4	**Analysis Date :** 09/15/16 10:51	**File ID**	: V00160915A02	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
Chloroethane	0.02	0.020	100	0.02	0.020	99	1	40-160	30
1,1-Dichloroethene	0.02	0.023	115	0.02	0.022	110	4	70-130	30
trans-1,2-Dichloroethene	0.02	0.019	96	0.02	0.019	94	2	70-130	30
Trichloroethene	0.02	0.019	96	0.02	0.019	94	2	70-130	30
1,2-Dichlorobenzene	0.02	0.020	102	0.02	0.020	100	2	70-130	30
1,3-Dichlorobenzene	0.02	0.020	102	0.02	0.020	101	1	70-130	30
1,4-Dichlorobenzene	0.02	0.020	101	0.02	0.020	100	1	70-130	30
Methyl tert butyl ether	0.02	0.019	94	0.02	0.019	95	1	70-130	30
p/m-Xylene	0.04	0.040	99	0.04	0.040	99	0	70-130	30
o-Xylene	0.04	0.038	96	0.04	0.039	97	1	70-130	30
cis-1,2-Dichloroethene	0.02	0.019	95	0.02	0.018	92	3	70-130	30
Dibromomethane	0.02	0.018	93	0.02	0.018	92	1	70-130	30
1,4-Dichlorobutane	0.02	0.025	124	0.02	0.025	125	1	70-130	30
1,2,3-Trichloropropane	0.02	0.022	109	0.02	0.023	114	4	70-130	30
Styrene	0.04	0.035	87	0.04	0.035	87	0	40-160	30
Dichlorodifluoromethane	0.02	0.019	96	0.02	0.019	94	2	40-160	30
Acetone	0.02	0.024	123	0.02	0.025	127	3	40-160	30
Carbon disulfide	0.02	0.019	97	0.02	0.019	96	1	40-160	30
2-Butanone	0.02	0.020	100	0.02	0.021	106	6	40-160	30
Vinyl acetate	0.02	0.018	90	0.02	0.018	90	0	70-130	30
4-Methyl-2-pentanone	0.02	0.020	99	0.02	0.021	104	5	40-160	30
2-Hexanone	0.02	0.020	102	0.02	0.021	107	5	40-160	30
Ethyl methacrylate	0.02	0.018	88	0.02	0.018	90	2	70-130	30
Acrolein	0.02	0.022	108	0.02	0.020	99	9	40-160	30
Acrylonitrile	0.02	0.020	102	0.02	0.021	107	5	70-130	30
Bromochloromethane	0.02	0.018	90	0.02	0.018	89	1	70-130	30
Tetrahydrofuran	0.02	0.019	97	0.02	0.019	95	2	70-130	30
2,2-Dichloropropane	0.02	0.020	100	0.02	0.020	100	0	40-160	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1628990	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG932329-3	**Analysis Date :** 09/15/16 10:24	**File ID**	: V00160915A01	
LCSD Sample ID	: WG932329-4	**Analysis Date :** 09/15/16 10:51	**File ID**	: V00160915A02	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,3-Dichloropropane	0.02	0.021	106	0.02	0.021	106	0	70-130	30
1,1,1,2-Tetrachloroethane	0.02	0.020	99	0.02	0.019	97	2	70-130	30
Bromobenzene	0.02	0.020	100	0.02	0.020	100	0	70-130	30
n-Butylbenzene	0.02	0.024	120	0.02	0.024	119	1	70-130	30
sec-Butylbenzene	0.02	0.022	111	0.02	0.022	110	1	70-130	30
tert-Butylbenzene	0.02	0.022	109	0.02	0.022	108	1	70-130	30
o-Chlorotoluene	0.02	0.018	91	0.02	0.018	90	1	70-130	30
p-Chlorotoluene	0.02	0.023	114	0.02	0.023	113	1	70-130	30
Hexachlorobutadiene	0.02	0.019	96	0.02	0.019	95	1	70-130	30
Isopropylbenzene	0.02	0.021	106	0.02	0.021	106	0	70-130	30
p-Isopropyltoluene	0.02	0.022	112	0.02	0.022	111	1	70-130	30
Naphthalene	0.02	0.020	99	0.02	0.021	103	4	40-160	30
n-Propylbenzene	0.02	0.022	112	0.02	0.022	112	0	70-130	30
1,2,3-Trichlorobenzene	0.02	0.019	96	0.02	0.020	98	2	70-130	30
1,2,4-Trichlorobenzene	0.02	0.020	98	0.02	0.020	98	0	70-130	30
1,3,5-Trimethylbenzene	0.02	0.022	109	0.02	0.022	108	1	70-130	30
1,2,4-Trimethylbenzene	0.02	0.022	110	0.02	0.022	110	0	70-130	30
trans-1,4-Dichloro-2-butene	0.02	0.025	123	0.02	0.026	128	4	70-130	30
Ethyl ether	0.02	0.018	89	0.02	0.018	89	0	70-130	30
Methyl Acetate	0.02	0.018	92	0.02	0.019	96	4	70-130	30
Ethyl Acetate	0.02	0.017	85	0.02	0.018	87	2	70-130	30
Isopropyl Ether	0.02	0.020	98	0.02	0.020	98	0	70-130	30
Cyclohexane	0.02	0.020	100	0.02	0.020	98	2	70-130	30
tert-Butyl Alcohol	0.1	0.096	96	0.1	0.10	105	9	40-160	30
Ethyl-Tert-Butyl-Ether	0.02	0.020	101	0.02	0.020	102	1	70-130	30
Tertiary-Amyl Methyl Ether	0.02	0.018	93	0.02	0.019	95	2	70-130	30
Methyl cyclohexane	0.02	0.018	91	0.02	0.018	88	3	70-130	30
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.02	0.020	98	0.02	0.019	94	4	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1628990	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG932329-3	**Analysis Date :** 09/15/16 10:24	**File ID**	: V00160915A01	
LCSD Sample ID	: WG932329-4	**Analysis Date :** 09/15/16 10:51	**File ID**	: V00160915A02	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,2,4,5-Tetramethylbenzene	0.02	0.019	97	0.02	0.019	97	0	70-130	30
1,4-Diethylbenzene	0.02	0.022	111	0.02	0.022	111	0	70-130	30
4-Ethyltoluene	0.02	0.022	110	0.02	0.022	109	1	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		Lab Number	: L1628990	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		Project Number	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG932471-3	Analysis Date : 09/15/16 10:22	File ID	: V10160915A01	
LCSD Sample ID	: WG932471-4	Analysis Date : 09/15/16 10:47	File ID	: V10160915A02	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,2-Dibromo-3-chloropropane	1	0.91	91	1	0.88	88	3	40-160	30
1,2-Dibromoethane	1	0.93	93	1	0.92	92	1	70-130	30
Methylene chloride	1	0.88	88	1	0.84	84	5	70-130	30
1,1-Dichloroethane	1	0.91	91	1	0.85	85	7	70-130	30
Chloroform	1	0.86	86	1	0.82	82	5	70-130	30
Carbon tetrachloride	1	0.73	73	1	0.64	64 Q	13	70-130	30
1,2-Dichloropropane	1	1.1	108	1	1.1	107	1	70-130	30
Dibromochloromethane	1	0.84	84	1	0.81	81	4	70-130	30
1,1,2-Trichloroethane	1	0.87	87	1	0.87	87	0	70-130	30
2-Chloroethylvinyl ether	1	1.2	116	1	1.2	119	3	40-160	30
Tetrachloroethene	1	0.77	77	1	0.71	71	8	70-130	30
Chlorobenzene	1	0.88	88	1	0.86	86	2	70-130	30
Trichlorofluoromethane	1	1.1	106	1	0.89	89	17	40-160	30
1,2-Dichloroethane	1	0.94	94	1	0.95	95	1	70-130	30
1,1,1-Trichloroethane	1	0.74	74	1	0.68	68 Q	8	70-130	30
Bromodichloromethane	1	0.86	86	1	0.85	85	1	70-130	30
trans-1,3-Dichloropropene	1	0.81	81	1	0.79	79	3	70-130	30
cis-1,3-Dichloropropene	1	0.95	95	1	0.95	95	0	40-160	30
1,1-Dichloropropene	1	0.86	86	1	0.77	77	11	70-130	30
Bromoform	1	0.79	79	1	0.75	75	5	40-160	30
1,1,2,2-Tetrachloroethane	1	0.94	94	1	0.93	93	1	40-160	30
Benzene	1	0.92	92	1	0.88	88	4	70-130	30
Toluene	1	0.84	84	1	0.79	79	6	70-130	30
Ethylbenzene	1	0.83	83	1	0.79	79	5	70-130	30
Chloromethane	1	1.0	105	1	0.91	91	14	40-160	30
Bromomethane	1	1.2	117	1	1.1	112	4	40-160	30
Vinyl chloride	1	0.97	97	1	0.81	81	18	70-130	30
Chloroethane	1	1.4	144	1	1.2	121	17	40-160	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		Lab Number	: L1628990	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		Project Number	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG932471-3	Analysis Date : 09/15/16 10:22	File ID	: V10160915A01	
LCSD Sample ID	: WG932471-4	Analysis Date : 09/15/16 10:47	File ID	: V10160915A02	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,1-Dichloroethene	1	0.80	80	1	0.67	67 Q	18	70-130	30
trans-1,2-Dichloroethene	1	0.88	88	1	0.78	78	12	70-130	30
Trichloroethene	1	0.84	84	1	0.79	79	6	70-130	30
1,2-Dichlorobenzene	1	0.91	91	1	0.90	90	1	70-130	30
1,3-Dichlorobenzene	1	0.88	88	1	0.85	85	3	70-130	30
1,4-Dichlorobenzene	1	0.90	90	1	0.89	89	1	70-130	30
Methyl tert butyl ether	1	1.1	106	1	1.0	103	3	70-130	30
p/m-Xylene	2	1.8	88	2	1.7	84	5	70-130	30
o-Xylene	2	1.8	90	2	1.8	88	2	70-130	30
cis-1,2-Dichloroethene	1	0.97	97	1	0.94	94	3	70-130	30
Dibromomethane	1	1.0	103	1	1.0	104	1	70-130	30
1,4-Dichlorobutane	1	0.97	97	1	0.98	98	1	70-130	30
1,2,3-Trichloropropane	1	0.94	94	1	0.94	94	0	70-130	30
Styrene	2	1.7	86	2	1.7	85	1	40-160	30
Dichlorodifluoromethane	1	0.64	64	1	0.53	53	19	40-160	30
Acetone	1	1.4	145	1	1.4	136	6	40-160	30
Carbon disulfide	1	0.80	80	1	0.72	72	11	40-160	30
2-Butanone	1	1.3	126	1	1.3	126	0	40-160	30
Vinyl acetate	1	1.3	133 Q	1	1.3	129	3	70-130	30
4-Methyl-2-pentanone	1	1.1	108	1	1.1	108	0	40-160	30
2-Hexanone	1	1.3	134	1	1.3	132	2	40-160	30
Ethyl methacrylate	1	0.93	93	1	0.92	92	1	70-130	30
Acrolein	1	1.1	112	1	1.2	116	4	40-160	30
Acrylonitrile	1	1.2	122	1	1.2	116	5	70-130	30
Bromochloromethane	1	1.1	110	1	1.1	111	1	70-130	30
Tetrahydrofuran	1	1.5	152 Q	1	1.5	150 Q	1	70-130	30
2,2-Dichloropropane	1	0.72	72	1	0.65	65	10	40-160	30
1,3-Dichloropropane	1	0.87	87	1	0.88	88	1	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		Lab Number	: L1628990	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		Project Number	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG932471-3	Analysis Date : 09/15/16 10:22	File ID	: V10160915A01	
LCSD Sample ID	: WG932471-4	Analysis Date : 09/15/16 10:47	File ID	: V10160915A02	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,1,1,2-Tetrachloroethane	1	0.79	79	1	0.77	77	3	70-130	30
Bromobenzene	1	0.91	91	1	0.90	90	1	70-130	30
n-Butylbenzene	1	0.86	86	1	0.80	80	7	70-130	30
sec-Butylbenzene	1	0.88	88	1	0.82	82	7	70-130	30
tert-Butylbenzene	1	0.92	92	1	0.86	86	7	70-130	30
o-Chlorotoluene	1	0.82	82	1	0.78	78	5	70-130	30
p-Chlorotoluene	1	0.87	87	1	0.84	84	4	70-130	30
Hexachlorobutadiene	1	0.84	84	1	0.79	79	6	70-130	30
Isopropylbenzene	1	0.87	87	1	0.81	81	7	70-130	30
p-Isopropyltoluene	1	0.87	87	1	0.82	82	6	70-130	30
Naphthalene	1	1.0	100	1	1.0	103	3	40-160	30
n-Propylbenzene	1	0.86	86	1	0.81	81	6	70-130	30
1,2,3-Trichlorobenzene	1	0.99	99	1	1.0	101	2	70-130	30
1,2,4-Trichlorobenzene	1	1.0	104	1	1.0	104	0	70-130	30
1,3,5-Trimethylbenzene	1	0.88	88	1	0.83	83	6	70-130	30
1,2,4-Trimethylbenzene	1	0.92	92	1	0.89	89	3	70-130	30
trans-1,4-Dichloro-2-butene	1	0.95	95	1	0.94	94	1	70-130	30
Ethyl ether	1	1.1	106	1	0.98	98	8	70-130	30
Methyl Acetate	1	1.4	141 Q	1	1.3	131 Q	7	70-130	30
Ethyl Acetate	1	1.2	125	1	1.2	124	1	70-130	30
Isopropyl Ether	1	1.4	135 Q	1	1.3	134 Q	1	70-130	30
Cyclohexane	1	0.86	86	1	0.77	77	11	70-130	30
tert-Butyl Alcohol	5	5.1	101	5	4.7	94	7	40-160	30
Ethyl-Tert-Butyl-Ether	1	1.1	111	1	1.1	110	1	70-130	30
Tertiary-Amyl Methyl Ether	1	1.1	108	1	1.1	108	0	70-130	30
Methyl cyclohexane	1	0.81	81	1	0.71	71	13	70-130	30
1,1,2-Trichloro-1,2,2-Trifluoroethane	1	0.72	72	1	0.60	60 Q	18	70-130	30
1,2,4,5-Tetramethylbenzene	1	0.90	90	1	0.88	88	2	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1628990	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG932471-3	**Analysis Date :** 09/15/16 10:22	**File ID**	: V10160915A01	
LCSD Sample ID	: WG932471-4	**Analysis Date :** 09/15/16 10:47	**File ID**	: V10160915A02	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,4-Diethylbenzene	1	0.84	84	1	0.78	78	7	70-130	30
4-Ethyltoluene	1	0.85	85	1	0.80	80	6	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1628990	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG935468-3	**Analysis Date :** 09/23/16 14:59	**File ID**	: VJ160923P02	
LCSD Sample ID	: WG935468-4	**Analysis Date :** 09/23/16 15:33	**File ID**	: VJ160923P04	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Methylene chloride	10	11.	110	10	12.	120	9	70-130	20
Chloroform	10	10.	100	10	9.9	99	1	70-130	20
Carbon tetrachloride	10	10.	100	10	10.	100	0	70-130	20
Chlorobenzene	10	9.2	92	10	9.5	95	3	70-130	20
1,2-Dichloroethane	10	9.8	98	10	9.8	98	0	70-130	20
Benzene	10	10.	100	10	9.6	96	4	70-130	20
Vinyl chloride	10	11.	110	10	11.	110	0	70-130	20
1,1-Dichloroethene	10	11.	110	10	12.	120	9	70-130	20
Trichloroethene	10	10.	100	10	10.	100	0	70-130	20
1,4-Dichlorobenzene	10	9.0	90	10	9.5	95	5	70-130	20
2-Butanone	10	8.7	87	10	8.0	80	8	40-160	20

Internal Standard Summary

Internal Standard Area and RT Summary
Form 8

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: VOA110	**Analysis Date**	: 09/15/16 10:22
Sample No	: WG932471-2	**Lab File ID**	: V10160915A01

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG932471-2	176148	6.21	138326	9.76	69768	12.43
Upper Limit	352296	6.71	276652	10.26	139536	12.93
Lower Limit	88074	5.71	69163	9.26	34884	11.93
Sample ID						
WG932471-3 LCS	176148	6.21	138326	9.76	69768	12.43
WG932471-4 LCSD	164455	6.21	131860	9.76	67431	12.43
WG932471-5 BLANK	152946	6.21	123072	9.76	63356	12.43
4479-091416-1000	156762	6.21	131312	9.76	67612	12.42
4479-091416-1055	148624	6.21	126489	9.76	66089	12.43
4479-091416-1130	162069	6.21	133971	9.76	68535	12.42
4479-091416-1145	154130	6.21	127540	9.76	65937	12.43
4479-091416-1210	156096	6.21	129126	9.76	66435	12.43
4479-091416-1215	155852	6.21	130022	9.76	66595	12.43
4479-091416-1340	158589	6.21	132448	9.76	67419	12.43
4479-091416-1500	157902	6.21	132303	9.76	67819	12.43

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: VOA100	**Analysis Date**	: 09/15/16 10:24
Sample No	: WG932329-2	**Lab File ID**	: V00160915A01

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG932329-2	341006	6.56	281424	10.14	156198	12.73
Upper Limit	682012	7.06	562848	10.64	312396	13.23
Lower Limit	170503	6.06	140712	9.64	78099	12.23
Sample ID						
WG932329-3 LCS	341006	6.56	281424	10.14	156198	12.73
WG932329-4 LCSD	345705	6.56	283053	10.14	156519	12.72
WG932329-5 BLANK	324379	6.55	262474	10.14	135036	12.72
4479-091416-0920	371922	6.56	309553	10.14	169036	12.72
4479-091416-1410	393961	6.56	336328	10.14	179454	12.72
4479-091416-1420	412869	6.56	336840	10.14	178975	12.72

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: JACK	**Analysis Date**	: 09/23/16 14:59
Sample No	: WG935468-2	**Lab File ID**	: VJ160923P02

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG935468-2	125031	3.89	67052	6.59	29574	8.98
Upper Limit	250062	4.39	134104	7.09	59148	9.48
Lower Limit	62516	3.39	33526	6.09	14787	8.48
Sample ID						
WG935468-3 LCS	125031	3.89	67052	6.59	29574	8.98
WG935468-4 LCSD	116800	3.89	65559	6.59	28608	8.98
WG935468-5 BLANK	115425	3.89	63109	6.59	27347	8.98
4479-091416-1055	116714	3.89	62547	6.59	31001	8.98
4479-091416-1130	119268	3.89	50543	6.60	39571	9.01
4479-091416-1210	129508	3.89	63764	6.59	33776	8.98
4479-091416-1215	131045	3.89	67534	6.59	31093	8.98
4479-091416-1145	120250	3.89	61502	6.59	34113	8.99
4479-091416-1340	123228	3.89	62280	6.59	33418	8.98
4479-091416-1500	124933	3.89	63419	6.59	30502	8.98

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Chromatograms

Sample Raw Data

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\160915A\
Data File : V10160915A16.D
Acq On : 15 Sep 2016 16:46
Operator : VOA110:MS
Sample : l1628990-04D,31H,4.5,5,0.001,,x
Misc : WG932471,ICAL12786
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 15 21:19:40 2016
Quant Method : I:\VOLATILES\VOA110\2016\160915A\V110_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:02:58 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA110\2016\160915A\V10160915A01.D
Sub List : 8260-Reg - Regular 8260

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.206	96	156762	20.000	ug/L	-0.02
Standard Area 1 = 176148			Recovery = 88.99%			
59) Chlorobenzene-d5	9.756	117	131312	20.000	ug/L	-0.02
Standard Area 1 = 138326			Recovery = 94.93%			
79) 1,4-Dichlorobenzene-d4	12.424	152	67612	20.000	ug/L	-0.02
Standard Area 1 = 69768			Recovery = 96.91%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.394	113	37878	18.035	ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 90.18%			
43) 1,2-Dichloroethane-d4	5.928	65	44953	17.358	ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 86.79%			
60) Toluene-d8	7.905	98	158418	17.986	ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 89.93%			
83) 4-Bromofluorobenzene	11.229	95	66164	21.969	ug/L	-0.01
Spiked Amount 20.000	Range 70 - 130		Recovery = 109.85%			
Target Compounds						Qvalue
73) Chlorobenzene	0.000		0	N.D.	d	

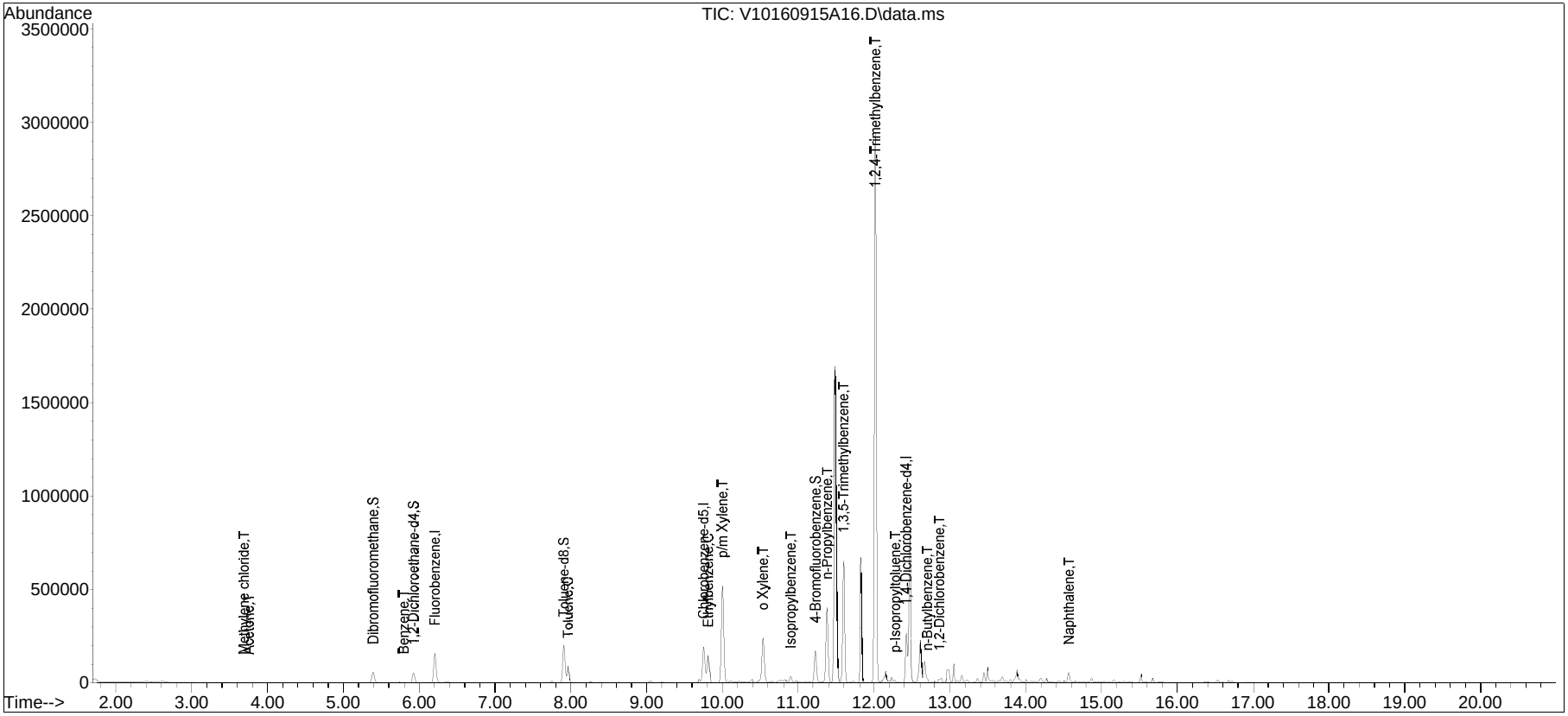
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\160915A\
Data File : V10160915A16.D
Acq On : 15 Sep 2016 16:46
Operator : VOA110:MS
Sample : l1628990-04D,31H,4.5,5,0.001,,x
Misc : WG932471,ICAL12786
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 15 21:19:40 2016
Quant Method : I:\VOLATILES\VOA110\2016\160915A\V110_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:02:58 2016
Response via : Initial Calibration

Sub List : 8260-Reg - Regular 8260\2016\160915A\V10160915A01.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA110\2016\1Q	Method	: V110_160819_8260.m
Data File	: V10160915A16.D	Operator	: VOA110:MS
Date Inj'd	: 9/15/2016 16:46	Instrument	: VOA110
Sample	: l1628990-04D,31H,4.5,5,0.0	Quant Date	: 9/15/2016 9:08 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\160915A\
Data File : V10160915A17.D
Acq On : 15 Sep 2016 17:11
Operator : VOA110:MS
Sample : l1628990-05D,31H,4.6,5,0.050,,x
Misc : WG932471,ICAL12786
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 15 21:21:36 2016
Quant Method : I:\VOLATILES\VOA110\2016\160915A\V110_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:02:58 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA110\2016\160915A\V10160915A01.D
Sub List : 8260-Reg - Regular 8260

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.206	96	148624	20.000 ug/L	-0.02
Standard Area 1 = 176148			Recovery = 84.37%		
59) Chlorobenzene-d5	9.756	117	126489	20.000 ug/L	-0.02
Standard Area 1 = 138326			Recovery = 91.44%		
79) 1,4-Dichlorobenzene-d4	12.425	152	66089	20.000 ug/L	-0.02
Standard Area 1 = 69768			Recovery = 94.73%		
System Monitoring Compounds					
36) Dibromofluoromethane	5.394	113	34272	17.212 ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 86.06%		
43) 1,2-Dichloroethane-d4	5.929	65	41703	16.985 ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 84.92%		
60) Toluene-d8	7.905	98	154242	18.179 ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 90.89%		
83) 4-Bromofluorobenzene	11.229	95	64365	21.864 ug/L	-0.01
Spiked Amount 20.000	Range 70 - 130		Recovery = 109.32%		
Target Compounds					Qvalue
48) Trichloroethene	6.385	95	1650	0.827 ug/L #	47

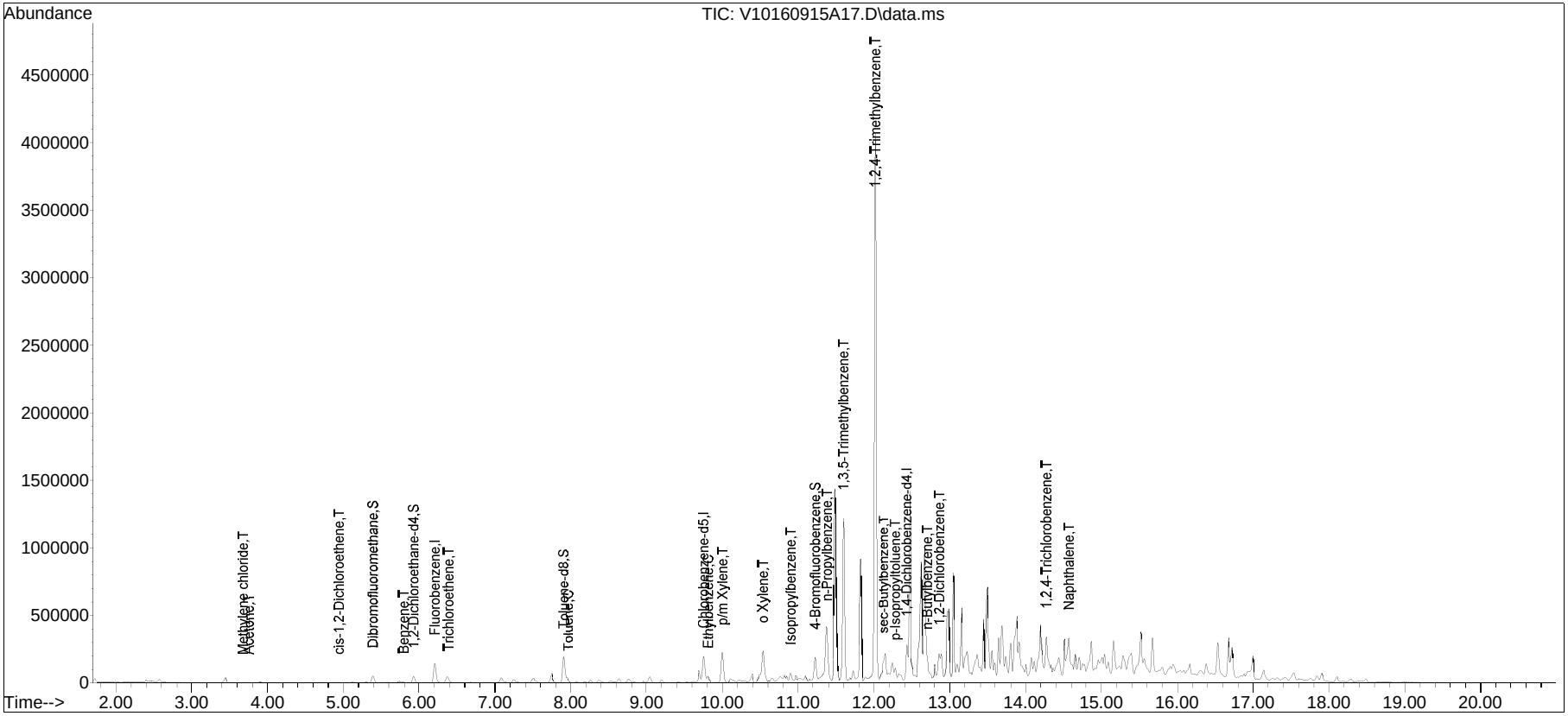
(#) = qualifier out of range (m) = manual integration (+) = signals summed

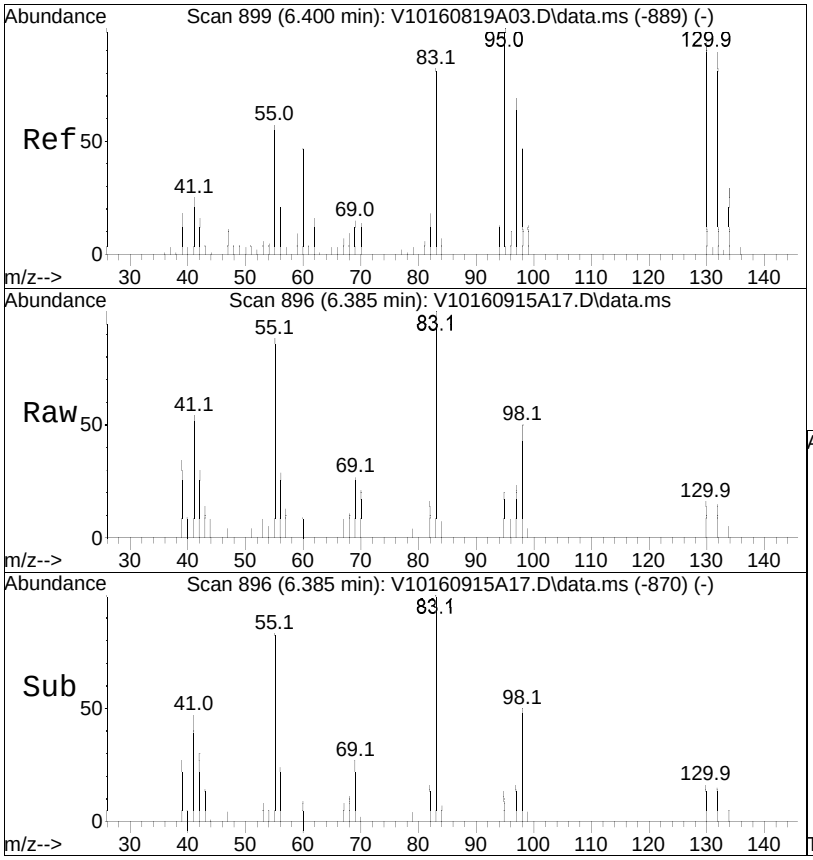
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\160915A\
Data File : V10160915A17.D
Acq On : 15 Sep 2016 17:11
Operator : VOA110:MS
Sample : l1628990-05D,31H,4.6,5,0.050,,x
Misc : WG932471,ICAL12786
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 15 21:21:36 2016
Quant Method : I:\VOLATILES\VOA110\2016\160915A\V110_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:02:58 2016
Response via : Initial Calibration

Sub List : 8260-Reg - Regular 8260\2016\160915A\V10160915A01.D•

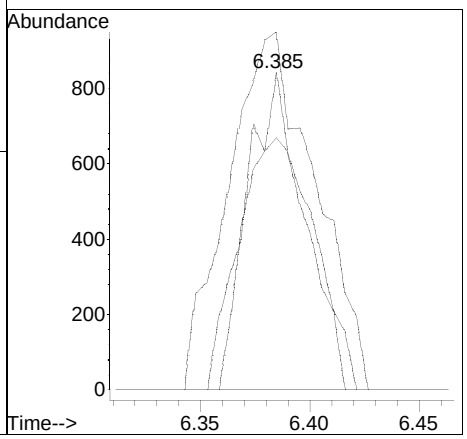




#48
Trichloroethene
Concen: 0.83 ug/L
RT: 6.385 min Scan# 896
Delta R.T. -0.015 min
Lab File: V10160915A17.D
Acq: 15 Sep 2016 17:11

Tgt Ion: 95 Resp: 1650

Ion	Ratio	Lower	Upper
95	100		
97	158.1	54.4	81.6#
130	89.4	82.8	124.2



Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\160915A\
Data File : V10160915A18.D
Acq On : 15 Sep 2016 17:37
Operator : VOA110:MS
Sample : l1628990-06D,31H,4.3,5,0.001,,x
Misc : WG932471,ICAL12786
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 15 21:22:46 2016
Quant Method : I:\VOLATILES\VOA110\2016\160915A\V110_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:02:58 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA110\2016\160915A\V10160915A01.D
Sub List : 8260-Reg - Regular 8260

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.206	96	162069	20.000	ug/L	-0.02
Standard Area 1 = 176148			Recovery = 92.01%			
59) Chlorobenzene-d5	9.756	117	133971	20.000	ug/L	-0.02
Standard Area 1 = 138326			Recovery = 96.85%			
79) 1,4-Dichlorobenzene-d4	12.424	152	68535	20.000	ug/L	-0.02
Standard Area 1 = 69768			Recovery = 98.23%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.394	113	37473	17.258	ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 86.29%			
43) 1,2-Dichloroethane-d4	5.928	65	44696	16.694	ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 83.47%			
60) Toluene-d8	7.905	98	163902	18.239	ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 91.20%			
83) 4-Bromofluorobenzene	11.229	95	65894	21.585	ug/L	-0.01
Spiked Amount 20.000	Range 70 - 130		Recovery = 107.93%			
Target Compounds						Qvalue
73) Chlorobenzene	9.777	112	11123	1.750	ug/L	90

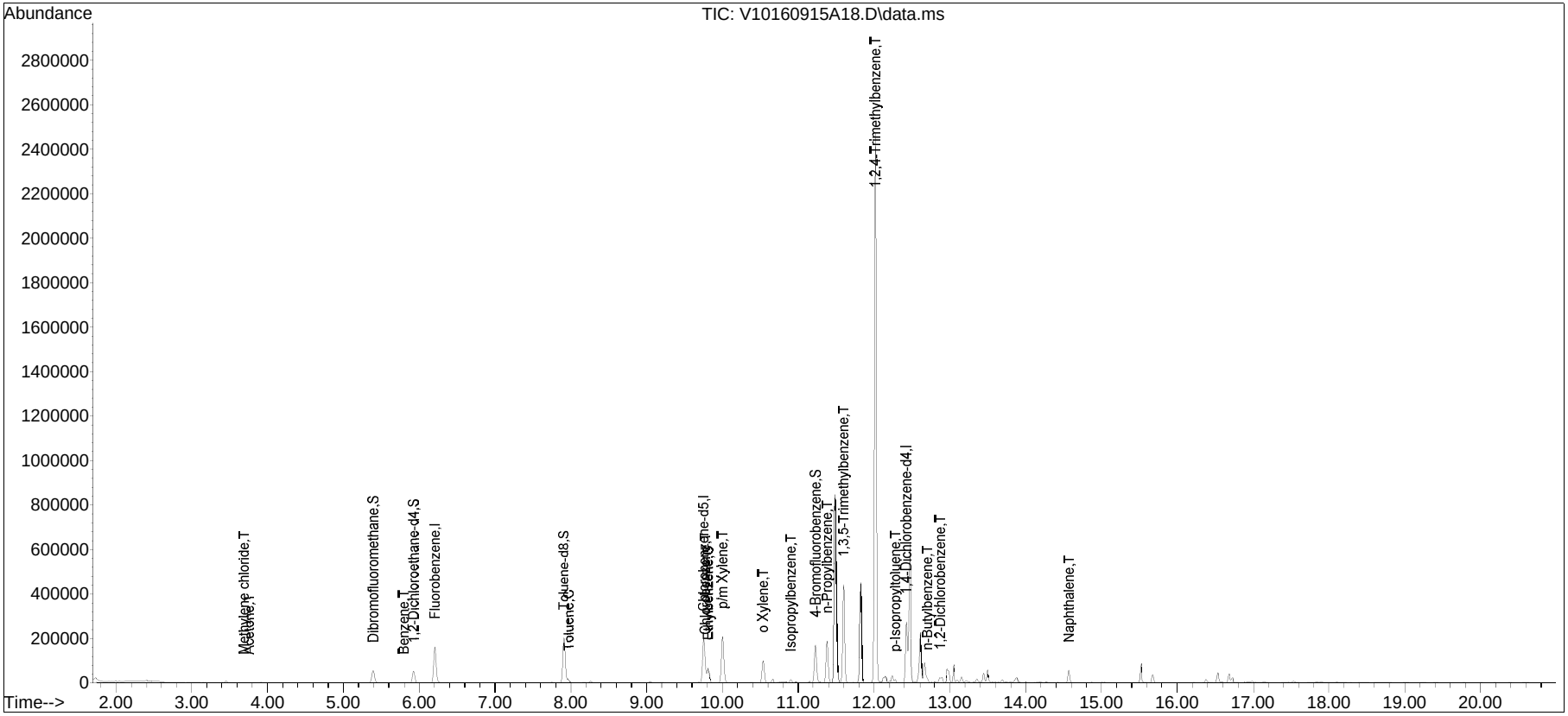
(#) = qualifier out of range (m) = manual integration (+) = signals summed

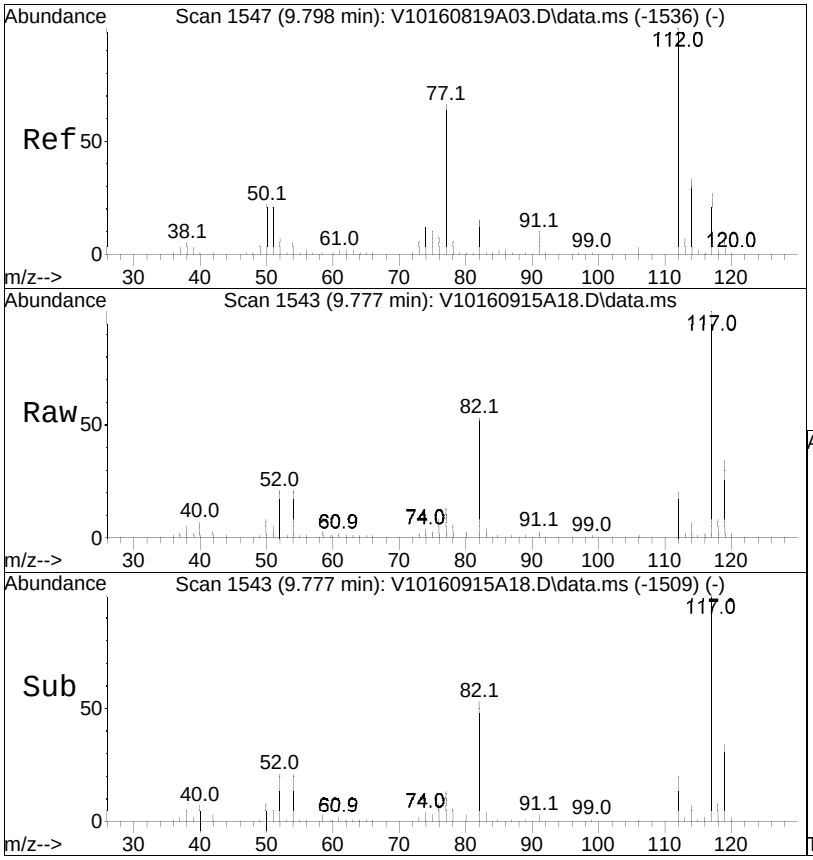
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\160915A\
Data File : V10160915A18.D
Acq On : 15 Sep 2016 17:37
Operator : VOA110:MS
Sample : l1628990-06D,31H,4.3,5,0.001,,x
Misc : WG932471,ICAL12786
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 15 21:22:46 2016
Quant Method : I:\VOLATILES\VOA110\2016\160915A\V110_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:02:58 2016
Response via : Initial Calibration

Sub List : 8260-Reg - Regular 8260\2016\160915A\V10160915A01.D•

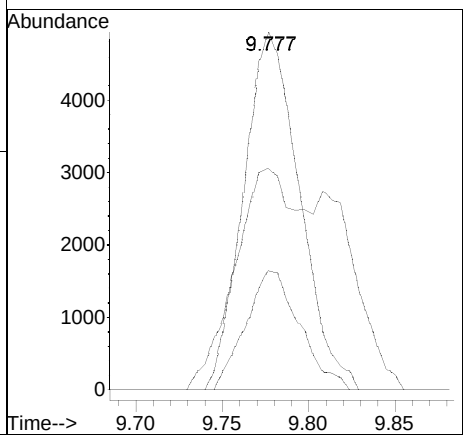




#73
Chlorobenzene
Concen: 1.75 ug/L
RT: 9.777 min Scan# 1543
Delta R.T. -0.021 min
Lab File: V10160915A18.D
Acq: 15 Sep 2016 17:37

Tgt Ion:112 Resp: 11123

Ion	Ratio	Lower	Upper
112	100		
77	63.2	60.2	90.2
114	32.2	25.3	37.9



Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA100\2016\160915A\
Data File : V00160915A18.D
Acq On : 15 Sep 2016 17:57
Operator : VOA100:MS
Sample : l1628990-03,31,4.4,5,,z
Misc : WG932329,ICAL12815
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 15 22:32:23 2016
Quant Method : I:\VOLATILES\VOA100\2016\160915A\V100_160829N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 06:21:02 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA100\2016\160915A\V00160915A01.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.558	96	371922	20.000	ug/L	0.00
Standard Area 1 = 341006			Recovery = 109.07%			
59) Chlorobenzene-d5	10.144	117	309553	20.000	ug/L	0.00
Standard Area 1 = 281424			Recovery = 110.00%			
79) 1,4-Dichlorobenzene-d4	12.724	152	169036	20.000	ug/L	0.00
Standard Area 1 = 156198			Recovery = 108.22%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.719	113	100996	19.177	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 95.88%			
43) 1,2-Dichloroethane-d4	6.270	65	111200	20.759	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 103.79%			
60) Toluene-d8	8.278	98	366844	21.189	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 105.94%			
83) 4-Bromofluorobenzene	11.555	95	158046	24.465	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 122.32%			
Target Compounds						Qvalue
73) Chlorobenzene	10.165	112	22346	1.629	ug/L	97

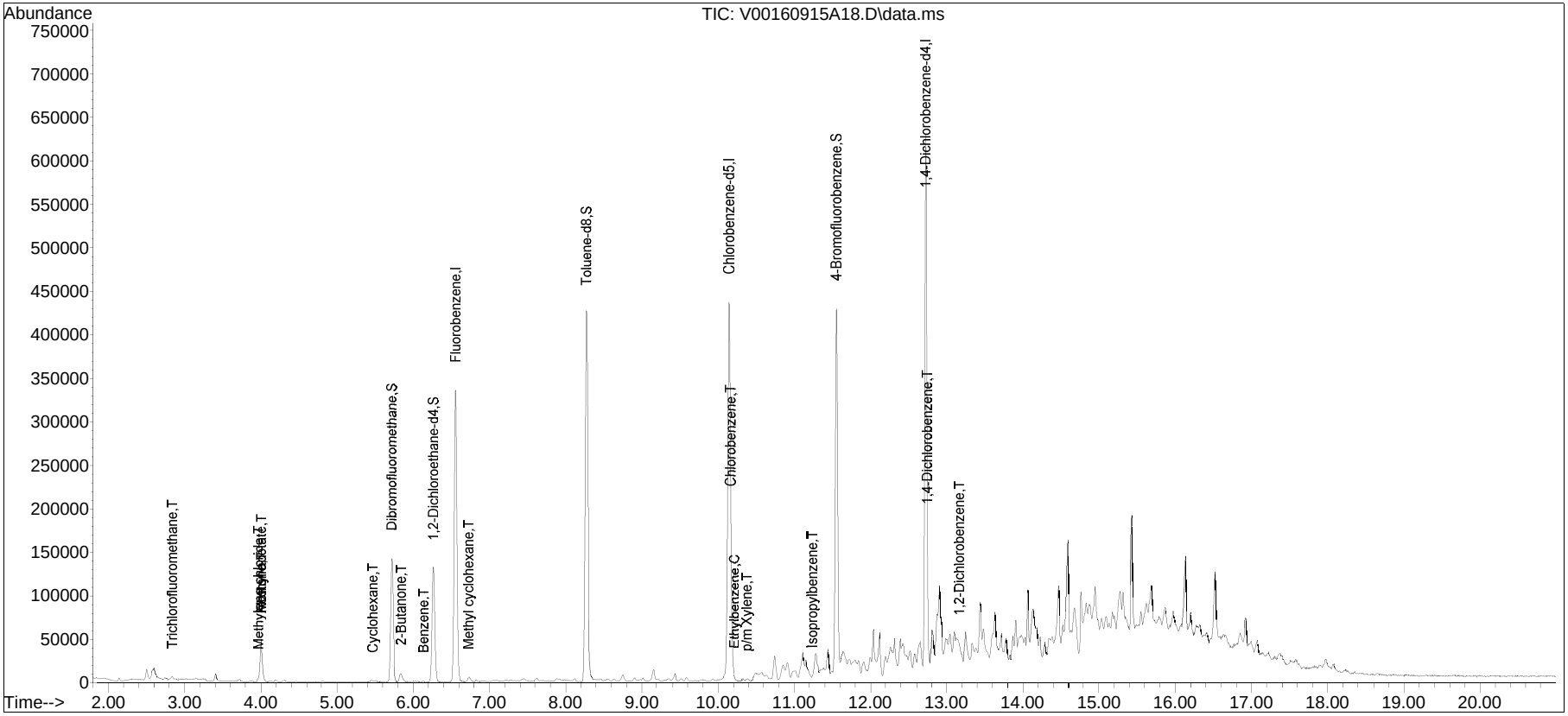
(#) = qualifier out of range (m) = manual integration (+) = signals summed

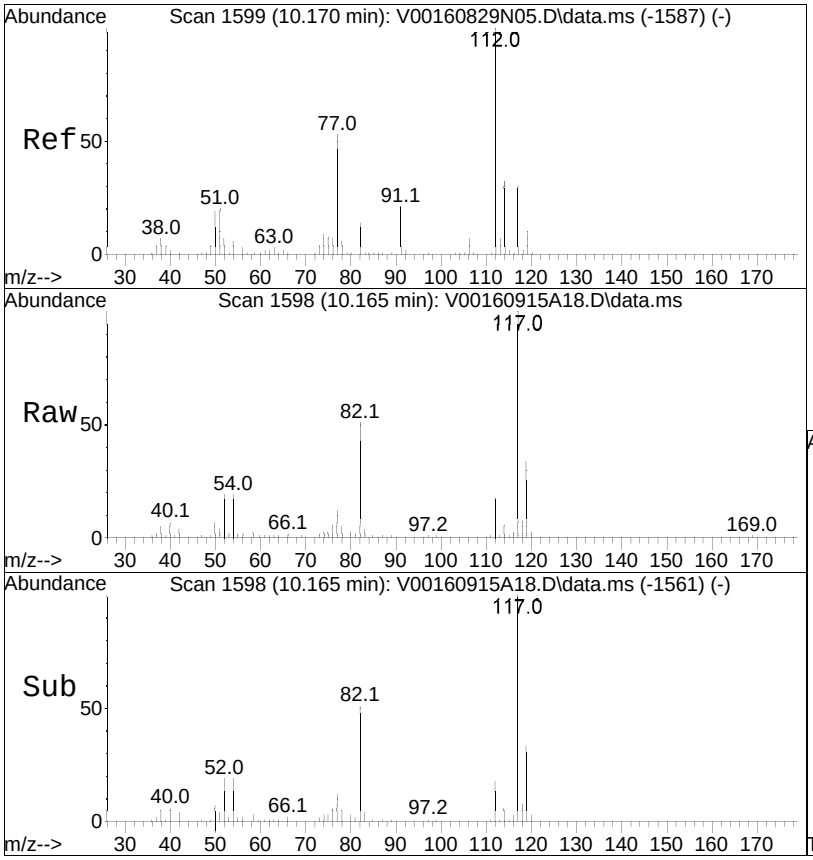
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA100\2016\160915A\
Data File : V00160915A18.D
Acq On : 15 Sep 2016 17:57
Operator : VOA100:MS
Sample : l1628990-03,31,4.4,5,,z
Misc : WG932329,ICAL12815
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 15 22:32:23 2016
Quant Method : I:\VOLATILES\VOA100\2016\160915A\V100_160829N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 06:21:02 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist915A\V00160915A01.D•

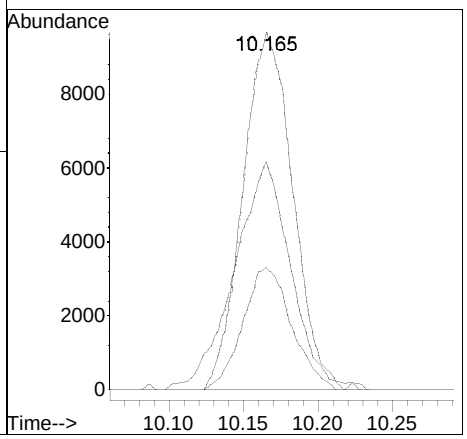




#73
Chlorobenzene
Concen: 1.63 ug/L
RT: 10.165 min Scan# 1598
Delta R.T. -0.005 min
Lab File: V00160915A18.D
Acq: 15 Sep 2016 17:57

Tgt Ion:112 Resp: 22346

Ion	Ratio	Lower	Upper
112	100		
77	72.2	55.0	82.6
114	33.6	26.2	39.2



Manual Integration Report

Data Path	: I:\VOLATILES\VOA100\2016\1	QMethod	: V100_160829N_8260.m
Data File	: V00160915A18.D	Operator	: VOA100:MS
Date Inj'd	: 9/15/2016 17:57	Instrument	: VOA 100
Sample	: l1628990-03,31,4.4,5,,z	Quant Date	: 9/15/2016 8:54 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\160915A\
Data File : V10160915A19.D
Acq On : 15 Sep 2016 18:02
Operator : VOA110:MS
Sample : l1628990-07D,31H,3.4,5,0.010,,x
Misc : WG932471,ICAL12786
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 15 21:23:51 2016
Quant Method : I:\VOLATILES\VOA110\2016\160915A\V110_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:02:58 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA110\2016\160915A\V10160915A01.D
Sub List : 8260-Reg - Regular 8260

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.206	96	154130	20.000	ug/L	-0.02
Standard Area 1 = 176148			Recovery = 87.50%			
59) Chlorobenzene-d5	9.756	117	127540	20.000	ug/L	-0.02
Standard Area 1 = 138326			Recovery = 92.20%			
79) 1,4-Dichlorobenzene-d4	12.425	152	65937	20.000	ug/L	-0.02
Standard Area 1 = 69768			Recovery = 94.51%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.394	113	35723	17.300	ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 86.50%			
43) 1,2-Dichloroethane-d4	5.928	65	42824	16.818	ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 84.09%			
60) Toluene-d8	7.905	98	156609	18.306	ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 91.53%			
83) 4-Bromofluorobenzene	11.229	95	65470	22.291	ug/L	-0.01
Spiked Amount 20.000	Range 70 - 130		Recovery = 111.46%			
Target Compounds						Qvalue
48) Trichloroethene	0.000		0	N.D.		
73) Chlorobenzene	9.777	112	27884	4.609	ug/L	90

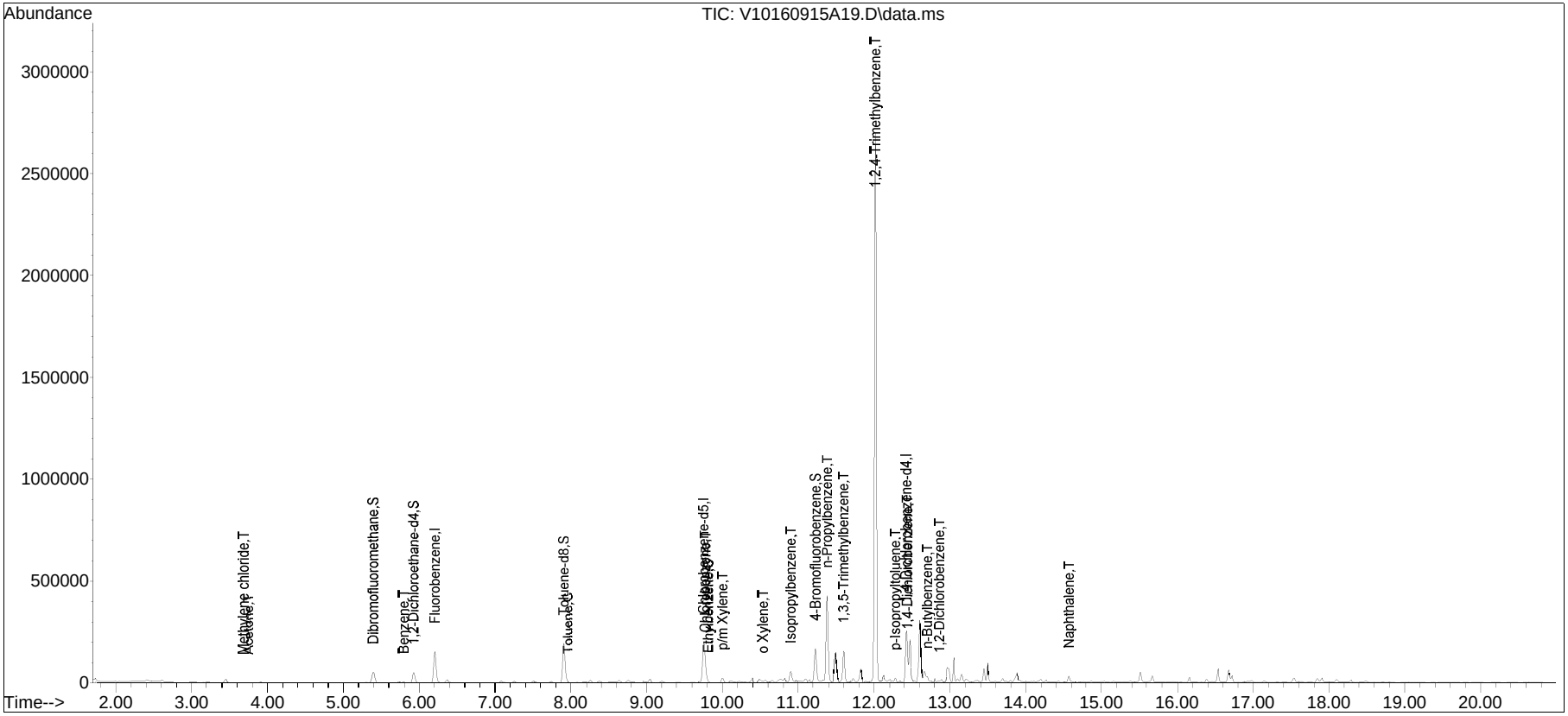
(#) = qualifier out of range (m) = manual integration (+) = signals summed

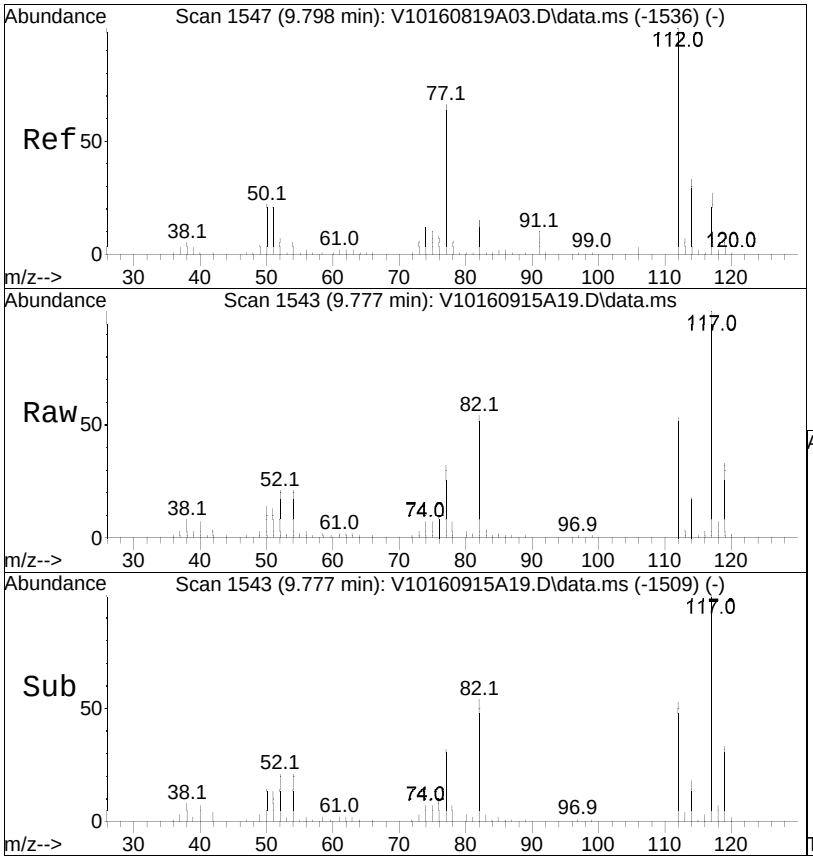
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\160915A\
Data File : V10160915A19.D
Acq On : 15 Sep 2016 18:02
Operator : VOA110:MS
Sample : l1628990-07D,31H,3.4,5,0.010,,x
Misc : WG932471,ICAL12786
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 15 21:23:51 2016
Quant Method : I:\VOLATILES\VOA110\2016\160915A\V110_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:02:58 2016
Response via : Initial Calibration

Sub List : 8260-Reg - Regular 8260\2016\160915A\V10160915A01.D•

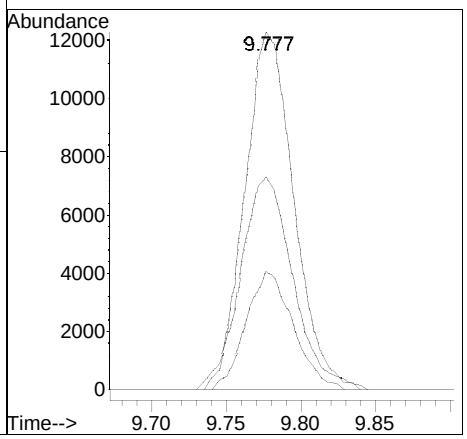




#73
Chlorobenzene
Concen: 4.61 ug/L
RT: 9.777 min Scan# 1543
Delta R.T. -0.021 min
Lab File: V10160915A19.D
Acq: 15 Sep 2016 18:02

Tgt Ion:112 Resp: 27884

Ion	Ratio	Lower	Upper
112	100		
77	63.9	60.2	90.2
114	32.1	25.3	37.9



Manual Integration Report

Data Path	: I:\VOLATILES\VOA110\2016\1Q	Method	: V110_160819_8260.m
Data File	: V10160915A19.D	Operator	: VOA110:MS
Date Inj'd	: 9/15/2016 18:02	Instrument	: VOA110
Sample	: l1628990-07D,31H,3.4,5,0.0	Quant Date	: 9/15/2016 9:09 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA100\2016\160915A\
Data File : V00160915A19.D
Acq On : 15 Sep 2016 18:23
Operator : VOA100:MS
Sample : l1628990-11,31,4.2,5,,z
Misc : WG932329,ICAL12815
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 15 22:33:20 2016
Quant Method : I:\VOLATILES\VOA100\2016\160915A\V100_160829N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 06:21:02 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA100\2016\160915A\V00160915A01.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.558	96	393961	20.000	ug/L	0.00
Standard Area 1 = 341006			Recovery = 115.53%			
59) Chlorobenzene-d5	10.144	117	336328	20.000	ug/L	0.00
Standard Area 1 = 281424			Recovery = 119.51%			
79) 1,4-Dichlorobenzene-d4	12.724	152	179454	20.000	ug/L	0.00
Standard Area 1 = 156198			Recovery = 114.89%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.719	113	106404	19.074	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 95.37%			
43) 1,2-Dichloroethane-d4	6.265	65	117280	20.670	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 103.35%			
60) Toluene-d8	8.273	98	391270	20.801	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 104.01%			
83) 4-Bromofluorobenzene	11.555	95	163519	23.843	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 119.22%			
Target Compounds						Qvalue
73) Chlorobenzene	10.165	112	887784	59.583	ug/L #	86

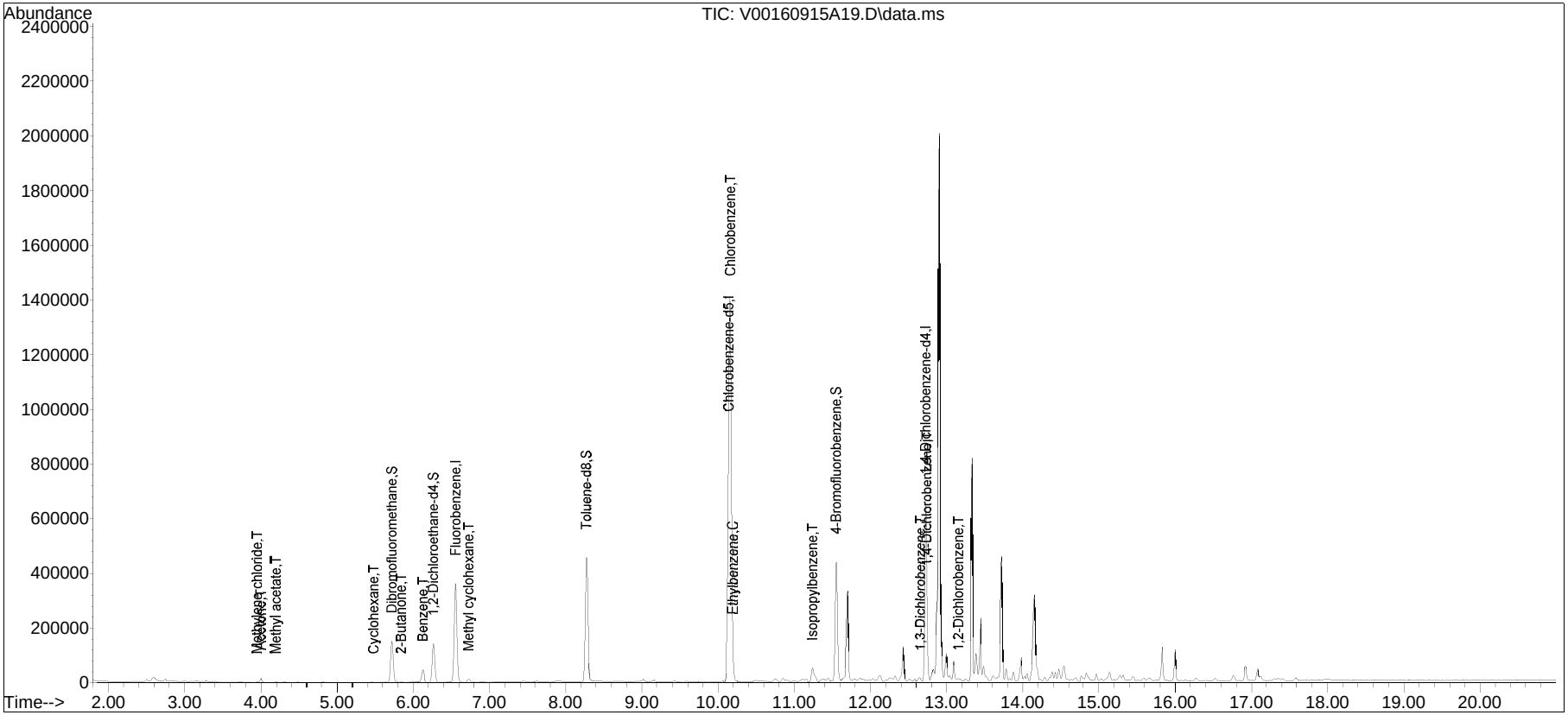
(#) = qualifier out of range (m) = manual integration (+) = signals summed

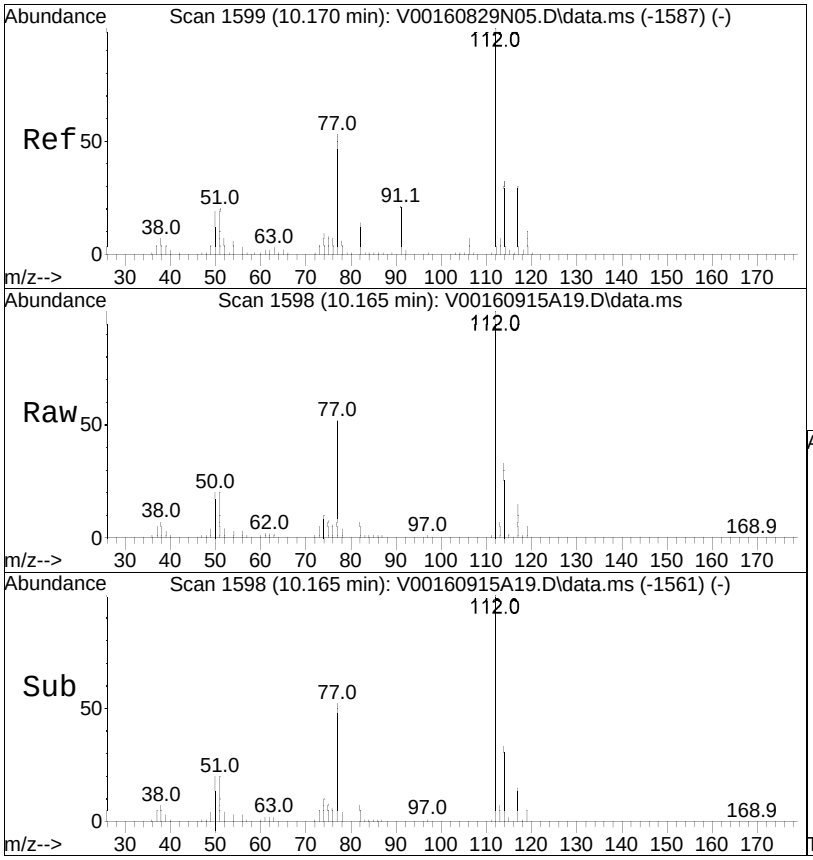
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA100\2016\160915A\
Data File : V00160915A19.D
Acq On : 15 Sep 2016 18:23
Operator : VOA100:MS
Sample : l1628990-11,31,4.2,5,,z
Misc : WG932329,ICAL12815
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 15 22:33:20 2016
Quant Method : I:\VOLATILES\VOA100\2016\160915A\V100_160829N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 06:21:02 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist915A\V00160915A01.D•

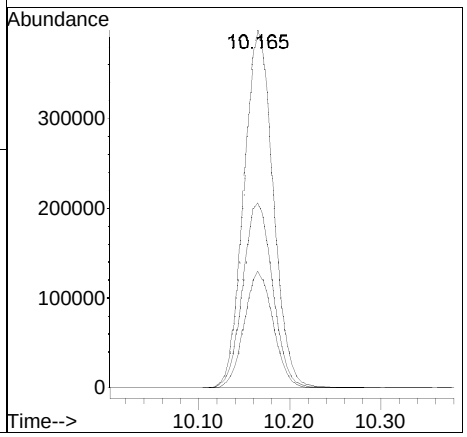




#73
Chlorobenzene
Concen: 59.58 ug/L
RT: 10.165 min Scan# 1598
Delta R.T. -0.005 min
Lab File: V00160915A19.D
Acq: 15 Sep 2016 18:23

Tgt Ion:112 Resp: 887784

Ion	Ratio	Lower	Upper
112	100		
77	52.6	55.0	82.6#
114	32.3	26.2	39.2



Manual Integration Report

Data Path	: I:\VOLATILES\VOA100\2016\1	QMethod	: V100_160829N_8260.m
Data File	: V00160915A19.D	Operator	: VOA100:MS
Date Inj'd	: 9/15/2016 18:23	Instrument	: VOA 100
Sample	: l1628990-11,31,4.2,5,,z	Quant Date	: 9/15/2016 8:55 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\160915A\
Data File : V10160915A20.D
Acq On : 15 Sep 2016 18:28
Operator : VOA110:MS
Sample : l1628990-08D,31H,3.4,5,0.002,,x
Misc : WG932471,ICAL12786
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 15 21:25:06 2016
Quant Method : I:\VOLATILES\VOA110\2016\160915A\V110_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:02:58 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA110\2016\160915A\V10160915A01.D
Sub List : 8260-Reg - Regular 8260

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.206	96	156096	20.000	ug/L	-0.02
Standard Area 1 = 176148			Recovery = 88.62%			
59) Chlorobenzene-d5	9.761	117	129126	20.000	ug/L	-0.02
Standard Area 1 = 138326			Recovery = 93.35%			
79) 1,4-Dichlorobenzene-d4	12.425	152	66435	20.000	ug/L	-0.02
Standard Area 1 = 69768			Recovery = 95.22%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.394	113	36952	17.669	ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 88.35%			
43) 1,2-Dichloroethane-d4	5.928	65	44596	17.294	ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 86.47%			
60) Toluene-d8	7.905	98	158567	18.307	ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 91.53%			
83) 4-Bromofluorobenzene	11.229	95	63488	21.454	ug/L	-0.01
Spiked Amount 20.000	Range 70 - 130		Recovery = 107.27%			
Target Compounds						Qvalue
73) Chlorobenzene	9.777	112	20079	3.278	ug/L	99

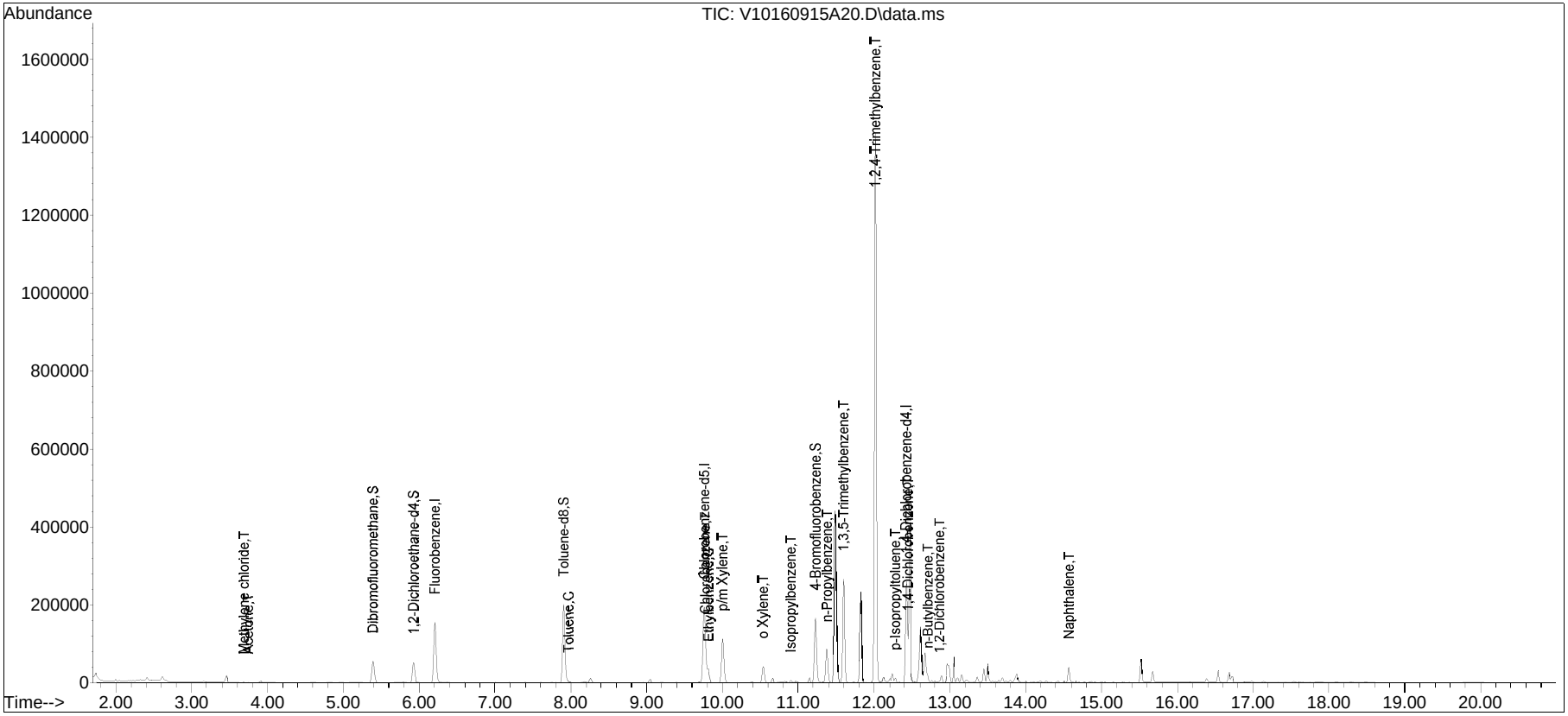
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

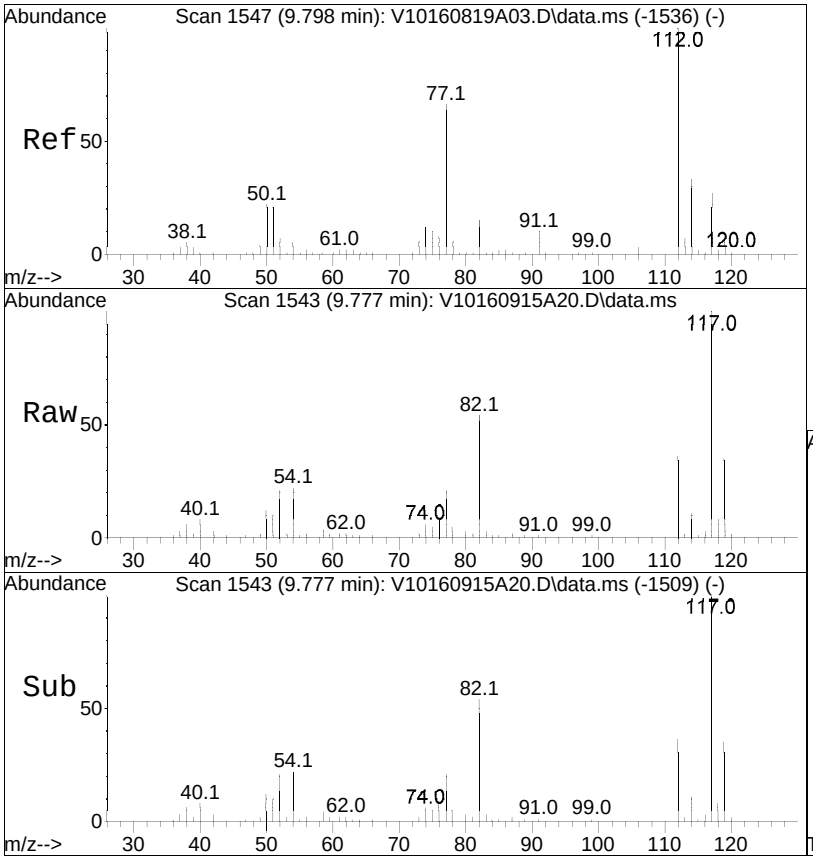
Data Path : I:\VOLATILES\VOA110\2016\160915A\
Data File : V10160915A20.D
Acq On : 15 Sep 2016 18:28
Operator : VOA110:MS
Sample : l1628990-08D,31H,3.4,5,0.002,,x
Misc : WG932471,ICAL12786
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 15 21:25:06 2016
Quant Method : I:\VOLATILES\VOA110\2016\160915A\V110_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:02:58 2016
Response via : Initial Calibration

Sub List : 8260-Reg - Regular 8260\2016\160915A\V10160915A01.D•



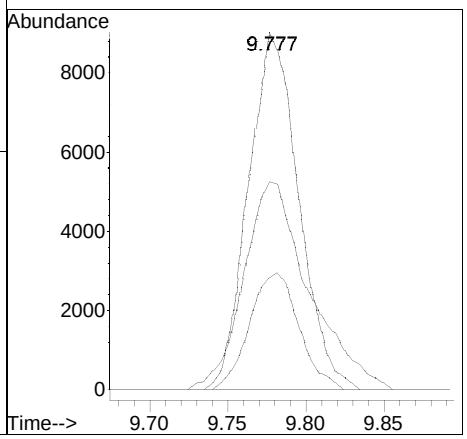
V110_160819_8260.m Thu Sep 15 21:40:06 2016 SVOA-INSTRUMENT Page 2 : 4



#73
Chlorobenzene
Concen: 3.28 ug/L
RT: 9.777 min Scan# 1543
Delta R.T. -0.021 min
Lab File: V10160915A20.D
Acq: 15 Sep 2016 18:28

Tgt Ion:112 Resp: 20079

Ion	Ratio	Lower	Upper
112	100		
77	75.7	60.2	90.2
114	32.3	25.3	37.9



Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\160915A\
Data File : V10160915A21.D
Acq On : 15 Sep 2016 18:53
Operator : VOA110:MS
Sample : l1628990-09D,31H,3.3,5,0.004,,x
Misc : WG932471,ICAL12786
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 15 21:26:12 2016
Quant Method : I:\VOLATILES\VOA110\2016\160915A\V110_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:02:58 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA110\2016\160915A\V10160915A01.D
Sub List : 8260-Reg - Regular 8260

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.206	96	155852	20.000	ug/L	-0.02
Standard Area 1 = 176148			Recovery = 88.48%			
59) Chlorobenzene-d5	9.756	117	130022	20.000	ug/L	-0.02
Standard Area 1 = 138326			Recovery = 94.00%			
79) 1,4-Dichlorobenzene-d4	12.425	152	66595	20.000	ug/L	-0.02
Standard Area 1 = 69768			Recovery = 95.45%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.394	113	36502	17.482	ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 87.41%			
43) 1,2-Dichloroethane-d4	5.928	65	43814	17.017	ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 85.08%			
60) Toluene-d8	7.905	98	158368	18.158	ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 90.79%			
83) 4-Bromofluorobenzene	11.229	95	65807	22.184	ug/L	-0.01
Spiked Amount 20.000	Range 70 - 130		Recovery = 110.92%			
Target Compounds						Qvalue
73) Chlorobenzene	9.777	112	41748	6.769	ug/L	95

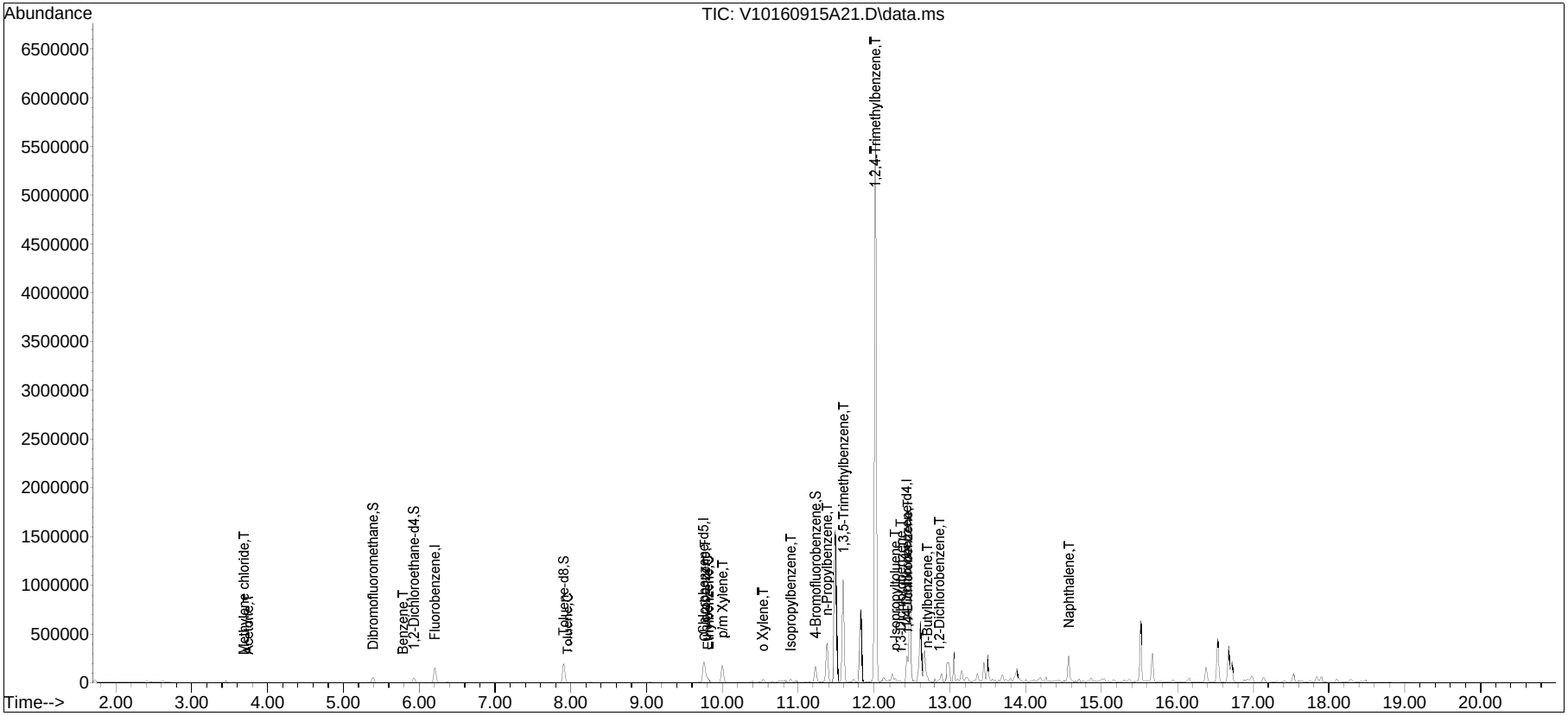
(#) = qualifier out of range (m) = manual integration (+) = signals summed

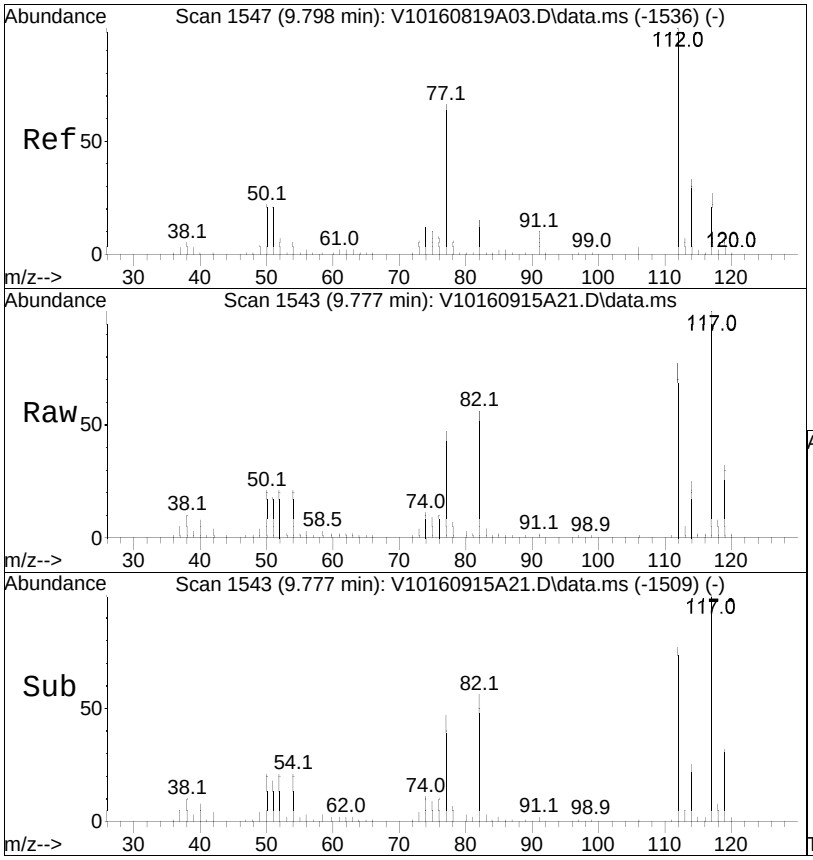
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\160915A\
Data File : V10160915A21.D
Acq On : 15 Sep 2016 18:53
Operator : VOA110:MS
Sample : l1628990-09D,31H,3.3,5,0.004,,x
Misc : WG932471,ICAL12786
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 15 21:26:12 2016
Quant Method : I:\VOLATILES\VOA110\2016\160915A\V110_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:02:58 2016
Response via : Initial Calibration

Sub List : 8260-Reg - Regular 8260\2016\160915A\V10160915A01.D•

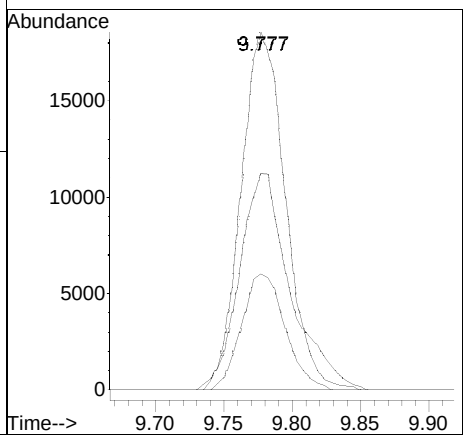




#73
Chlorobenzene
Concen: 6.77 ug/L
RT: 9.777 min Scan# 1543
Delta R.T. -0.021 min
Lab File: V10160915A21.D
Acq: 15 Sep 2016 18:53

Tgt Ion:112 Resp: 41748

Ion	Ratio	Lower	Upper
112	100		
77	69.2	60.2	90.2
114	31.9	25.3	37.9



Manual Integration Report

Data Path	: I:\VOLATILES\VOA110\2016\1Q	Method	: V110_160819_8260.m
Data File	: V10160915A21.D	Operator	: VOA110:MS
Date Inj'd	: 9/15/2016 18:53	Instrument	: VOA110
Sample	: l1628990-09D,31H,3.3,5,0.0	Quant Date	: 9/15/2016 9:10 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA100\2016\160915A\
Data File : V00160915A21.D
Acq On : 15 Sep 2016 19:17
Operator : VOA100:MS
Sample : l1628990-12,31,3.6,5,,y
Misc : WG932329,ICAL12815
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 15 22:35:37 2016
Quant Method : I:\VOLATILES\VOA100\2016\160915A\V100_160829N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 06:21:02 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA100\2016\160915A\V00160915A01.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.558	96	412869	20.000	ug/L	0.00
Standard Area 1 = 341006			Recovery = 121.07%			
59) Chlorobenzene-d5	10.144	117	336840	20.000	ug/L	0.00
Standard Area 1 = 281424			Recovery = 119.69%			
79) 1,4-Dichlorobenzene-d4	12.724	152	178975	20.000	ug/L	0.00
Standard Area 1 = 156198			Recovery = 114.58%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.719	113	110565	18.912	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 94.56%			
43) 1,2-Dichloroethane-d4	6.265	65	124201	20.887	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 104.44%			
60) Toluene-d8	8.273	98	405279	21.513	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 107.57%			
83) 4-Bromofluorobenzene	11.555	95	163319	23.877	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 119.38%			
Target Compounds						Qvalue
73) Chlorobenzene	10.165	112	51484	3.450	ug/L	91

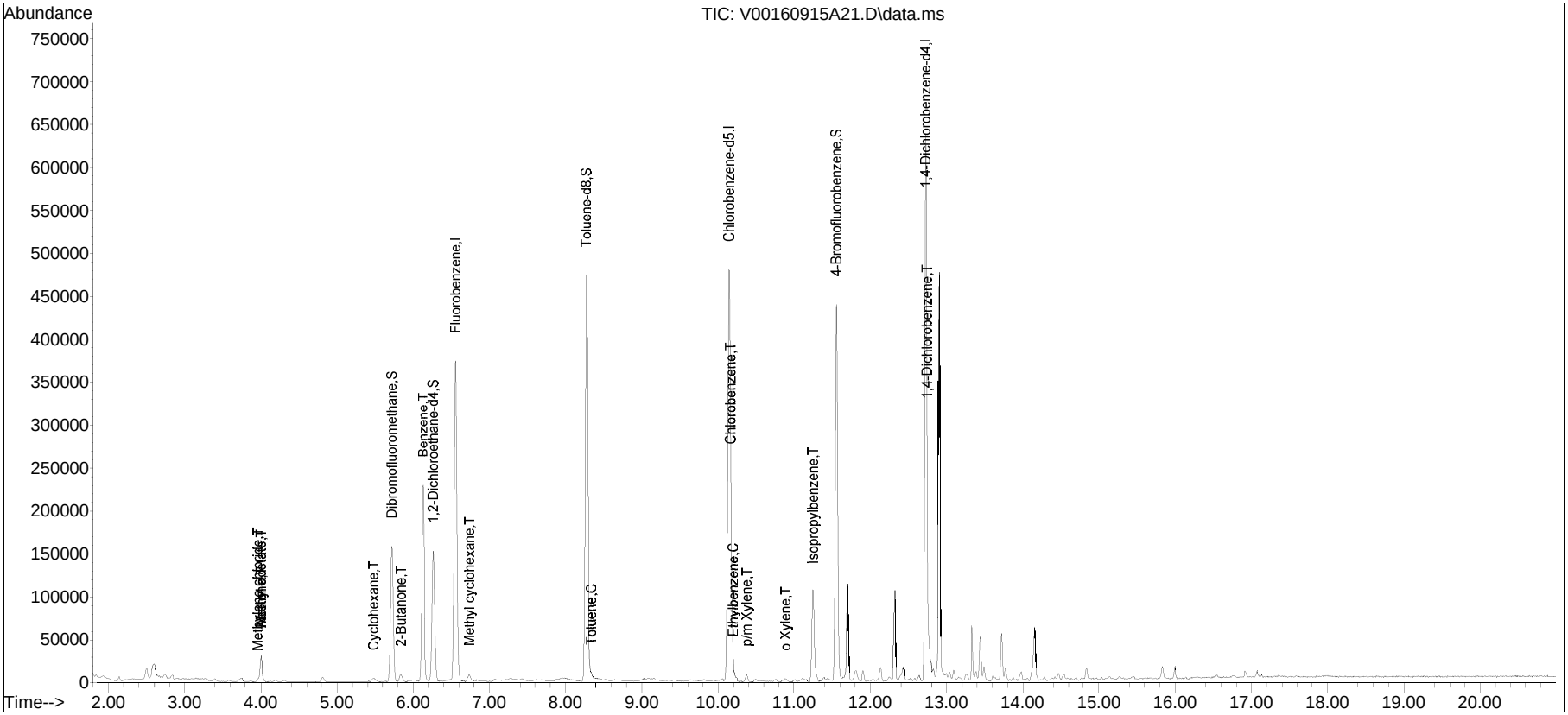
(#) = qualifier out of range (m) = manual integration (+) = signals summed

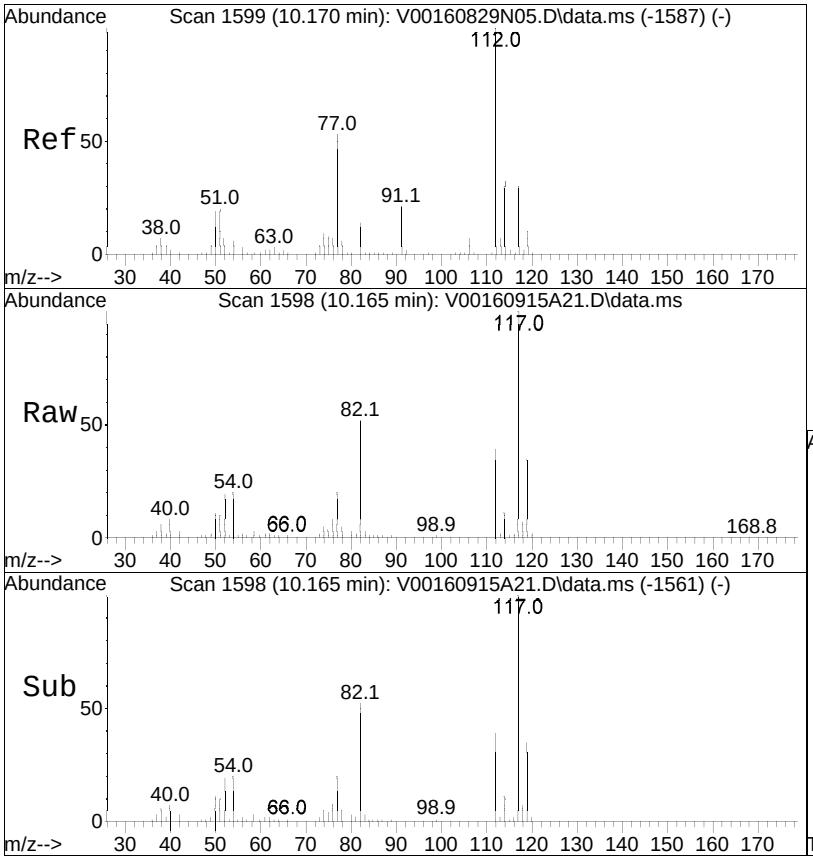
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA100\2016\160915A\
Data File : V00160915A21.D
Acq On : 15 Sep 2016 19:17
Operator : VOA100:MS
Sample : l1628990-12,31,3.6,5,,y
Misc : WG932329,ICAL12815
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 15 22:35:37 2016
Quant Method : I:\VOLATILES\VOA100\2016\160915A\V100_160829N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 06:21:02 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist915A\V00160915A01.D•

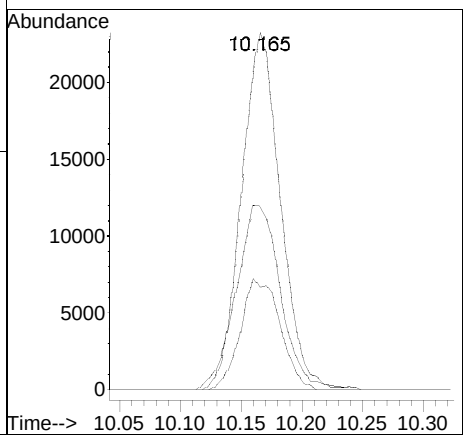




#73
Chlorobenzene
Concen: 3.45 ug/L
RT: 10.165 min Scan# 1598
Delta R.T. -0.005 min
Lab File: V00160915A21.D
Acq: 15 Sep 2016 19:17

Tgt Ion:112 Resp: 51484

Ion	Ratio	Lower	Upper
112	100		
77	58.7	55.0	82.6
114	31.8	26.2	39.2



Manual Integration Report

Data Path	: I:\VOLATILES\VOA100\2016\1	QMethod	: V100_160829N_8260.m
Data File	: V00160915A21.D	Operator	: VOA100:MS
Date Inj'd	: 9/15/2016 19:17	Instrument	: VOA 100
Sample	: l1628990-12,31,3.6,5,,y	Quant Date	: 9/15/2016 8:55 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\160915A\
Data File : V10160915A22.D
Acq On : 15 Sep 2016 19:19
Operator : VOA110:MS
Sample : l1628990-10D,31H,3.4,5,0.001,,x
Misc : WG932471,ICAL12786
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 15 21:27:55 2016
Quant Method : I:\VOLATILES\VOA110\2016\160915A\V110_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:02:58 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA110\2016\160915A\V10160915A01.D
Sub List : 8260-Reg - Regular 8260

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.206	96	158589	20.000	ug/L	-0.02
Standard Area 1 = 176148			Recovery = 90.03%			
59) Chlorobenzene-d5	9.756	117	132448	20.000	ug/L	-0.02
Standard Area 1 = 138326			Recovery = 95.75%			
79) 1,4-Dichlorobenzene-d4	12.425	152	67419	20.000	ug/L	-0.02
Standard Area 1 = 69768			Recovery = 96.63%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.394	113	37156	17.488	ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 87.44%			
43) 1,2-Dichloroethane-d4	5.928	65	44073	16.822	ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 84.11%			
60) Toluene-d8	7.905	98	160599	18.077	ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 90.39%			
83) 4-Bromofluorobenzene	11.229	95	64832	21.588	ug/L	-0.01
Spiked Amount 20.000	Range 70 - 130		Recovery = 107.94%			
Target Compounds						Qvalue
73) Chlorobenzene	9.777	112	10045	1.599	ug/L	98

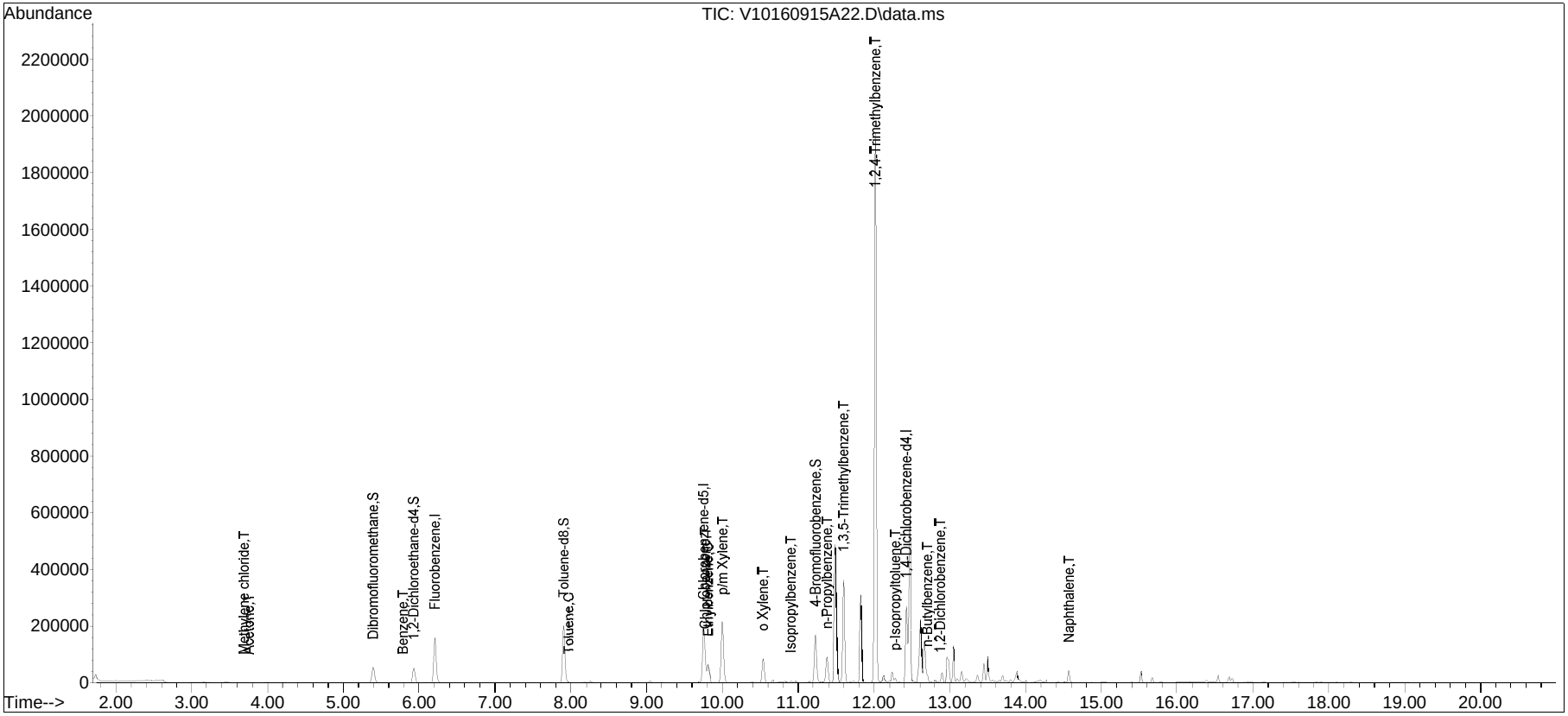
(#) = qualifier out of range (m) = manual integration (+) = signals summed

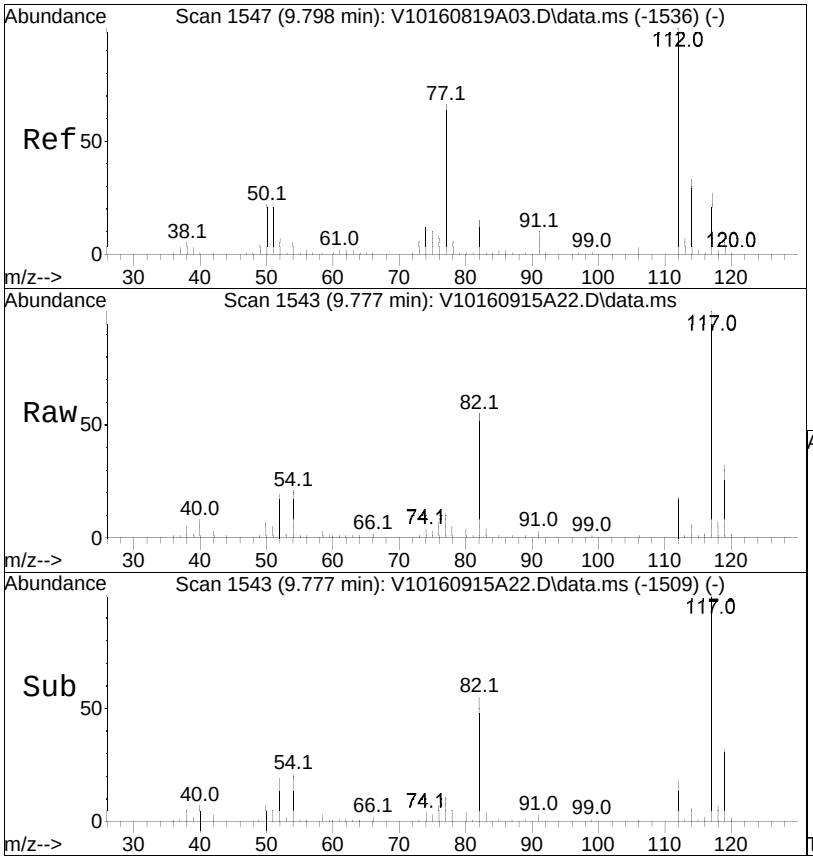
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\160915A\
Data File : V10160915A22.D
Acq On : 15 Sep 2016 19:19
Operator : VOA110:MS
Sample : l1628990-10D,31H,3.4,5,0.001,,x
Misc : WG932471,ICAL12786
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 15 21:27:55 2016
Quant Method : I:\VOLATILES\VOA110\2016\160915A\V110_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:02:58 2016
Response via : Initial Calibration

Sub List : 8260-Reg - Regular 8260\2016\160915A\V10160915A01.D•

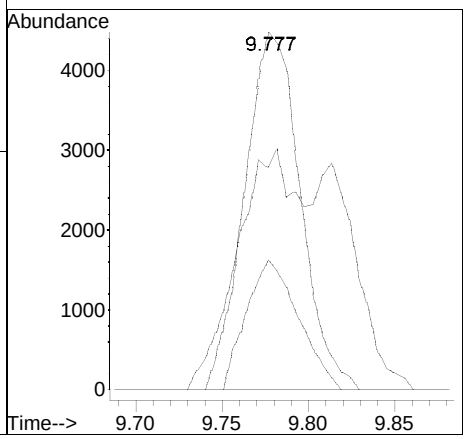




#73
Chlorobenzene
Concen: 1.60 ug/L
RT: 9.777 min Scan# 1543
Delta R.T. -0.021 min
Lab File: V10160915A22.D
Acq: 15 Sep 2016 19:19

Tgt Ion:112 Resp: 10045

Ion	Ratio	Lower	Upper
112	100		
77	74.4	60.2	90.2
114	33.9	25.3	37.9



Manual Integration Report

Data Path	: I:\VOLATILES\VOA110\2016\1Q	Method	: V110_160819_8260.m
Data File	: V10160915A22.D	Operator	: VOA110:MS
Date Inj'd	: 9/15/2016 19:19	Instrument	: VOA110
Sample	: l1628990-10D,31H,3.4,5,0.0	Quant Date	: 9/15/2016 9:11 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\160915A\
Data File : V10160915A23.D
Acq On : 15 Sep 2016 19:44
Operator : VOA110:MS
Sample : l1628990-13D,31H,4.5,5,0.002,,x
Misc : WG932471,ICAL12786
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 15 21:29:10 2016
Quant Method : I:\VOLATILES\VOA110\2016\160915A\V110_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:02:58 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA110\2016\160915A\V10160915A01.D
Sub List : 8260-Reg - Regular 8260

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.206	96	157902	20.000	ug/L	-0.02
Standard Area 1 = 176148			Recovery = 89.64%			
59) Chlorobenzene-d5	9.756	117	132303	20.000	ug/L	-0.02
Standard Area 1 = 138326			Recovery = 95.65%			
79) 1,4-Dichlorobenzene-d4	12.425	152	67819	20.000	ug/L	-0.02
Standard Area 1 = 69768			Recovery = 97.21%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.394	113	37156	17.564	ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 87.82%			
43) 1,2-Dichloroethane-d4	5.928	65	44636	17.111	ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 85.56%			
60) Toluene-d8	7.905	98	161024	18.144	ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 90.72%			
83) 4-Bromofluorobenzene	11.229	95	65865	21.803	ug/L	-0.01
Spiked Amount 20.000	Range 70 - 130		Recovery = 109.02%			
Target Compounds						Qvalue
73) Chlorobenzene	9.777	112	7147	1.139	ug/L	99

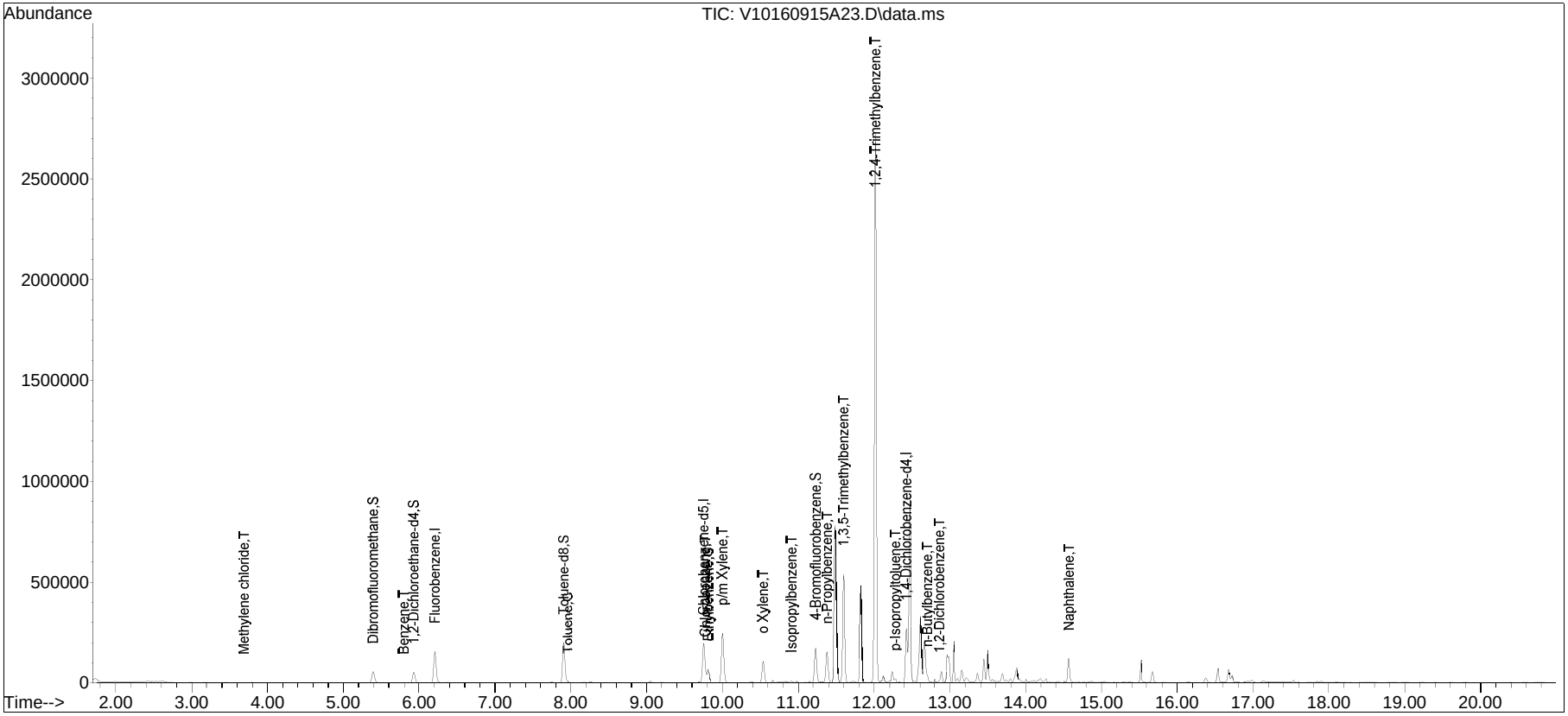
(#) = qualifier out of range (m) = manual integration (+) = signals summed

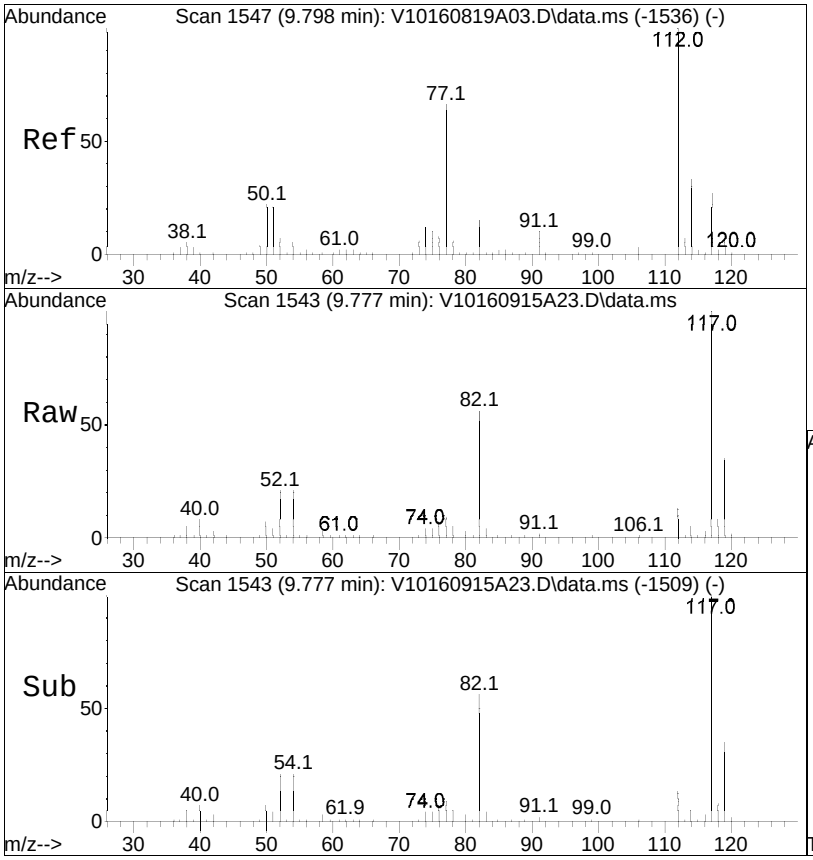
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\160915A\
Data File : V10160915A23.D
Acq On : 15 Sep 2016 19:44
Operator : VOA110:MS
Sample : l1628990-13D,31H,4.5,5,0.002,,x
Misc : WG932471,ICAL12786
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 15 21:29:10 2016
Quant Method : I:\VOLATILES\VOA110\2016\160915A\V110_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:02:58 2016
Response via : Initial Calibration

Sub List : 8260-Reg - Regular 8260\2016\160915A\V10160915A01.D•

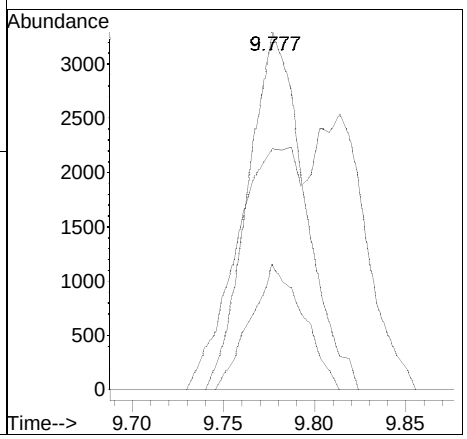




#73
Chlorobenzene
Concen: 1.14 ug/L
RT: 9.777 min Scan# 1543
Delta R.T. -0.021 min
Lab File: V10160915A23.D
Acq: 15 Sep 2016 19:44

Tgt Ion:112 Resp: 7147

Ion	Ratio	Lower	Upper
112	100		
77	76.3	60.2	90.2
114	32.5	25.3	37.9



Manual Integration Report

Data Path	: I:\VOLATILES\VOA110\2016\1Q	Method	: V110_160819_8260.m
Data File	: V10160915A23.D	Operator	: VOA110:MS
Date Inj'd	: 9/15/2016 19:44	Instrument	: VOA110
Sample	: l1628990-13D,31H,4.5,5,0.0	Quant Date	: 9/15/2016 9:11 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Jack\2016\160923Pcon2\
Data File : VJ160923P12.D
Acq On : 23 Sep 2016 5:46 pm
Operator : JACK:PK
Sample : l1628990-05,31,10,10,,u
Misc : WG935468,ICAL12860
ALS Vial : 56 Sample Multiplier: 1

Quant Time: Sep 24 14:01:28 2016
Quant Method : I:\VOLATILES\Jack\2016\160923Pcon2\VJ_160908_8260con2.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 12 04:50:40 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Jack\2016\160923Pcon2\VJ160923P02.D
Sub List : 8260-TCLP+DCM - TCLP

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	3.890	96	116714	10.000	ug/L	0.00
Standard Area 1 = 125031			Recovery = 93.35%			
60) Chlorobenzene-d5	6.593	117	62547	10.000	ug/L	0.00
Standard Area 1 = 67052			Recovery = 93.28%			
80) 1,4-Dichlorobenzene-d4	8.976	152	31001	10.000	ug/L	0.00
Standard Area 1 = 29574			Recovery = 104.83%			
System Monitoring Compounds						
37) Dibromofluoromethane	3.290	113	25757	10.054	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.54%			
44) 1,2-Dichloroethane-d4	3.674	65	23685	9.095	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 90.95%			
61) Toluene-d8	5.195	98	99067	9.227	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 92.27%			
84) 4-Bromofluorobenzene	7.816	95	21851	8.942	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 89.42%			
Target Compounds						Qvalue
49) Trichloroethene	4.018	95	4354	1.106	ug/L	97

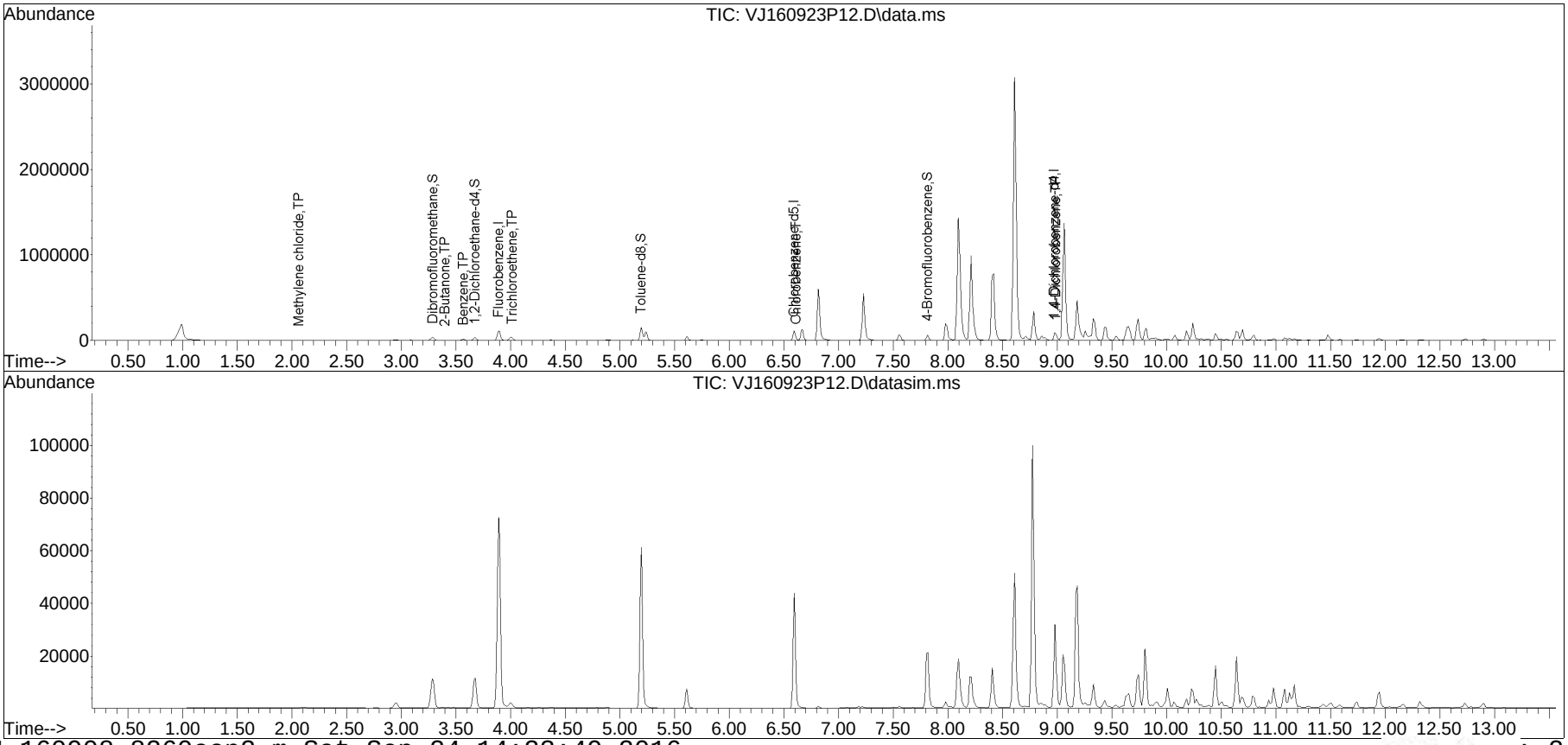
(#) = qualifier out of range (m) = manual integration (+) = signals summed

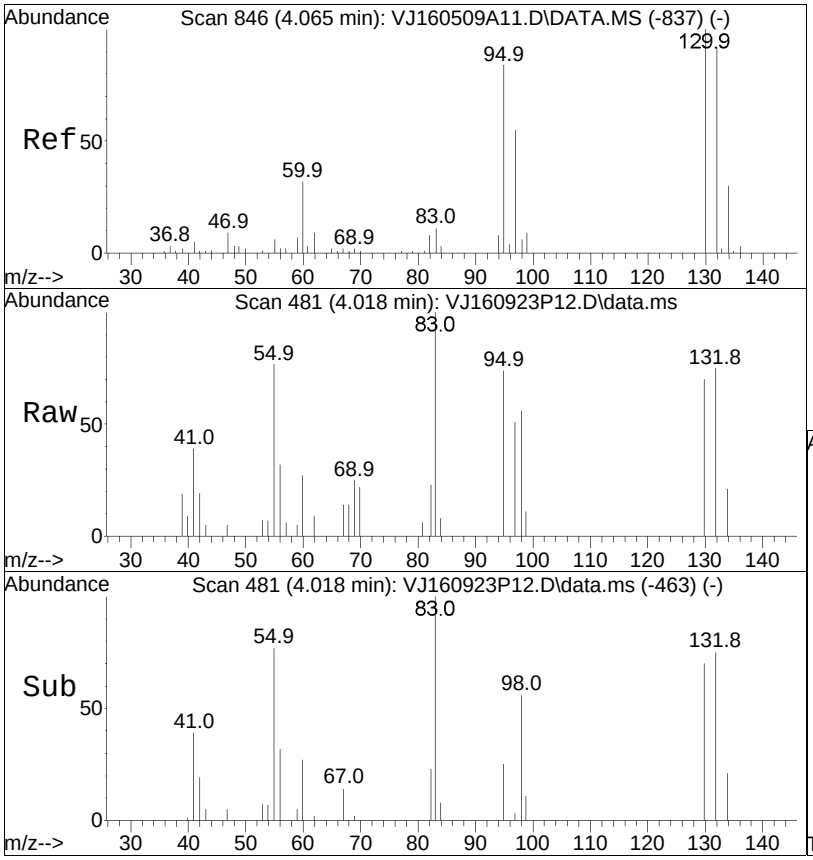
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Jack\2016\160923Pcon2\
Data File : VJ160923P12.D
Acq On : 23 Sep 2016 5:46 pm
Operator : JACK:PK
Sample : l1628990-05,31,10,10,,u
Misc : WG935468,ICAL12860
ALS Vial : 56 Sample Multiplier: 1

Quant Time: Sep 24 14:01:28 2016
Quant Method : I:\VOLATILES\Jack\2016\160923Pcon2\VJ_160908_8260con2.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 12 04:50:40 2016
Response via : Initial Calibration

Sub List : 8260-TCLP+DCM - TCLPk\2016\160923Pcon2\VJ160923P02.D•

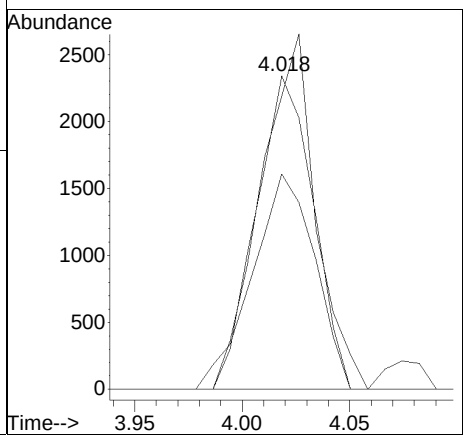




#49
Trichloroethene
Concen: 1.11 ug/L
RT: 4.018 min Scan# 481
Delta R.T. 0.000 min
Lab File: VJ160923P12.D
Acq: 23 Sep 2016 5:46 pm

Tgt Ion: 95 Resp: 4354

Ion	Ratio	Lower	Upper
95	100		
97	74.7	56.1	84.1
130	109.0	86.4	129.6



Manual Integration Report

Data Path	: I:\VOLATILES\Jack\2016\160	QMethod	: VJ_160908_8260con2.m
Data File	: VJ160923P12.D	Operator	: JACK:PK
Date Inj'd	: 9/23/2016 5:46 pm	Instrument	: Jack
Sample	: l1628990-05,31,10,10,,u	Quant Date	: 9/24/2016 2:01 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Jack\2016\160923Pcon2\
Data File : VJ160923P14.D
Acq On : 23 Sep 2016 6:19 pm
Operator : JACK:PK
Sample : l1628990-06,31,10,10,,u
Misc : WG935468,ICAL12860
ALS Vial : 57 Sample Multiplier: 1

Quant Time: Sep 24 14:10:14 2016
Quant Method : I:\VOLATILES\Jack\2016\160923Pcon2\VJ_160908_8260con2.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 12 04:50:40 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Jack\2016\160923Pcon2\VJ160923P02.D
Sub List : 8260-TCLP+DCM - TCLP

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	3.890	96	119268	10.000	ug/L	0.00
Standard Area 1 = 125031			Recovery = 95.39%			
60) Chlorobenzene-d5	6.602	117	50543	10.000	ug/L	0.00
Standard Area 1 = 67052			Recovery = 75.38%			
80) 1,4-Dichlorobenzene-d4	9.005	152	39571	10.000	ug/L	0.03
Standard Area 1 = 29574			Recovery = 133.80%			
System Monitoring Compounds						
37) Dibromofluoromethane	3.282	113	26915	10.281	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.81%			
44) 1,2-Dichloroethane-d4	3.674	65	24940	9.372	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 93.72%			
61) Toluene-d8	5.195	98	92104	10.616	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 106.16%			
84) 4-Bromofluorobenzene	7.815	95	31279	10.028	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.28%			
Target Compounds						Qvalue
74) Chlorobenzene	6.612	112	1179711	182.383	ug/L	98

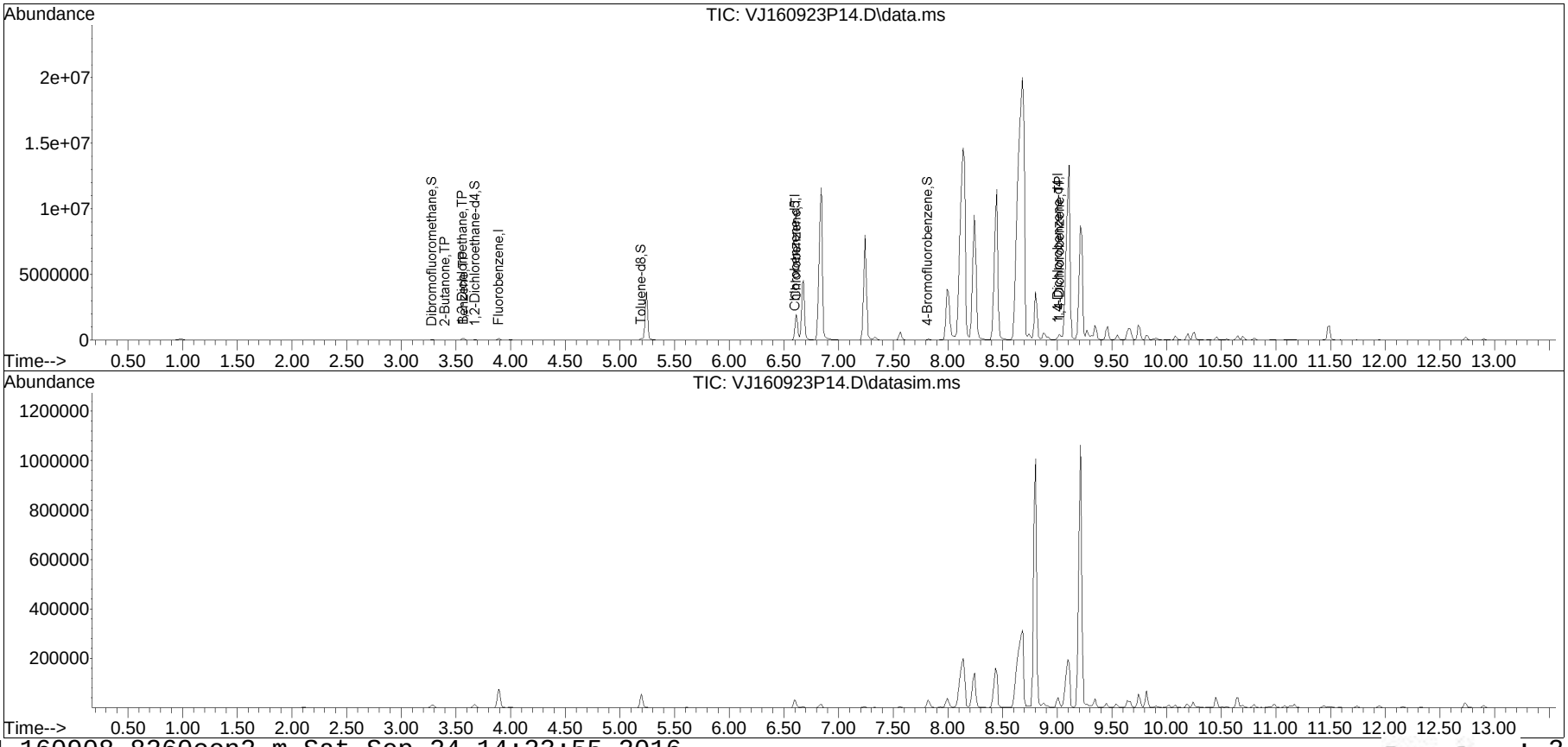
(#) = qualifier out of range (m) = manual integration (+) = signals summed

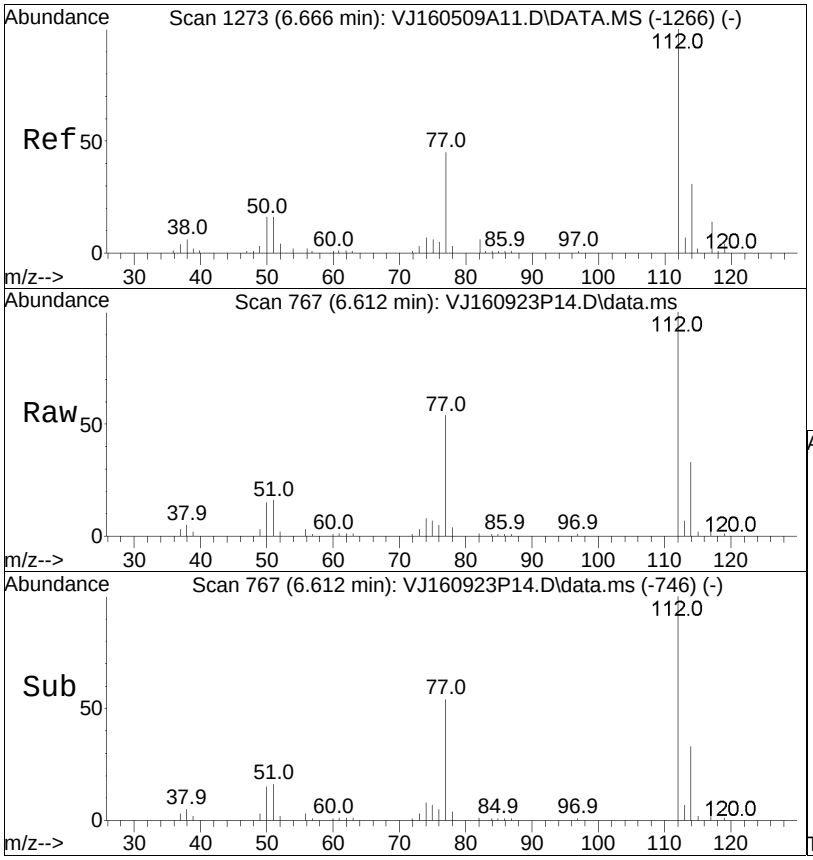
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Jack\2016\160923Pcon2\
Data File : VJ160923P14.D
Acq On : 23 Sep 2016 6:19 pm
Operator : JACK:PK
Sample : l1628990-06,31,10,10,,u
Misc : WG935468,ICAL12860
ALS Vial : 57 Sample Multiplier: 1

Quant Time: Sep 24 14:10:14 2016
Quant Method : I:\VOLATILES\Jack\2016\160923Pcon2\VJ_160908_8260con2.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 12 04:50:40 2016
Response via : Initial Calibration

Sub List : 8260-TCLP+DCM - TCLPk\2016\160923Pcon2\VJ160923P02.D•

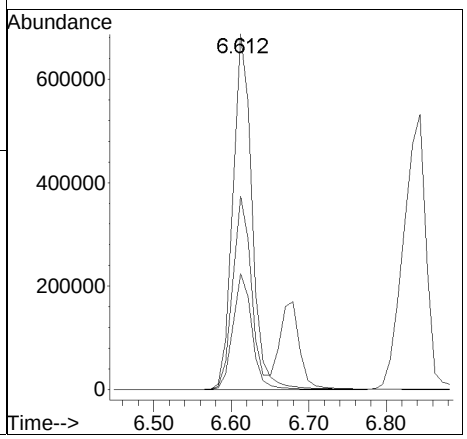




#74
Chlorobenzene
Concen: 182.38 ug/L
RT: 6.612 min Scan# 767
Delta R.T. -0.000 min
Lab File: VJ160923P14.D
Acq: 23 Sep 2016 6:19 pm

Tgt Ion:112 Resp: 1179711

Ion	Ratio	Lower	Upper
112	100		
77	53.5	44.5	66.7
114	32.5	25.2	37.8



Manual Integration Report

Data Path	: I:\VOLATILES\Jack\2016\160	QMethod	: VJ_160908_8260con2.m
Data File	: VJ160923P14.D	Operator	: JACK:PK
Date Inj'd	: 9/23/2016 6:19 pm	Instrument	: Jack
Sample	: l1628990-06,31,10,10,,u	Quant Date	: 9/24/2016 2:09 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Jack\2016\160923Pcon2\
Data File : VJ160923P16.D
Acq On : 23 Sep 2016 6:52 pm
Operator : JACK:PK
Sample : l1628990-08D,31,1,10,,u
Misc : WG935468,ICAL12860
ALS Vial : 58 Sample Multiplier: 1

Quant Time: Sep 24 14:05:09 2016
Quant Method : I:\VOLATILES\Jack\2016\160923Pcon2\VJ_160908_8260con2.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 12 04:50:40 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Jack\2016\160923Pcon2\VJ160923P02.D
Sub List : 8260-TCLP+DCM - TCLP

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	3.890	96	129508	10.000	ug/L	0.00
Standard Area 1 = 125031			Recovery = 103.58%			
60) Chlorobenzene-d5	6.593	117	63764	10.000	ug/L	0.00
Standard Area 1 = 67052			Recovery = 95.10%			
80) 1,4-Dichlorobenzene-d4	8.976	152	33776	10.000	ug/L	0.00
Standard Area 1 = 29574			Recovery = 114.21%			
System Monitoring Compounds						
37) Dibromofluoromethane	3.282	113	28588	10.056	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.56%			
44) 1,2-Dichloroethane-d4	3.674	65	26031	9.008	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 90.08%			
61) Toluene-d8	5.195	98	106866	9.763	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.63%			
84) 4-Bromofluorobenzene	7.816	95	22246	8.356	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 83.56%			
Target Compounds						Qvalue
74) Chlorobenzene	6.612	112	377437	46.253	ug/L	97

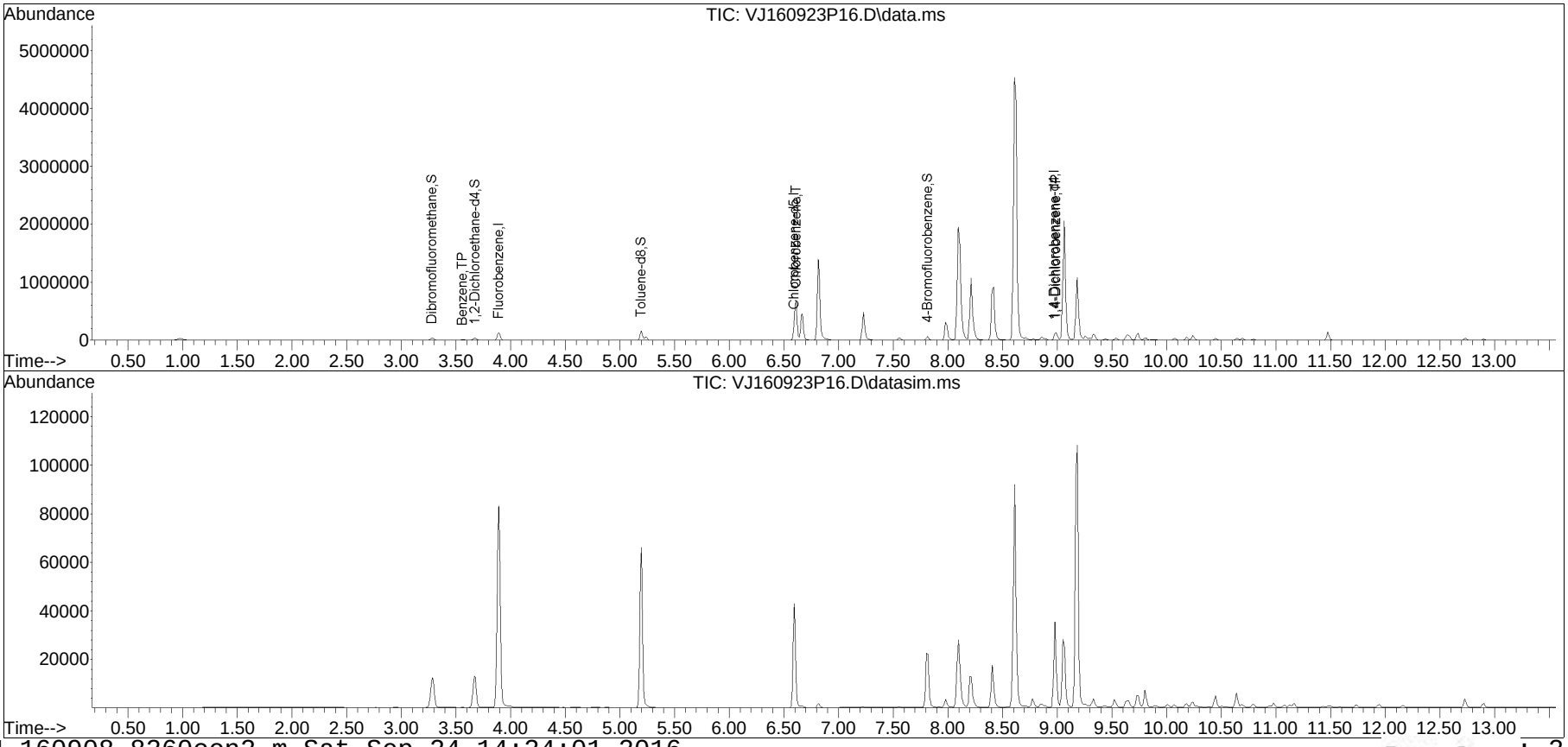
(#) = qualifier out of range (m) = manual integration (+) = signals summed

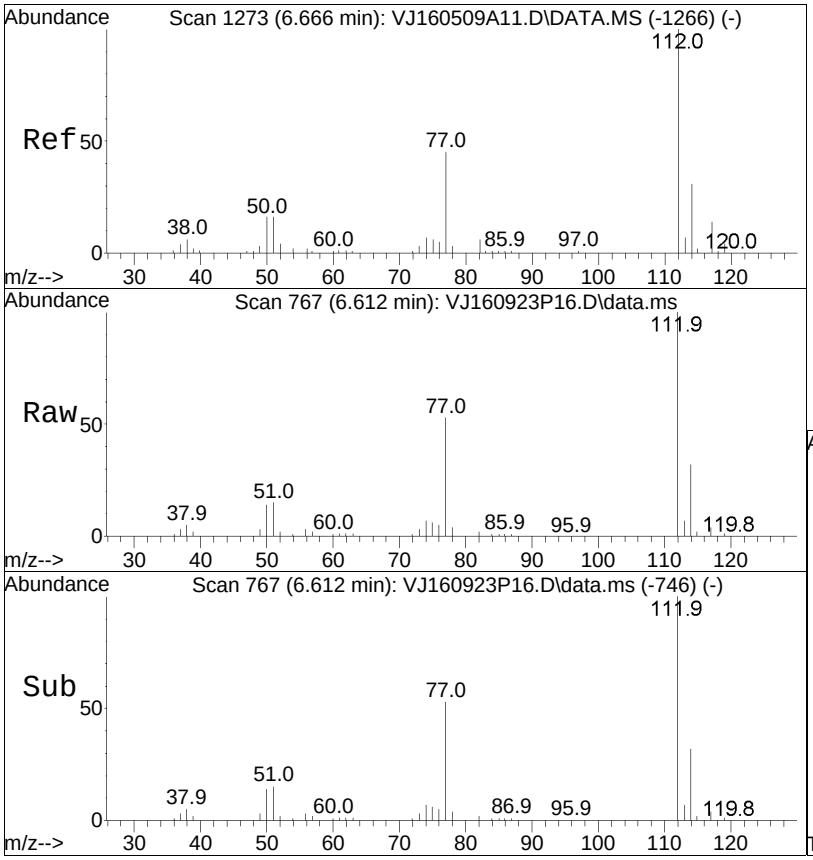
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Jack\2016\160923Pcon2\
Data File : VJ160923P16.D
Acq On : 23 Sep 2016 6:52 pm
Operator : JACK:PK
Sample : l1628990-08D,31,1,10,,u
Misc : WG935468,ICAL12860
ALS Vial : 58 Sample Multiplier: 1

Quant Time: Sep 24 14:05:09 2016
Quant Method : I:\VOLATILES\Jack\2016\160923Pcon2\VJ_160908_8260con2.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 12 04:50:40 2016
Response via : Initial Calibration

Sub List : 8260-TCLP+DCM - TCLPk\2016\160923Pcon2\VJ160923P02.D•

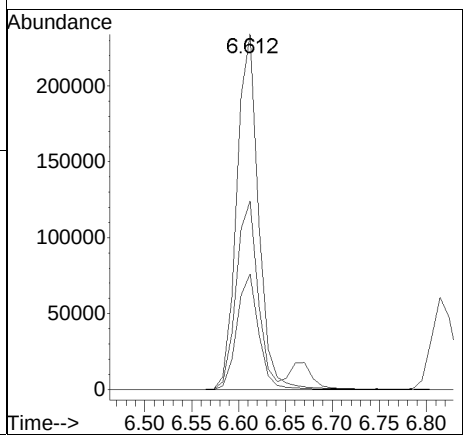




#74
Chlorobenzene
Concen: 46.25 ug/L
RT: 6.612 min Scan# 767
Delta R.T. 0.000 min
Lab File: VJ160923P16.D
Acq: 23 Sep 2016 6:52 pm

Tgt Ion:112 Resp: 377437

Ion	Ratio	Lower	Upper
112	100		
77	53.0	44.5	66.7
114	32.5	25.2	37.8



Manual Integration Report

Data Path	: I:\VOLATILES\Jack\2016\160	QMethod	: VJ_160908_8260con2.m
Data File	: VJ160923P16.D	Operator	: JACK:PK
Date Inj'd	: 9/23/2016 6:52 pm	Instrument	: Jack
Sample	: l1628990-08D,31,1,10,,u	Quant Date	: 9/24/2016 2:01 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Jack\2016\160923Pcon2\
Data File : VJ160923P18.D
Acq On : 23 Sep 2016 7:25 pm
Operator : JACK:PK
Sample : l1628990-09D,31,1,10,,t
Misc : WG935468,ICAL12860
ALS Vial : 59 Sample Multiplier: 1

Quant Time: Sep 24 14:05:29 2016
Quant Method : I:\VOLATILES\Jack\2016\160923Pcon2\VJ_160908_8260con2.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 12 04:50:40 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Jack\2016\160923Pcon2\VJ160923P02.D
Sub List : 8260-TCLP+DCM - TCLP

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	3.890	96	131045	10.000	ug/L	0.00
Standard Area 1 = 125031			Recovery = 104.81%			
60) Chlorobenzene-d5	6.593	117	67534	10.000	ug/L	0.00
Standard Area 1 = 67052			Recovery = 100.72%			
80) 1,4-Dichlorobenzene-d4	8.976	152	31093	10.000	ug/L	0.00
Standard Area 1 = 29574			Recovery = 105.14%			
System Monitoring Compounds						
37) Dibromofluoromethane	3.290	113	28614	9.948	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.48%			
44) 1,2-Dichloroethane-d4	3.674	65	25649	8.772	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 87.72%			
61) Toluene-d8	5.195	98	107125	9.241	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 92.41%			
84) 4-Bromofluorobenzene	7.815	95	23404	9.550	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 95.50%			
Target Compounds						Qvalue
74) Chlorobenzene	6.612	112	111320	12.880	ug/L	99

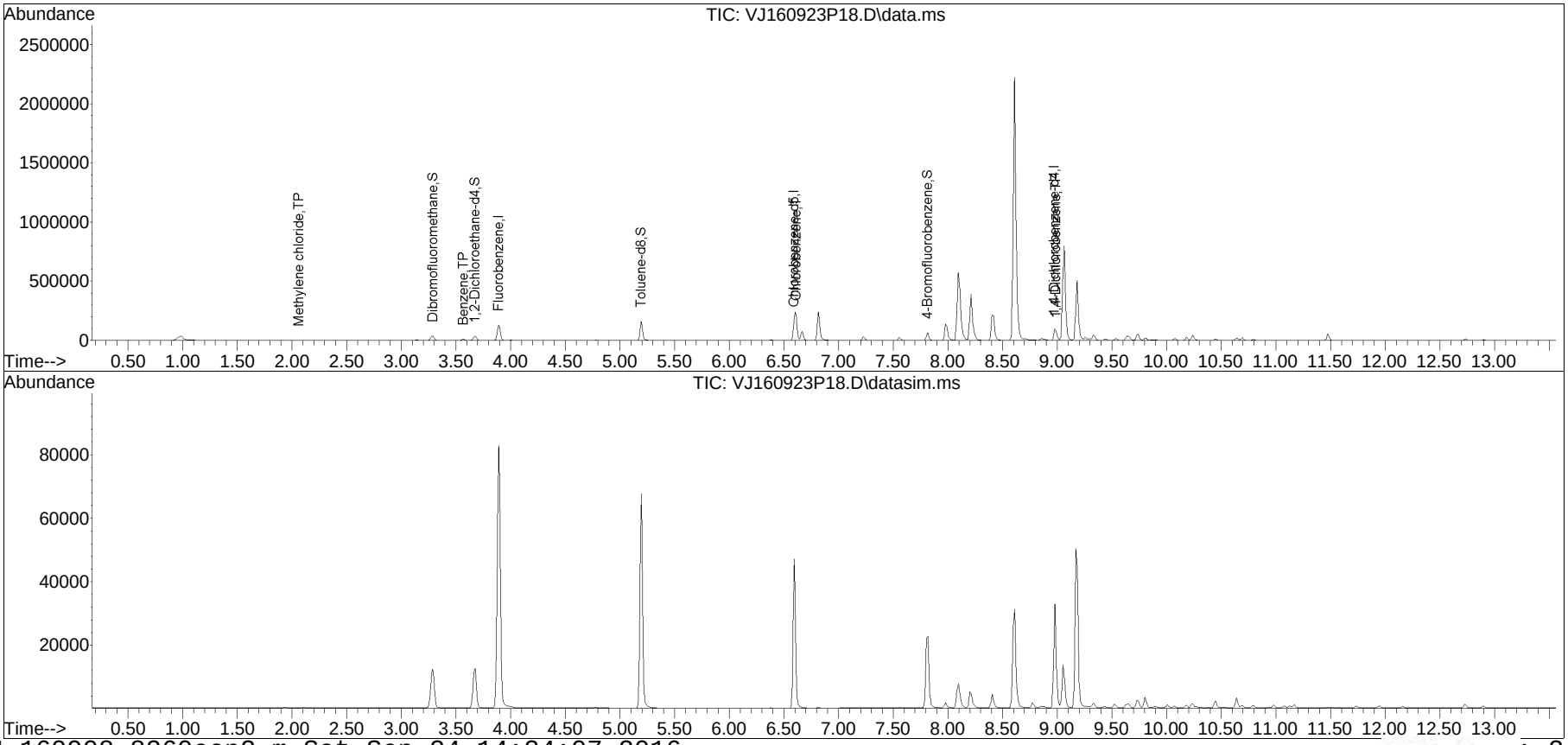
(#) = qualifier out of range (m) = manual integration (+) = signals summed

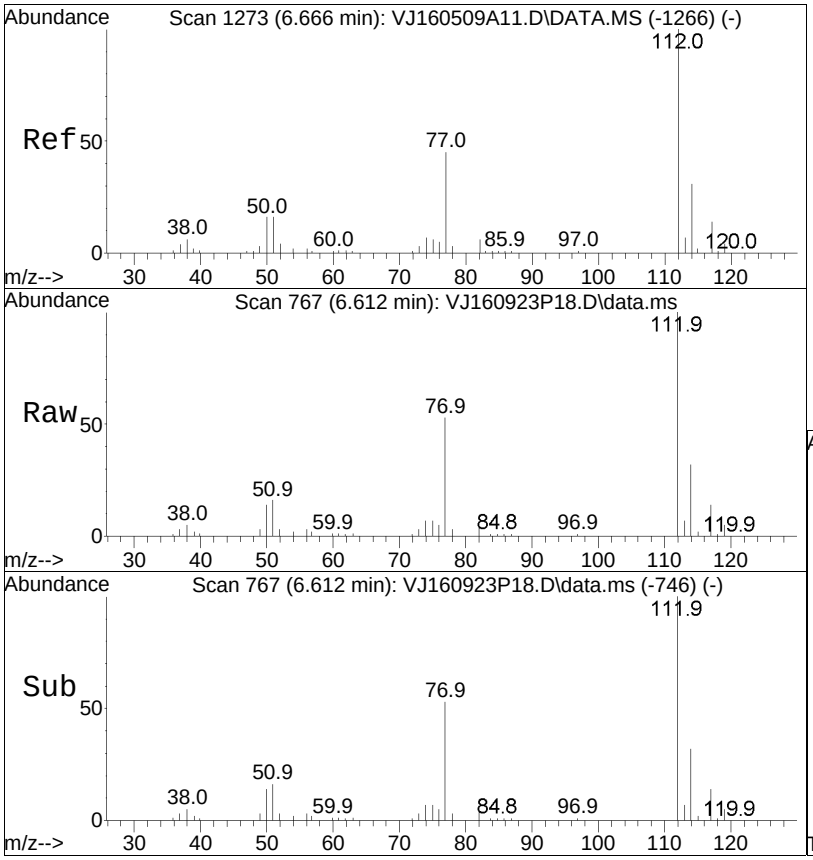
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Jack\2016\160923Pcon2\
Data File : VJ160923P18.D
Acq On : 23 Sep 2016 7:25 pm
Operator : JACK:PK
Sample : l1628990-09D,31,1,10,,t
Misc : WG935468,ICAL12860
ALS Vial : 59 Sample Multiplier: 1

Quant Time: Sep 24 14:05:29 2016
Quant Method : I:\VOLATILES\Jack\2016\160923Pcon2\VJ_160908_8260con2.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 12 04:50:40 2016
Response via : Initial Calibration

Sub List : 8260-TCLP+DCM - TCLPk\2016\160923Pcon2\VJ160923P02.D•

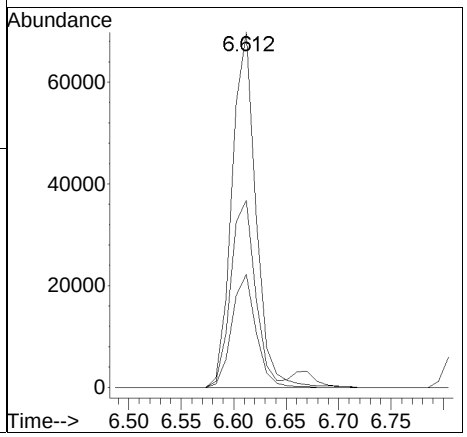




#74
Chlorobenzene
Concen: 12.88 ug/L
RT: 6.612 min Scan# 767
Delta R.T. -0.000 min
Lab File: VJ160923P18.D
Acq: 23 Sep 2016 7:25 pm

Tgt Ion:112 Resp: 111320

Ion	Ratio	Lower	Upper
112	100		
77	54.8	44.5	66.7
114	32.0	25.2	37.8



Manual Integration Report

Data Path	: I:\VOLATILES\Jack\2016\160	QMethod	: VJ_160908_8260con2.m
Data File	: VJ160923P18.D	Operator	: JACK:PK
Date Inj'd	: 9/23/2016 7:25 pm	Instrument	: Jack
Sample	: l1628990-09D,31,1,10,,t	Quant Date	: 9/24/2016 2:01 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Jack\2016\160923Pcon2\
Data File : VJ160923P20.D
Acq On : 23 Sep 2016 7:59 pm
Operator : JACK:PK
Sample : l1628990-07,31,10,10,,u
Misc : WG935468,ICAL12860
ALS Vial : 60 Sample Multiplier: 1

Quant Time: Sep 24 14:05:47 2016
Quant Method : I:\VOLATILES\Jack\2016\160923Pcon2\VJ_160908_8260con2.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 12 04:50:40 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Jack\2016\160923Pcon2\VJ160923P02.D
Sub List : 8260-TCLP+DCM - TCLP

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	3.890	96	120250	10.000	ug/L	0.00
Standard Area 1 = 125031			Recovery = 96.18%			
60) Chlorobenzene-d5	6.593	117	61502	10.000	ug/L	0.00
Standard Area 1 = 67052			Recovery = 91.72%			
80) 1,4-Dichlorobenzene-d4	8.991	152	34113	10.000	ug/L	0.01
Standard Area 1 = 29574			Recovery = 115.35%			
System Monitoring Compounds						
37) Dibromofluoromethane	3.282	113	27279	10.335	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.35%			
44) 1,2-Dichloroethane-d4	3.674	65	24593	9.166	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 91.66%			
61) Toluene-d8	5.195	98	99717	9.445	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 94.45%			
84) 4-Bromofluorobenzene	7.815	95	23687	8.809	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 88.09%			
Target Compounds						Qvalue
74) Chlorobenzene	6.612	112	452627	57.507	ug/L	97

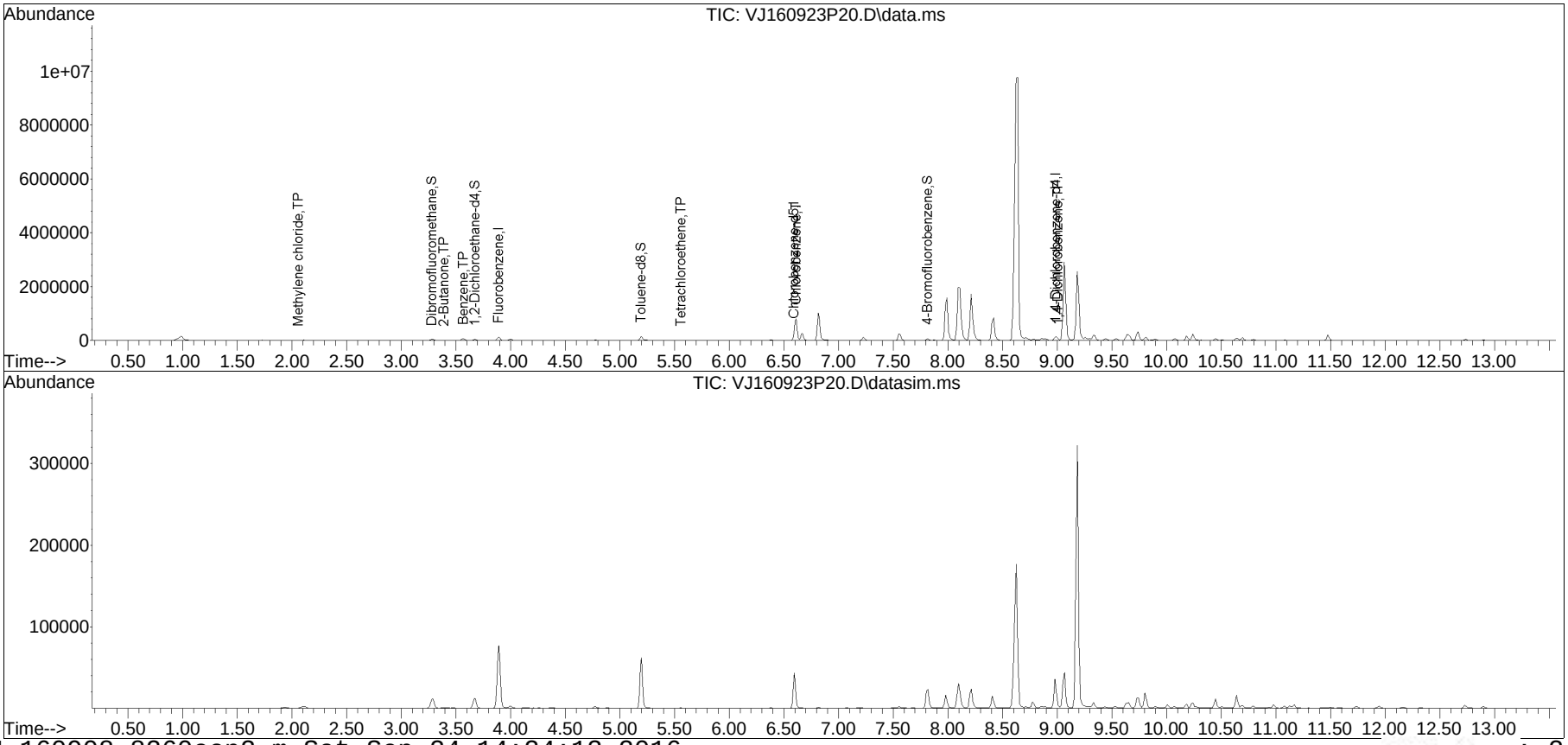
(#) = qualifier out of range (m) = manual integration (+) = signals summed

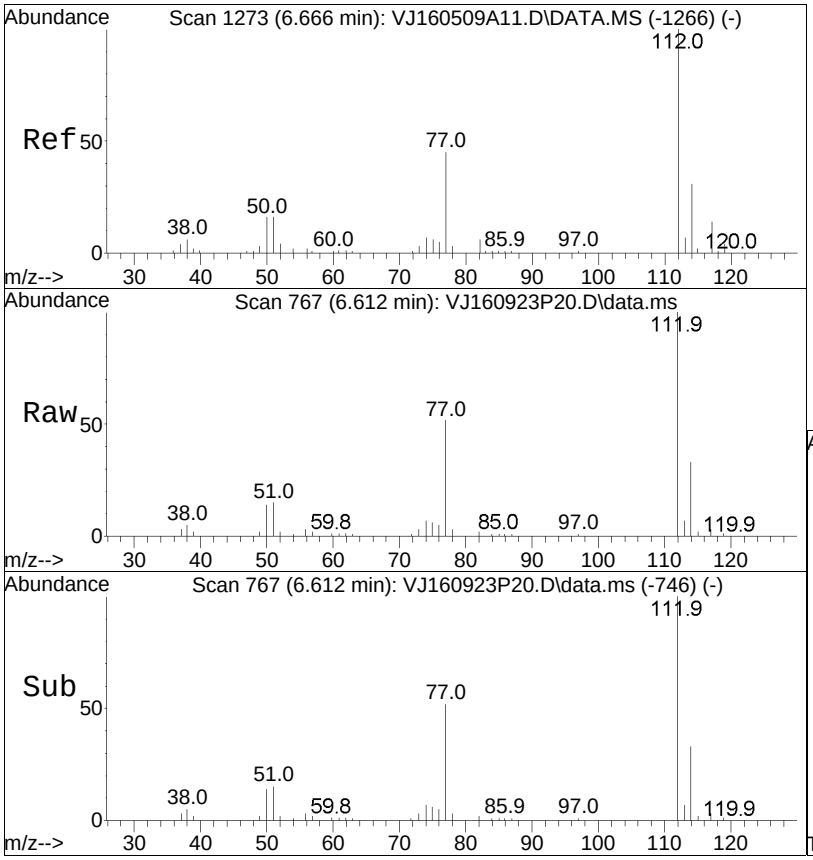
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Jack\2016\160923Pcon2\
Data File : VJ160923P20.D
Acq On : 23 Sep 2016 7:59 pm
Operator : JACK:PK
Sample : l1628990-07,31,10,10,,u
Misc : WG935468,ICAL12860
ALS Vial : 60 Sample Multiplier: 1

Quant Time: Sep 24 14:05:47 2016
Quant Method : I:\VOLATILES\Jack\2016\160923Pcon2\VJ_160908_8260con2.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 12 04:50:40 2016
Response via : Initial Calibration

Sub List : 8260-TCLP+DCM - TCLPk\2016\160923Pcon2\VJ160923P02.D•

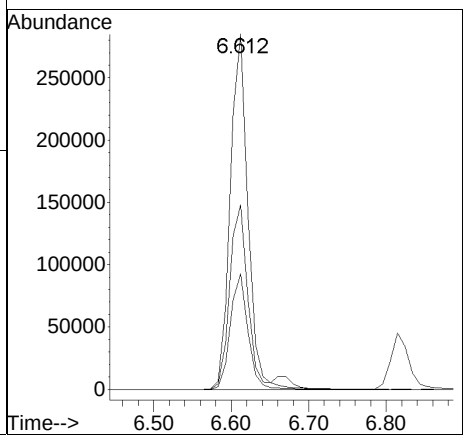




#74
Chlorobenzene
Concen: 57.51 ug/L
RT: 6.612 min Scan# 767
Delta R.T. 0.000 min
Lab File: VJ160923P20.D
Acq: 23 Sep 2016 7:59 pm

Tgt Ion:112 Resp: 452627

Ion	Ratio	Lower	Upper
112	100		
77	53.0	44.5	66.7
114	32.5	25.2	37.8



Manual Integration Report

Data Path	: I:\VOLATILES\Jack\2016\160	QMethod	: VJ_160908_8260con2.m
Data File	: VJ160923P20.D	Operator	: JACK:PK
Date Inj'd	: 9/23/2016 7:59 pm	Instrument	: Jack
Sample	: l1628990-07,31,10,10,,u	Quant Date	: 9/24/2016 2:01 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Jack\2016\160923Pcon2\
Data File : VJ160923P22.D
Acq On : 23 Sep 2016 8:32 pm
Operator : JACK:PK
Sample : l1628990-10D,31,1,10,,t
Misc : WG935468,ICAL12860
ALS Vial : 61 Sample Multiplier: 1

Quant Time: Sep 24 14:06:07 2016
Quant Method : I:\VOLATILES\Jack\2016\160923Pcon2\VJ_160908_8260con2.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 12 04:50:40 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Jack\2016\160923Pcon2\VJ160923P02.D
Sub List : 8260-TCLP+DCM - TCLP

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	3.890	96	123228	10.000	ug/L	0.00
Standard Area 1 = 125031			Recovery = 98.56%			
60) Chlorobenzene-d5	6.593	117	62280	10.000	ug/L	0.00
Standard Area 1 = 67052			Recovery = 92.88%			
80) 1,4-Dichlorobenzene-d4	8.976	152	33418	10.000	ug/L	0.00
Standard Area 1 = 29574			Recovery = 113.00%			
System Monitoring Compounds						
37) Dibromofluoromethane	3.282	113	27058	10.003	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.03%			
44) 1,2-Dichloroethane-d4	3.674	65	24648	8.964	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 89.64%			
61) Toluene-d8	5.195	98	102743	9.610	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.10%			
84) 4-Bromofluorobenzene	7.815	95	22617	8.586	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 85.86%			
Target Compounds						Qvalue
74) Chlorobenzene	6.612	112	215595	27.050	ug/L	97

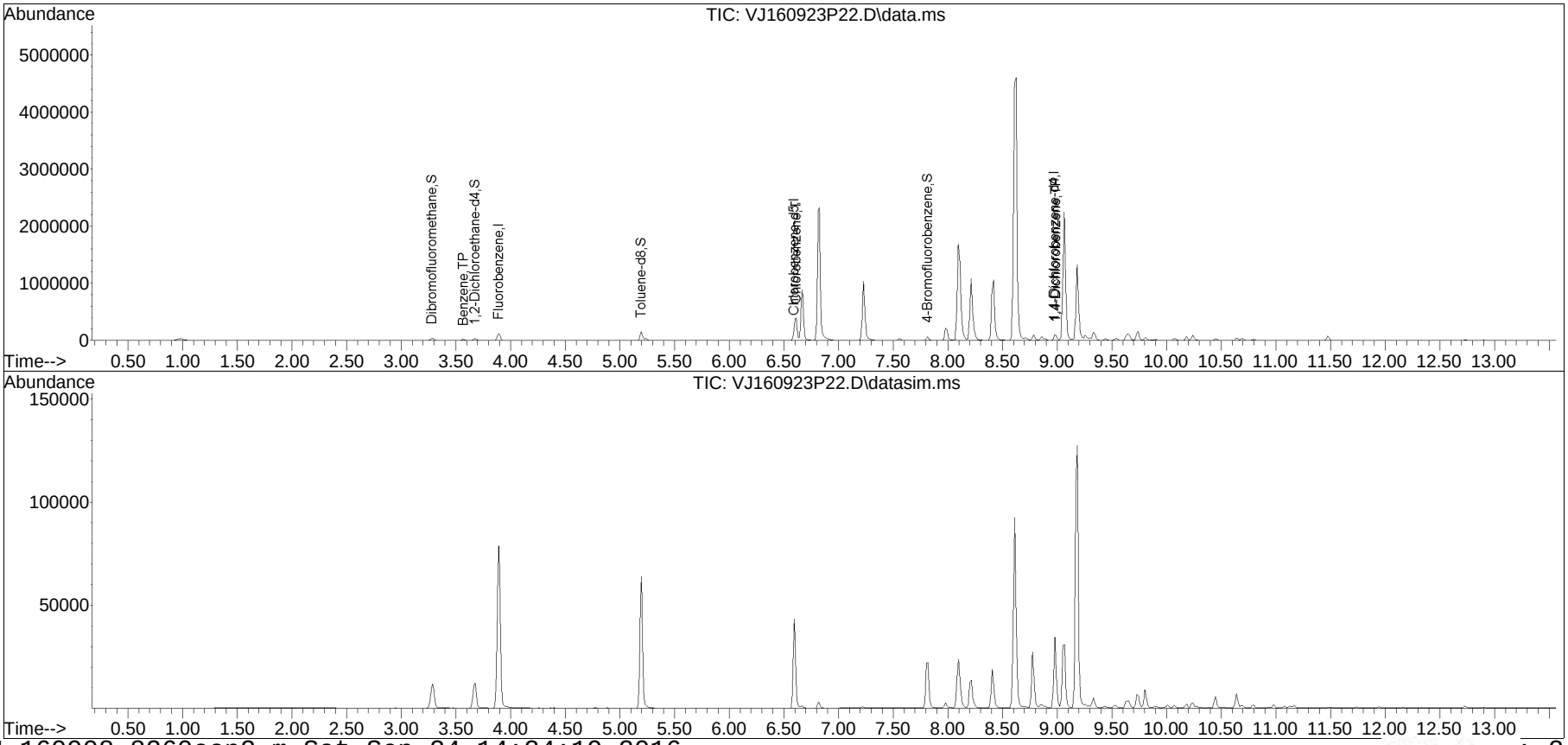
(#) = qualifier out of range (m) = manual integration (+) = signals summed

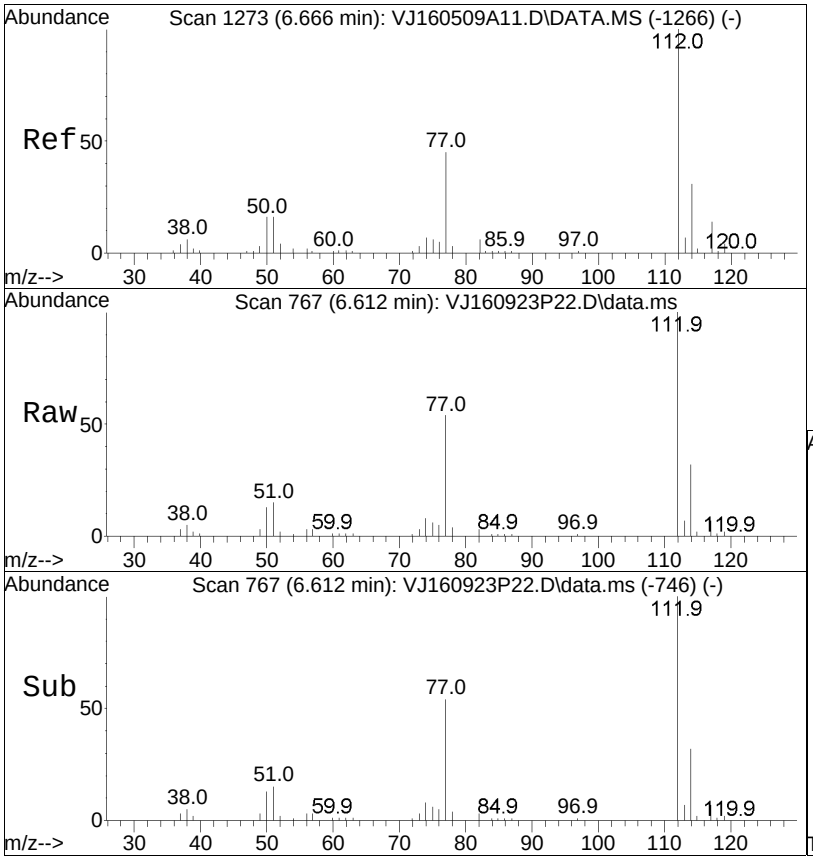
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Jack\2016\160923Pcon2\
Data File : VJ160923P22.D
Acq On : 23 Sep 2016 8:32 pm
Operator : JACK:PK
Sample : l1628990-10D,31,1,10,,t
Misc : WG935468,ICAL12860
ALS Vial : 61 Sample Multiplier: 1

Quant Time: Sep 24 14:06:07 2016
Quant Method : I:\VOLATILES\Jack\2016\160923Pcon2\VJ_160908_8260con2.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 12 04:50:40 2016
Response via : Initial Calibration

Sub List : 8260-TCLP+DCM - TCLPk\2016\160923Pcon2\VJ160923P02.D•

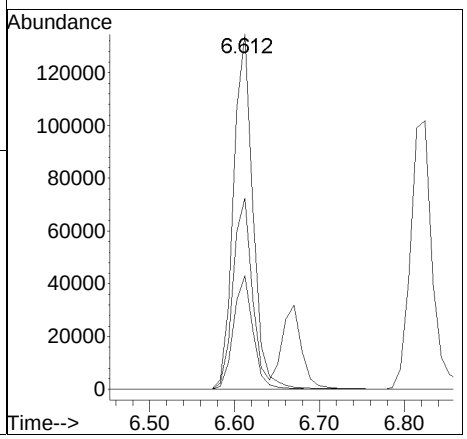




#74
Chlorobenzene
Concen: 27.05 ug/L
RT: 6.612 min Scan# 767
Delta R.T. 0.000 min
Lab File: VJ160923P22.D
Acq: 23 Sep 2016 8:32 pm

Tgt Ion:112 Resp: 215595

Ion	Ratio	Lower	Upper
112	100		
77	53.0	44.5	66.7
114	32.1	25.2	37.8



Manual Integration Report

Data Path	: I:\VOLATILES\Jack\2016\160	QMethod	: VJ_160908_8260con2.m
Data File	: VJ160923P22.D	Operator	: JACK:PK
Date Inj'd	: 9/23/2016 8:32 pm	Instrument	: Jack
Sample	: l1628990-10D,31,1,10,,t	Quant Date	: 9/24/2016 2:01 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Jack\2016\160923Pcon2\
Data File : VJ160923P24.D
Acq On : 23 Sep 2016 9:05 pm
Operator : JACK:PK
Sample : l1628990-13D,31,1,10,,t
Misc : WG935468,ICAL12860
ALS Vial : 62 Sample Multiplier: 1

Quant Time: Sep 24 14:06:28 2016
Quant Method : I:\VOLATILES\Jack\2016\160923Pcon2\VJ_160908_8260con2.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 12 04:50:40 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Jack\2016\160923Pcon2\VJ160923P02.D
Sub List : 8260-TCLP+DCM - TCLP

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	3.890	96	124933	10.000	ug/L	0.00
Standard Area 1 = 125031			Recovery = 99.92%			
60) Chlorobenzene-d5	6.593	117	63419	10.000	ug/L	0.00
Standard Area 1 = 67052			Recovery = 94.58%			
80) 1,4-Dichlorobenzene-d4	8.976	152	30502	10.000	ug/L	0.00
Standard Area 1 = 29574			Recovery = 103.14%			
System Monitoring Compounds						
37) Dibromofluoromethane	3.282	113	27306	9.957	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.57%			
44) 1,2-Dichloroethane-d4	3.674	65	24737	8.874	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 88.74%			
61) Toluene-d8	5.195	98	103901	9.544	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 95.44%			
84) 4-Bromofluorobenzene	7.815	95	22470	9.346	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 93.46%			
Target Compounds						Qvalue
74) Chlorobenzene	6.612	112	23141	2.851	ug/L	100

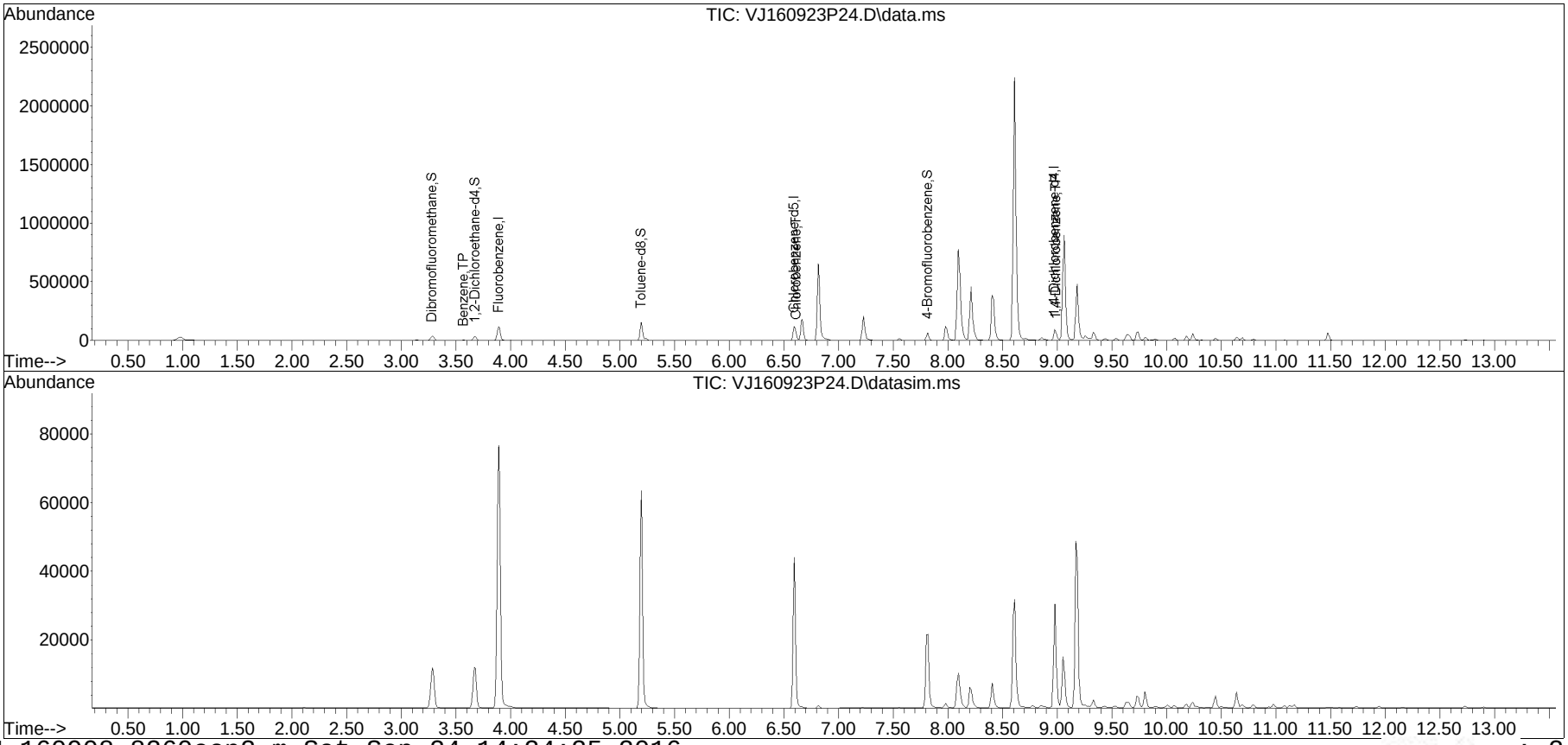
(#) = qualifier out of range (m) = manual integration (+) = signals summed

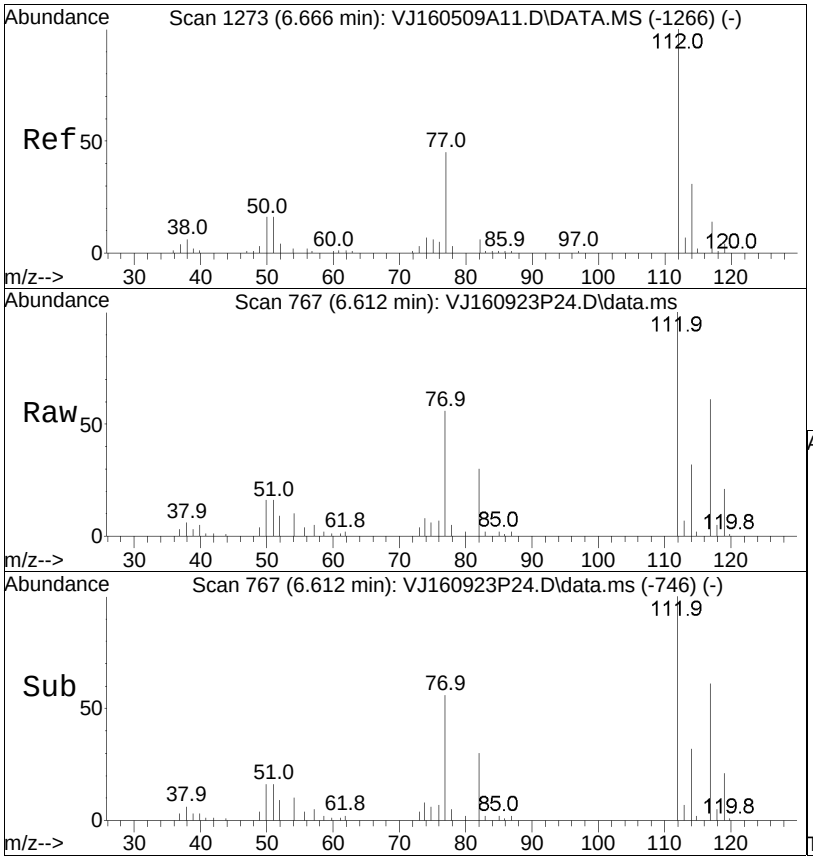
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Jack\2016\160923Pcon2\
Data File : VJ160923P24.D
Acq On : 23 Sep 2016 9:05 pm
Operator : JACK:PK
Sample : l1628990-13D,31,1,10,,t
Misc : WG935468,ICAL12860
ALS Vial : 62 Sample Multiplier: 1

Quant Time: Sep 24 14:06:28 2016
Quant Method : I:\VOLATILES\Jack\2016\160923Pcon2\VJ_160908_8260con2.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 12 04:50:40 2016
Response via : Initial Calibration

Sub List : 8260-TCLP+DCM - TCLPk\2016\160923Pcon2\VJ160923P02.D•

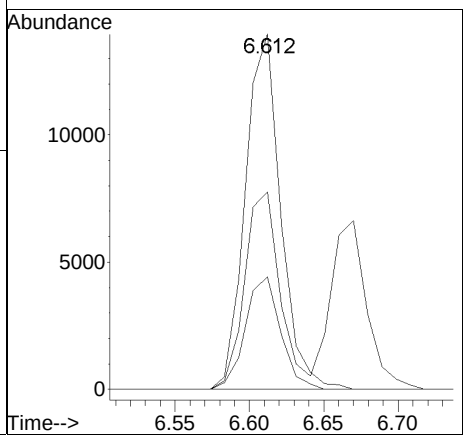




#74
Chlorobenzene
Concen: 2.85 ug/L
RT: 6.612 min Scan# 767
Delta R.T. 0.000 min
Lab File: VJ160923P24.D
Acq: 23 Sep 2016 9:05 pm

Tgt Ion:112 Resp: 23141

Ion	Ratio	Lower	Upper
112	100		
77	55.9	44.5	66.7
114	31.6	25.2	37.8



Manual Integration Report

Data Path	: I:\VOLATILES\Jack\2016\160	QMethod	: VJ_160908_8260con2.m
Data File	: VJ160923P24.D	Operator	: JACK:PK
Date Inj'd	: 9/23/2016 9:05 pm	Instrument	: Jack
Sample	: l1628990-13D,31,1,10,,t	Quant Date	: 9/24/2016 2:01 pm

There are no manual integrations or false positives in this file.

Method Blank
Raw Data

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA100\2016\160915A\
Data File : V00160915A04.D
Acq On : 15 Sep 2016 11:44 am
Operator : VOA100:JC
Sample : WG932329-5,31,5,5
Misc : WG932329,ICAL12815
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 15 13:53:51 2016
Quant Method : I:\VOLATILES\VOA100\2016\160915A\V100_160829N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 06:21:02 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA100\2016\160915A\V00160915A01.D
Sub List : 8260-CurveSoil - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.547	96	324379	20.000	ug/L	-0.01
Standard Area 1 = 341006			Recovery = 95.12%			
59) Chlorobenzene-d5	10.144	117	262474	20.000	ug/L	0.00
Standard Area 1 = 281424			Recovery = 93.27%			
79) 1,4-Dichlorobenzene-d4	12.724	152	135036	20.000	ug/L	0.00
Standard Area 1 = 156198			Recovery = 86.45%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.714	113	85855	18.692	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 93.46%			
43) 1,2-Dichloroethane-d4	6.259	65	100449	21.501	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 107.51%			
60) Toluene-d8	8.272	98	319205	21.745	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 108.73%			
83) 4-Bromofluorobenzene	11.555	95	125814	24.379	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 121.90%			
Target Compounds						Qvalue
73) Chlorobenzene	0.000		0	N.D.		

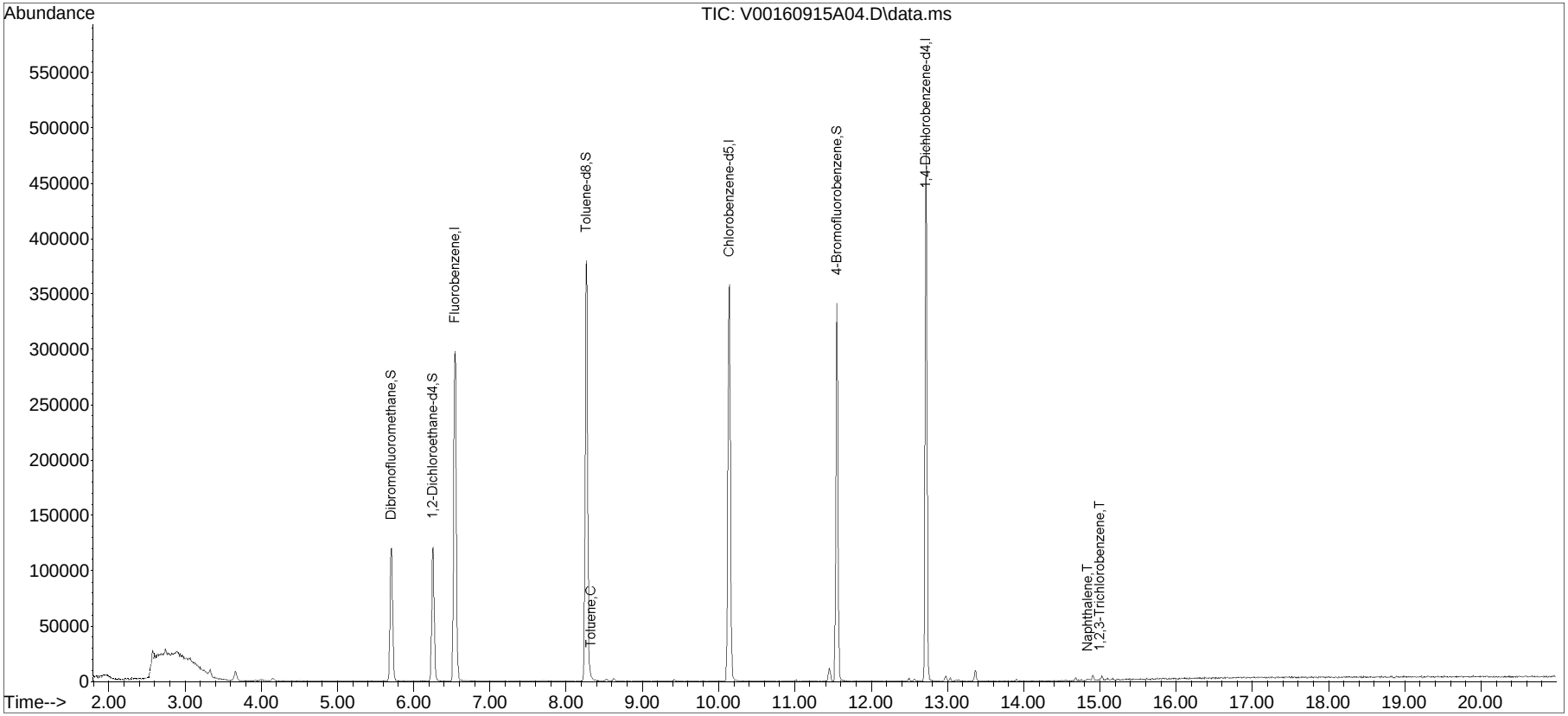
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA100\2016\160915A\
Data File : V00160915A04.D
Acq On : 15 Sep 2016 11:44 am
Operator : VOA100:JC
Sample : WG932329-5,31,5,5
Misc : WG932329,ICAL12815
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 15 13:53:51 2016
Quant Method : I:\VOLATILES\VOA100\2016\160915A\V100_160829N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 06:21:02 2016
Response via : Initial Calibration

Sub List : 8260-CurveSoil - Megamix plus Diox5A\V00160915A01.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA100\2016\1Q	Method	: V100_160829N_8260.m
Data File	: V00160915A04.D	Operator	: VOA100:JC
Date Inj'd	: 9/15/2016 11:44 am	Instrument	: VOA 100
Sample	: WG932329-5,31,5,5	Quant Date	: 9/15/2016 1:42 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\160915A\
Data File : V10160915A05.D
Acq On : 15 Sep 2016 12:04
Operator : VOA110:MV
Sample : WG932471-5,31h,5,5,0.1
Misc : WG932471,ICAL12786
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 15 13:27:28 2016
Quant Method : I:\VOLATILES\VOA110\2016\160915A\V110_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:02:58 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA110\2016\160915A\V10160915A01.D
Sub List : 8260-CurveSoils-D - Megamix only

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.206	96	152946	20.000	ug/L	-0.02
Standard Area 1 = 176148			Recovery = 86.83%			
59) Chlorobenzene-d5	9.756	117	123072	20.000	ug/L	-0.02
Standard Area 1 = 138326			Recovery = 88.97%			
79) 1,4-Dichlorobenzene-d4	12.430	152	63356	20.000	ug/L	-0.01
Standard Area 1 = 69768			Recovery = 90.81%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.388	113	36517	17.821	ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 89.11%			
43) 1,2-Dichloroethane-d4	5.923	65	43342	17.154	ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 85.77%			
60) Toluene-d8	7.905	98	152300	18.449	ug/L	-0.02
Spiked Amount 20.000	Range 70 - 130		Recovery = 92.25%			
83) 4-Bromofluorobenzene	11.229	95	59582	21.112	ug/L	-0.01
Spiked Amount 20.000	Range 70 - 130		Recovery = 105.56%			
Target Compounds						Qvalue
48) Trichloroethene	0.000		0	N.D.		
73) Chlorobenzene	0.000		0	N.D.		

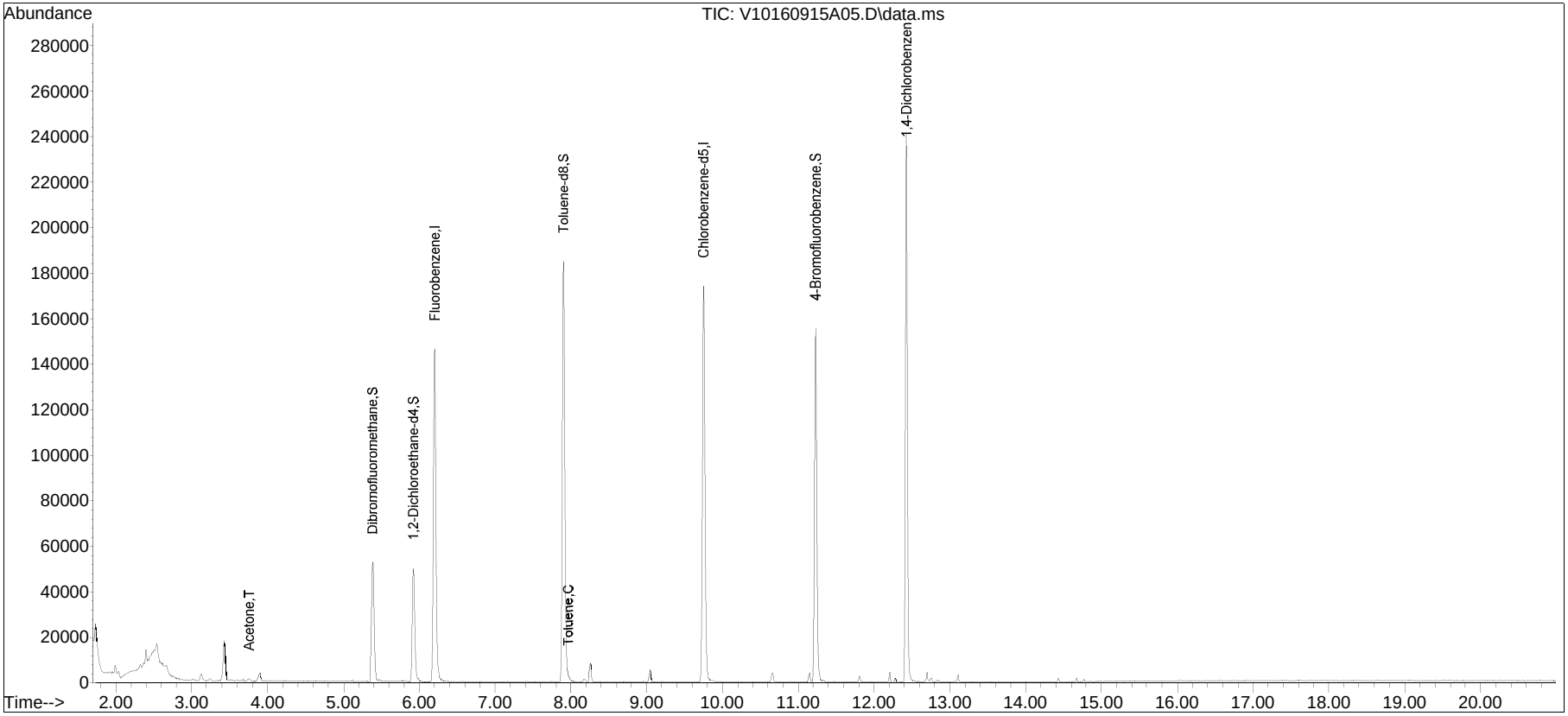
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\160915A\
Data File : V10160915A05.D
Acq On : 15 Sep 2016 12:04
Operator : VOA110:MV
Sample : WG932471-5,31h,5,5,0.1
Misc : WG932471,ICAL12786
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 15 13:27:28 2016
Quant Method : I:\VOLATILES\VOA110\2016\160915A\V110_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:02:58 2016
Response via : Initial Calibration

Sub List : 8260-CurveSoils-D - Megamix only915A\V10160915A01.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA110\2016\1	QMethod	: V110_160819_8260.m
Data File	: V10160915A05.D	Operator	: VOA110:MV
Date Inj'd	: 9/15/2016 12:04	Instrument	: VOA110
Sample	: WG932471-5,31h,5,5,0.1	Quant Date	: 9/15/2016 1:19 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Jack\2016\160923Pcon2\
Data File : VJ160923P10.D
Acq On : 23 Sep 2016 5:12 pm
Operator : JACK:PK
Sample : WG935468-5,31,10,10 (Sig #1); SPLP MB (Sig #2)
Misc : WG935468,ICAL12860
ALS Vial : 55 Sample Multiplier: 1

Quant Time: Sep 24 14:03:52 2016
Quant Method : I:\VOLATILES\Jack\2016\160923Pcon2\VJ_160908_8260con2.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 12 04:50:40 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Jack\2016\160923Pcon2\VJ160923P02.D
Sub List : 8260-TCLP+DCM - TCLP

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	3.890	96	115425	10.000 ug/L	0.00
Standard Area 1 = 125031			Recovery = 92.32%		
60) Chlorobenzene-d5	6.593	117	63109	10.000 ug/L	0.00
Standard Area 1 = 67052			Recovery = 94.12%		
80) 1,4-Dichlorobenzene-d4	8.976	152	27347	10.000 ug/L	0.00
Standard Area 1 = 29574			Recovery = 92.47%		
System Monitoring Compounds					
37) Dibromofluoromethane	3.290	113	26163	10.326 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.26%		
44) 1,2-Dichloroethane-d4	3.674	65	23562	9.149 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 91.49%		
61) Toluene-d8	5.195	98	94655	8.737 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 87.37%		
84) 4-Bromofluorobenzene	7.815	95	20751	9.627 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.27%		
Target Compounds					Qvalue
49) Trichloroethene	4.026	95	1082	0.278 ug/L #	86
74) Chlorobenzene	6.612	112	95	N.D.	

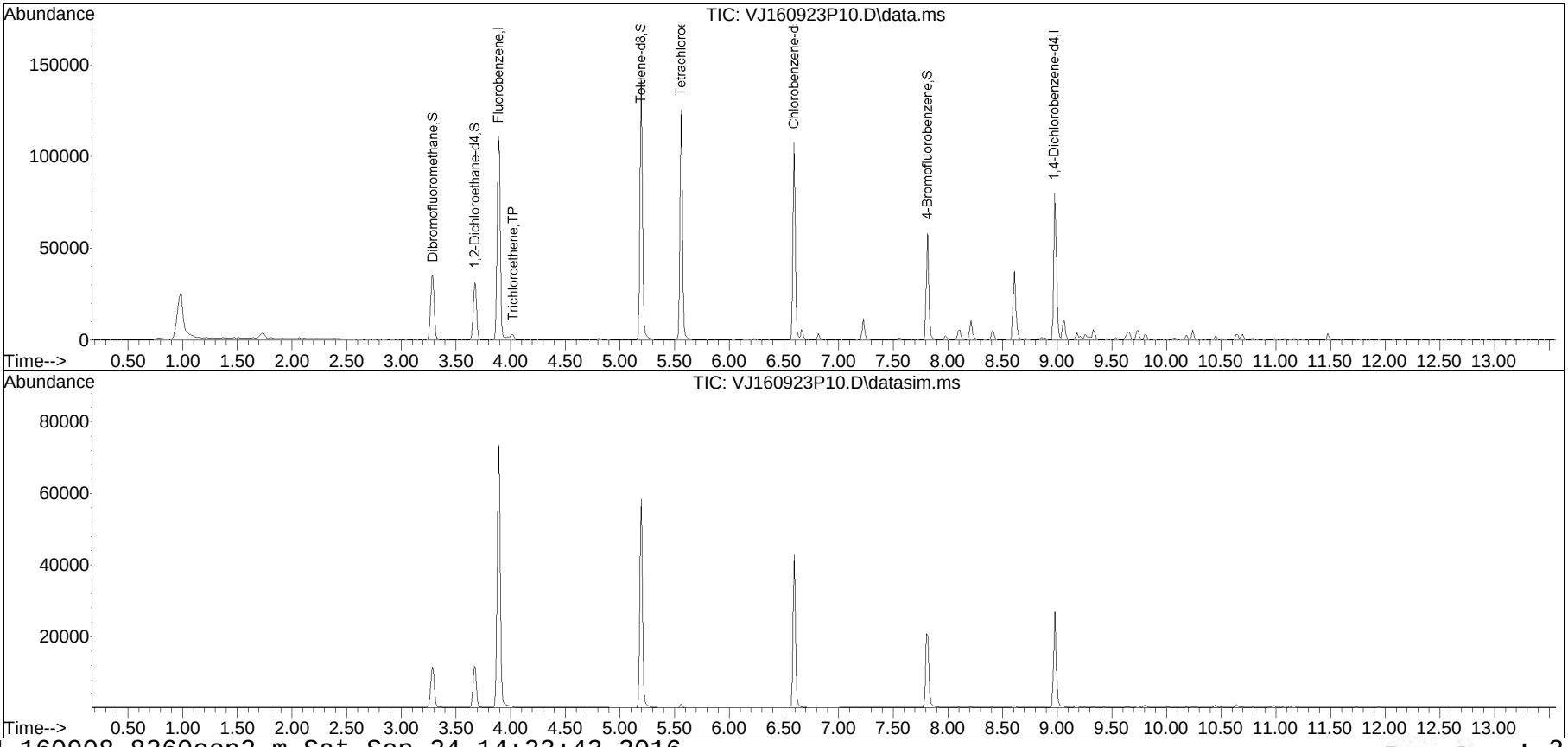
(#) = qualifier out of range (m) = manual integration (+) = signals summed

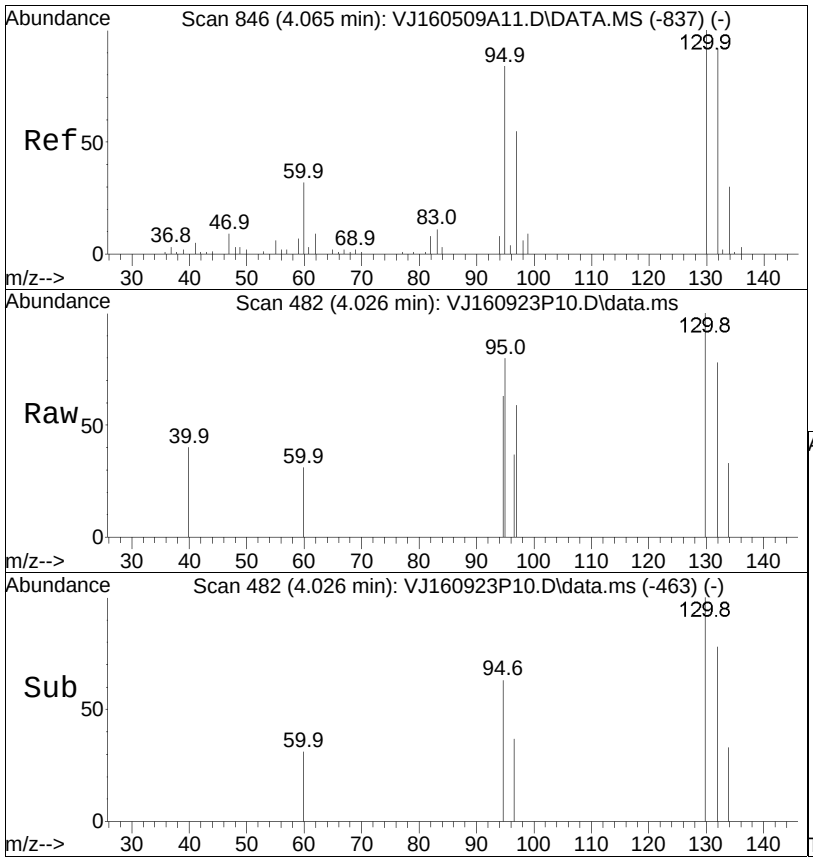
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Jack\2016\160923Pcon2\
Data File : VJ160923P10.D
Acq On : 23 Sep 2016 5:12 pm
Operator : JACK:PK
Sample : WG935468-5,31,10,10 (Sig #1); SPLP MB (Sig #2)
Misc : WG935468,ICAL12860
ALS Vial : 55 Sample Multiplier: 1

Quant Time: Sep 24 14:03:52 2016
Quant Method : I:\VOLATILES\Jack\2016\160923Pcon2\VJ_160908_8260con2.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Mon Sep 12 04:50:40 2016
Response via : Initial Calibration

Sub List : 8260-TCLP+DCM - TCLPk\2016\160923Pcon2\VJ160923P02.D•

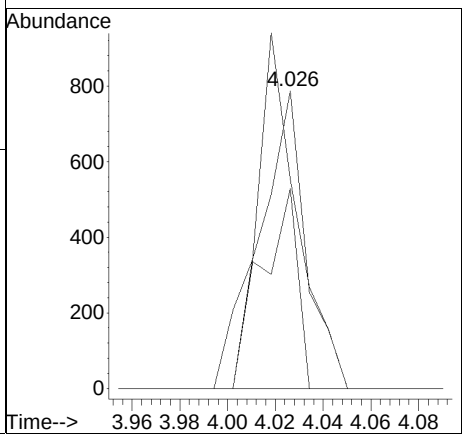




#49
Trichloroethene
Concen: 0.28 ug/L
RT: 4.026 min Scan# 482
Delta R.T. 0.008 min
Lab File: VJ160923P10.D
Acq: 23 Sep 2016 5:12 pm

Tgt Ion: 95 Resp: 1082

Ion	Ratio	Lower	Upper
95	100		
97	51.8	56.1	84.1#
130	99.4	86.4	129.6



Manual Integration Report

Data Path	: I:\VOLATILES\Jack\2016\160	QMethod	: VJ_160908_8260con2.m
Data File	: VJ160923P10.D	Operator	: JACK:PK
Date Inj'd	: 9/23/2016 5:12 pm	Instrument	: Jack
Sample	: WG935468-5,31,10,10	Quant Date	: 9/24/2016 2:01 pm

There are no manual integrations or false positives in this file.

Metals

Inorganic Data
(ICP Analysis)

Sample Results Summary

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-01	**Date Collected**	: 09/14/16 08:40
Client ID	: 4479-091416-0840	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 10:16
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG932125.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.295g	**%Solids**	: 85
Digestion Method	: EPA 3050B	**Date Digested**	: 09/15/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, Total	5.4	1.1	0.18	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-02	**Date Collected**	: 09/14/16 08:50
Client ID	: 4479-091416-0850	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 10:20
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG932125.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.278g	**%Solids**	: 86
Digestion Method	: EPA 3050B	**Date Digested**	: 09/15/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, Total	1100	1.1	0.18	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-04	**Date Collected**	: 09/14/16 10:00
Client ID	: 4479-091416-1000	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 10:24
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG932125.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.262g	**%Solids**	: 78
Digestion Method	: EPA 3050B	**Date Digested**	: 09/15/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, Total	480	1.3	0.20	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-05	**Date Collected**	: 09/14/16 10:55
Client ID	: 4479-091416-1055	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 10:40
Sample Matrix	: SOIL	**Dilution Factor**	: 5
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG932125.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.275g	**%Solids**	: 80
Digestion Method	: EPA 3050B	**Date Digested**	: 09/15/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, Total	3000	6.2	0.98	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-11	**Date Collected**	: 09/14/16 14:10
Client ID	: 4479-091416-1410	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 10:32
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG932125.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.286g	**%Solids**	: 84
Digestion Method	: EPA 3050B	**Date Digested**	: 09/15/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, Total	6.1	1.2	0.18	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-12	**Date Collected**	: 09/14/16 14:20
Client ID	: 4479-091416-1420	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 10:36
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG932125.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.274g	**%Solids**	: 79
Digestion Method	: EPA 3050B	**Date Digested**	: 09/15/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, Total	220	1.2	0.20	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: WG932068-1	Date Collected	: NA
Client ID	: WG932068-1BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 09/15/16 09:16
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,6010C	Analyst	: PS
Lab File ID	: WG932125.pdf	Instrument ID	: TRACE7
Sample Amount	: 1.25g	%Solids	: NA
Digestion Method	: EPA 3050B	Date Digested	: 09/15/16

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-02-0	Nickel, Total	ND	1.0	0.16	U

Blank Results Summary

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TRACE7		

		Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID	:	R900470-2		R900470-7		R900470-9		R900470-11		WG932068-1	
Date Analyzed	:	09/15/16 08:03		09/15/16 08:39		09/15/16 10:00		09/15/16 10:55		09/15/16 09:16	
Parameter		mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q	mg/kg	Q
Nickel		0.00400	U	0.00400	U	0.00400	U	0.00400	U	0.16	U

Calibration Summary

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TRACE7	**Units**	: mg/l

		Initial Calibration			Continuing Calibration(s)						
Lab ID	:	R900470-1			R900470-6			R900470-8		R900470-10	
Date Analyzed	:	09/15/16 07:59			09/15/16 08:36			09/15/16 09:56		09/15/16 10:51	
Parameter		**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Nickel		0.5000	0.4950	99.	0.5000	0.4970	99.	0.4840	97.	0.4950	99.

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2B
CRI Check Standard

Client	:	Haley & Aldrich, Inc.	**Lab Number**	:	L1628990
Project Name	:	EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	:	70613-814
Instrument ID	:	TRACE7	**Units**	:	mg/L

		Initial	Final
Lab ID	:	R900470-5	
Date Analyzed	:	09/15/16 08:31	

Parameter	True	Found	%R	Found	%R
Nickel	0.080	0.083	103		

Acceptance Criteria: Methods 200.7, 6010

CRI: 70-130%

ICP Interference Check Sample Results Summary

Form 4a
Interference Check Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TRACE7	**Concentration Units**	: mg/L

	True		Initial Found				Final Found			
Lab ID :			R900470-3		R900470-4					
Analysis Date :			09/15/16 08:23		09/15/16 08:28					
	Sol.	Sol.	Sol.		Sol.		Sol.		Sol.	
Analyte	A	AB	A	%R	AB	%R	A	%R	AB	%R
Nickel		0.3	-0.00140		0.290	97				

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

LCS Sample Results Summary

Form 7
Laboratory Control Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Client Sample ID	: NA	**Matrix**	: SOIL
Lab Sample ID	: WG932068-2	**LCS Analysis Date**	: 09/15/16 09:20
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
	True	Found	%R	True	Found	%R	RPD	Recovery	RPD
Parameter	(mg/kg)	(mg/kg)		(mg/kg)	(mg/kg)			Limits	Limit
Nickel, Total	129.	130.	101.					83-117	20

Run Logs

Form 13
Analysis Run Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TRACE7	**Analysis Method**	: 1,6010C
Start Date	: 09/15/16 07:59	**End Date**	: 09/15/16 10:55

Sample Number	Dilution Factor	Analysis Time	Nickel, Total
R900470-1 ICV	1	07:59:00	X
R900470-2 ICB	1	08:03:00	X
R900470-3 ICSA	1	08:23:00	X
R900470-4 ICSAB	1	08:28:00	X
R900470-5 CRI	1	08:31:00	X
R900470-6 CCV	1	08:36:00	X
R900470-7 CCB	1	08:39:00	X
WG932068-1 BLANK	1	09:16:00	X
WG932068-2 LCS	8	09:20:00	X
R900470-8 CCV	1	09:56:00	X
R900470-9 CCB	1	10:00:00	X
L1628990-01	1	10:16:00	X
L1628990-02	1	10:20:00	X
L1628990-04	1	10:24:00	X
L1628990-11	1	10:32:00	X
L1628990-12	1	10:36:00	X
L1628990-05	5	10:40:00	X
R900470-10 CCV	1	10:51:00	X
R900470-11 CCB	1	10:55:00	X

Digestion Logs
ICP

Form 12
Preparation Log

Client	:	**Haley & Aldrich, Inc.**	**Lab Number**	:	**L1628990**
Project Name	:	**EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	:	**70613-814**
Matrix	:	**SOIL**	**Prep Method**	:	**EPA 3050B**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L1628990-01	09/15/16 07:00	1.30	-
L1628990-02	09/15/16 07:00	1.28	-
L1628990-04	09/15/16 07:00	1.26	-
L1628990-05	09/15/16 07:00	1.28	-
L1628990-11	09/15/16 07:00	1.29	-
L1628990-12	09/15/16 07:00	1.27	-
WG932068-1	09/15/16 07:00	1.25	-
WG932068-2	09/15/16 07:00	0.39	-

Inorganic Data
(ICPMS Analysis)

Sample Results Summary

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-02	**Date Collected**	: 09/14/16 08:50
Client ID	: 4479-091416-0850	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/22/16 09:36
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,6020A	**Analyst**	: AM
Lab File ID	: WG934589.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: 86
Digestion Method	: EPA 3005A	**Date Digested**	: 09/22/16

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, SPLP	348.	5.00	0.865	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1628990-04	Date Collected	: 09/14/16 10:00
Client ID	: 4479-091416-1000	Date Received	: 09/14/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/22/16 09:39
Sample Matrix	: SOIL	Dilution Factor	: 10
Analytical Method	: 1,6020A	Analyst	: AM
Lab File ID	: WG934589.pdf	Instrument ID	: ICPMSQ
Sample Amount	: 50ml	%Solids	: 78
Digestion Method	: EPA 3005A	Date Digested	: 09/22/16

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-02-0	Nickel, SPLP	1760	5.00	0.865	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-05	**Date Collected**	: 09/14/16 10:55
Client ID	: 4479-091416-1055	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/22/16 09:42
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,6020A	**Analyst**	: AM
Lab File ID	: WG934589.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: 80
Digestion Method	: EPA 3005A	**Date Digested**	: 09/22/16

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, SPLP	767.	5.00	0.865	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1628990-12	Date Collected	: 09/14/16 14:20
Client ID	: 4479-091416-1420	Date Received	: 09/14/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/22/16 11:05
Sample Matrix	: SOIL	Dilution Factor	: 10
Analytical Method	: 1,6020A	Analyst	: AM
Lab File ID	: WG934589.pdf	Instrument ID	: ICPMSQ
Sample Amount	: 50ml	%Solids	: 79
Digestion Method	: EPA 3005A	Date Digested	: 09/22/16

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-02-0	Nickel, SPLP	5.77	5.00	0.865	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: WG934572-1	Date Collected	: NA
Client ID	: WG934572-1BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 09/22/16 09:15
Sample Matrix	: SOIL	Dilution Factor	: 10
Analytical Method	: 1,6020A	Analyst	: AM
Lab File ID	: WG934589.pdf	Instrument ID	: ICPMSQ
Sample Amount	: 50ml	%Solids	: NA
Digestion Method	: EPA 3005A	Date Digested	: 09/22/16

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-02-0	Nickel, SPLP	ND	5.00	0.865	U

Blank Results Summary

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: ICPMSQ		

		Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID	:	R902788-2		R902788-6		R902788-8		R902788-10		WG934572-1	
Date Analyzed	:	09/22/16 08:52		09/22/16 09:12		09/22/16 09:50		09/22/16 10:35		09/22/16 09:15	
Parameter		ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q
Nickel		0.0865	U	0.0865	U	0.0865	U	0.0865	U	0.865	U

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: ICPMSQ		

		Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID	:			R902788-12							
Date Analyzed	:			09/22/16 11:13							
Parameter		ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Nickel				0.0865	U						

Calibration Summary

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: ICPMSQ	**Units**	: ug/l

		Initial Calibration			Continuing Calibration(s)						
Lab ID	:	R902788-1			R902788-5			R902788-7		R902788-9	
Date Analyzed	:	09/22/16 08:46			09/22/16 09:07			09/22/16 09:45		09/22/16 10:30	
Parameter		**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Nickel		100.0000	110.0000	110	100.0000	101.0000	101	96.5000	96	102.0000	102

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R902788-11						
Date Analyzed :				09/22/16 11:08						
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Nickel				100.0000	100.0000	100				

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

ICP Interference Check Sample Results Summary

Form 4a
Interference Check Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: ICPMSQ	**Concentration Units**	: ug/l

	True		Initial Found				Final Found			
Lab ID :			R902788-3		R902788-4					
Analysis Date :			09/22/16 08:58		09/22/16 09:01					
	Sol.	Sol.	Sol.		Sol.		Sol.		Sol.	
Analyte	A	AB	A	%R	AB	%R	A	%R	AB	%R
Nickel		40	0.748		37.9	95				

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

LCS Sample Results Summary

Form 7
Laboratory Control Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Client Sample ID	: NA	**Matrix**	: SOIL
Lab Sample ID	: WG934572-2	**LCS Analysis Date**	: 09/22/16 09:18
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Nickel, SPLP	500.	496.	99.					80-120	20

Internal Standard Summary

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020A
Start Date	: 09/22/16	**End Date**	: 09/22/16

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R902788-1 ICV	08:46:56	138	115	108	103	102
R902788-2 ICB	08:52:01	141	126	119	113	108
R902788-3 ICSA	08:58:14	131	135	126	117	109
R902788-4 ICSAB	09:01:20	130	144	129	119	111
R902788-5 CCV	09:07:21	138	132	123	112	106
R902788-6 CCB	09:12:17	137	138	128	120	109
WG934572-1 BLANK	09:15:24	123	139	126	118	114
WG934572-2 LCS	09:18:26	111	117	112	106	107
L1628990-02	09:36:34	88	90	91	89	99
L1628990-04	09:39:38	88	88	93	93	104
L1628990-05	09:42:42	86	97	98	97	106
R902788-7 CCV	09:45:46	97	101	101	100	102
R902788-8 CCB	09:50:54	103	106	104	106	104
R902788-9 CCV	10:30:51	97	93	96	93	100
R902788-10 CCB	10:35:07	101	108	104	104	99
L1628990-12	11:05:35	72	86	84	88	98
R902788-11 CCV	11:08:39	73	76	80	83	91
R902788-12 CCB	11:13:43	83	84	85	90	95

Run Logs

Form 13
Analysis Run Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020A
Start Date	: 09/22/16 07:52	**End Date**	: 09/22/16 11:13

Sample Number	Dilution Factor	Analysis Time	Nickel, SPLP
R902788-13 TUNE		07:52:00	
R902788-1 ICV	1	08:46:56	X
R902788-2 ICB	1	08:52:01	X
R902788-3 ICSA	1	08:58:14	X
R902788-4 ICSAB	1	09:01:20	X
R902788-5 CCV	1	09:07:21	X
R902788-6 CCB	1	09:12:17	X
WG934572-1 BLANK	10	09:15:24	X
WG934572-2 LCS	10	09:18:26	X
L1628990-02	10	09:36:34	X
L1628990-04	10	09:39:38	X
L1628990-05	10	09:42:42	X
R902788-7 CCV	1	09:45:46	X
R902788-8 CCB	1	09:50:54	X
R902788-9 CCV	1	10:30:51	X
R902788-10 CCB	1	10:35:07	X
L1628990-12	10	11:05:35	X
R902788-11 CCV	1	11:08:39	X
R902788-12 CCB	1	11:13:43	X

Digestion Logs
ICPMS

Form 12
Preparation Log

Client	:	**Haley & Aldrich, Inc.**	**Lab Number**	:	**L1628990**
Project Name	:	**EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	:	**70613-814**
Matrix	:	**SOIL**	**Prep Method**	:	**EPA 3005A**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L1628990-02	09/22/16 06:28	-	50
L1628990-04	09/22/16 06:28	-	50
L1628990-05	09/22/16 06:28	-	50
L1628990-12	09/22/16 06:28	-	50
WG934572-1	09/22/16 06:28	-	50
WG934572-2	09/22/16 06:28	-	50

Wet Chemistry

Total Solids / Percent Moisture Analysis

Results Summary

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-01	**Date Collected**	: 09/14/16 08:40
Client ID	: 4479-091416-0840	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 02:11
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932044.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 85
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**84.9**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-02	**Date Collected**	: 09/14/16 08:50
Client ID	: 4479-091416-0850	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 02:11
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932044.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 86
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**85.9**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-03	**Date Collected**	: 09/14/16 09:20
Client ID	: 4479-091416-0920	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 02:11
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932044.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 93
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**92.5**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-04	**Date Collected**	: 09/14/16 10:00
Client ID	: 4479-091416-1000	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 02:11
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932044.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 78
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	% RL	% MDL	Qualifier
NONE	Solids, Total	78.1	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-05	**Date Collected**	: 09/14/16 10:55
Client ID	: 4479-091416-1055	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 02:11
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932044.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 80
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**79.6**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-06	**Date Collected**	: 09/14/16 11:30
Client ID	: 4479-091416-1130	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 02:11
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932044.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 63
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	62.5	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-07	**Date Collected**	: 09/14/16 11:45
Client ID	: 4479-091416-1145	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 02:11
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932044.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 62
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	62.1	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-08	**Date Collected**	: 09/14/16 12:10
Client ID	: 4479-091416-1210	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 02:11
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932044.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 71
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	% RL	% MDL	Qualifier
NONE	Solids, Total	71.2	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-09	**Date Collected**	: 09/14/16 12:15
Client ID	: 4479-091416-1215	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 02:11
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932044.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 66
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	66.1	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1628990-10	Date Collected	: 09/14/16 13:40
Client ID	: 4479-091416-1340	Date Received	: 09/14/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/15/16 02:11
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 121,2540G	Analyst	: VB
Lab File ID	: WG932044.csv	Instrument ID	:
Sample Amount	:	%Solids	: 65
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	65.4	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-11	**Date Collected**	: 09/14/16 14:10
Client ID	: 4479-091416-1410	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 02:11
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932044.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 84
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	% RL	% MDL	Qualifier
NONE	Solids, Total	84.4	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1628990-12	Date Collected	: 09/14/16 14:20
Client ID	: 4479-091416-1420	Date Received	: 09/14/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/15/16 02:11
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 121,2540G	Analyst	: VB
Lab File ID	: WG932044.csv	Instrument ID	:
Sample Amount	:	%Solids	: 79
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	78.7	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1628990
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1628990-13	**Date Collected**	: 09/14/16 15:00
Client ID	: 4479-091416-1500	**Date Received**	: 09/14/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/15/16 02:11
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932044.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 70
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	% RL	% MDL	Qualifier
NONE	Solids, Total	70.2	0.100	NA	

ALPHA ANALYTICAL

World Class Chemistry

www.alphalab.com

Lab Number: L1629226

Client: Haley & Aldrich, Inc.

ATTN: Dimitri Quafisi

Project Name: EWING TOWNSHIP INDUSTRIAL

Project Number: 70613-814

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

ANALYTICAL DATA PACKAGE FOR THE
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
TRENTON NEW JERSEY 08625

Agency/Division:	**Bureau/Office:**
Project No: 70613-814	**Contract No:**
Laboratory: Alpha Analytical	**Laboratory Location:** Westborough, Ma.
	Laboratory Phone Number: (508) 898-9220
SDG No: L1629226	**NJDEP Certification #:** MA015/MA935
Date of First Sample Receipt: 09/15/2016	**Date of Last Sample Receipt:** 09/15/2016

Agency Sample Number	Laboratory Sample Number	Sample Location	Date/Time of Collection
4479-091516-0810	L1629226-01	EWING TOWNSHIP INDUS	09/15/2016 08:10
4479-091516-0830	L1629226-02	EWING TOWNSHIP INDUS	09/15/2016 08:30
4479-091516-0840	L1629226-03	EWING TOWNSHIP INDUS	09/15/2016 08:40
4479-091516-0855	L1629226-04	EWING TOWNSHIP INDUS	09/15/2016 08:55
4479-091516-0945	L1629226-05	EWING TOWNSHIP INDUS	09/15/2016 09:45
4479-091516-1000	L1629226-06	EWING TOWNSHIP INDUS	09/15/2016 10:00
4479-091516-1020	L1629226-07	EWING TOWNSHIP INDUS	09/15/2016 10:20
4479-091516-1045	L1629226-08	EWING TOWNSHIP INDUS	09/15/2016 10:45
4479-091516-1055	L1629226-09	EWING TOWNSHIP INDUS	09/15/2016 10:55
4479-091516-1110	L1629226-10	EWING TOWNSHIP INDUS	09/15/2016 11:10
4479-091516-1305	L1629226-11	EWING TOWNSHIP INDUS	09/15/2016 13:05
4479-091516-1300	L1629226-12	EWING TOWNSHIP INDUS	09/15/2016 13:00
4479-091516-1330	L1629226-13	EWING TOWNSHIP INDUS	09/15/2016 13:30
4479-091516-1340	L1629226-14	EWING TOWNSHIP INDUS	09/15/2016 13:40
4479-091516-1345	L1629226-15	EWING TOWNSHIP INDUS	09/15/2016 13:45
4479-091516-1415	L1629226-16	EWING TOWNSHIP INDUS	09/15/2016 14:15
4479-091516-1435	L1629226-17	EWING TOWNSHIP INDUS	09/15/2016 14:35
4479-091516-1440	L1629226-18	EWING TOWNSHIP INDUS	09/15/2016 14:40
4479-091516-1500	L1629226-19	EWING TOWNSHIP INDUS	09/15/2016 15:00

ANALYTICAL DATA PACKAGE FOR THE
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
TRENTON NEW JERSEY 08625

Agency/Division:	**Bureau/Office:**
Project No: 70613-814	**Contract No:**
Laboratory: Alpha Analytical	**Laboratory Location:** Westborough, Ma.
	Laboratory Phone Number: (508) 898-9220
SDG No: L1629226	**NJDEP Certification #:** MA015/MA935
Date of First Sample Receipt: 09/15/2016	**Date of Last Sample Receipt:** 09/15/2016

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on disk or electronically has been authorized by the laboratory director or his/her designee, as verified by the following signature.

Technical Director/Representative (Typed)	Kelly Stenstrom	09/28/16
Technical Director/Representative (Signature)	Kelly Stenstrom	

Table of Contents

New Jersey Reduced Data Deliverable Package 1
- Title Page 2
- Table of Contents 4
- Chain of Custody 7
  - External Chain of Custody 8
  - Lims COC (LN01) 11
  - Sample Receipt Tracking Report 16
- Methodology Review 43
  - Method References 44
- Laboratory Chronicle 45
  - Sample Receipt and Container Information 46
- NJ DEP DKQP Summary Questionnaire 54
  - DKQP Summary Questionnaire 55
- Conformance/Non-Conformance (Reliability) Summary 56
  - Conformance/Non-Conformance (Reliability) Report 57
- Glossary 60
  - Glossary Report 61
- SPLP Extraction Data 63
  - SPLP ZHE Extraction Data 64
    - Form 1 - Organics 65
  - SPLP Extraction Data - NonCLP 74
    - Form 1 - Organics 75
- Organics Analysis 83
  - GCMS 8260 Analysis 84
    - Sample Results Summary 85
      - Form 1 - Organics 86
    - Tune Results Summary 116
      - Form 5 - Organics 117
    - Blank Results Summary 129
      - Form 4 - Organics 130
    - Standards Data Summary 137
      - Form 6 - Organics 138
      - Form 7 - Organics 153
    - Surrogate Summary 166
      - Form 2 - Organics 167
    - Batch QC Summary 169
      - Form 3 - Organics 170
    - Internal Standard Summary 186
      - Form 8 - Organics 187
    - Chromatograms 194
      - Sample Raw Data 195
        - 4479-091516-1045 (L1629226-08) Analyzed: 09/16/16 13:35 196
        - 4479-091516-1055 (L1629226-09) Analyzed: 09/16/16 14:01 200
        - 4479-091516-1110 (L1629226-10) Analyzed: 09/16/16 14:27 204
        - 4479-091516-0830 (L1629226-02) Analyzed: 09/16/16 14:34 207
        - 4479-091516-1415 (L1629226-16) Analyzed: 09/16/16 14:53 210
        - 4479-091516-1345 (L1629226-15) Analyzed: 09/16/16 15:00 213
        - 4479-091516-0840 (L1629226-03) Analyzed: 09/16/16 15:13 216
        - 4479-091516-1500 (L1629226-19) Analyzed: 09/16/16 15:27 221
        - 4479-091516-0855 (L1629226-04) Analyzed: 09/16/16 16:30 224

Table of Contents

4479-091516-0945 (L1629226-05) Analyzed: 09/16/16 16:56 229
4479-091516-1000 (L1629226-06) Analyzed: 09/16/16 17:21 233
4479-091516-1020 (L1629226-07) Analyzed: 09/16/16 17:47 237
4479-091516-0840 (L1629226-03) Analyzed: 09/22/16 11:25 242
4479-091516-0945 (L1629226-05) Analyzed: 09/22/16 11:56 246
4479-091516-1055 (L1629226-09) Analyzed: 09/22/16 12:27 250
4479-091516-1110 (L1629226-10) Analyzed: 09/22/16 12:59 255
4479-091516-1415 (L1629226-16) Analyzed: 09/22/16 13:30 260
4479-091516-0855 (L1629226-04) Analyzed: 09/22/16 14:01 264
4479-091516-1000 (L1629226-06) Analyzed: 09/22/16 14:33 268
4479-091516-1045 (L1629226-08) Analyzed: 09/22/16 15:04 271
4479-091516-0855 (L1629226-04) Analyzed: 09/23/16 09:18 274
4479-091516-1020 (L1629226-07) Analyzed: 09/28/16 11:13 279
Method Blank Raw Data 284
Laboratory Method Bl (WG932865-5) Analyzed: 09/16/16 09:38 285
Laboratory Method Bl (WG932751-5) Analyzed: 09/16/16 10:33 288
Laboratory Method Bl (WG932860-5) Analyzed: 09/16/16 10:34 297
Laboratory Method Bl (WG933853-5) Analyzed: 09/20/16 09:15 304
Laboratory Method Bl (WG933853-17) Analyzed: 09/22/16 09:19 307
Laboratory Method Bl (WG933853-22) Analyzed: 09/23/16 08:16 310
Laboratory Method Bl (WG936703-5) Analyzed: 09/28/16 10:48 313
Metals Analysis 316
Inorganic Data (ICP Analysis) 317
Sample Results Summary 318
Form 1 - Inorganics 319
Blank Results Summary 333
Form 3 - Inorganics 334
Calibration Summary 336
Form 2A - Inorganics 337
Form 2B - Inorganics 339
ICP Interference Check Sample Results Summary 340
Form 4A - Inorganics 341
Spike Sample Results 342
Form 5A - Inorganics 343
Duplicate Sample Results Summary 344
Form 6 - Inorganics 345
LCS Sample Results Summary 346
Form 7 - Inorganics 347
Serial Dilution Summary 348
Form 8 - Inorganics 349
Sample Run Logs 350
Form 13 - Inorganics 351
ICP Digestion 353
Form 12 - Inorganics 354
Inorganic Data (ICPMS Analysis) 355
Sample Results Summary 356
Form 1 - Inorganics 357
Blank Results Summary 366
Form 3 - Inorganics 367
Calibration Summary 368

Table of Contents

Form 2A - Inorganics 369
ICP Interference Check Sample Results Summary 370
Form 4A - Inorganics 371
LCS Sample Results Summary 372
Form 7 - Inorganics 373
Internal Standard Summary 374
Form 15 - Inorganics 375
Sample Run Logs 376
Form 13 - Inorganics 377
ICPMS Digestion 378
Form 12 - Inorganics 379
Wet Chemistry Analysis 380
Total Solids Analysis 381
Results Summary 382
Form 1 - Inorganics 383
Duplicate Sample Results Summary 403
Form 6 - Inorganics 404
Organic Carbon Analysis 405
Results Summary 406
Form 1 - Inorganics 407
Calibration Summary 410
Form 2A - Inorganics 411
Blank Results Summary 414
Form 3 - Inorganics 415
Grainsize Analysis 418
Results Summary 419
Form 1 - Inorganics 420
Duplicate Sample Results Summary 424
Form 6 - Inorganics 425
Sample Raw Data 426
Grainsize Raw Data 427

Chain of Custody

ALPHA ANALYTICAL — Westborough, MA 01581, 8 Walkup Dr., TEL: 508-898-9220, FAX: 508-898-9193; Mansfield, MA 02048, 320 Forbes Blvd, TEL: 508-822-9300, FAX: 508-822-3288

CHAIN OF CUSTODY

Service Centers: Brewer, ME 04412; Portsmouth, NH 03801; Mahwah, NJ 07430; Albany, NY 12205; Tonawanda, NY 14150; Holmes, PA 19043

Page 1 of 2

Date Rec'd in Lab: 9/15/16

ALPHA Job #: L1629276

H&A Information
- H&A Client: RACER
- H&A Address: 6500 Rockside Rd, Cleveland, OH 44131
- H&A Phone: 216-706-1314
- H&A Fax:
- H&A Email: dputz@haleyaldrich.com

Project Information
- Project Name: Ewing Township Industrial Land
- Project Location: Ewing, NJ
- Project #: 70613-814
- (Use Project name as Project #): ☐
- Project Manager: Dan Putz
- ALPHAQuote #:

Turn-Around Time
- Standard ☐ Due Date:
- Rush (only if pre approved) ☒ # of Days:

Deliverables
- ☒ Email ☐ Fax
- ☐ EQuIS (1 File) ☐ EQuIS (4 File)
- ☐ Other:

Billing Information
- ☐ Same as Client Info
- PO #

Regulatory Requirements (Program/Criteria)
Note: Select State from menu & identify criteria:

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
- ☐ NJ ☐ NY
- ☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Rush Totals
Hold SPLP pending Totals Analysis

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
- ☐ Done
- ☐ Lab to do

Preservation
- ☐ Lab to do

(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	SPLP + Total Nickel	SPLP + Total Arsenic	SPLP + Total TCE	SPLP + Total Benzene	Grain Size	FOC	SPLP + Total Chlorobenzene	Total Bottles	Sample Specific Comments
L1629276 -01	4479-091516-0810	9/15/16	0810	Soil	TMD	X				X				
-02	4479-091516-0830	9/15/16	0830	Soil	TMD			X						
-03	4479-091516-0840	9/15/16	0840	Soil	TMD				X			X		
-04	4479-091516-0855	9/15/16	0855	Soil	TMD				X			X		
-05	4479-091516-0945	9/15/16	0945	Soil	TMD	X						X		
-06	4479-091516-1000	9/15/16	1000	Soil	TMD	X						X		
-07	4479-091516-1020	9/15/16	1020	Soil	TMD				X			X		
-08	4479-091516-1045	9/15/16	1045	Soil	TMD							X		
-09	4479-091516-1055	9/15/16	1055	Soil	TMD				X			X		
-10	4479-091516-1110	9/15/16	1110	Soil	TMD	X		X	X	X				
Container Type						A	A	E	E	P	A	E		
Preservative						A	A	A	A	A	A	A		

Preservative Code: A = None; B = HCl; C = HNO_3; D = H_2SO_4; E = NaOH; F = MeOH; G = $NaHSO_4$; H = $Na_2S_2O_3$; K/E = Zn Ac/NaOH; O = Other

Container Code: P = Plastic; A = Amber Glass; V = Vial; G = Glass; B = Bacteria Cup; C = Cube; O = Other; E = Encore; D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	9/15/16 1615	[illegible] ALT	9/15/16 1615
Dave [illegible]	9/15/16 1350	Tom Taylor	9/15/16 1851
Tom Taylor	9/15/16 2300	[illegible]	9/15/16 2300

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. Alpha Analytical's services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement# 2015-18-Alpha Analytical by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Alpha Analytical.

Document ID: 20455 Rev 1 (1/28/2016)

CHAIN OF CUSTODY

ALPHA ANALYTICAL — Westborough, MA 01581, 8 Walkup Dr., TEL: 508-898-9220, FAX: 508-898-9193 | Mansfield, MA 02048, 320 Forbes Blvd, TEL: 508-822-9300, FAX: 508-822-3288

Service Centers
Brewer, ME 04412 Portsmouth, NH 03801 Mahwah, NJ 07430
Albany, NY 12205
Tonawanda, NY 14150 Holmes, PA 19043

Page 1 of 2

Date Rec'd in Lab: 9/15/16

ALPHA Job #: L1629276

H&A Information
H&A Client: RACER
H&A Address: 6500 Rockside Rd, Cleveland, OH 44131
H&A Phone: 216-706-1314
H&A Fax:
H&A Email: dputz@haleyaldrich.com

Project Information
Project Name: Ewing Township Industrial Land
Project Location: Ewing, NJ
Project #: 70613-814
(Use Project name as Project #) ☐
Project Manager: Dan Putz
ALPHAQuote #:

Turn-Around Time
Standard ☐ Due Date:
Rush (only if pre approved) ☒ # of Days:

Deliverables
☒ Email ☐ Fax
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other:

Billing Information
☐ Same as Client Info
PO #

Regulatory Requirements (Program/Criteria)
Note: Select State from menu & identify criteria:

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:
Rush Totals
Hold SPLP pending Totals Analysis

Please specify Metals or TAL.

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	SPLP + Total Nickel	SPLP + Total Arsenic	SPLP + Total TCE	SPLP + Total Benzene	Grain Size	FOC	SPLP + Total Chlorobenzene	Total Bottles	Sample Specific Comments
79736 -01	4479-091516-0810	9/15/16	0810	Soil	TMD	X				X				
-02	4479-091516-0830	9/15/16	0830	Soil	TMD			X						
-03	4479-091516-0840	9/15/16	0840	Soil	TMD				X			X		
-04	4479-091516-0855	9/15/16	0855	Soil	TMD				X			XX		
-05	4479-091516-0945	9/15/16	0945	Soil	TMD	X						X		
-06	4479-091516-1000	9/15/16	1000	Soil	TMD	X						X		
-07	4479-091516-1020	9/15/16	1020	Soil	TMD				X			X		
-08	4479-091516-1045	9/15/16	1045	Soil	TMD							X		
-09	4479-091516-1055	9/15/16	1055	Soil	TMD				X			X		
-10	4479-091516-1110	9/15/16	1110	Soil	TMD	X		X	X					
	Container Type					A	A	E	E	P	A	E		
	Preservative					A	A	A	A	A	A	A		

Preservative Code: A = None; B = HCl; C = HNO_3; D = H_2SO_4; E = NaOH; F = MeOH; G = $NaHSO_4$; H = $Na_2S_2O_3$; K/E = Zn Ac/NaOH; O = Other

Container Code: P = Plastic; A = Amber Glass; V = Vial; G = Glass; B = Bacteria Cup; C = Cube; O = Other; E = Encore; D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	9/15/16 1615	[illegible] ALT	9/15/16 1615
Dave [illegible]	9/15/16 1350	Tom Tosta	9/15/16 1851
Tom Tosta	9/15/16 2300	[illegible]	9/15/16 2300

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. Alpha Analytical's services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement# 2015-18-Alpha Analytical by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Alpha Analytical.

Document ID: 20455 Rev 1 (1/28/2016)

CHAIN OF CUSTODY

ALPHA ANALYTICAL — Westborough, MA 01581, 8 Walkup Dr., TEL: 508-898-9220, FAX: 508-898-9193; Mansfield, MA 02048, 320 Forbes Blvd, TEL: 508-822-9300, FAX: 508-822-3288

Service Centers
Brewer, ME 04412 Portsmouth, NH 03801 Mahwah, NJ 07430
Albany, NY 12205
Tonawanda, NY 14150 Holmes, PA 19043

Page 2 of 2

Date Rec'd in Lab: 9/15/16

ALPHA Job #: L1629228

H&A Information
- H&A Client: RACER
- H&A Address: 6500 Rockside Rd, Cleveland, OH 44131
- H&A Phone: 216-706-1314
- H&A Fax:
- H&A Email: dputz@haleyaldrich.com

Project Information
- Project Name: ~~R~~ Ewing Township Industrial Land
- Project Location: Ewing, NJ
- Project # 70613-814
- (Use Project name as Project #) ☐
- Project Manager: Dan Putz
- ALPHAQuote #:

Turn-Around Time
- Standard ☐ Due Date:
- Rush (only if pre approved) ☒ # of Days:

Deliverables
- ☒ Email ☐ Fax
- ☐ EQuIS (1 File) ☐ EQuIS (4 File)
- ☐ Other:

Billing Information
- ☐ Same as Client Info
- PO #

Regulatory Requirements (Program/Criteria)
Note: Select State from menu & identify criteria.

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
- ☐ NJ ☐ NY
- ☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:
Rush Totals
Hold SPLP samples pending Totals Analysis

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
- ☐ Done
- ☐ Lab to do

Preservation
- ☐ Lab to do

(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Arsenic SPLP & Total	SPLP & Total Nickel	SPLP & Total Chlorobenzene	SPLP & Total Benzene	SPLP & Total TCE	Grain Size	FOC	Sample Specific Comments	Total Bottles
29226 11	4479-091516-1305	9/15/16	1305	Soil	TMD	X								
12	4479-091516-1300	9/15/16	1300	Soil	TMD	X								
13	4479-091516-1330	9/15/16	1330	Soil	TMD		X							
14	4479-091516-1340	9/15/16	1340	Soil	TMD		X							
15	4479-091516-1345	9/15/16	1345	Soil	TMD		X	X						
16	4479-091516-1415	9/15/16	1415	Soil	TMD				X					
17	4479-091516-1435	9/15/16	1435	Soil	TMD		X							
18	4479-091516-1440	9/15/16	1440	Soil	TMD	X								
19	4479-091516-1500	9/15/16	1500	Soil	TMD		X			X	X	X		
	TMD													

Container Type: A A E E E P A
Preservative: A A A A A A A

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	9/15/16 1615		9/15/16 1616
	9/15/16 1850		9-15-16 2511
	9-15-16 2300		9/15/16 2300

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. Alpha Analytical's services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement# 2015-18-Alpha Analytical by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Alpha Analytical.

Document ID: 20455 Rev 1 (1/28/2016)

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Sep 29 2016, 04:26 pm

Login Number: L1629226
Account: HALEY-OH2 Haley & Aldrich, Inc.Project: 70613-814
Received: 15SEP16 Due Date: 28SEP16

Sample #	Client ID	Mat	PR	Collected	Container
L1629226-01	4479-091516-0810	3	S0	15SEP16 08:10	1-EPlastic-C.120,1-Glass-A.25,1-Plastic-A-GS,1-SGlass-A.06,1-Tumble Vessel

PREPP: Metals only Prelim 9/22 A2-TOC; SPLP-Metals&SPLP-VO(not sample -07) Prelim 9/26; Prelim 9/28 for -07 SPLP-VO; A2-SIEV & FINAL 9/29 NJ-RED Package Due Date: 09/16/16

A2-SIEVE-HYDRO-NJ,A2-HYDRO-CFINE,A2-HYDRO-CGRAVEL,A2-HYDRO-COBBLES,A2-HYDRO-CSAND,A2-HYDRO-FGRAVEL, A2-HYDRO-FSAND,A2-HYDRO-MSAND,A2-HYDRO-SFINE,A2-HYDRO-TFINE,NI-TI,NJ-RED,NJ-SPLPEXT-DATA,NJDEP, PREPP,PREPT,SPLP-NI-6020T-PPB,TS

L1629226-02	4479-091516-0830	3	S0	15SEP16 08:30	2-Encore-25,3-Encore-5,1-Plastic-A-TS,1-SVial-F,4-SVial-W

8260: TCE only, report list built. Prelim 9/22 A2-TOC; SPLP-Metals&SPLP-VO(not sample -07) Prelim 9/26; Prelim 9/28 for -07 SPLP-VO; A2-SIEV & FINAL 9/29 Package Due Date: 09/16/16

ENCORE,HOLD-CONTINGENCY,NJ-8260HLW,TS

L1629226-03	4479-091516-0840	3	S0	15SEP16 08:40	2-EVial-A,2-Encore-25,3-Encore-5,1-Plastic-A-TS,1-SVial-F,4-SVial-W

8260 total/SPLP: Benzene and Chlorobenzene only, report list built. Prelim 9/22 A2-TOC; SPLP-Metals&SPLP-VO(not sample -07) Prelim 9/26; Prelim 9/28 for -07 SPLP-VO; A2-SIEV & FINAL 9/29 Package Due Date: 09/16/16

ENCORE,HOLD-CONTINGENCY,NJ-8260HLW,NJ-SPLP-8260,NJ-SPLP-VOA,NJ-SPLPZHEEXT-DATA,SPLP-EXT-ZHE,TS

L1629226-04	4479-091516-0855	3	S0	15SEP16 08:55	2-EVial-A,2-Encore-25,3-Encore-5,1-Plastic-A-TS,1-SVial-F,4-SVial-W

8260 total/SPLP: Benzene and Chlorobenzene only, report list built. Prelim 9/22 A2-TOC; SPLP-Metals&SPLP-VO(not sample -07) Prelim 9/26; Prelim 9/28 for -07 SPLP-VO; A2-SIEV & FINAL 9/29 Package Due Date: 09/16/16

ENCORE,HOLD-CONTINGENCY,NJ-8260HLW,NJ-SPLP-8260,NJ-SPLP-VOA,NJ-SPLPZHEEXT-DATA,SPLP-EXT-ZHE,TS

L1629226-05	4479-091516-0945	3	S0	15SEP16 09:45	1-EPlastic-C.120,2-EVial-A,2-Encore-25,3-Encore-5,1-Glass-A.25,1-Plastic-A-TS,1-

PREPP: Metals only 8260 total/SPLP: Chlorobenzene only, report list built. Prelim 9/22 A2-TOC; SPLP-Metals&SPLP-VO(not sample -07) Prelim 9/26; Prelim 9/28 for -07 SPLP-VO; A2-SIEV & FINAL 9/29 Package Due Date: 09/16/16

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Sep 29 2016, 04:26 pm

Login Number: L1629226
Account: HALEY-OH2 Haley & Aldrich, Inc.Project: 70613-814
Received: 15SEP16 Due Date: 28SEP16

Sample #	Client ID	Mat	PR	Collected	Container

ENCORE,HOLD-CONTINGENCY,NI-TI,NJ-8260HLW,NJ-SPLP-8260,NJ-SPLP-VOA,NJ-SPLPZHEEXT-DATA,SPLP-EXT-ZHE, NJ-SPLPEXT-DATA,PREPP,PREPT,SPLP-NI-6020T-PPB,TS

L1629226-06 4479-091516-1000 3 S0 15SEP16 10:00 1-EPlastic-C.120,2-EVial-A,2-Encore-25,3-Encore-5,1-Glass-A.25,1-Plastic-A-TS,1-

PREPP: Metals only 8260 total/SPLP: Chlorobenzene only, report list built. Prelim 9/22 A2-TOC; SPLP-Metals&SPLP-VO(not sample -07) Prelim 9/26; Prelim 9/28 for -07 SPLP-VO; A2-SIEV & FINAL 9/29 Package Due Date: 09/16/16

ENCORE,HOLD-CONTINGENCY,NI-TI,NJ-8260HLW,NJ-SPLP-8260,NJ-SPLP-VOA,NJ-SPLPZHEEXT-DATA,SPLP-EXT-ZHE, NJ-SPLPEXT-DATA,PREPP,PREPT,SPLP-NI-6020T-PPB,TS

L1629226-07 4479-091516-1020 3 S0 15SEP16 10:20 2-EVial-A,2-Encore-25,3-Encore-5,1-Plastic-A-TS,1-SVial-F,4-SVial-W

8260-SPLP: Benzene and Chlorobenzene only, report list built. 8260total: Benzene, TCE and Chlorobenzene only, report list built. Prelim 9/22 A2-TOC; SPLP-Metals&SPLP-VO(not sample -07) Prelim 9/26; Prelim 9/28 for -07 SPLP-VO; A2-SIEV & FINAL 9/29 Package Due Date: 09/16/16

ENCORE,HOLD-CONTINGENCY,NJ-8260HLW,NJ-SPLP-8260,NJ-SPLP-VOA,NJ-SPLPZHEEXT-DATA,SPLP-EXT-ZHE,TS

L1629226-08 4479-091516-1045 3 S0 15SEP16 10:45 2-EVial-A,2-Encore-25,3-Encore-5,1-Plastic-A-TS,1-SVial-F,4-SVial-W

8260 total/SPLP: Chlorobenzene only, report list built. Prelim 9/22 A2-TOC; SPLP-Metals&SPLP-VO(not sample -07) Prelim 9/26; Prelim 9/28 for -07 SPLP-VO; A2-SIEV & FINAL 9/29 Package Due Date: 09/16/16

ENCORE,HOLD-CONTINGENCY,NJ-8260HLW,NJ-SPLP-8260,NJ-SPLP-VOA,NJ-SPLPZHEEXT-DATA,SPLP-EXT-ZHE,TS

L1629226-09 4479-091516-1055 3 S0 15SEP16 10:55 2-EVial-A,2-Encore-25,3-Encore-5,1-Plastic-A-TS,1-SVial-F,4-SVial-W

8260 total/SPLP: Benzene and Chlorobenzene only, report list built. Prelim 9/22 A2-TOC; SPLP-Metals&SPLP-VO(not sample -07) Prelim 9/26; Prelim 9/28 for -07 SPLP-VO; A2-SIEV & FINAL 9/29 Package Due Date: 09/16/16

ENCORE,HOLD-CONTINGENCY,NJ-8260HLW,NJ-SPLP-8260,NJ-SPLP-VOA,NJ-SPLPZHEEXT-DATA,SPLP-EXT-ZHE,TS

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Sep 29 2016, 04:26 pm

Login Number: L1629226
Account: HALEY-OH2 Haley & Aldrich, Inc.Project: 70613-814
Received: 15SEP16 Due Date: 28SEP16

Sample #	Client ID	Mat	PR	Collected	Container
L1629226-10	4479-091516-1110	3	S0	15SEP16 11:10	1-EPlastic-C.120,2-EVial-A,5-Encore-5,1-Glass-A.25,1-Plastic-A-GS,1-Plastic-A-TS

PREPP: Metals only 8260 total/SPLP: TCE and Benzene only, report list built, Prelim 9/22 A2-TOC; SPLP-Metals&SPLP-VO(not sample -07) Prelim 9/26; Prelim 9/28 for -07 SPLP-VO; A2-SIEV & FINAL 9/29 Package Due Date: 09/16/16

A2-SIEVE-HYDRO-NJ,A2-HYDRO-CFINE,A2-HYDRO-CGRAVEL,A2-HYDRO-COBBLES,A2-HYDRO-CSAND,A2-HYDRO-FGRAVEL, A2-HYDRO-FSAND,A2-HYDRO-MSAND,A2-HYDRO-SFINE,A2-HYDRO-TFINE,ENCORE,HOLD-CONTINGENCY,NI-TI,NJ-8260HLW,NJ-SPLP-8260,NJ-SPLP-VOA,NJ-SPLPZHEEXT-DATA,SPLP-EXT-ZHE,NJ-SPLPEXT-DATA,PREPP,PREPT,SPLP-NI-6020T-PPB,TS

L1629226-11	4479-091516-1305	3	S0	15SEP16 13:05	1-EPlastic-C.120,1-Glass-A.25,1-SGlass-A.06,1-Tumble Vessel

PREPP: Metals only Prelim 9/22 A2-TOC; SPLP-Metals&SPLP-VO(not sample -07) Prelim 9/26; Prelim 9/28 for -07 SPLP-VO; A2-SIEV & FINAL 9/29 Package Due Date: 09/16/16

AS-TI,NJ-SPLPEXT-DATA,PREPP,PREPT,SPLP-AS-6020T-PPB,TS

L1629226-12	4479-091516-1300	3	S0	15SEP16 13:00	1-EPlastic-C.120,1-Glass-A.25,1-SGlass-A.06,1-Tumble Vessel

PREPP: Metals only Prelim 9/22 A2-TOC; SPLP-Metals&SPLP-VO(not sample -07) Prelim 9/26; Prelim 9/28 for -07 SPLP-VO; A2-SIEV & FINAL 9/29 Package Due Date: 09/16/16

AS-TI,NJ-SPLPEXT-DATA,PREPP,PREPT,SPLP-AS-6020T-PPB,TS

L1629226-13	4479-091516-1330	3	S0	15SEP16 13:30	1-Glass-A.25,1-SGlass-A.06

Prelim 9/22 A2-TOC; SPLP-Metals&SPLP-VO(not sample -07) Prelim 9/26; Prelim 9/28 for -07 SPLP-VO; A2-SIEV & FINAL 9/29 Package Due Date: 09/16/16

NI-TI,PREPT,TS

L1629226-14	4479-091516-1340	3	S0	15SEP16 13:40	1-Glass-A.25,1-SGlass-A.06

Prelim 9/22 A2-TOC; SPLP-Metals&SPLP-VO(not sample -07) Prelim 9/26; Prelim 9/28 for -07 SPLP-VO; A2-SIEV & FINAL 9/29 Package Due Date: 09/16/16

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Sep 29 2016, 04:26 pm

Login Number: L1629226
Account: HALEY-OH2 Haley & Aldrich, Inc.Project: 70613-814
Received: 15SEP16 Due Date: 28SEP16

Sample #	Client ID	Mat	PR	Collected	Container

NI-TI,PREPT,TS

L1629226-15 4479-091516-1345 3 S0 15SEP16 13:45 2-Encore-25,3-Encore-5,1-Glass-A.25,1-Plastic-A-TS,1-SVial-F,4-SVial-W

8260: Chlorobenzene only, report list built, Prelim 9/22 A2-TOC; SPLP-Metals&SPLP-VO(not sample -07) Prelim 9/26; Prelim 9/28 for -07 SPLP-VO; A2-SIEV & FINAL 9/29 Package Due Date: 09/16/16

ENCORE,HOLD-CONTINGENCY,NI-TI,NJ-8260HLW,PREPT,TS

L1629226-16 4479-091516-1415 3 S0 15SEP16 14:15 2-EVial-A,2-Encore-25,3-Encore-5,1-Plastic-A-TS,1-SVial-F,4-SVial-W

8260 total/SPLP: Benzene only, report list built, Prelim 9/22 A2-TOC; SPLP-Metals&SPLP-VO(not sample -07) Prelim 9/26; Prelim 9/28 for -07 SPLP-VO; A2-SIEV & FINAL 9/29 Package Due Date: 09/16/16

ENCORE,HOLD-CONTINGENCY,NJ-8260HLW,NJ-SPLP-8260,NJ-SPLP-VOA,NJ-SPLPZHEEXT-DATA,SPLP-EXT-ZHE,TS

L1629226-17 4479-091516-1435 3 S0 15SEP16 14:35 1-EPlastic-C.120,1-Glass-A.25,1-SGlass-A.06,1-Tumble Vessel

PREPP: Metals only Prelim 9/22 A2-TOC; SPLP-Metals&SPLP-VO(not sample -07) Prelim 9/26; Prelim 9/28 for -07 SPLP-VO; A2-SIEV & FINAL 9/29 Package Due Date: 09/16/16

NI-TI,NJ-SPLPEXT-DATA,PREPP,PREPT,SPLP-NI-6020T-PPB,TS

L1629226-18 4479-091516-1440 3 S0 15SEP16 14:40 1-EPlastic-C.120,1-Glass-A.25,1-SGlass-A.06,1-Tumble Vessel

PREPP: Metals only Prelim 9/22 A2-TOC; SPLP-Metals&SPLP-VO(not sample -07) Prelim 9/26; Prelim 9/28 for -07 SPLP-VO; A2-SIEV & FINAL 9/29 Package Due Date: 09/16/16

AS-TI,NJ-SPLPEXT-DATA,PREPP,PREPT,SPLP-AS-6020T-PPB,TS

L1629226-19 4479-091516-1500 3 S0 15SEP16 15:00 2-Encore-25,3-Encore-5,1-Glass-A.25,1-Glass-AM.06,1-Plastic-A-GS,1-Plastic-A-TS,

8260: TCE only, report list built, Prelim 9/22 A2-TOC; SPLP-Metals&SPLP-VO(not sample -07) Prelim 9/26; Prelim 9/28 for -07 SPLP-VO; A2-SIEV & FINAL 9/29 Package Due Date: 09/16/16

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Sep 29 2016, 04:26 pm

Login Number: L1629226
Account: HALEY-OH2 Haley & Aldrich, Inc.Project: 70613-814
Received: 15SEP16 Due Date: 28SEP16

Sample #	Client ID	Mat	PR	Collected	Container

A2-SIEVE-HYDRO-NJ,A2-HYDRO-CFINE,A2-HYDRO-CGRAVEL,A2-HYDRO-COBBLES,A2-HYDRO-CSAND,A2-HYDRO-FGRAVEL,
A2-HYDRO-FSAND,A2-HYDRO-MSAND,A2-HYDRO-SFINE,A2-HYDRO-TFINE,A2-TOC-LK-2REPS-PPM,ENCORE,HOLD-
CONTINGENCY,NI-TI,NJ-8260HLW,PREPT,TS

Logged By: Lisa Westerlind

ALPHA ANALYTICAL LABORATORIES
Container Tracking Report

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1629226-01A	SGlass-A.06	INTACT	16-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Fatima Cofie	A2-CUSTODY-MET3-S4	A2-CUSTODY-MET3-S4	Fatima Cofie
L1629226-01A	SGlass-A.06	INTACT	16-SEP-16	CUSTODY	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1629226-01A	SGlass-A.06	INTACT	16-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillips	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1629226-01A	SGlass-A.06	INTACT	16-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillips	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	S
L1629226-01A	SGlass-A.06	INTACT	16-SEP-16		CUSTODY	Graham Phillips	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillips
L1629226-01A	SGlass-A.06	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-01B	Glass-A.25	INTACT	19-SEP-16		RETURN WALK-IN CUSTODY	Sam Bardsley	W21-S3-C CUSTODY	W21-S3-C CUSTODY	Sam Bardsley
L1629226-01B	Glass-A.25	INTACT	19-SEP-16	ORGPREP	ORGPREP	Lily Boateng	CUSTODY	RETURN WALK-IN CUSTODY	Lily Boateng
L1629226-01B	Glass-A.25	INTACT	19-SEP-16		W3-S4-B CUSTODY	Lily Boateng	ORGPREP	ORGPREP	Lily Boateng
L1629226-01B	Glass-A.25	INTACT	16-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	W3-S4-B CUSTODY	W3-S4-B CUSTODY	Fred Ababio
L1629226-01B	Glass-A.25	INTACT	16-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629226-01B	Glass-A.25	INTACT	16-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629226-01B	Glass-A.25	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-01C	Plastic-A-GS	INTACT	16-SEP-16	CUSTODY	A2-WET CHEMISTRY	Sonal Patel	A2-CUSTODY-GRAINSIZE1	A2-CUSTODY-GRAINSIZE1	Sonal Patel
L1629226-01C	Plastic-A-GS	INTACT	16-SEP-16	CUSTODY	A2-CUSTODY-GRAINSIZE1	Sonal Patel	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Sonal Patel
L1629226-01C	Plastic-A-GS	INTACT	16-SEP-16	CUSTODY	A2-CUSTODY	Bethany Bedard	A2-CUSTODY-GRAINSIZE1	A2-CUSTODY-GRAINSIZE1	Bethany Bedard
L1629226-01C	Plastic-A-GS	INTACT	16-SEP-16	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	Graham Phillips	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1629226-01C	Plastic-A-GS	INTACT	16-SEP-16	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	Graham Phillips	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	S
L1629226-01C	Plastic-A-GS	INTACT	16-SEP-16		CUSTODY	Graham Phillips	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	Graham Phillips
L1629226-01C	Plastic-A-GS	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-01W	EPlastic-C.120	INTACT	22-SEP-16	CUSTODY	A2-CUSTODY	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1629226-01W	EPlastic-C.120	INTACT	21-SEP-16	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	A2-CUSTODY	A2-CUSTODY	John Figueroa
L1629226-01W	EPlastic-C.120	INTACT	21-SEP-16	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSFIE	
L1629226-01W	EPlastic-C.120	INTACT	21-SEP-16		CUSTODY	Lily Boateng	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng
L1629226-01W	EPlastic-C.120	INTACT	19-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629226-02A	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-02A	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-02A	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-02B	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-02B	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-02B	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-02C	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-02C	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-02C	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-02D	Plastic-A-TS	INTACT	16-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Fred Ababio
L1629226-02D	Plastic-A-TS	INTACT	16-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629226-02D	Plastic-A-TS	INTACT	16-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629226-02D	Plastic-A-TS	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-02E	Encore-25	EMPTY	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1629226-02E	Encore-25	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-02E	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-02F	Encore-25	EMPTY	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1629226-02F	Encore-25	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-02F	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-02U	SVial-W	INTACT	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1629226-02U	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-02U	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-02V	SVial-W	INTACT	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1629226-02V	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-02V	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629226-02X	SVial-F	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-02X	SVial-F	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-02X	SVial-F	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-02Y	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629226-02Y	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-02Y	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-02Z	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Briana Dolbec	CUSTODY	VOA DEAD FRIDGE	CUSTODY Briana Dolbec
L1629226-02Z	SVial-W	INTACT	16-SEP-16	CUSTODY	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1629226-02Z	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629226-02Z	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-02Z	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-03A	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-03A	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-03A	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-03B	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-03B	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-03B	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-03C	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-03C	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-03C	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-03D	Plastic-A-TS	INTACT	16-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Fred Ababio
L1629226-03D	Plastic-A-TS	INTACT	16-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629226-03D	Plastic-A-TS	INTACT	16-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629226-03D	Plastic-A-TS	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-03E	Encore-25	EMPTY	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629226-03E	Encore-25	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-03E	Encore-25	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-03F	Encore-25	EMPTY	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1629226-03F	Encore-25	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-03F	Encore-25	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-03U	SVial-W	EMPTY	21-SEP-16	GC	GC/MS	Tyler Eno	CUSTODY	F-VOA CUSTODY	Tyler Eno
L1629226-03U	SVial-W	INTACT	21-SEP-16	GC/MS	F-VOA CUSTODY	Matilda Owusuaa	GC/MS	GC/MS	Matilda Owusuaa
L1629226-03U	SVial-W	INTACT	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1629226-03U	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-03U	SVial-W	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-03V	SVial-W	INTACT	22-SEP-16	GC/MS	GC/MS	Mike May	CUSTODY	VOA DEAD FRIDGE	CUSTODY Mike May
L1629226-03V	SVial-W	INTACT	22-SEP-16	CUSTODY	F-VOA CUSTODY	Mike May	GC/MS	GC/MS	Mike May
L1629226-03V	SVial-W	INTACT	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1629226-03V	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-03V	SVial-W	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-03X	SVial-F	INTACT	16-SEP-16	GC/MS	GC/MS	Mike Vickery	CUSTODY	VOA CUSTODY	Mike Vickery
L1629226-03X	SVial-F	INTACT	16-SEP-16	CUSTODY	VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1629226-03X	SVial-F	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-03X	SVial-F	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-03X	SVial-F	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-03Y	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629226-03Y	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-03Y	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-03Z	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629226-03Z	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629226-03Z	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-04A	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-04A	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-04A	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-04B	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-04B	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-04B	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-04C	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-04C	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-04C	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-04D	Plastic-A-TS	INTACT	16-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Fred Ababio
L1629226-04D	Plastic-A-TS	INTACT	16-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629226-04D	Plastic-A-TS	INTACT	16-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629226-04D	Plastic-A-TS	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-04E	Encore-25	EMPTY	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1629226-04E	Encore-25	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-04E	Encore-25	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-04F	Encore-25	EMPTY	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1629226-04F	Encore-25	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-04F	Encore-25	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-04U	SVial-W	EMPTY	21-SEP-16	GC	GC/MS	Tyler Eno	CUSTODY	F-VOA CUSTODY	Tyler Eno
L1629226-04U	SVial-W	INTACT	21-SEP-16	GC/MS	F-VOA CUSTODY	Matilda Owusuaa	GC/MS	GC/MS	Matilda Owusuaa
L1629226-04U	SVial-W	INTACT	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1629226-04U	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-04U	SVial-W	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629226-04V	SVial-W	INTACT	22-SEP-16	GC/MS	GC/MS	Mike May	CUSTODY	VOA DEAD FRIDGE	CUSTODY Mike May
L1629226-04V	SVial-W	INTACT	22-SEP-16	CUSTODY	F-VOA CUSTODY	Mike May	GC/MS	GC/MS	Mike May
L1629226-04V	SVial-W	INTACT	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1629226-04V	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-04V	SVial-W	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-04X	SVial-F	INTACT	16-SEP-16	GC/MS	GC/MS	Mike Vickery	CUSTODY	VOA CUSTODY	Mike Vickery
L1629226-04X	SVial-F	INTACT	16-SEP-16	CUSTODY	VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1629226-04X	SVial-F	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-04X	SVial-F	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-04X	SVial-F	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-04Y	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629226-04Y	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-04Y	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-04Z	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629226-04Z	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-04Z	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-05A	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-05A	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-05A	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-05B	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-05B	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-05B	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-05C	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-05C	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-05C	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629226-05D	Plastic-A-TS	INTACT	16-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Fred Ababio
L1629226-05D	Plastic-A-TS	INTACT	16-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629226-05D	Plastic-A-TS	INTACT	16-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629226-05D	Plastic-A-TS	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-05E	Glass-A.25	INTACT	19-SEP-16		RETURN WALK-IN CUSTODY	Sam Bardsley	W21-S3-C CUSTODY	W21-S3-C CUSTODY	Sam Bardsley
L1629226-05E	Glass-A.25	INTACT	19-SEP-16	ORGPREP	ORGPREP	Lily Boateng	CUSTODY	RETURN WALK-IN CUSTODY	Lily Boateng
L1629226-05E	Glass-A.25	INTACT	19-SEP-16		CUSTODY	Lily Boateng	ORGPREP	ORGPREP	Lily Boateng
L1629226-05E	Glass-A.25	INTACT	19-SEP-16	TRANSIT COURIER	COOLER3-TRANSFER_TO_WESTBORO	Sam Bardsley	CUSTODY	CUSTODY	Sam Bardsley
L1629226-05E	Glass-A.25	INTACT	19-SEP-16	COOLER3-TRANSFER_TO_WESTBORO	COOLER3-TRANSFER_TO_WESTBORO	Sam Bardsley	TRANSIT COURIER	COOLER3-TRANSFER_TO_WESTBORO	Sa
L1629226-05E	Glass-A.25	INTACT	19-SEP-16	CUSTODY	A2-CUSTODY-MET3-S4	Sam Bardsley	COOLER3-TRANSFER_TO_WESTBORO	COOLER3-TRANSFER_TO_WESTBORO	Sam Bardsley
L1629226-05E	Glass-A.25	INTACT	16-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Fatima Cofie	A2-CUSTODY-MET3-S4	A2-CUSTODY-MET3-S4	Fatima Cofie
L1629226-05E	Glass-A.25	INTACT	16-SEP-16	CUSTODY	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1629226-05E	Glass-A.25	INTACT	16-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillips	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1629226-05E	Glass-A.25	INTACT	16-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillips	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	
L1629226-05E	Glass-A.25	INTACT	16-SEP-16		CUSTODY	Graham Phillips	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phill
L1629226-05E	Glass-A.25	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-05F	Encore-25	EMPTY	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1629226-05F	Encore-25	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-05F	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-05G	Encore-25	EMPTY	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1629226-05G	Encore-25	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-05G	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-05U	SVial-W	EMPTY	21-SEP-16	GC	GC/MS	Tyler Eno	CUSTODY	F-VOA CUSTODY	Tyler Eno
L1629226-05U	SVial-W	INTACT	21-SEP-16	GC/MS	F-VOA CUSTODY	Matilda Owusuaa	GC/MS	GC/MS	Matilda Owusuaa
L1629226-05U	SVial-W	INTACT	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629226-05U	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-05U	SVial-W	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-05V	SVial-W	INTACT	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1629226-05V	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-05V	SVial-W	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-05W	EPlastic-C.120	INTACT	22-SEP-16	CUSTODY	A2-CUSTODY	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1629226-05W	EPlastic-C.120	INTACT	21-SEP-16	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	A2-CUSTODY	A2-CUSTODY	John Figueroa
L1629226-05W	EPlastic-C.120	INTACT	21-SEP-16	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSF	
L1629226-05W	EPlastic-C.120	INTACT	21-SEP-16		CUSTODY	Lily Boateng	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boater
L1629226-05W	EPlastic-C.120	INTACT	19-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629226-05X	SVial-F	INTACT	16-SEP-16	GC/MS	GC/MS	Mike Vickery	CUSTODY	VOA CUSTODY	Mike Vickery
L1629226-05X	SVial-F	INTACT	16-SEP-16	CUSTODY	VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1629226-05X	SVial-F	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-05X	SVial-F	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-05X	SVial-F	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-05Y	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629226-05Y	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-05Y	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-05Z	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629226-05Z	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-05Z	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-06A	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-06A	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-06A	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-06B	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629226-06B	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-06B	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-06C	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-06C	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-06C	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-06D	Plastic-A-TS	INTACT	16-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Fred Ababio
L1629226-06D	Plastic-A-TS	INTACT	16-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629226-06D	Plastic-A-TS	INTACT	16-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629226-06D	Plastic-A-TS	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-06E	Glass-A.25	INTACT	19-SEP-16		RETURN WALK-IN CUSTODY	Sam Bardsley	W21-S3-C CUSTODY	W21-S3-C CUSTODY	Sam Bardsley
L1629226-06E	Glass-A.25	INTACT	19-SEP-16	ORGPREP	ORGPREP	Lily Boateng	CUSTODY	RETURN WALK-IN CUSTODY	Lily Boateng
L1629226-06E	Glass-A.25	INTACT	19-SEP-16		CUSTODY	Lily Boateng	ORGPREP	ORGPREP	Lily Boateng
L1629226-06E	Glass-A.25	INTACT	19-SEP-16	TRANSIT COURIER	COOLER3-TRANSFER_TO_WESTBORO	Sam Bardsley	CUSTODY	CUSTODY	Sam Bardsley
L1629226-06E	Glass-A.25	INTACT	19-SEP-16	COOLER3-TRANSFER_TO_WESTBORO	COOLER3-TRANSFER_TO_WESTBORO	Sam Bardsley	TRANSIT COURIER	COOLER3-TRANSFER_TO_WESTBORO	Sa
L1629226-06E	Glass-A.25	INTACT	19-SEP-16	CUSTODY	A2-CUSTODY-MET3-S4	Sam Bardsley	COOLER3-TRANSFER_TO_WESTBORO	COOLER3-TRANSFER_TO_WESTBORO	Sam Bardsley
L1629226-06E	Glass-A.25	INTACT	16-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Fatima Cofie	A2-CUSTODY-MET3-S4	A2-CUSTODY-MET3-S4	Fatima Cofie
L1629226-06E	Glass-A.25	INTACT	16-SEP-16	CUSTODY	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1629226-06E	Glass-A.25	INTACT	16-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillips	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1629226-06E	Glass-A.25	INTACT	16-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillips	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	
L1629226-06E	Glass-A.25	INTACT	16-SEP-16		CUSTODY	Graham Phillips	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillip
L1629226-06E	Glass-A.25	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-06F	Encore-25	EMPTY	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1629226-06F	Encore-25	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-06F	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-06G	Encore-25	EMPTY	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629226-06G	Encore-25	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-06G	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-06U	SVial-W	EMPTY	21-SEP-16	GC	GC/MS	Tyler Eno	CUSTODY	F-VOA CUSTODY	Tyler Eno
L1629226-06U	SVial-W	INTACT	21-SEP-16	GC/MS	F-VOA CUSTODY	Matilda Owusuaa	GC/MS	GC/MS	Matilda Owusuaa
L1629226-06U	SVial-W	INTACT	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1629226-06U	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-06U	SVial-W	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-06V	SVial-W	INTACT	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1629226-06V	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-06V	SVial-W	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-06W	EPlastic-C.120	INTACT	22-SEP-16	CUSTODY	A2-CUSTODY	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1629226-06W	EPlastic-C.120	INTACT	21-SEP-16	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	A2-CUSTODY	A2-CUSTODY	John Figueroa
L1629226-06W	EPlastic-C.120	INTACT	21-SEP-16	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSF	
L1629226-06W	EPlastic-C.120	INTACT	21-SEP-16		CUSTODY	Lily Boateng	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boater
L1629226-06W	EPlastic-C.120	INTACT	19-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629226-06X	SVial-F	INTACT	16-SEP-16	GC/MS	GC/MS	Mike Vickery	CUSTODY	VOA CUSTODY	Mike Vickery
L1629226-06X	SVial-F	INTACT	16-SEP-16	CUSTODY	VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1629226-06X	SVial-F	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-06X	SVial-F	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-06X	SVial-F	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-06Y	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629226-06Y	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-06Y	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-06Z	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629226-06Z	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629226-06Z	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-07A	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-07A	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-07A	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-07B	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-07B	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-07B	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-07C	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-07C	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-07C	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-07D	Plastic-A-TS	INTACT	16-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Fred Ababio
L1629226-07D	Plastic-A-TS	INTACT	16-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629226-07D	Plastic-A-TS	INTACT	16-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629226-07D	Plastic-A-TS	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-07E	Encore-25	EMPTY	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1629226-07E	Encore-25	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-07E	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-07F	Encore-25	EMPTY	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1629226-07F	Encore-25	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-07F	Encore-25	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-07T	EVial-A	INTACT	29-SEP-16	GC/MS	GC/MS	Mike May	CUSTODY	VOA DEAD FRIDGE	CUSTODY Mike May
L1629226-07T	EVial-A	INTACT	29-SEP-16	CUSTODY	CUSTODY	Mike May	GC/MS	GC/MS	Mike May
L1629226-07T	EVial-A	INTACT	22-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629226-07U	SVial-W	EMPTY	28-SEP-16	GC/MS	F-VOA CUSTODY	Matilda Owusuaa	CUSTODY	VOA CUSTODY	Matilda Owusuaa
L1629226-07U	SVial-W	INTACT	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629226-07U	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-07U	SVial-W	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-07V	SVial-W	INTACT	21-SEP-16	GC/MS	GC/MS	Matilda Owusuaa	CUSTODY	F-VOA CUSTODY	Matilda Owusuaa
L1629226-07V	SVial-W	INTACT	21-SEP-16	GC/MS	F-VOA CUSTODY	Matilda Owusuaa	GC/MS	GC/MS	Matilda Owusuaa
L1629226-07V	SVial-W	INTACT	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1629226-07V	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-07V	SVial-W	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-07X	SVial-F	INTACT	16-SEP-16	GC/MS	GC/MS	Mike Vickery	CUSTODY	VOA CUSTODY	Mike Vickery
L1629226-07X	SVial-F	INTACT	16-SEP-16	CUSTODY	VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1629226-07X	SVial-F	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-07X	SVial-F	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-07X	SVial-F	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-07Y	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629226-07Y	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-07Y	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-07Z	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629226-07Z	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-07Z	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-08A	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-08A	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-08A	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-08B	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-08B	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-08B	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-08C	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629226-08C	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-08C	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-08D	Plastic-A-TS	INTACT	16-SEP-16		RETURN WALK-IN	CUSTODY Fred Ababio	RETURN WALK-IN CUSTODY		RETURN WALK-IN CUSTODY Fred Ababio
L1629226-08D	Plastic-A-TS	INTACT	16-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY		RETURN WALK-IN CUSTODY Vivian Boahen
L1629226-08D	Plastic-A-TS	INTACT	16-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629226-08D	Plastic-A-TS	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-08E	Encore-25	EMPTY	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1629226-08E	Encore-25	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-08E	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-08F	Encore-25	EMPTY	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1629226-08F	Encore-25	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-08F	Encore-25	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-08U	SVial-W	EMPTY	21-SEP-16	GC	GC/MS	Tyler Eno	CUSTODY	F-VOA CUSTODY	Tyler Eno
L1629226-08U	SVial-W	INTACT	21-SEP-16	GC/MS	F-VOA CUSTODY	Matilda Owusuaa	GC/MS	GC/MS	Matilda Owusuaa
L1629226-08U	SVial-W	INTACT	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1629226-08U	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-08U	SVial-W	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-08V	SVial-W	INTACT	22-SEP-16	GC/MS	GC/MS	Mike May	CUSTODY	VOA DEAD FRIDGE	CUSTODY Mike May
L1629226-08V	SVial-W	INTACT	22-SEP-16	CUSTODY	F-VOA CUSTODY	Mike May	GC/MS	GC/MS	Mike May
L1629226-08V	SVial-W	INTACT	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1629226-08V	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-08V	SVial-W	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-08X	SVial-F	INTACT	16-SEP-16	GC/MS	GC/MS	Mike Vickery	CUSTODY	VOA CUSTODY	Mike Vickery
L1629226-08X	SVial-F	INTACT	16-SEP-16	CUSTODY	VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1629226-08X	SVial-F	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629226-08X	SVial-F	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-08X	SVial-F	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-08Y	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629226-08Y	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-08Y	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-08Z	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629226-08Z	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-08Z	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-09A	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-09A	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-09A	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-09B	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-09B	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-09B	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-09C	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-09C	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-09C	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-09D	Plastic-A-TS	INTACT	16-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Fred Ababio
L1629226-09D	Plastic-A-TS	INTACT	16-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629226-09D	Plastic-A-TS	INTACT	16-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629226-09D	Plastic-A-TS	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-09E	Encore-25	EMPTY	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1629226-09E	Encore-25	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-09E	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-09F	Encore-25	EMPTY	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629226-09F	Encore-25	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-09F	Encore-25	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-09U	SVial-W	INTACT	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1629226-09U	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-09U	SVial-W	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-09V	SVial-W	EMPTY	21-SEP-16	GC	GC/MS	Tyler Eno	CUSTODY	F-VOA CUSTODY	Tyler Eno
L1629226-09V	SVial-W	INTACT	21-SEP-16	GC/MS	F-VOA CUSTODY	Matilda Owusuaa	GC/MS	GC/MS	Matilda Owusuaa
L1629226-09V	SVial-W	INTACT	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1629226-09V	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-09V	SVial-W	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-09X	SVial-F	INTACT	16-SEP-16	GC/MS	GC/MS	Mike Vickery	CUSTODY	VOA CUSTODY	Mike Vickery
L1629226-09X	SVial-F	INTACT	16-SEP-16	CUSTODY	VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1629226-09X	SVial-F	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-09X	SVial-F	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-09X	SVial-F	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-09Y	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629226-09Y	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-09Y	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-09Z	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629226-09Z	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-09Z	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-10A	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-10A	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-10A	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-10B	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629226-10B	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-10B	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-10C	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-10C	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-10C	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-10D	Plastic-A-TS	INTACT	16-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Fred Ababio
L1629226-10D	Plastic-A-TS	INTACT	16-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629226-10D	Plastic-A-TS	INTACT	16-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629226-10D	Plastic-A-TS	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-10E	Glass-A.25	INTACT	19-SEP-16		RETURN WALK-IN CUSTODY	Sam Bardsley	W21-S3-C CUSTODY	W21-S3-C CUSTODY	Sam Bardsley
L1629226-10E	Glass-A.25	INTACT	19-SEP-16	ORGPREP	ORGPREP	Lily Boateng	CUSTODY	RETURN WALK-IN CUSTODY	Lily Boateng
L1629226-10E	Glass-A.25	INTACT	19-SEP-16		CUSTODY	Lily Boateng	ORGPREP	ORGPREP	Lily Boateng
L1629226-10E	Glass-A.25	INTACT	19-SEP-16	TRANSIT COURIER	COOLER3-TRANSFER_TO_WESTBORO	Sam Bardsley	CUSTODY	CUSTODY	Sam Bardsley
L1629226-10E	Glass-A.25	INTACT	19-SEP-16	COOLER3-TRANSFER_TO_WESTBORO	COOLER3-TRANSFER_TO_WESTBORO	Sam Bardsley	TRANSIT COURIER	COOLER3-TRANSFER_TO_WESTBORO	Sa
L1629226-10E	Glass-A.25	INTACT	19-SEP-16	CUSTODY	A2-CUSTODY-MET3-S4	Sam Bardsley	COOLER3-TRANSFER_TO_WESTBORO	COOLER3-TRANSFER_TO_WESTBORO	Sam Bardsley
L1629226-10E	Glass-A.25	INTACT	16-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Fatima Cofie	A2-CUSTODY-MET3-S4	A2-CUSTODY-MET3-S4	Fatima Cofie
L1629226-10E	Glass-A.25	INTACT	16-SEP-16	CUSTODY	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1629226-10E	Glass-A.25	INTACT	16-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillips	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1629226-10E	Glass-A.25	INTACT	16-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillips	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	
L1629226-10E	Glass-A.25	INTACT	16-SEP-16		CUSTODY	Graham Phillips	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillip
L1629226-10E	Glass-A.25	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-10F	Plastic-A-GS	INTACT	16-SEP-16	CUSTODY	A2-WET CHEMISTRY	Sonal Patel	A2-CUSTODY-GRAINSIZE1	A2-CUSTODY-GRAINSIZE1	Sonal Patel
L1629226-10F	Plastic-A-GS	INTACT	16-SEP-16	CUSTODY	A2-CUSTODY-GRAINSIZE1	Sonal Patel	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Sonal Patel
L1629226-10F	Plastic-A-GS	INTACT	16-SEP-16	CUSTODY	A2-CUSTODY	Bethany Bedard	A2-CUSTODY-GRAINSIZE1	A2-CUSTODY-GRAINSIZE1	Bethany Bedard
L1629226-10F	Plastic-A-GS	INTACT	16-SEP-16	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	Graham Phillips	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629226-10F	Plastic-A-GS	INTACT	16-SEP-16	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	Graham Phillips	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	
L1629226-10F	Plastic-A-GS	INTACT	16-SEP-16		CUSTODY	Graham Phillips	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	Graham Phillip
L1629226-10F	Plastic-A-GS	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-10G	Encore-5	EMPTY	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1629226-10G	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-10G	Encore-5	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-10H	Encore-5	EMPTY	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1629226-10H	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-10H	Encore-5	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-10U	SVial-W	INTACT	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1629226-10U	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-10U	SVial-W	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-10V	SVial-W	EMPTY	21-SEP-16	GC	GC/MS	Tyler Eno	CUSTODY	F-VOA CUSTODY	Tyler Eno
L1629226-10V	SVial-W	INTACT	21-SEP-16	GC/MS	F-VOA CUSTODY	Matilda Owusuaa	GC/MS	GC/MS	Matilda Owusuaa
L1629226-10V	SVial-W	INTACT	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1629226-10V	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-10V	SVial-W	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-10W	EPlastic-C.120	INTACT	22-SEP-16	CUSTODY	A2-CUSTODY	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1629226-10W	EPlastic-C.120	INTACT	21-SEP-16	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	A2-CUSTODY	A2-CUSTODY	John Figueroa
L1629226-10W	EPlastic-C.120	INTACT	21-SEP-16	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSF	
L1629226-10W	EPlastic-C.120	INTACT	21-SEP-16		CUSTODY	Lily Boateng	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boate
L1629226-10W	EPlastic-C.120	INTACT	19-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629226-10X	SVial-F	INTACT	16-SEP-16	GC/MS	GC/MS	Mike Vickery	CUSTODY	VOA CUSTODY	Mike Vickery
L1629226-10X	SVial-F	INTACT	16-SEP-16	CUSTODY	VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1629226-10X	SVial-F	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629226-10X	SVial-F	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-10X	SVial-F	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-10Y	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629226-10Y	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-10Y	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-10Z	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629226-10Z	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-10Z	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-11A	SGlass-A.06	INTACT	16-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Fatima Cofie	A2-CUSTODY-MET3-S4	A2-CUSTODY-MET3-S4	Fatima Cofie
L1629226-11A	SGlass-A.06	INTACT	16-SEP-16	CUSTODY	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1629226-11A	SGlass-A.06	INTACT	16-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillips	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1629226-11A	SGlass-A.06	INTACT	16-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillips	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	
L1629226-11A	SGlass-A.06	INTACT	16-SEP-16		CUSTODY	Graham Phillips	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillip
L1629226-11A	SGlass-A.06	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-11B	Glass-A.25	INTACT	19-SEP-16		RETURN WALK-IN CUSTODY	Sam Bardsley	W21-S3-C CUSTODY	W21-S3-C CUSTODY	Sam Bardsley
L1629226-11B	Glass-A.25	INTACT	19-SEP-16	ORGPREP	ORGPREP	Lily Boateng	CUSTODY	RETURN WALK-IN CUSTODY	Lily Boateng
L1629226-11B	Glass-A.25	INTACT	19-SEP-16		W3-S4-B CUSTODY	Lily Boateng	ORGPREP	ORGPREP	Lily Boateng
L1629226-11B	Glass-A.25	INTACT	16-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	W3-S4-B CUSTODY	W3-S4-B CUSTODY	Fred Ababio
L1629226-11B	Glass-A.25	INTACT	16-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629226-11B	Glass-A.25	INTACT	16-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629226-11B	Glass-A.25	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-11W	EPlastic-C.120	INTACT	22-SEP-16	CUSTODY	A2-CUSTODY	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1629226-11W	EPlastic-C.120	INTACT	21-SEP-16	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	A2-CUSTODY	A2-CUSTODY	John Figueroa
L1629226-11W	EPlastic-C.120	INTACT	21-SEP-16	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSF	
L1629226-11W	EPlastic-C.120	INTACT	21-SEP-16		CUSTODY	Lily Boateng	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boater

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1629226-11W	EPlastic-C.120	INTACT	19-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629226-12A	SGlass-A.06	INTACT	16-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Fatima Cofie	A2-CUSTODY-MET3-S4	A2-CUSTODY-MET3-S4	Fatima Cofie
L1629226-12A	SGlass-A.06	INTACT	16-SEP-16	CUSTODY	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1629226-12A	SGlass-A.06	INTACT	16-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillips	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1629226-12A	SGlass-A.06	INTACT	16-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillips	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	
L1629226-12A	SGlass-A.06	INTACT	16-SEP-16		CUSTODY	Graham Phillips	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillip
L1629226-12A	SGlass-A.06	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-12B	Glass-A.25	INTACT	19-SEP-16		RETURN WALK-IN CUSTODY	Sam Bardsley	W21-S3-C CUSTODY	W21-S3-C CUSTODY	Sam Bardsley
L1629226-12B	Glass-A.25	INTACT	19-SEP-16	ORGPREP	ORGPREP	Lily Boateng	CUSTODY	RETURN WALK-IN CUSTODY	Lily Boateng
L1629226-12B	Glass-A.25	INTACT	19-SEP-16		W3-S4-B CUSTODY	Lily Boateng	ORGPREP	ORGPREP	Lily Boateng
L1629226-12B	Glass-A.25	INTACT	16-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	W3-S4-B CUSTODY	W3-S4-B CUSTODY	Fred Ababio
L1629226-12B	Glass-A.25	INTACT	16-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629226-12B	Glass-A.25	INTACT	16-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629226-12B	Glass-A.25	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-12W	EPlastic-C.120	INTACT	22-SEP-16	CUSTODY	A2-CUSTODY	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1629226-12W	EPlastic-C.120	INTACT	21-SEP-16	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	A2-CUSTODY	A2-CUSTODY	John Figueroa
L1629226-12W	EPlastic-C.120	INTACT	21-SEP-16	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSF	
L1629226-12W	EPlastic-C.120	INTACT	21-SEP-16		CUSTODY	Lily Boateng	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boate
L1629226-12W	EPlastic-C.120	INTACT	19-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629226-13A	SGlass-A.06	INTACT	16-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Fatima Cofie	A2-CUSTODY-MET3-S4	A2-CUSTODY-MET3-S4	Fatima Cofie
L1629226-13A	SGlass-A.06	INTACT	16-SEP-16	CUSTODY	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1629226-13A	SGlass-A.06	INTACT	16-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillips	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1629226-13A	SGlass-A.06	INTACT	16-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillips	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	
L1629226-13A	SGlass-A.06	INTACT	16-SEP-16		CUSTODY	Graham Phillips	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillip
L1629226-13A	SGlass-A.06	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629226-13B	Glass-A.25	INTACT	16-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	W3-S4-B CUSTODY	W3-S4-B CUSTODY	Fred Ababio
L1629226-13B	Glass-A.25	INTACT	16-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629226-13B	Glass-A.25	INTACT	16-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629226-13B	Glass-A.25	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-14A	SGlass-A.06	INTACT	16-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Fatima Cofie	A2-CUSTODY-MET3-S4	A2-CUSTODY-MET3-S4	Fatima Cofie
L1629226-14A	SGlass-A.06	INTACT	16-SEP-16	CUSTODY	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1629226-14A	SGlass-A.06	INTACT	16-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillips	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1629226-14A	SGlass-A.06	INTACT	16-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillips	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	
L1629226-14A	SGlass-A.06	INTACT	16-SEP-16		CUSTODY	Graham Phillips	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillip
L1629226-14A	SGlass-A.06	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-14B	Glass-A.25	INTACT	16-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	W3-S4-B CUSTODY	W3-S4-B CUSTODY	Fred Ababio
L1629226-14B	Glass-A.25	INTACT	16-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629226-14B	Glass-A.25	INTACT	16-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629226-14B	Glass-A.25	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-15A	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-15A	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-15A	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-15B	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-15B	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-15B	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-15C	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-15C	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-15C	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-15D	Plastic-A-TS	INTACT	16-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Fred Ababio
L1629226-15D	Plastic-A-TS	INTACT	16-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629226-15D	Plastic-A-TS	INTACT	16-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629226-15D	Plastic-A-TS	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-15E	Glass-A.25	INTACT	16-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Fatima Cofie	A2-CUSTODY-MET3-S4	A2-CUSTODY-MET3-S4	Fatima Cofie
L1629226-15E	Glass-A.25	INTACT	16-SEP-16	CUSTODY	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1629226-15E	Glass-A.25	INTACT	16-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillips	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1629226-15E	Glass-A.25	INTACT	16-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillips	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	
L1629226-15E	Glass-A.25	INTACT	16-SEP-16		CUSTODY	Graham Phillips	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillip
L1629226-15E	Glass-A.25	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-15F	Encore-25	EMPTY	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1629226-15F	Encore-25	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-15F	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-15G	Encore-25	EMPTY	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1629226-15G	Encore-25	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-15G	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-15U	SVial-W	INTACT	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1629226-15U	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-15U	SVial-W	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-15V	SVial-W	INTACT	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1629226-15V	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-15V	SVial-W	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-15X	SVial-F	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-15X	SVial-F	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-15X	SVial-F	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-15Y	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Briana Dolbec	CUSTODY	VOA DEAD FRIDGE	CUSTODY Briana Dolbec
L1629226-15Y	SVial-W	INTACT	16-SEP-16	CUSTODY	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629226-15Y	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629226-15Y	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-15Y	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-15Z	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629226-15Z	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-15Z	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-16A	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-16A	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-16A	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-16B	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-16B	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-16B	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-16C	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-16C	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-16C	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-16D	Plastic-A-TS	INTACT	16-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Fred Ababio
L1629226-16D	Plastic-A-TS	INTACT	16-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629226-16D	Plastic-A-TS	INTACT	16-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629226-16D	Plastic-A-TS	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-16E	Encore-25	EMPTY	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1629226-16E	Encore-25	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-16E	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-16F	Encore-25	EMPTY	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1629226-16F	Encore-25	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-16F	Encore-25	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629226-16U	SVial-W	INTACT	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1629226-16U	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-16U	SVial-W	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-16V	SVial-W	EMPTY	21-SEP-16	GC	GC/MS	Tyler Eno	CUSTODY	F-VOA CUSTODY	Tyler Eno
L1629226-16V	SVial-W	INTACT	21-SEP-16	GC/MS	F-VOA CUSTODY	Matilda Owusuaa	GC/MS	GC/MS	Matilda Owusuaa
L1629226-16V	SVial-W	INTACT	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1629226-16V	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-16V	SVial-W	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-16X	SVial-F	INTACT	16-SEP-16	GC/MS	GC/MS	Mike Vickery	CUSTODY	VOA CUSTODY	Mike Vickery
L1629226-16X	SVial-F	INTACT	16-SEP-16	CUSTODY	VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1629226-16X	SVial-F	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-16X	SVial-F	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-16X	SVial-F	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-16Y	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629226-16Y	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-16Y	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-16Z	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629226-16Z	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-16Z	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-17A	SGlass-A.06	INTACT	16-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Fatima Cofie	A2-CUSTODY-MET3-S4	A2-CUSTODY-MET3-S4	Fatima Cofie
L1629226-17A	SGlass-A.06	INTACT	16-SEP-16	CUSTODY	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1629226-17A	SGlass-A.06	INTACT	16-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillips	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1629226-17A	SGlass-A.06	INTACT	16-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillips	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	
L1629226-17A	SGlass-A.06	INTACT	16-SEP-16		CUSTODY	Graham Phillips	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillip
L1629226-17A	SGlass-A.06	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629226-17B	Glass-A.25	INTACT	19-SEP-16		RETURN WALK-IN CUSTODY	Sam Bardsley	W21-S3-C CUSTODY	W21-S3-C CUSTODY	Sam Bardsley
L1629226-17B	Glass-A.25	INTACT	19-SEP-16	ORGPREP	ORGPREP	Lily Boateng	CUSTODY	RETURN WALK-IN CUSTODY	Lily Boateng
L1629226-17B	Glass-A.25	INTACT	19-SEP-16		W3-S4-B CUSTODY	Lily Boateng	ORGPREP	ORGPREP	Lily Boateng
L1629226-17B	Glass-A.25	INTACT	16-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	W3-S4-B CUSTODY	W3-S4-B CUSTODY	Fred Ababio
L1629226-17B	Glass-A.25	INTACT	16-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629226-17B	Glass-A.25	INTACT	16-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629226-17B	Glass-A.25	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-17W	EPlastic-C.120	INTACT	22-SEP-16	CUSTODY	A2-CUSTODY	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1629226-17W	EPlastic-C.120	INTACT	21-SEP-16	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	A2-CUSTODY	A2-CUSTODY	John Figueroa
L1629226-17W	EPlastic-C.120	INTACT	21-SEP-16	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSF	
L1629226-17W	EPlastic-C.120	INTACT	21-SEP-16		CUSTODY	Lily Boateng	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boater
L1629226-17W	EPlastic-C.120	INTACT	19-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629226-18A	SGlass-A.06	INTACT	16-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Fatima Cofie	A2-CUSTODY-MET3-S4	A2-CUSTODY-MET3-S4	Fatima Cofie
L1629226-18A	SGlass-A.06	INTACT	16-SEP-16	CUSTODY	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1629226-18A	SGlass-A.06	INTACT	16-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillips	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1629226-18A	SGlass-A.06	INTACT	16-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillips	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	
L1629226-18A	SGlass-A.06	INTACT	16-SEP-16		CUSTODY	Graham Phillips	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillip
L1629226-18A	SGlass-A.06	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-18B	Glass-A.25	INTACT	19-SEP-16		RETURN WALK-IN CUSTODY	Sam Bardsley	W21-S3-C CUSTODY	W21-S3-C CUSTODY	Sam Bardsley
L1629226-18B	Glass-A.25	INTACT	19-SEP-16	ORGPREP	ORGPREP	Lily Boateng	CUSTODY	RETURN WALK-IN CUSTODY	Lily Boateng
L1629226-18B	Glass-A.25	INTACT	19-SEP-16		W3-S3-B CUSTODY	Lily Boateng	ORGPREP	ORGPREP	Lily Boateng
L1629226-18B	Glass-A.25	INTACT	16-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	W3-S3-B CUSTODY	W3-S3-B CUSTODY	Fred Ababio
L1629226-18B	Glass-A.25	INTACT	16-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629226-18B	Glass-A.25	INTACT	16-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629226-18B	Glass-A.25	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1629226-18W	EPlastic-C.120	INTACT	22-SEP-16	CUSTODY	A2-CUSTODY	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1629226-18W	EPlastic-C.120	INTACT	21-SEP-16	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	A2-CUSTODY	A2-CUSTODY	John Figueroa
L1629226-18W	EPlastic-C.120	INTACT	21-SEP-16	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boateng	TRANSIT COURIER	COOLER23-TRANSFER_TO_MANSF	
L1629226-18W	EPlastic-C.120	INTACT	21-SEP-16		CUSTODY	Lily Boateng	COOLER23-TRANSFER_TO_MANSFIELD	COOLER23-TRANSFER_TO_MANSFIELD	Lily Boater
L1629226-18W	EPlastic-C.120	INTACT	19-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629226-19A	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-19A	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-19A	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-19B	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-19B	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-19B	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-19C	Encore-5	EMPTY	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-19C	Encore-5	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-19C	Encore-5	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-19D	Plastic-A-TS	INTACT	16-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Fred Ababio
L1629226-19D	Plastic-A-TS	INTACT	16-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629226-19D	Plastic-A-TS	INTACT	16-SEP-16		CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629226-19D	Plastic-A-TS	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-19E	Glass-AM.06	INTACT	16-SEP-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Fatima Cofie	A2-CUSTODY-MET3-S4	A2-CUSTODY-MET3-S4	Fatima Cofie
L1629226-19E	Glass-AM.06	INTACT	16-SEP-16	CUSTODY	A2-CUSTODY	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1629226-19E	Glass-AM.06	INTACT	16-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillips	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1629226-19E	Glass-AM.06	INTACT	16-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillips	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	
L1629226-19E	Glass-AM.06	INTACT	16-SEP-16		CUSTODY	Graham Phillips	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	Graham Phillip
L1629226-19E	Glass-AM.06	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-19F	Glass-A.25	INTACT	19-SEP-16	CUSTODY	A2-WET CHEMISTRY	Sonal Patel	A2-CUSTODY-FRZ1-Z1	A2-CUSTODY-FRZ1-Z1	Sonal Patel

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629226-19F	Glass-A.25	INTACT	19-SEP-16	CUSTODY	A2-CUSTODY-NOAA4	Ashley Roulx	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Ashley Roulx
L1629226-19F	Glass-A.25	INTACT	16-SEP-16	CUSTODY	A2-CUSTODY	Bethany Bedard	A2-CUSTODY-NOAA4	A2-CUSTODY-NOAA4	Bethany Bedard
L1629226-19F	Glass-A.25	INTACT	16-SEP-16	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	Graham Phillips	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1629226-19F	Glass-A.25	INTACT	16-SEP-16	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	Graham Phillips	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	
L1629226-19F	Glass-A.25	INTACT	16-SEP-16		CUSTODY	Graham Phillips	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	Graham Phillip
L1629226-19F	Glass-A.25	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-19G	Plastic-A-GS	INTACT	16-SEP-16	CUSTODY	A2-WET CHEMISTRY	Sonal Patel	A2-CUSTODY-GRAINSIZE1	A2-CUSTODY-GRAINSIZE1	Sonal Patel
L1629226-19G	Plastic-A-GS	INTACT	16-SEP-16	CUSTODY	A2-CUSTODY-GRAINSIZE1	Sonal Patel	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Sonal Patel
L1629226-19G	Plastic-A-GS	INTACT	16-SEP-16	CUSTODY	A2-CUSTODY	Bethany Bedard	A2-CUSTODY-GRAINSIZE1	A2-CUSTODY-GRAINSIZE1	Bethany Bedard
L1629226-19G	Plastic-A-GS	INTACT	16-SEP-16	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	Graham Phillips	A2-CUSTODY	A2-CUSTODY	Sharon Hoffman
L1629226-19G	Plastic-A-GS	INTACT	16-SEP-16	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	Graham Phillips	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	
L1629226-19G	Plastic-A-GS	INTACT	16-SEP-16		CUSTODY	Graham Phillips	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	Graham Phillip
L1629226-19G	Plastic-A-GS	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-19H	Encore-25	EMPTY	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1629226-19H	Encore-25	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-19H	Encore-25	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-19I	Encore-25	EMPTY	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	VOA CUSTODY	VOA CUSTODY	Andrew Schult
L1629226-19I	Encore-25	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-19I	Encore-25	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-19U	SVial-W	INTACT	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1629226-19U	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-19U	SVial-W	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain
L1629226-19V	SVial-W	INTACT	16-SEP-16	CUSTODY	GC/MS	Andrew Schult	F-VOA CUSTODY	F-VOA CUSTODY	Andrew Schult
L1629226-19V	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Andrew Schult	GC/MS	GC/MS	Andrew Schult
L1629226-19V	SVial-W	INTACT	16-SEP-16	LOGIN	LOGIN	Roobenso Romain	CUSTODY	CUSTODY	Roobenso Romain

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629226-19X	SVial-F	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629226-19X	SVial-F	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-19X	SVial-F	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-19Y	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629226-19Y	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-19Y	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1629226-19Z	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Briana Dolbec	CUSTODY	VOA DEAD FRIDGE	CUSTODY Briana Dolbec
L1629226-19Z	SVial-W	INTACT	16-SEP-16	CUSTODY	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1629226-19Z	SVial-W	INTACT	16-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629226-19Z	SVial-W	INTACT	16-SEP-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629226-19Z	SVial-W	INTACT	15-SEP-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane

Methodology Review

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

12 Annual Book of ASTM Standards. (American Society for Testing and Materials) ASTM International.

13 Determination of Total Organic Carbon in Sediment. U.S. EPA, Region II. July 27, 1988.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Laboratory Chronicle

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: 21-SEP-16 12:28

Cooler Information Custody Seal

Cooler	
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1629226-01A	Glass 60ml unpreserved split	A	N/A	2.9	Y	Absent	NI-TI(180)
L1629226-01B	Glass 250ml/8oz unpreserved	A	N/A	2.9	Y	Absent	TS(7)
L1629226-01C	Plastic 8oz unpreserved for Grai	A	N/A	2.9	Y	Absent	A2-HYDRO-TFINE(),A2-HYDRO-CFINE(),A2-HYDRO-CGRAVEL(),A2-HYDRO-FSAND(),A2-HYDRO-MSAND(),A2-HYDRO-CSAND(),A2-HYDRO-SFINE(),A2-HYDRO-COBBLES(),A2-HYDRO-FGRAVEL()
L1629226-01W	Plastic 120ml HNO3 preserved Ext	A	<2	2.9	Y	Absent	SPLP-NI-6020T-PPB(180)
L1629226-01W9	Tumble Vessel	A	N/A	2.9	Y	Absent	-
L1629226-02A	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1629226-02B	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1629226-02C	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1629226-02D	Plastic 2oz unpreserved for TS	A	N/A	2.9	Y	Absent	TS(7)
L1629226-02E	25 gram Encore Sampler	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14)
L1629226-02F	25 gram Encore Sampler	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14)
L1629226-02U	Vial Water preserved split	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14)
L1629226-02V	Vial Water preserved split	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14)
L1629226-02X	Vial MeOH preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1629226-02Y	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1629226-02Z	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1629226-03A	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1629226-03B	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1629226-03C	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1629226-03D	Plastic 2oz unpreserved for TS	A	N/A	2.9	Y	Absent	TS(7)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1629226-03E	25 gram Encore Sampler	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14),NJ-SPLPZHEEXT-DATA(14)
L1629226-03F	25 gram Encore Sampler	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14),NJ-SPLPZHEEXT-DATA(14)
L1629226-03S	Vial unpreserved Extracts	A	N/A	2.9	Y	Absent	NJ-SPLP-VOA(14)
L1629226-03T	Vial unpreserved Extracts	A	N/A	2.9	Y	Absent	NJ-SPLP-VOA(14)
L1629226-03U	Vial Water preserved split	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14),NJ-SPLPZHEEXT-DATA(14)
L1629226-03V	Vial Water preserved split	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14),NJ-SPLPZHEEXT-DATA(14)
L1629226-03X	Vial MeOH preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1629226-03Y	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1629226-03Z	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1629226-04A	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1629226-04B	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1629226-04C	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1629226-04D	Plastic 2oz unpreserved for TS	A	N/A	2.9	Y	Absent	TS(7)
L1629226-04E	25 gram Encore Sampler	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-04F	25 gram Encore Sampler	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-04S	Vial unpreserved Extracts	A	N/A	2.9	Y	Absent	NJ-SPLP-VOA(14)
L1629226-04T	Vial unpreserved Extracts	A	N/A	2.9	Y	Absent	NJ-SPLP-VOA(14)
L1629226-04U	Vial Water preserved split	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-04V	Vial Water preserved split	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-04X	Vial MeOH preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1629226-04Y	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1629226-04Z	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1629226-05A	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1629226-05B	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1629226-05C	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1629226-05D	Plastic 2oz unpreserved for TS	A	N/A	2.9	Y	Absent	TS(7)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1629226-05E	Glass 250ml/8oz unpreserved	A	N/A	2.9	Y	Absent	NI-TI(180)
L1629226-05F	25 gram Encore Sampler	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-05G	25 gram Encore Sampler	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-05S	Vial unpreserved Extracts	A	N/A	2.9	Y	Absent	NJ-SPLP-VOA(14)
L1629226-05T	Vial unpreserved Extracts	A	N/A	2.9	Y	Absent	NJ-SPLP-VOA(14)
L1629226-05U	Vial Water preserved split	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-05V	Vial Water preserved split	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-05W	Plastic 120ml HNO3 preserved Ext	A	<2	2.9	Y	Absent	SPLP-NI-6020T-PPB(180)
L1629226-05W9	Tumble Vessel	A	N/A	2.9	Y	Absent	-
L1629226-05X	Vial MeOH preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1629226-05Y	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1629226-05Z	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1629226-06A	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1629226-06B	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1629226-06C	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1629226-06D	Plastic 2oz unpreserved for TS	A	N/A	2.9	Y	Absent	TS(7)
L1629226-06E	Glass 250ml/8oz unpreserved	A	N/A	2.9	Y	Absent	NI-TI(180)
L1629226-06F	25 gram Encore Sampler	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-06G	25 gram Encore Sampler	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-06S	Vial unpreserved Extracts	A	N/A	2.9	Y	Absent	NJ-SPLP-VOA(14)
L1629226-06T	Vial unpreserved Extracts	A	N/A	2.9	Y	Absent	NJ-SPLP-VOA(14)
L1629226-06U	Vial Water preserved split	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-06V	Vial Water preserved split	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-06W	Plastic 120ml HNO3 preserved Ext	A	<2	2.9	Y	Absent	SPLP-NI-6020T-PPB(180)
L1629226-06W9	Tumble Vessel	A	N/A	2.9	Y	Absent	-
L1629226-06X	Vial MeOH preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1629226-06Y	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1629226-06Z	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1629226-07A	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1629226-07B	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1629226-07C	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1629226-07D	Plastic 2oz unpreserved for TS	A	N/A	2.9	Y	Absent	TS(7)
L1629226-07E	25 gram Encore Sampler	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-07F	25 gram Encore Sampler	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-07S	Vial unpreserved Extracts	A	N/A	2.9	Y	Absent	NJ-SPLP-VOA(14)
L1629226-07T	Vial unpreserved Extracts	A	N/A	2.9	Y	Absent	NJ-SPLP-VOA(14)
L1629226-07U	Vial Water preserved split	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-07V	Vial Water preserved split	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-07X	Vial MeOH preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1629226-07Y	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1629226-07Z	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1629226-08A	5 gram Encore Sampler	B	N/A	3.7	Y	Absent	NJ-8260HLW(2)
L1629226-08B	5 gram Encore Sampler	B	N/A	3.7	Y	Absent	NJ-8260HLW(2)
L1629226-08C	5 gram Encore Sampler	B	N/A	3.7	Y	Absent	NJ-8260HLW(2)
L1629226-08D	Plastic 2oz unpreserved for TS	B	N/A	3.7	Y	Absent	TS(7)
L1629226-08E	25 gram Encore Sampler	B	N/A	3.7	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-08F	25 gram Encore Sampler	B	N/A	3.7	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-08S	Vial unpreserved Extracts	A	N/A	2.9	Y	Absent	NJ-SPLP-VOA(14)
L1629226-08T	Vial unpreserved Extracts	A	N/A	2.9	Y	Absent	NJ-SPLP-VOA(14)
L1629226-08U	Vial Water preserved split	B	N/A	3.7	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-08V	Vial Water preserved split	B	N/A	3.7	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-08X	Vial MeOH preserved split	B	N/A	3.7	Y	Absent	NJ-8260HLW(14)
L1629226-08Y	Vial Water preserved split	B	N/A	3.7	Y	Absent	NJ-8260HLW(14)
L1629226-08Z	Vial Water preserved split	B	N/A	3.7	Y	Absent	NJ-8260HLW(14)
L1629226-09A	5 gram Encore Sampler	B	N/A	3.7	Y	Absent	NJ-8260HLW(2)
L1629226-09B	5 gram Encore Sampler	B	N/A	3.7	Y	Absent	NJ-8260HLW(2)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1629226-09C	5 gram Encore Sampler	B	N/A	3.7	Y	Absent	NJ-8260HLW(2)
L1629226-09D	Plastic 2oz unpreserved for TS	B	N/A	3.7	Y	Absent	TS(7)
L1629226-09E	25 gram Encore Sampler	B	N/A	3.7	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-09F	25 gram Encore Sampler	B	N/A	3.7	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-09S	Vial unpreserved Extracts	A	N/A	2.9	Y	Absent	NJ-SPLP-VOA(14)
L1629226-09T	Vial unpreserved Extracts	A	N/A	2.9	Y	Absent	NJ-SPLP-VOA(14)
L1629226-09U	Vial Water preserved split	B	N/A	3.7	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-09V	Vial Water preserved split	B	N/A	3.7	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-09X	Vial MeOH preserved split	B	N/A	3.7	Y	Absent	NJ-8260HLW(14)
L1629226-09Y	Vial Water preserved split	B	N/A	3.7	Y	Absent	NJ-8260HLW(14)
L1629226-09Z	Vial Water preserved split	B	N/A	3.7	Y	Absent	NJ-8260HLW(14)
L1629226-10A	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1629226-10B	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1629226-10C	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1629226-10D	Plastic 2oz unpreserved for TS	A	N/A	2.9	Y	Absent	TS(7)
L1629226-10E	Glass 250ml/8oz unpreserved	A	N/A	2.9	Y	Absent	NI-TI(180)
L1629226-10F	Plastic 8oz unpreserved for Grai	A	N/A	2.9	Y	Absent	A2-HYDRO-TFINE(),A2-HYDRO-CFINE(),A2-HYDRO-CGRAVEL(),A2-HYDRO-FSAND(),A2-HYDRO-MSAND(),A2-HYDRO-CSAND(),A2-HYDRO-SFINE(),A2-HYDRO-COBBLES(),A2-HYDRO-FGRAVEL()
L1629226-10G	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-10H	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-10S	Vial unpreserved Extracts	A	N/A	2.9	Y	Absent	NJ-SPLP-VOA(14)
L1629226-10T	Vial unpreserved Extracts	A	N/A	2.9	Y	Absent	NJ-SPLP-VOA(14)
L1629226-10U	Vial Water preserved split	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-10V	Vial Water preserved split	A	N/A	2.9	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1629226-10W	Plastic 120ml HNO3 preserved Ext	A	<2	2.9	Y	Absent	SPLP-NI-6020T-PPB(180)
L1629226-10W9	Tumble Vessel	A	N/A	2.9	Y	Absent	-
L1629226-10X	Vial MeOH preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1629226-10Y	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1629226-10Z	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1629226-11A	Glass 60ml unpreserved split	A	N/A	2.9	Y	Absent	AS-TI(180)
L1629226-11B	Glass 250ml/8oz unpreserved	A	N/A	2.9	Y	Absent	TS(7)
L1629226-11W	Plastic 120ml HNO3 preserved Ext	A	<2	2.9	Y	Absent	SPLP-AS-6020T-PPB(180)
L1629226-11W9	Tumble Vessel	A	N/A	2.9	Y	Absent	-
L1629226-12A	Glass 60ml unpreserved split	A	N/A	2.9	Y	Absent	AS-TI(180)
L1629226-12B	Glass 250ml/8oz unpreserved	A	N/A	2.9	Y	Absent	TS(7)
L1629226-12W	Plastic 120ml HNO3 preserved Ext	A	<2	2.9	Y	Absent	SPLP-AS-6020T-PPB(180)
L1629226-12W9	Tumble Vessel	A	N/A	2.9	Y	Absent	-
L1629226-13A	Glass 60ml unpreserved split	B	N/A	3.7	Y	Absent	NI-TI(180)
L1629226-13B	Glass 250ml/8oz unpreserved	B	N/A	3.7	Y	Absent	TS(7)
L1629226-14A	Glass 60ml unpreserved split	B	N/A	3.7	Y	Absent	NI-TI(180)
L1629226-14B	Glass 250ml/8oz unpreserved	B	N/A	3.7	Y	Absent	TS(7)
L1629226-15A	5 gram Encore Sampler	B	N/A	3.7	Y	Absent	NJ-8260HLW(2)
L1629226-15B	5 gram Encore Sampler	B	N/A	3.7	Y	Absent	NJ-8260HLW(2)
L1629226-15C	5 gram Encore Sampler	B	N/A	3.7	Y	Absent	NJ-8260HLW(2)
L1629226-15D	Plastic 2oz unpreserved for TS	B	N/A	3.7	Y	Absent	TS(7)
L1629226-15E	Glass 250ml/8oz unpreserved	B	N/A	3.7	Y	Absent	NI-TI(180)
L1629226-15F	25 gram Encore Sampler	B	N/A	3.7	Y	Absent	HOLD-CONTINGENCY(14)
L1629226-15G	25 gram Encore Sampler	B	N/A	3.7	Y	Absent	HOLD-CONTINGENCY(14)
L1629226-15U	Vial Water preserved split	B	N/A	3.7	Y	Absent	HOLD-CONTINGENCY(14)
L1629226-15V	Vial Water preserved split	B	N/A	3.7	Y	Absent	HOLD-CONTINGENCY(14)
L1629226-15X	Vial MeOH preserved split	B	N/A	3.7	Y	Absent	NJ-8260HLW(14)
L1629226-15Y	Vial Water preserved split	B	N/A	3.7	Y	Absent	NJ-8260HLW(14)
L1629226-15Z	Vial Water preserved split	B	N/A	3.7	Y	Absent	NJ-8260HLW(14)
L1629226-16A	5 gram Encore Sampler	B	N/A	3.7	Y	Absent	NJ-8260HLW(2)
L1629226-16B	5 gram Encore Sampler	B	N/A	3.7	Y	Absent	NJ-8260HLW(2)
L1629226-16C	5 gram Encore Sampler	B	N/A	3.7	Y	Absent	NJ-8260HLW(2)
L1629226-16D	Plastic 2oz unpreserved for TS	B	N/A	3.7	Y	Absent	TS(7)
L1629226-16E	25 gram Encore Sampler	B	N/A	3.7	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1629226-16F	25 gram Encore Sampler	B	N/A	3.7	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-16S	Vial unpreserved Extracts	B	N/A	3.7	Y	Absent	NJ-SPLP-VOA(14)
L1629226-16T	Vial unpreserved Extracts	B	N/A	3.7	Y	Absent	NJ-SPLP-VOA(14)
L1629226-16U	Vial Water preserved split	B	N/A	3.7	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-16V	Vial Water preserved split	B	N/A	3.7	Y	Absent	HOLD-CONTINGENCY(14),SPLP-EXT-ZHE(14)
L1629226-16X	Vial MeOH preserved split	B	N/A	3.7	Y	Absent	NJ-8260HLW(14)
L1629226-16Y	Vial Water preserved split	B	N/A	3.7	Y	Absent	NJ-8260HLW(14)
L1629226-16Z	Vial Water preserved split	B	N/A	3.7	Y	Absent	NJ-8260HLW(14)
L1629226-17A	Glass 60ml unpreserved split	B	N/A	3.7	Y	Absent	NI-TI(180)
L1629226-17B	Glass 250ml/8oz unpreserved	B	N/A	3.7	Y	Absent	TS(7)
L1629226-17W	Plastic 120ml HNO3 preserved Ext	B	<2	3.7	Y	Absent	SPLP-NI-6020T-PPB(180)
L1629226-17W9	Tumble Vessel	B	N/A	3.7	Y	Absent	-
L1629226-18A	Glass 60ml unpreserved split	B	N/A	3.7	Y	Absent	AS-TI(180)
L1629226-18B	Glass 250ml/8oz unpreserved	B	N/A	3.7	Y	Absent	TS(7)
L1629226-18W	Plastic 120ml HNO3 preserved Ext	B	<2	3.7	Y	Absent	SPLP-AS-6020T-PPB(180)
L1629226-18W9	Tumble Vessel	B	N/A	3.7	Y	Absent	-
L1629226-19A	5 gram Encore Sampler	B	N/A	3.7	Y	Absent	NJ-8260HLW(2)
L1629226-19B	5 gram Encore Sampler	B	N/A	3.7	Y	Absent	NJ-8260HLW(2)
L1629226-19C	5 gram Encore Sampler	B	N/A	3.7	Y	Absent	NJ-8260HLW(2)
L1629226-19D	Plastic 2oz unpreserved for TS	B	N/A	3.7	Y	Absent	TS(7)
L1629226-19E	Metals Only - Glass 60mL/2oz unp	B	N/A	3.7	Y	Absent	NI-TI(180)
L1629226-19F	Glass 250ml/8oz unpreserved	B	N/A	3.7	Y	Absent	A2-TOC-LK-2REPS-PPM(14)
L1629226-19G	Plastic 8oz unpreserved for Grai	B	N/A	3.7	Y	Absent	A2-HYDRO-TFINE(),A2-HYDRO-CFINE(),A2-HYDRO-CGRAVEL(),A2-HYDRO-FSAND(),A2-HYDRO-MSAND(),A2-HYDRO-CSAND(),A2-HYDRO-SFINE(),A2-HYDRO-COBBLES(),A2-HYDRO-FGRAVEL()
L1629226-19H	25 gram Encore Sampler	B	N/A	3.7	Y	Absent	HOLD-CONTINGENCY(14)
L1629226-19I	25 gram Encore Sampler	B	N/A	3.7	Y	Absent	HOLD-CONTINGENCY(14)
L1629226-19U	Vial Water preserved split	B	N/A	3.7	Y	Absent	HOLD-CONTINGENCY(14)
L1629226-19V	Vial Water preserved split	B	N/A	3.7	Y	Absent	HOLD-CONTINGENCY(14)
L1629226-19X	Vial MeOH preserved split	B	N/A	3.7	Y	Absent	NJ-8260HLW(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1629226-19Y	Vial Water preserved split	B	N/A	3.7	Y	Absent	NJ-8260HLW(14)
L1629226-19Z	Vial Water preserved split	B	N/A	3.7	Y	Absent	NJ-8260HLW(14)

*Values in parentheses indicate holding time in days

NJ DEP
Data of Known Quality Protocols
Conformance/Non-Conformance
Summary Questionnaire

NJ DEP Data of Known Quality Protocols
Conformance/Non-Conformance
Summary Questionnaire

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	YES
1a	Were the method specified handling, preservation, and holding time requirements met?	YES
1b	EPH Method: Was the EPH Method conducted without significant modifications (see Section 11.3 of respective DKQ methods)?	N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	YES
3	Were all samples received at an appropriate temperature (4 ± 2° C)?	YES
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	NO
5a	Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	YES
5b	Were these reporting limits met?	NO
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	NO
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	YES

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1a or #1b is "No", the data package does not meet the requirements for "Data of Known Quality".

Conformance/Non-Conformance Summary

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Case Narrative (continued)

Report Submission

This final report replaces the partial reports issued September 22 and 26, 2016, and includes the results of all requested analyses.

A previously-issued partial report replaced the partial report issued September 20, 2016, and included the result of the TOC analysis performed on L1629226-19.

A previously-issued partial report replaced the partial report issued September 16, 2016. Trichloroethene was added to the Volatile Organics compound list on L1629226-07.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

DKQP Related Narratives

Volatile Organics

L1629226-03 through -08: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

L1629226-10 and -16: The analysis of Volatile Organics by EPA Method 5035/8260 Low Level could not be performed due to the elevated concentrations of non-target compounds in the sample.

In reference to question 5b:

L1629226-10: One or more of the target analytes did not achieve the requested regulatory limits.

In reference to question 6:

At the client's request, all submitted samples were not analyzed for the full DKQP list of constituents identified in the method specific analyte list presented in the DKQP documents.

SPLP Volatiles

In reference to question 4:

WG936703-6/-7: One or more compounds failed to meet the DKQP recovery and/or RPD limits. Please refer to the QC section of the report for specific details.

In reference to question 6:

Case Narrative (continued)

At the client's request, all submitted samples were not analyzed for the full DKQP list of constituents identified in the method specific analyte list presented in the DKQP documents.

Total Metals

In reference to question 4:

The WG932535-4 MS recovery for nickel (7660%), performed on L1629226-01, does not apply because the sample concentration is greater than four times the spike amount added.

In reference to question 6:

At the client's request, all submitted samples were not analyzed for the full DKQP list of constituents identified in the method specific analyte list presented in the DKQP documents.

SPLP Metals

In reference to question 6:

At the client's request, all submitted samples were not analyzed for the full DKQP list of constituents identified in the method specific analyte list presented in the DKQP documents.

Non-DKQP Related Narratives

Total Organic Carbon

WG934874: A Matrix Spike and Laboratory Duplicate were prepared with the sample batch, however, the native sample required a different reporting method; therefore, the matrix spike and laboratory duplicate results could not be reported.

Grain Size Analysis

The WG936692-1 Laboratory Duplicate RPDs, performed on L1629226-01, are outside the acceptance criteria for % fine gravel (64%), % coarse sand (31%), % fine sand (30%) and % clay fine (21%). The elevated RPDs have been attributed to the non-homogeneous nature of the native sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Kelly Stenstrom Report Date: 09/28/16

Title: Technical Director/Representative

Glossary

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the

Data Qualifiers

reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

SPLP Extraction Data

SPLP Extraction Data
Volatile Organics

Form 1
Volatile Organics

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629226-03	Date Collected	: 09/15/16 08:40
Client ID	: 4479-091516-0840	Date Received	: 09/15/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/22/16 19:30
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,1312	Analyst	: MS
Lab File ID	:	Instrument ID	:
Sample Amount	:	GC Column	:
Level	: LOW	%Solids	: 73
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Sample Weight	0.025	-	NA	
NONE	Leachate Volume	0.500	-	NA	
NONE	pH, Extraction Post-Filtration	7.74	-	NA	

Form 1
Volatile Organics

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-04	**Date Collected**	: 09/15/16 08:55
Client ID	: 4479-091516-0855	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/22/16 19:30
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: MS
Lab File ID	:	**Instrument ID**	:
Sample Amount	:	**GC Column**	:
Level	: LOW	**%Solids**	: 54
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

			kg		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Sample Weight	0.025	-	NA	
NONE	Leachate Volume	0.500	-	NA	
NONE	pH, Extraction Post-Filtration	7.99	-	NA	

Form 1
Volatile Organics

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629226-05	Date Collected	: 09/15/16 09:45
Client ID	: 4479-091516-0945	Date Received	: 09/15/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/22/16 19:30
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,1312	Analyst	: MS
Lab File ID	:	Instrument ID	:
Sample Amount	:	GC Column	:
Level	: LOW	%Solids	: 86
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

			kg		
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Sample Weight	0.025	-	NA	
NONE	Leachate Volume	0.500	-	NA	
NONE	pH, Extraction Post-Filtration	8.23	-	NA	

Form 1
Volatile Organics

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629226-06	Date Collected	: 09/15/16 10:00
Client ID	: 4479-091516-1000	Date Received	: 09/15/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/22/16 19:30
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,1312	Analyst	: MS
Lab File ID	:	Instrument ID	:
Sample Amount	:	GC Column	:
Level	: LOW	%Solids	: 60
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

			kg		
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Sample Weight	0.025	-	NA	
NONE	Leachate Volume	0.500	-	NA	
NONE	pH, Extraction Post-Filtration	7.98	-	NA	

Form 1
Volatile Organics

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-07	**Date Collected**	: 09/15/16 10:20
Client ID	: 4479-091516-1020	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/28/16 16:00
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: PK
Lab File ID	:	**Instrument ID**	:
Sample Amount	:	**GC Column**	:
Level	: LOW	**%Solids**	: 67
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Sample Weight	0.025	-	NA	
NONE	Leachate Volume	0.500	-	NA	
NONE	pH, Extraction Post-Filtration	7.38	-	NA	

Form 1
Volatile Organics

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-08	**Date Collected**	: 09/15/16 10:45
Client ID	: 4479-091516-1045	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/22/16 19:30
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: MS
Lab File ID	:	**Instrument ID**	:
Sample Amount	:	**GC Column**	:
Level	: LOW	**%Solids**	: 77
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Sample Weight	0.025	-	NA	
NONE	Leachate Volume	0.500	-	NA	
NONE	pH, Extraction Post-Filtration	7.83	-	NA	

Form 1
Volatile Organics

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-09	**Date Collected**	: 09/15/16 10:55
Client ID	: 4479-091516-1055	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/22/16 19:30
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: MS
Lab File ID	:	**Instrument ID**	:
Sample Amount	:	**GC Column**	:
Level	: LOW	**%Solids**	: 73
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

			kg		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Sample Weight	0.025	-	NA	
NONE	Leachate Volume	0.500	-	NA	
NONE	pH, Extraction Post-Filtration	7.94	-	NA	

Form 1
Volatile Organics

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629226-10	Date Collected	: 09/15/16 11:10
Client ID	: 4479-091516-1110	Date Received	: 09/15/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/22/16 19:30
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,1312	Analyst	: MS
Lab File ID	:	Instrument ID	:
Sample Amount	:	GC Column	:
Level	: LOW	%Solids	: 72
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

			kg		
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Sample Weight	0.025	-	NA	
NONE	Leachate Volume	0.500	-	NA	
NONE	pH, Extraction Post-Filtration	7.79	-	NA	

Form 1
Volatile Organics

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-16	**Date Collected**	: 09/15/16 14:15
Client ID	: 4479-091516-1415	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/22/16 19:30
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: MS
Lab File ID	:	**Instrument ID**	:
Sample Amount	:	**GC Column**	:
Level	: LOW	**%Solids**	: 76
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Sample Weight	0.025	-	NA	
NONE	Leachate Volume	0.500	-	NA	
NONE	pH, Extraction Post-Filtration	8.61	-	NA	

SPLP Extraction Data
Non- Volatiles

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-01	**Date Collected**	: 09/15/16 08:10
Client ID	: 4479-091516-0810	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/20/16 16:13
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: LB
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 77

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	8.32	-	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-05	**Date Collected**	: 09/15/16 09:45
Client ID	: 4479-091516-0945	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/20/16 16:13
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: LB
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 86

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	9.20	-	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-06	**Date Collected**	: 09/15/16 10:00
Client ID	: 4479-091516-1000	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/20/16 16:13
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: LB
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 60

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	8.83	-	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-10	**Date Collected**	: 09/15/16 11:10
Client ID	: 4479-091516-1110	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/20/16 16:13
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: LB
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 72

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	9.47	-	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-11	**Date Collected**	: 09/15/16 13:05
Client ID	: 4479-091516-1305	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/20/16 16:13
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: LB
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 93

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	9.78	-	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-12	**Date Collected**	: 09/15/16 13:00
Client ID	: 4479-091516-1300	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/20/16 16:13
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: LB
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 94

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	9.22	-	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-17	**Date Collected**	: 09/15/16 14:35
Client ID	: 4479-091516-1435	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/20/16 16:13
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: LB
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 91

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	11.0	-	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-18	**Date Collected**	: 09/15/16 14:40
Client ID	: 4479-091516-1440	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/20/16 16:13
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: LB
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 88

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	9.63	-	NA	

Organics

GC/MS 8260
Analysis

Sample Results Summary

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-02	**Date Collected**	: 09/15/16 08:30
Client ID	: 4479-091516-0830	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 14:34
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: BD
Lab File ID	: V00160916A14	**Instrument ID**	: VOA100
Sample Amount	: 3.0 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 94
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
79-01-6	Trichloroethene	ND	0.0018	0.00022	U

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-03	**Date Collected**	: 09/15/16 08:40
Client ID	: 4479-091516-0840	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/22/16 11:25
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: PK
Lab File ID	: VQ160922A14	**Instrument ID**	: QUIMBY
Sample Amount	: 10.0 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: 73
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	42	0.50	0.07	
71-43-2	Benzene	1.3	0.50	0.09	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-03D	**Date Collected**	: 09/15/16 08:40
Client ID	: 4479-091516-0840	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 15:13
Sample Matrix	: SOIL	**Dilution Factor**	: 4
Analytical Method	: 1,8260C	**Analyst**	: BD
Lab File ID	: V11160916A16	**Instrument ID**	: VOA111
Sample Amount	:	**GC Column**	: RTX-VMS
Level	: HIGH	**%Solids**	: 73
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.025 ml

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	2.6	0.32	0.11	
71-43-2	Benzene	0.086	0.32	0.037	J

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-04D	**Date Collected**	: 09/15/16 08:55
Client ID	: 4479-091516-0855	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 16:30
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,8260C	**Analyst**	: BD
Lab File ID	: V11160916A19	**Instrument ID**	: VOA111
Sample Amount	:	**GC Column**	: RTX-VMS
Level	: HIGH	**%Solids**	: 54
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.01 ml

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	83.	2.4	0.85	
71-43-2	Benzene	2.6	2.4	0.29	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-04D	**Date Collected**	: 09/15/16 08:55
Client ID	: 4479-091516-0855	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/22/16 14:01
Sample Matrix	: SOIL	**Dilution Factor**	: 2.5
Analytical Method	: 1,8260C	**Analyst**	: PK
Lab File ID	: VQ160922A19	**Instrument ID**	: QUIMBY
Sample Amount	: 4.0 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: 54
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	520	1.2	0.18	E
71-43-2	Benzene	29	1.2	0.22	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-04D2	**Date Collected**	: 09/15/16 08:55
Client ID	: 4479-091516-0855	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/23/16 09:18
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,8260C	**Analyst**	: MM
Lab File ID	: VQ160922A07	**Instrument ID**	: QUIMBY
Sample Amount	: 1.0 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: 54
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	470	5.0	0.70	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-05	**Date Collected**	: 09/15/16 09:45
Client ID	: 4479-091516-0945	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/22/16 11:56
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: PK
Lab File ID	: VQ160922A15	**Instrument ID**	: QUIMBY
Sample Amount	: 10.0 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: 86
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	53	0.50	0.07	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-05D	**Date Collected**	: 09/15/16 09:45
Client ID	: 4479-091516-0945	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 16:56
Sample Matrix	: SOIL	**Dilution Factor**	: 4
Analytical Method	: 1,8260C	**Analyst**	: BD
Lab File ID	: V11160916A20	**Instrument ID**	: VOA111
Sample Amount	:	**GC Column**	: RTX-VMS
Level	: HIGH	**%Solids**	: 86
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.025 ml

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	2.9	0.28	0.099	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-06D	**Date Collected**	: 09/15/16 10:00
Client ID	: 4479-091516-1000	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/22/16 14:33
Sample Matrix	: SOIL	**Dilution Factor**	: 5
Analytical Method	: 1,8260C	**Analyst**	: PK
Lab File ID	: VQ160922A20	**Instrument ID**	: QUIMBY
Sample Amount	: 2.0 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: 60
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	160	2.5	0.35	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-06D	**Date Collected**	: 09/15/16 10:00
Client ID	: 4479-091516-1000	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 17:21
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: V11160916A21	**Instrument ID**	: VOA111
Sample Amount	:	**GC Column**	: RTX-VMS
Level	: HIGH	**%Solids**	: 60
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.01 ml

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	12.	1.3	0.45	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-07D	**Date Collected**	: 09/15/16 10:20
Client ID	: 4479-091516-1020	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/28/16 11:13
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,8260C	**Analyst**	: MM
Lab File ID	: V16160928A19	**Instrument ID**	: VOA116
Sample Amount	: 1.0 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: 67
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	280	5.0	1.8	
71-43-2	Benzene	9.6	5.0	1.6	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-07D	**Date Collected**	: 09/15/16 10:20
Client ID	: 4479-091516-1020	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 17:47
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: V11160916A22	**Instrument ID**	: VOA111
Sample Amount	:	**GC Column**	: RTX-VMS
Level	: HIGH	**%Solids**	: 67
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.01 ml

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	29.	1.2	0.41	
71-43-2	Benzene	0.61	1.2	0.14	J
79-01-6	Trichloroethene	ND	1.2	0.15	U

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-08D	**Date Collected**	: 09/15/16 10:45
Client ID	: 4479-091516-1045	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 13:35
Sample Matrix	: SOIL	**Dilution Factor**	: 4
Analytical Method	: 1,8260C	**Analyst**	: BD
Lab File ID	: V04160916A12	**Instrument ID**	: VOA104
Sample Amount	:	**GC Column**	: RTX-VMS
Level	: HIGH	**%Solids**	: 77
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.025 ml

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	5.3	0.29	0.10	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-08D	**Date Collected**	: 09/15/16 10:45
Client ID	: 4479-091516-1045	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/22/16 15:04
Sample Matrix	: SOIL	**Dilution Factor**	: 5
Analytical Method	: 1,8260C	**Analyst**	: MM
Lab File ID	: VQ160922A21	**Instrument ID**	: QUIMBY
Sample Amount	: 2.0 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: 77
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	110	2.5	0.35	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-09	**Date Collected**	: 09/15/16 10:55
Client ID	: 4479-091516-1055	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/22/16 12:27
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: PK
Lab File ID	: VQ160922A16	**Instrument ID**	: QUIMBY
Sample Amount	: 10.0 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: 73
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	34	0.50	0.07	
71-43-2	Benzene	1.1	0.50	0.09	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-09	**Date Collected**	: 09/15/16 10:55
Client ID	: 4479-091516-1055	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 14:01
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: PP
Lab File ID	: V04160916A13	**Instrument ID**	: VOA104
Sample Amount	:	**GC Column**	: RTX-VMS
Level	: HIGH	**%Solids**	: 73
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.1 ml

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	3.4	0.081	0.028	
71-43-2	Benzene	0.094	0.081	0.0096	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-10	**Date Collected**	: 09/15/16 11:10
Client ID	: 4479-091516-1110	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/22/16 12:59
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: PK
Lab File ID	: VQ160922A17	**Instrument ID**	: QUIMBY
Sample Amount	: 10.0 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: 72
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-43-2	Benzene	3.9	0.50	0.09	
79-01-6	Trichloroethene	0.17	0.50	0.11	J

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-10	**Date Collected**	: 09/15/16 11:10
Client ID	: 4479-091516-1110	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 14:27
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: PP
Lab File ID	: V04160916A14	**Instrument ID**	: VOA104
Sample Amount	:	**GC Column**	: RTX-VMS
Level	: HIGH	**%Solids**	: 72
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.1 ml

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-43-2	Benzene	0.18	0.097	0.011	
79-01-6	Trichloroethene	ND	0.097	0.012	U

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-15	**Date Collected**	: 09/15/16 13:45
Client ID	: 4479-091516-1345	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 15:00
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: BD
Lab File ID	: V00160916A15	**Instrument ID**	: VOA100
Sample Amount	: 4.7 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 85
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	ND	0.0012	0.00043	U

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-16	**Date Collected**	: 09/15/16 14:15
Client ID	: 4479-091516-1415	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/22/16 13:30
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: PK
Lab File ID	: VQ160922A18	**Instrument ID**	: QUIMBY
Sample Amount	: 10.0 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: 76
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-43-2	Benzene	3.5	0.50	0.09	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-16	**Date Collected**	: 09/15/16 14:15
Client ID	: 4479-091516-1415	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 14:53
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: PP
Lab File ID	: V04160916A15	**Instrument ID**	: VOA104
Sample Amount	:	**GC Column**	: RTX-VMS
Level	: HIGH	**%Solids**	: 76
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.1 ml

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-43-2	Benzene	0.12	0.082	0.0097	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-19	**Date Collected**	: 09/15/16 15:00
Client ID	: 4479-091516-1500	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 15:27
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: BD
Lab File ID	: V00160916A16	**Instrument ID**	: VOA100
Sample Amount	: 3.7 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 92
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
79-01-6	Trichloroethene	ND	0.0015	0.00018	U

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: WG932751-5	**Date Collected**	: NA
Client ID	: WG932751-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/16/16 10:33
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MV
Lab File ID	: V00160916A05	**Instrument ID**	: VOA100
Sample Amount	: 5.0 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: NA
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	ND	0.0010	0.00035	U
79-01-6	Trichloroethene	ND	0.0010	0.00012	U

Tentatively Identified Compounds
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: WG932751-5	**Date Collected**	: NA
Client ID	: WG932751-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/16/16 10:33
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MV
Lab File ID	: V00160916A05	**Instrument ID**	: VOA100
Sample Amount	:	**GC Column**	:
Level	:	**%Solids**	: NA
Extract Volume (MeOH)	: NA	**Injection Volume**	: 1

Number TICS found: 4 **Concentration Units: mg/kg**

CAS Number	Compound Name	RT	EST. CONC.	Qualifier
	Unknown	2.58	.00228	J
	Unknown	3.34	.00206	J
000107-83-5	Pentane, 2-methyl-	3.67	.00233	NJ
	Total TIC Compounds		0.007J	J

Form 1
VOA

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: WG932860-5	Date Collected	: NA
Client ID	: WG932860-5BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 09/16/16 10:34
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MV
Lab File ID	: V04160916A05	Instrument ID	: VOA104
Sample Amount	:	GC Column	: RTX-VMS
Level	: HIGH	%Solids	: NA
Extract Volume (MeOH)	: NA	Injection Volume	: 0.1 ml

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
108-90-7	Chlorobenzene	ND	0.050	0.017	U
71-43-2	Benzene	ND	0.050	0.0059	U
79-01-6	Trichloroethene	ND	0.050	0.0062	U

Tentatively Identified Compounds
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: WG932860-5	**Date Collected**	: NA
Client ID	: WG932860-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/16/16 10:34
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MV
Lab File ID	: V04160916A05	**Instrument ID**	: VOA104
Sample Amount	:	**GC Column**	:
Level	:	**%Solids**	: NA
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.1 g

Number TICS found: 2 **Concentration Units: mg/kg**

CAS Number	Compound Name	RT	EST. CONC.	Qualifier
000107-83-5	Pentane, 2-methyl-	3.20	.152	NJ
	Total TIC Compounds		0.152J	J

Form 1
VOA

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: WG932865-5	Date Collected	: NA
Client ID	: WG932865-5BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 09/16/16 09:38
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MV
Lab File ID	: V11160916A06	Instrument ID	: VOA111
Sample Amount	:	GC Column	: RTX-VMS
Level	: HIGH	%Solids	: NA
Extract Volume (MeOH)	: NA	Injection Volume	: 0.1 ml

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
108-90-7	Chlorobenzene	ND	0.050	0.017	U
71-43-2	Benzene	ND	0.050	0.0059	U
79-01-6	Trichloroethene	ND	0.050	0.0062	U

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: WG936703-5	**Date Collected**	: NA
Client ID	: WG936703-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/28/16 10:48
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MM
Lab File ID	: V16160928A18	**Instrument ID**	: VOA116
Sample Amount	: 10.0 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: NA
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	ND	0.50	0.18	U
71-43-2	Benzene	ND	0.50	0.16	U

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: WG933853-17	**Date Collected**	: NA
Client ID	: WG933853-17BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/22/16 09:19
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MM
Lab File ID	: VQ160922A10	**Instrument ID**	: QUIMBY
Sample Amount	: 10.0 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: NA
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	ND	0.50	0.07	U
71-43-2	Benzene	ND	0.50	0.09	U
79-01-6	Trichloroethene	0.24	0.50	0.11	J

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: WG933853-22	**Date Collected**	: NA
Client ID	: WG933853-22BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/23/16 08:16
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MM
Lab File ID	: VQ160922A05	**Instrument ID**	: QUIMBY
Sample Amount	: 10.0 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: NA
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
108-90-7	Chlorobenzene	ND	0.50	0.07	U
71-43-2	Benzene	ND	0.50	0.09	U
79-01-6	Trichloroethene	ND	0.50	0.11	U

Tuning Results Summary

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: VOA116	**Analysis Date**	: 08/29/16 07:46
Tune Standard	: WG927139-1	**Tune File ID**	: V16160829BF2_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	15.2
75	30.0 - 60.0% of mass 95	46.6
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.2 (.2)1
174	Greater than 50.0 of mass 95	90.7
175	5.0 - 9.0% of mass 174	7.5 (8.3)1
176	95.0 - 101% of mass 174	88.9 (98)1
177	5.0 - 9.0% of mass 176	5.5 (6.2)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STDL11	R895874-1	V16160829A03	08/29/16 09:00
STDL1	R895874-2	V16160829A04	08/29/16 09:25
STDL2	R895874-3	V16160829A05	08/29/16 09:50
STDL3	R895874-4	V16160829A06	08/29/16 10:16
STDL6	R895874-5	V16160829A08	08/29/16 11:07
STDL8	R895874-6	V16160829A09	08/29/16 11:32
STDL10	R895874-7	V16160829A10	08/29/16 11:58
ICV Quant Report	R895874-8	V16160829A16	08/29/16 14:30

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: VOA116	**Analysis Date**	: 09/28/16 03:23
Tune Standard	: WG936703-1	**Tune File ID**	: V16160928BF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	15.9
75	30.0 - 60.0% of mass 95	49.3
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.4 (.4)1
174	Greater than 50.0 of mass 95	99.3
175	5.0 - 9.0% of mass 174	7.7 (7.8)1
176	95.0 - 101% of mass 174	95.6 (96.3)1
177	5.0 - 9.0% of mass 176	6.3 (6.6)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG936703-2CCAL	WG936703-2	V16160928A02	09/28/16 04:09
WG936703-3LCS	WG936703-3	V16160928A02	09/28/16 04:09
WG936703-4LCSD	WG936703-4	V16160928A03	09/28/16 04:34
WG936703-5BLANK	WG936703-5	V16160928A18	09/28/16 10:48
4479-091516-1020	L1629226-07D	V16160928A19	09/28/16 11:13
WG936703-6MS	WG936703-6	V16160928A21	09/28/16 12:03
WG936703-7MSD	WG936703-7	V16160928A22	09/28/16 12:28

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: VOA100	**Analysis Date**	: 08/29/16 19:02
Tune Standard	: WG927151-1	**Tune File ID**	: V00160829NBF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	19.6
75	30.0 - 60.0% of mass 95	49
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	1.1 (1.1)1
174	Greater than 50.0 of mass 95	99.6
175	5.0 - 9.0% of mass 174	7.3 (7.3)1
176	95.0 - 101% of mass 174	95.9 (96.3)1
177	5.0 - 9.0% of mass 176	6.4 (6.7)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STDL1	R895883-1	V00160829N03	08/29/16 20:22
STDL2	R895883-2	V00160829N04	08/29/16 20:48
STDL3	R895883-3	V00160829N05	08/29/16 21:15
STDL4	R895883-4	V00160829N06	08/29/16 21:42
STDL5	R895883-5	V00160829N07	08/29/16 22:09
STDL6	R895883-6	V00160829N08	08/29/16 22:35
STDL7	R895883-7	V00160829N09	08/29/16 23:02
STDL8	R895883-8	V00160829N10	08/29/16 23:29
ICV Quant Report	R895883-9	V00160829N13	08/30/16 00:49

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Instrument ID	: VOA100	Analysis Date	: 09/16/16 08:26
Tune Standard	: WG932751-1	Tune File ID	: V00160916BF4_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	20.4
75	30.0 - 60.0% of mass 95	49
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.7 (.9)1
174	Greater than 50.0 of mass 95	82.4
175	5.0 - 9.0% of mass 174	6.5 (7.9)1
176	95.0 - 101% of mass 174	82.2 (99.8)1
177	5.0 - 9.0% of mass 176	5.4 (6.5)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG932751-2CCAL	WG932751-2	V00160916A02	09/16/16 09:14
WG932751-3LCS	WG932751-3	V00160916A02	09/16/16 09:14
WG932751-4LCSD	WG932751-4	V00160916A03	09/16/16 09:40
WG932751-5BLANK	WG932751-5	V00160916A05	09/16/16 10:33
4479-091516-0830	L1629226-02	V00160916A14	09/16/16 14:34
4479-091516-1345	L1629226-15	V00160916A15	09/16/16 15:00
4479-091516-1500	L1629226-19	V00160916A16	09/16/16 15:27
WG932751-6DUP	WG932751-6	V00160916A19	09/16/16 16:47
WG932751-7MS	WG932751-7	V00160916A21	09/16/16 17:40

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Instrument ID	: VOA104	Analysis Date	: 08/05/16 20:24
Tune Standard	: WG920558-1	Tune File ID	: V04160805BFN_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	20
75	30.0 - 60.0% of mass 95	46.3
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.3 (.3)1
174	Greater than 50.0 of mass 95	98.7
175	5.0 - 9.0% of mass 174	7 (7.1)1
176	95.0 - 101% of mass 174	94.1 (95.4)1
177	5.0 - 9.0% of mass 176	6.3 (6.7)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STDL1	R889964-1	V04160805N03	08/05/16 21:44
STDL3	R889964-2	V04160805N05	08/05/16 22:36
STDL4	R889964-3	V04160805N06	08/05/16 23:03
STDL5	R889964-4	V04160805N07	08/05/16 23:29
STDL6	R889964-5	V04160805N08	08/05/16 23:55
STDL7	R889964-6	V04160805N09	08/06/16 00:21
STDL8	R889964-7	V04160805N10	08/06/16 00:48
ICV Quant Report	R889964-8	V04160805N13	08/06/16 02:07

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Instrument ID	: VOA104	Analysis Date	: 09/16/16 08:27
Tune Standard	: WG932860-1	Tune File ID	: V04160916BF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	18.9
75	30.0 - 60.0% of mass 95	43.5
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.3 (.3)1
174	Greater than 50.0 of mass 95	93.4
175	5.0 - 9.0% of mass 174	7.2 (7.7)1
176	95.0 - 101% of mass 174	90.4 (96.7)1
177	5.0 - 9.0% of mass 176	6.1 (6.7)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG932860-2CCAL	WG932860-2	V04160916A02	09/16/16 09:16
WG932860-3LCS	WG932860-3	V04160916A02	09/16/16 09:16
WG932860-4LCSD	WG932860-4	V04160916A03	09/16/16 09:42
WG932860-5BLANK	WG932860-5	V04160916A05	09/16/16 10:34
4479-091516-1045	L1629226-08D	V04160916A12	09/16/16 13:35
4479-091516-1055	L1629226-09	V04160916A13	09/16/16 14:01
4479-091516-1110	L1629226-10	V04160916A14	09/16/16 14:27
4479-091516-1415	L1629226-16	V04160916A15	09/16/16 14:53

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: VOA111	**Analysis Date**	: 08/19/16 09:11
Tune Standard	: WG924340-1	**Tune File ID**	: V11160819BF2_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	28.4
75	30.0 - 60.0% of mass 95	56.9
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7
173	Less than 2.0% of mass 174	0 (0)1
174	Greater than 50.0 of mass 95	60.2
175	5.0 - 9.0% of mass 174	5.2 (8.6)1
176	95.0 - 101% of mass 174	59.1 (98.2)1
177	5.0 - 9.0% of mass 176	4.2 (7)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STDL1	R893416-1	V11160819B01	08/19/16 10:01
STDL2	R893416-2	V11160819B02	08/19/16 10:27
STDL3	R893416-3	V11160819B03	08/19/16 10:52
STDL4	R893416-4	V11160819B04	08/19/16 11:17
STDL5	R893416-5	V11160819B05	08/19/16 11:43
STDL6	R893416-6	V11160819B06	08/19/16 12:08
STDL7	R893416-7	V11160819B07	08/19/16 12:34
STDL8	R893416-8	V11160819B08	08/19/16 13:00
ICV Quant Report	R893416-9	V11160819B12	08/19/16 14:42

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Instrument ID	: VOA111	Analysis Date	: 09/16/16 06:50
Tune Standard	: WG932865-1	Tune File ID	: V11160916BF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	24
75	30.0 - 60.0% of mass 95	58.2
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.8 (1.2)1
174	Greater than 50.0 of mass 95	66.2
175	5.0 - 9.0% of mass 174	4.6 (7)1
176	95.0 - 101% of mass 174	64.9 (98)1
177	5.0 - 9.0% of mass 176	4.7 (7.2)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG932865-2CCAL	WG932865-2	V11160916A03	09/16/16 08:23
WG932865-3LCS	WG932865-3	V11160916A03	09/16/16 08:23
WG932865-4LCSD	WG932865-4	V11160916A04	09/16/16 08:48
WG932865-5BLANK	WG932865-5	V11160916A06	09/16/16 09:38
4479-091516-0840	L1629226-03D	V11160916A16	09/16/16 15:13
4479-091516-0855	L1629226-04D	V11160916A19	09/16/16 16:30
4479-091516-0945	L1629226-05D	V11160916A20	09/16/16 16:56
4479-091516-1000	L1629226-06D	V11160916A21	09/16/16 17:21
4479-091516-1020	L1629226-07D	V11160916A22	09/16/16 17:47

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: QUIMBY	**Analysis Date**	: 08/29/16 07:23
Tune Standard	: WG927217-1	**Tune File ID**	: VQ160829BF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	22.7
75	30.0 - 60.0% of mass 95	52.8
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0 (0)1
174	Greater than 50.0 of mass 95	66.4
175	5.0 - 9.0% of mass 174	4.6 (6.9)1
176	95.0 - 101% of mass 174	64 (96.3)1
177	5.0 - 9.0% of mass 176	4.1 (6.5)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STDL11	R895934-1	VQ160829A03	08/29/16 09:05
STDL1	R895934-2	VQ160829A04	08/29/16 09:37
STDL2	R895934-3	VQ160829A05	08/29/16 10:08
STDL3	R895934-4	VQ160829A06	08/29/16 10:40
STDL6	R895934-5	VQ160829A08	08/29/16 11:43
STDL8	R895934-7	VQ160829A09	08/29/16 12:14
STDL10	R895934-8	VQ160829A10	08/29/16 12:46
ICV Quant Report	R895934-6	VQ160829A16	08/29/16 15:54

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Instrument ID	: QUIMBY	Analysis Date	: 09/20/16 04:47
Tune Standard	: WG933853-1	Tune File ID	: VQ160920BF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	27.9
75	30.0 - 60.0% of mass 95	55.4
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7
173	Less than 2.0% of mass 174	0.3 (.4)1
174	Greater than 50.0 of mass 95	58.2
175	5.0 - 9.0% of mass 174	4.5 (7.7)1
176	95.0 - 101% of mass 174	56.2 (96.6)1
177	5.0 - 9.0% of mass 176	3.8 (6.8)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG933853-2CCAL	WG933853-2	VQ160920A03	09/20/16 06:07
WG933853-3LCS	WG933853-3	VQ160920A03	09/20/16 06:07
WG933853-4LCSD	WG933853-4	VQ160920A04	09/20/16 06:38
WG933853-5BLANK	WG933853-5	VQ160920A09	09/20/16 09:15
WG933853-6DUP	WG933853-6	VQ160920A14	09/20/16 11:52
WG933853-7MS	WG933853-7	VQ160920A15	09/20/16 12:24

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: QUIMBY	**Analysis Date**	: 09/22/16 04:24
Tune Standard	: WG933853-13	**Tune File ID**	: VQ160922BF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	29.4
75	30.0 - 60.0% of mass 95	58
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.1 (.2)1
174	Greater than 50.0 of mass 95	60.9
175	5.0 - 9.0% of mass 174	4.7 (7.7)1
176	95.0 - 101% of mass 174	59 (96.8)1
177	5.0 - 9.0% of mass 176	3.9 (6.6)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG933853-14CCAL	WG933853-14	VQ160922A02	09/22/16 05:09
WG933853-15LCS	WG933853-15	VQ160922A02	09/22/16 05:09
WG933853-16LCSD	WG933853-16	VQ160922A03	09/22/16 05:40
WG933853-17BLANK	WG933853-17	VQ160922A10	09/22/16 09:19
4479-091516-0840	L1629226-03	VQ160922A14	09/22/16 11:25
4479-091516-0945	L1629226-05	VQ160922A15	09/22/16 11:56
4479-091516-1055	L1629226-09	VQ160922A16	09/22/16 12:27
4479-091516-1110	L1629226-10	VQ160922A17	09/22/16 12:59
4479-091516-1415	L1629226-16	VQ160922A18	09/22/16 13:30
4479-091516-0855	L1629226-04D	VQ160922A19	09/22/16 14:01
4479-091516-1000	L1629226-06D	VQ160922A20	09/22/16 14:33
4479-091516-1045	L1629226-08D	VQ160922A21	09/22/16 15:04

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: QUIMBY	**Analysis Date**	: 09/23/16 05:53
Tune Standard	: WG933853-18	**Tune File ID**	: VQ160922BF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	25.9
75	30.0 - 60.0% of mass 95	57.3
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0 (0)1
174	Greater than 50.0 of mass 95	62.1
175	5.0 - 9.0% of mass 174	4.3 (6.9)1
176	95.0 - 101% of mass 174	60.6 (97.5)1
177	5.0 - 9.0% of mass 176	3.8 (6.3)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG933853-19CCAL	WG933853-19	VQ160922A02	09/23/16 06:42
WG933853-20LCS	WG933853-20	VQ160922A02	09/23/16 06:42
WG933853-21LCSD	WG933853-21	VQ160922A03	09/23/16 07:13
WG933853-22BLANK	WG933853-22	VQ160922A05	09/23/16 08:16
4479-091516-0855	L1629226-04D2	VQ160922A07	09/23/16 09:18

Blank Results Summary

Method Blank Summary
Form 4

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab Sample ID	: WG932865-5	**Lab File ID**	: V11160916A06
Instrument ID	: VOA111		
Matrix	: SOIL	**Analysis Date**	: 09/16/16 09:38

Client Sample No.	Lab Sample ID	Analysis Date
WG932865-3LCS	WG932865-3	09/16/16 08:23
WG932865-4LCSD	WG932865-4	09/16/16 08:48
4479-091516-0840	L1629226-03D	09/16/16 15:13
4479-091516-0855	L1629226-04D	09/16/16 16:30
4479-091516-0945	L1629226-05D	09/16/16 16:56
4479-091516-1000	L1629226-06D	09/16/16 17:21
4479-091516-1020	L1629226-07D	09/16/16 17:47

Method Blank Summary
Form 4

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab Sample ID	: WG932751-5	**Lab File ID**	: V00160916A05
Instrument ID	: VOA100		
Matrix	: SOIL	**Analysis Date**	: 09/16/16 10:33

Client Sample No.	Lab Sample ID	Analysis Date
WG932751-3LCS	WG932751-3	09/16/16 09:14
WG932751-4LCSD	WG932751-4	09/16/16 09:40
4479-091516-0830	L1629226-02	09/16/16 14:34
4479-091516-1345	L1629226-15	09/16/16 15:00
4479-091516-1500	L1629226-19	09/16/16 15:27
SP-1DUP	WG932751-6	09/16/16 16:47
SP-2MS	WG932751-7	09/16/16 17:40

Method Blank Summary
Form 4

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab Sample ID	: WG932860-5	**Lab File ID**	: V04160916A05
Instrument ID	: VOA104		
Matrix	: SOIL	**Analysis Date**	: 09/16/16 10:34

Client Sample No.	Lab Sample ID	Analysis Date
WG932860-3LCS	WG932860-3	09/16/16 09:16
WG932860-4LCSD	WG932860-4	09/16/16 09:42
4479-091516-1045	L1629226-08D	09/16/16 13:35
4479-091516-1055	L1629226-09	09/16/16 14:01
4479-091516-1110	L1629226-10	09/16/16 14:27
4479-091516-1415	L1629226-16	09/16/16 14:53

Method Blank Summary
Form 4

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab Sample ID	: WG933853-5	**Lab File ID**	: VQ160920A09
Instrument ID	: QUIMBY		
Matrix	: SOIL	**Analysis Date**	: 09/20/16 09:15

Client Sample No.	Lab Sample ID	Analysis Date
WG933853-3LCS	WG933853-3	09/20/16 06:07
WG933853-4LCSD	WG933853-4	09/20/16 06:38
SB-02_2.0-2.5DUP	WG933853-6	09/20/16 11:52
SB-03_5.5-6.0MS	WG933853-7	09/20/16 12:24
WG933853-15LCS	WG933853-15	09/22/16 05:09
WG933853-16LCSD	WG933853-16	09/22/16 05:40

Method Blank Summary
Form 4

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab Sample ID	: WG933853-17	**Lab File ID**	: VQ160922A10
Instrument ID	: QUIMBY		
Matrix	: SOIL	**Analysis Date**	: 09/22/16 09:19

Client Sample No.	Lab Sample ID	Analysis Date
WG933853-15LCS	WG933853-15	09/22/16 05:09
WG933853-16LCSD	WG933853-16	09/22/16 05:40
4479-091516-0840	L1629226-03	09/22/16 11:25
4479-091516-0945	L1629226-05	09/22/16 11:56
4479-091516-1055	L1629226-09	09/22/16 12:27
4479-091516-1110	L1629226-10	09/22/16 12:59
4479-091516-1415	L1629226-16	09/22/16 13:30
4479-091516-0855	L1629226-04D	09/22/16 14:01
4479-091516-1000	L1629226-06D	09/22/16 14:33
4479-091516-1045	L1629226-08D	09/22/16 15:04
WG933853-20LCS	WG933853-20	09/23/16 06:42
WG933853-21LCSD	WG933853-21	09/23/16 07:13

Method Blank Summary
Form 4

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab Sample ID	: WG933853-22	**Lab File ID**	: VQ160922A05
Instrument ID	: QUIMBY		
Matrix	: SOIL	**Analysis Date**	: 09/23/16 08:16

Client Sample No.	Lab Sample ID	Analysis Date
WG933853-20LCS	WG933853-20	09/23/16 06:42
WG933853-21LCSD	WG933853-21	09/23/16 07:13
4479-091516-0855	L1629226-04D2	09/23/16 09:18

Method Blank Summary
Form 4

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab Sample ID	: WG936703-5	**Lab File ID**	: V16160928A18
Instrument ID	: VOA116		
Matrix	: SOIL	**Analysis Date**	: 09/28/16 10:48

Client Sample No.	Lab Sample ID	Analysis Date
WG936703-3LCS	WG936703-3	09/28/16 04:09
WG936703-4LCSD	WG936703-4	09/28/16 04:34
4479-091516-1020	L1629226-07D	09/28/16 11:13
4479-091516-1020MS	WG936703-6	09/28/16 12:03
4479-091516-1020MSD	WG936703-7	09/28/16 12:28

Standards Data Summary

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1629226**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: VOA104**	**Ical Ref**	**: ICAL12726**
Calibration dates	**: 08/05/16 21:44 08/06/16 00:48**		

Calibration Files
L1 =V04160805N03.D L3 =V04160805N05.D L4 =V04160805N06.D L5 =V04160805N07.D L6 =V04160805N08.D
L7 =V04160805N09.D L8 =V04160805N10.D

		Compound	L1	L3	L4	L5	L6	L7	L8	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------								
2)	T	Dichlorodifluoromethane	0.240	0.263	0.250	0.268	0.239	0.267	0.222	0.250	6.89
3)	T	Chloromethane	0.658	0.481	0.442	0.439	0.415	0.427	0.414	*L	0.9992
4)	C	Vinyl chloride	0.327	0.335	0.323	0.338	0.314	0.336	0.315	0.327	3.03
5)	T	Bromomethane	0.238	0.184	0.174	0.176	0.171	0.180	0.174	0.185	12.80
6)	T	Chloroethane	0.163	0.151	0.140	0.141	0.126			0.144	9.43
7)	T	Trichlorofluoromethane	0.346	0.333	0.322	0.343	0.306	0.325	0.264	0.320	8.78
8)	T	Ethyl ether	0.117	0.113	0.114	0.113	0.113	0.113	0.108	0.113	2.29
10)	C	1,1-Dichloroethene	0.188	0.199	0.194	0.195	0.180	0.195	0.186	0.191	3.47
11)	T	Carbon disulfide	1.571	0.884	0.858	0.712	0.672	0.819	0.782	*L	0.9947
12)	T	Freon-113	0.180	0.239	0.232	0.200	0.185	0.234	0.202	0.210	11.66
14)	T	Acrolein	0.033	0.041	0.045	0.041	0.044	0.045	0.045	0.042	10.77
15)	T	Methylene chloride	0.391	0.305	0.299	0.290	0.285	0.287	0.279	0.305	12.72
17)	T	Acetone	0.274	0.072	0.068	0.061	0.062	0.063	0.062	*L	0.9996
18)	T	trans-1,2-Dichloroethene	0.277	0.285	0.278	0.278	0.273	0.277	0.261	0.275	2.68
19)	T	Methyl acetate	0.274	0.190	0.194	0.177	0.187	0.189	0.188	*L	0.9996
20)	T	Methyl tert-butyl ether	0.684	0.740	0.760	0.718	0.733	0.745	0.726	0.730	3.30
21)	T	tert-Butyl alcohol	0.039	0.030	0.031	0.028	0.030	0.031	0.031	0.031	10.67
22)	T	Diisopropyl ether	1.178	1.165	1.175	1.150	1.142	1.140	1.094	1.149	2.49
23)	T	1,1-Dichloroethane	0.562	0.571	0.559	0.552	0.541	0.547	0.524	0.551	2.82
24)	T	Halothane	0.214	0.214	0.209	0.214	0.204	0.213	0.197	0.209	3.16
25)	T	Acrylonitrile	0.070	0.095	0.103	0.095	0.101	0.102	0.101	0.095	12.08
26)	T	Ethyl tert-butyl ether	1.005	1.038	1.056	1.020	1.021	1.030	0.996	1.024	1.97
27)	T	Vinyl acetate	0.394	0.588	0.649	0.620	0.649	0.669	0.650	*L	0.9994
28)	T	cis-1,2-Dichloroethene	0.316	0.315	0.312	0.308	0.303	0.305	0.295	0.308	2.43
29)	T	2,2-Dichloropropane	0.434	0.407	0.391	0.401	0.383	0.400	0.373	0.398	4.84
30)	T	Bromochloromethane	0.145	0.157	0.155	0.149	0.148	0.145	0.139	0.148	4.03
31)	T	Cyclohexane	0.552	0.550	0.529	0.554	0.502	0.550	0.468	0.529	6.24
32)	C	Chloroform	0.537	0.507	0.500	0.491	0.484	0.491	0.471	0.497	4.21
33)	T	Ethyl acetate	0.635	0.318	0.305	0.279	0.286	0.296	0.288	*L	0.9995
34)	T	Carbon tetrachloride	0.358	0.392	0.383	0.405	0.378	0.409	0.368	0.385	4.81
35)	T	Tetrahydrofuran	0.101	0.083	0.106	0.098	0.102	0.104	0.102	0.099	7.77
36)	S	Dibromofluoromethane	0.274	0.274	0.280	0.281	0.281	0.278	0.275	0.278	1.14
37)	T	1,1,1-Trichloroethane	0.424	0.434	0.423	0.432	0.414	0.434	0.405	0.424	2.64
39)	T	2-Butanone	0.251	0.114	0.121	0.113	0.116	0.120	0.121	*L	0.9991
40)	T	1,1-Dichloropropene	0.353	0.351	0.341	0.355	0.335	0.354	0.326	0.345	3.21
41)	T	Benzene	1.114	1.097	1.070	1.058	1.041	1.057	1.008	1.063	3.29
42)	T	tert-Amyl methyl ether	0.756	0.788	0.792	0.763	0.773	0.781	0.765	0.774	1.74
43)	S	1,2-Dichloroethane-d4	0.264	0.261	0.262	0.262	0.266	0.266	0.270	0.264	1.21
44)	T	1,2-Dichloroethane	0.386	0.386	0.389	0.373	0.377	0.380	0.369	0.380	1.97

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1629226**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: VOA104**	**Ical Ref**	**: ICAL12726**
Calibration dates	**: 08/05/16 21:44 08/06/16 00:48**		

Calibration Files
L1 =V04160805N03.D L3 =V04160805N05.D L4 =V04160805N06.D L5 =V04160805N07.D L6 =V04160805N08.D
L7 =V04160805N09.D L8 =V04160805N10.D

	Compound	L1	L3	L4	L5	L6	L7	L8	Avg	%RSD
47) T	Methyl cyclohexane	0.399	0.432	0.412	0.432	0.396	0.436	0.378	0.412	5.33
48) T	Trichloroethene	0.313	0.303	0.295	0.298	0.286	0.293	0.275	0.295	4.14
50) T	Dibromomethane	0.151	0.175	0.179	0.171	0.174	0.177	0.173	0.171	5.51
51) C	1,2-Dichloropropane	0.332	0.326	0.327	0.317	0.319	0.321	0.313	0.322	1.99
53) T	2-Chloroethyl vinyl ether	0.106	0.139	0.144	0.138	0.138	0.142	0.140	0.135	9.73
54) T	Bromodichloromethane	0.370	0.384	0.384	0.379	0.384	0.394	0.383	0.383	1.85
57) T	1,4-Dioxane	0.001	0.002	0.003	0.002	0.003	0.003	0.003	*L	0.9992
58) T	cis-1,3-Dichloropropene	0.390	0.447	0.456	0.448	0.454	0.466	0.455	0.445	5.64
59) I	Chlorobenzene-d5	----------ISTD----------								
60) S	Toluene-d8	1.173	1.180	1.172	1.183	1.166	1.183	1.184	1.177	0.60
61) C	Toluene	0.895	0.842	0.813	0.810	0.789	0.818	0.781	0.821	4.65
62) T	4-Methyl-2-pentanone	0.096	0.128	0.137	0.127	0.133	0.137	0.135	0.128	11.41
63) T	Tetrachloroethene	0.396	0.425	0.408	0.420	0.396	0.417	0.384	0.407	3.69
65) T	trans-1,3-Dichloropropene	0.359	0.456	0.474	0.462	0.477	0.491	0.484	0.458	9.87
67) T	Ethyl methacrylate	0.302	0.385	0.404	0.386	0.397	0.410	0.403	0.384	9.76
68) T	1,1,2-Trichloroethane	0.234	0.250	0.251	0.241	0.243	0.246	0.241	0.244	2.43
69) T	Chlorodibromomethane	0.344	0.383	0.393	0.383	0.394	0.409	0.405	0.387	5.55
70) T	1,3-Dichloropropane	0.444	0.480	0.481	0.464	0.469	0.485	0.475	0.471	2.98
71) T	1,2-Dibromoethane	0.283	0.317	0.329	0.313	0.322	0.333	0.328	0.318	5.29
72) T	2-Hexanone	0.166	0.212	0.230	0.214	0.225	0.241	0.238	0.218	11.75
73) T	Chlorobenzene	1.003	1.013	0.993	0.986	0.974	0.982	0.940	0.984	2.40
74) C	Ethylbenzene	1.579	1.595	1.548	1.541	1.510	1.544	1.465	1.540	2.81
75) T	1,1,1,2-Tetrachloroethane	0.353	0.382	0.377	0.375	0.374	0.381	0.369	0.373	2.67
76) T	p/m Xylene	0.627	0.646	0.628	0.625	0.609	0.613	0.573	0.617	3.71
77) T	o Xylene	0.632	0.636	0.621	0.610	0.595	0.594	0.556	0.606	4.58
78) T	Styrene	0.996	1.069	1.039	1.017	1.005	0.999	0.937	1.009	4.07
79) I	1,4-Dichlorobenzene-d4	----------ISTD----------								
80) T	Bromoform	0.411	0.466	0.496	0.476	0.497	0.509	0.507	0.480	7.18
82) T	Isopropylbenzene	2.907	2.921	2.910	2.937	2.876	2.913	2.758	2.889	2.10
83) S	4-Bromofluorobenzene	0.849	0.837	0.856	0.848	0.861	0.862	0.866	0.854	1.18
84) T	Bromobenzene	0.815	0.838	0.839	0.827	0.832	0.825	0.804	0.826	1.52
85) T	n-Propylbenzene	3.266	3.314	3.278	3.288	3.216	3.261	3.075	3.243	2.46
86) T	1,4-Dichlorobutane	1.089	1.082	1.125	1.073	1.105	1.102	1.084	1.094	1.60
87) T	1,1,2,2-Tetrachloroethane	0.635	0.634	0.669	0.634	0.656	0.669	0.666	0.652	2.59
88) T	4-Ethyltoluene	3.062	3.080	3.064	3.065	3.038	3.042	2.892	3.035	2.13
89) T	2-Chlorotoluene	2.018	2.004	1.980	1.973	1.968	1.998	1.918	1.980	1.65
90) T	1,3,5-Trimethylbenzene	2.582	2.513	2.475	2.465	2.439	2.451	2.329	2.465	3.12
91) T	1,2,3-Trichloropropane	0.485	0.486	0.506	0.476	0.492	0.503	0.493	0.492	2.11
92) T	trans-1,4-Dichloro-2-b...	0.087	0.182	0.193	0.185	0.201	0.210	0.212	*L	0.9983
93) T	4-Chlorotoluene	2.032	2.015	2.031	2.000	2.030	2.055	1.966	2.019	1.42

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1629226**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: VOA104**	**Ical Ref**	**: ICAL12726**
Calibration dates	**: 08/05/16 21:44 08/06/16 00:48**		

Calibration Files
L1 =V04160805N03.D L3 =V04160805N05.D L4 =V04160805N06.D L5 =V04160805N07.D L6 =V04160805N08.D
L7 =V04160805N09.D L8 =V04160805N10.D

		Compound	L1	L3	L4	L5	L6	L7	L8	Avg	%RSD
94)	T	tert-Butylbenzene	2.092	2.087	2.070	2.101	2.040	2.088	1.986	2.066	1.97
97)	T	1,2,4-Trimethylbenzene	2.380	2.507	2.506	2.475	2.477	2.496	2.388	2.461	2.21
98)	T	sec-Butylbenzene	3.211	3.130	3.101	3.151	3.028	3.138	2.953	3.102	2.76
99)	T	p-Isopropyltoluene	2.603	2.633	2.626	2.616	2.563	2.624	2.466	2.590	2.30
100)	T	1,3-Dichlorobenzene	1.501	1.538	1.535	1.504	1.507	1.517	1.445	1.507	2.05
101)	T	1,4-Dichlorobenzene	1.589	1.526	1.512	1.502	1.518	1.520	1.451	1.517	2.68
102)	T	p-Diethylbenzene	1.548	1.647	1.652	1.652	1.628	1.671	1.565	1.623	2.93
103)	T	n-Butylbenzene	1.952	2.210	2.192	2.214	2.184	2.264	2.107	2.160	4.78
104)	T	1,2-Dichlorobenzene	1.415	1.460	1.470	1.428	1.448	1.442	1.397	1.437	1.78
105)	T	1,2,4,5-Tetramethylben...	2.609	2.696	2.754	2.701	2.719	2.760	2.626	2.695	2.17
106)	T	1,2-Dibromo-3-chloropr...	0.087	0.108	0.122	0.115	0.121	0.129	0.131	0.116	13.06
107)	T	1,3,5-Trichlorobenzene	1.188	1.190	1.203	1.171	1.201	1.227	1.154	1.190	1.98
108)	T	Hexachlorobutadiene	0.597	0.556	0.576	0.580	0.581	0.624	0.583	0.585	3.59
109)	T	1,2,4-Trichlorobenzene	0.933	1.005	1.050	1.022	1.070	1.096	1.032	1.030	5.08
110)	T	Naphthalene	1.950	2.086	2.249	2.155	2.268	2.338	2.295	2.192	6.24
111)	T	1,2,3-Trichlorobenzene	0.889	0.938	0.983	0.959	1.001	1.026	0.990	0.969	4.69

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1629226**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: VOA111**	**Ical Ref**	**: ICAL12787**
Calibration dates	**: 08/19/16 10:01 08/19/16 13:00**		

Calibration Files

L1 =V11160819B01.D L2 =V11160819B02.D L3 =V11160819B03.D L4 =V11160819B04.D L5 =V11160819B05.D

L6 =V11160819B06.D L7 =V11160819B07.D L8 =V11160819B08.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------									
2)	T	Dichlorodifluoromethane	0.183	0.155	0.138	0.140	0.162	0.158	0.159	0.184	0.160	10.73
3)	T	Chloromethane	0.612	0.391	0.341	0.331	0.368	0.353	0.338	0.378	*L	0.9970
4)	C	Vinyl chloride	0.283	0.284	0.244	0.244	0.287	0.273	0.275	0.324	0.277	9.30
5)	T	Bromomethane	0.123	0.107	0.093	0.090	0.097	0.097	0.101	0.117	0.103	11.52
6)	T	Chloroethane	0.146	0.128	0.112	0.109	0.123	0.115	0.096	0.112	0.118	12.58
7)	T	Trichlorofluoromethane	0.343	0.303	0.273	0.267	0.316	0.308	0.307	0.295	0.301	7.99
8)	T	Ethyl ether	0.120	0.097	0.115	0.104	0.103	0.107	0.109	0.114	0.108	6.88
10)	T	1,1-Dichloroethene	0.157	0.149	0.150	0.147	0.168	0.163	0.164	0.182	0.160	7.33
11)	T	Carbon disulfide	1.705	0.890	0.613	0.562	0.634	0.608	0.600	0.660	*L	0.9965
12)	T	Freon-113	0.163	0.165	0.146	0.142	0.159	0.160	0.155	0.173	0.158	6.37
14)	T	Acrolein	0.042	0.043	0.045	0.044	0.043	0.047	0.047	0.047	0.045	4.71
15)	T	Methylene chloride	0.384	0.235	0.207	0.203	0.215	0.216	0.210	0.224	*L	0.9986
17)	T	Acetone	0.201	0.070	0.062	0.054	0.057	0.055	0.056	0.054	*L	0.9987
18)	T	trans-1,2-Dichloroethene	0.199	0.195	0.183	0.176	0.199	0.193	0.190	0.207	0.193	5.00
19)	T	Methyl acetate	0.177	0.159	0.174	0.166	0.155	0.161	0.157	0.152	0.163	5.51
20)	T	Methyl tert-butyl ether	0.656	0.585	0.613	0.591	0.586	0.603	0.611	0.627	0.609	3.94
21)	T	tert-Butyl alcohol	0.054	0.036	0.035	0.033	0.032	0.033	0.033	0.034	*L	0.9994
22)	T	Diisopropyl ether	1.167	1.068	1.052	1.041	1.054	1.048	1.020	1.014	1.058	4.50
23)	C	1,1-Dichloroethane	0.585	0.564	0.530	0.515	0.567	0.560	0.546	0.582	0.556	4.39
24)	T	Halothane	0.137	0.131	0.128	0.124	0.143	0.134	0.135	0.147	0.135	5.68
25)	T	Acrylonitrile	0.115	0.105	0.118	0.115	0.115	0.115	0.116	0.113	0.114	3.30
26)	T	Ethyl tert-butyl ether	1.365	1.191	1.187	1.171	1.171	1.186	1.173	1.200	1.206	5.42
27)	T	Vinyl acetate	0.488	0.536	0.589	0.585	0.580	0.583	0.563	0.547	0.559	6.20
28)	T	cis-1,2-Dichloroethene	0.211	0.232	0.214	0.208	0.226	0.227	0.219	0.236	0.222	4.59
29)	T	2,2-Dichloropropane	0.368	0.313	0.304	0.301	0.342	0.337	0.329	0.357	0.331	7.42
30)	T	Bromochloromethane	0.117	0.090	0.091	0.090	0.090	0.090	0.089	0.091	0.094	10.15
31)	T	Cyclohexane	0.724	0.631	0.578	0.575	0.652	0.629	0.604	0.650	0.631	7.61
32)	C	Chloroform	0.465	0.412	0.387	0.382	0.399	0.393	0.389	0.412	0.405	6.57
33)	T	Ethyl acetate		0.598	0.303	0.299	0.250	0.238	0.231	0.222	*L	0.9978
34)	T	Carbon tetrachloride	0.259	0.255	0.247	0.246	0.292	0.280	0.276	0.304	0.270	7.95
35)	T	Tetrahydrofuran	0.142	0.099	0.094	0.089	0.083	0.079	0.079	0.075	*L	0.9973
36)	S	Dibromofluoromethane	0.221	0.224	0.235	0.233	0.227	0.228	0.224	0.219	0.226	2.44
37)	T	1,1,1-Trichloroethane	0.418	0.349	0.309	0.316	0.360	0.343	0.338	0.362	0.349	9.69
39)	T	2-Butanone	0.147	0.114	0.105	0.105	0.109	0.108	0.104	0.093	0.111	14.39
40)	T	1,1-Dichloropropene	0.328	0.270	0.249	0.242	0.275	0.270	0.258	0.281	0.272	9.71
41)	T	Benzene	0.947	0.854	0.792	0.773	0.831	0.815	0.793	0.848	0.832	6.55
42)	T	tert-Amyl methyl ether	0.736	0.617	0.623	0.623	0.614	0.623	0.621	0.638	0.637	6.39
43)	S	1,2-Dichloroethane-d4	0.322	0.325	0.329	0.333	0.335	0.326	0.331	0.334	0.329	1.48
44)	T	1,2-Dichloroethane	0.432	0.417	0.435	0.420	0.418	0.417	0.406	0.415	0.420	2.24

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1629226**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: VOA111**	**Ical Ref**	**: ICAL12787**
Calibration dates	**: 08/19/16 10:01 08/19/16 13:00**		

Calibration Files

L1 =V11160819B01.D L2 =V11160819B02.D L3 =V11160819B03.D L4 =V11160819B04.D L5 =V11160819B05.D

L6 =V11160819B06.D L7 =V11160819B07.D L8 =V11160819B08.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
47)	T	Methyl cyclohexane	0.364	0.306	0.289	0.295	0.331	0.325	0.320	0.349	0.323	8.01
48)	T	Trichloroethene	0.254	0.243	0.209	0.204	0.226	0.224	0.216	0.233	0.226	7.44
50)	T	Dibromomethane	0.137	0.135	0.134	0.136	0.132	0.137	0.137	0.144	0.137	2.42
51)	C	1,2-Dichloropropane	0.410	0.359	0.350	0.338	0.352	0.348	0.342	0.358	0.357	6.27
53)	T	2-Chloroethyl vinyl ether	0.213	0.168	0.187	0.197	0.185	0.196	0.197	0.198	0.193	6.80
54)	T	Bromodichloromethane	0.352	0.299	0.307	0.309	0.319	0.316	0.320	0.337	0.320	5.39
57)	T	1,4-Dioxane	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	11.23
58)	T	cis-1,3-Dichloropropene	0.368	0.330	0.354	0.349	0.366	0.370	0.370	0.389	0.362	4.89
59)	I	Chlorobenzene-d5	----------ISTD----------									
60)	S	Toluene-d8	1.353	1.329	1.350	1.397	1.368	1.373	1.371	1.361	1.363	1.47
61)	C	Toluene	0.975	0.807	0.709	0.727	0.783	0.762	0.740	0.764	0.784	10.65
62)	T	4-Methyl-2-pentanone	0.234	0.163	0.189	0.196	0.181	0.184	0.184	0.180	0.189	10.83
63)	T	Tetrachloroethene	0.358	0.280	0.260	0.267	0.298	0.283	0.279	0.293	0.290	10.45
65)	T	trans-1,3-Dichloropropene	0.525	0.439	0.471	0.492	0.481	0.496	0.497	0.498	0.487	5.13
67)	T	Ethyl methacrylate	0.405	0.329	0.376	0.390	0.382	0.395	0.395	0.389	0.383	6.13
68)	T	1,1,2-Trichloroethane	0.313	0.241	0.242	0.242	0.237	0.239	0.237	0.237	0.248	10.62
69)	T	Chlorodibromomethane	0.351	0.279	0.281	0.299	0.302	0.306	0.305	0.309	0.304	7.23
70)	T	1,3-Dichloropropane	0.601	0.463	0.447	0.464	0.450	0.460	0.447	0.446	0.472	11.17
71)	T	1,2-Dibromoethane	0.293	0.260	0.258	0.270	0.262	0.266	0.266	0.269	0.268	4.07
72)	T	2-Hexanone	0.264	0.201	0.237	0.250	0.250	0.247	0.247	0.230	0.241	7.89
73)	T	Chlorobenzene	1.102	0.837	0.777	0.794	0.823	0.826	0.805	0.825	0.849	12.30
74)	C	Ethylbenzene	1.798	1.562	1.395	1.422	1.535	1.509	1.472	1.516	1.526	8.10
75)	T	1,1,1,2-Tetrachloroethane	0.379	0.311	0.255	0.271	0.279	0.273	0.273	0.274	0.289	13.62
76)	T	p/m Xylene	0.700	0.575	0.519	0.537	0.568	0.550	0.523	0.525	0.562	10.60
77)	T	o Xylene	0.683	0.552	0.518	0.533	0.548	0.548	0.523	0.529	0.554	9.70
78)	T	Styrene	1.153	0.876	0.883	0.904	0.922	0.914	0.873	0.872	0.925	10.20
79)	I	1,4-Dichlorobenzene-d4	----------ISTD----------									
80)	T	Bromoform	0.493	0.372	0.414	0.404	0.402	0.422	0.438	0.417	0.420	8.38
82)	T	Isopropylbenzene	3.642	2.877	2.691	2.666	2.980	2.965	3.017	3.046	2.986	10.10
83)	S	4-Bromofluorobenzene	1.047	1.051	1.075	1.083	1.062	1.107	1.139	1.127	1.086	3.19
84)	T	Bromobenzene	0.888	0.687	0.661	0.677	0.682	0.700	0.729	0.724	0.719	10.06
85)	T	n-Propylbenzene	4.607	3.668	3.430	3.405	3.767	3.766	3.817	3.866	3.791	9.81
86)	T	1,4-Dichlorobutane	2.558	1.830	1.968	1.897	1.857	1.903	1.920	1.804	1.967	12.41
87)	T	1,1,2,2-Tetrachloroethane	1.015	0.742	0.729	0.719	0.710	0.735	0.752	0.735	0.767	13.19
88)	T	4-Ethyltoluene	3.851	3.133	2.910	2.839	3.155	3.130	3.142	3.165	3.166	9.58
89)	T	2-Chlorotoluene	3.348	2.730	2.513	2.446	2.634	2.654	2.685	2.682	2.712	10.11
90)	T	1,3,5-Trimethylbenzene	3.205	2.706	2.409	2.351	2.553	2.565	2.539	2.553	2.610	10.08
91)	T	1,2,3-Trichloropropane	0.806	0.583	0.593	0.564	0.555	0.568	0.577	0.552	0.600	14.11
92)	T	trans-1,4-Dichloro-2-b...	0.286	0.277	0.314	0.316	0.311	0.322	0.325	0.309	0.308	5.54
93)	T	4-Chlorotoluene	3.114	2.230	2.255	2.175	2.340	2.362	2.389	2.383	2.406	12.32

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1629226**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: VOA111**	**Ical Ref**	**: ICAL12787**
Calibration dates	**: 08/19/16 10:01 08/19/16 13:00**		

Calibration Files
L1 =V11160819B01.D L2 =V11160819B02.D L3 =V11160819B03.D L4 =V11160819B04.D L5 =V11160819B05.D
L6 =V11160819B06.D L7 =V11160819B07.D L8 =V11160819B08.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
94)	T	tert-Butylbenzene	2.541	1.985	1.797	1.751	1.962	1.942	1.942	1.979	1.987	12.08
97)	T	1,2,4-Trimethylbenzene	3.344	2.550	2.446	2.431	2.615	2.627	2.655	2.671	2.667	10.80
98)	T	sec-Butylbenzene	4.116	3.127	2.933	2.857	3.225	3.188	3.204	3.267	3.240	11.82
99)	T	p-Isopropyltoluene	3.043	2.417	2.273	2.214	2.461	2.476	2.501	2.525	2.489	10.04
100)	T	1,3-Dichlorobenzene	1.775	1.286	1.256	1.212	1.297	1.319	1.319	1.304	1.346	13.15
101)	T	1,4-Dichlorobenzene	1.682	1.317	1.263	1.229	1.292	1.303	1.307	1.288	1.335	10.71
102)	T	p-Diethylbenzene	2.025	1.548	1.487	1.431	1.620	1.605	1.624	1.650	1.624	11.00
103)	T	n-Butylbenzene	3.211	2.613	2.574	2.458	2.801	2.780	2.817	2.839	2.762	8.25
104)	T	1,2-Dichlorobenzene	1.644	1.259	1.205	1.186	1.203	1.226	1.252	1.236	1.276	11.81
105)	T	1,2,4,5-Tetramethylben...	3.212	2.548	2.565	2.529	2.698	2.758	2.814	2.814	2.742	8.13
106)	T	1,2-Dibromo-3-chloropr...	0.049	0.091	0.091	0.092	0.092	0.098	0.106	0.102	*L	0.9981
107)	T	1,3,5-Trichlorobenzene	1.360	1.095	1.072	1.015	1.111	1.112	1.128	1.099	1.124	9.03
108)	T	Hexachlorobutadiene	0.601	0.506	0.482	0.464	0.534	0.532	0.532	0.541	0.524	7.96
109)	T	1,2,4-Trichlorobenzene	1.065	0.936	0.916	0.872	0.920	0.938	0.928	0.896	0.934	6.14
110)	T	Naphthalene	2.608	1.993	1.988	1.946	1.918	1.983	2.070	1.997	2.063	10.88
111)	T	1,2,3-Trichlorobenzene	1.167	0.889	0.833	0.816	0.847	0.866	0.882	0.847	0.893	12.69

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1629226**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: QUIMBY**	**Ical Ref**	**: ICAL12824**
Calibration dates	**: 08/29/16 09:05 08/29/16 12:46**		

Calibration Files
L11 =VQ160829A03.D L1 =VQ160829A04.D L2 =VQ160829A05.D L3 =VQ160829A06.D L6 =VQ160829A08.D
L8 =VQ160829A09.D L10 =VQ160829A10.D

		Compound	L11	L1	L2	L3	L6	L8	L10	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------								
2)	TP	Dichlorodifluo		0.317	0.328	0.350	0.349	0.354	0.337	0.339	4.31
3)	TP	Chloromethane		0.578	0.530	0.541	0.516	0.527	0.519	0.535	4.25
4)	TP	Vinyl chloride	0.514	0.401	0.452	0.456	0.457	0.465	0.456	0.457	7.18
5)	TP	Bromomethane		0.197	0.219	0.229	0.261	0.274	0.283	0.244	13.93
6)	TP	Chloroethane		0.282	0.280	0.293	0.294	0.295	0.295	0.290	2.42
7)	TP	Trichlorofluor		0.477	0.482	0.504	0.495	0.520	0.510	0.498	3.30
8)	TP	Ethyl ether		0.152	0.149	0.148	0.156	0.146	0.144	0.149	2.85
10)	TP	1,1-Dichloroet		0.303	0.291	0.319	0.317	0.308	0.313	0.309	3.38
11)	TP	Carbon disulfide		1.113	0.955	0.983	0.995	1.006	1.002	1.009	5.38
12)	TP	Freon-113		0.252	0.267	0.283	0.287	0.291	0.285	0.277	5.40
13)	TP	Iodomethane		0.304	0.362	0.416	0.489	0.511	0.526	*L	0.9985
14)	TP	Acrolein		0.002	0.001	0.000	0.001	0.002	0.003	0.001#	67.15#
15)	TP	Methylene chlo		0.486	0.396	0.374	0.377	0.375	0.376	0.397	11.16
17)	TP	Acetone			0.089	0.056	0.047	0.042	0.043	*L	0.9980
18)	TP	trans-1,2-Dich		0.357	0.343	0.349	0.353	0.353	0.352	0.351	1.40
19)	TP	Methyl acetate		0.150	0.116	0.102	0.107	0.102	0.100	*L	0.9994
20)	TP	Methyl tert butyl ether		0.701	0.670	0.681	0.720	0.682	0.666	0.686	2.94
21)	TP	tert-Butyl alc		0.016	0.012	0.013	0.014	0.013	0.012	0.013#	10.90
22)	TP	Diisopropyl ether		1.152	1.188	1.187	1.236	1.179	1.158	1.183	2.53
23)	TP	1,1-Dichloroet		0.715	0.687	0.693	0.694	0.691	0.685	0.694	1.53
24)	TP	Halothane		0.212	0.222	0.230	0.237	0.238	0.239	0.230	4.64
25)	TP	Acrylonitrile			0.074	0.070	0.076	0.071	0.073	0.073	3.25
26)	TP	Ethyl tert-but		1.011	1.018	1.014	1.089	1.034	1.024	1.032	2.82
27)	TP	Vinyl acetate		0.458	0.439	0.449	0.442	0.434	0.433	0.442	2.15
28)	TP	cis-1,2-Dichlo		0.389	0.371	0.372	0.383	0.378	0.380	0.379	1.76
29)	TP	2,2-Dichloropr		0.583	0.581	0.603	0.607	0.614	0.610	0.600	2.38
30)	TP	Bromochloromet		0.134	0.141	0.139	0.146	0.142	0.143	0.141	2.85
31)	TP	Cyclohexane		0.696	0.658	0.702	0.701	0.702	0.688	0.691	2.49
32)	TP	Chloroform		0.618	0.622	0.632	0.633	0.623	0.623	0.625	0.97
33)	TP	Ethyl acetate		0.262	0.200	0.163	0.179	0.166	0.165	*L	0.9988
34)	TP	Carbon tetrach		0.450	0.443	0.482	0.504	0.511	0.511	0.484	6.30
35)	TP	Tetrahydrofuran		0.053	0.055	0.047	0.052	0.048	0.047	*LF	0.9981
36)	S	Dibromofluoromethane	0.188	0.188	0.189	0.195	0.191	0.193	0.190	0.191	1.44
37)	TP	1,1,1-Trichlor		0.575	0.556	0.582	0.603	0.602	0.603	0.587	3.34
39)	TP	2-Butanone			0.080	0.074	0.077	0.071	0.070	0.075#	5.67
40)	TP	1,1-Dichloropr		0.489	0.492	0.510	0.515	0.517	0.521	0.507	2.71
41)	TP	Benzene		1.610	1.557	1.598	1.576	1.549	1.536	1.571	1.85
42)	TP	Tertiary-Amyl Methyl Ether		0.779	0.806	0.789	0.858	0.810	0.804	0.808	3.40
43)	S	1,2-Dichloroethane-d4	0.220	0.221	0.222	0.225	0.223	0.219	0.214	0.221	1.63

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1629226**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: QUIMBY**	**Ical Ref**	**: ICAL12824**
Calibration dates	**: 08/29/16 09:05 08/29/16 12:46**		

Calibration Files
L11 =VQ160829A03.D L1 =VQ160829A04.D L2 =VQ160829A05.D L3 =VQ160829A06.D L6 =VQ160829A08.D
L8 =VQ160829A09.D L10 =VQ160829A10.D

		Compound	L11	L1	L2	L3	L6	L8	L10	Avg	%RSD
44)	TP	1,2-Dichloroet		0.410	0.437	0.429	0.450	0.436	0.435	0.433	3.06
47)	TP	Methyl cyclohe		0.596	0.589	0.640	0.664	0.657	0.658	0.634	5.22
48)	TP	Trichloroethene		0.418	0.401	0.409	0.410	0.410	0.417	0.411	1.50
50)	TP	Dibromomethane		0.164	0.158	0.162	0.170	0.165	0.166	0.164	2.56
51)	TP	1,2-Dichloropr		0.392	0.399	0.394	0.404	0.400	0.407	0.399	1.40
53)	TP	2-Chloroethyl		0.147	0.168	0.164	0.181	0.174	0.178	0.168	7.29
54)	TP	Bromodichlorom		0.437	0.440	0.451	0.484	0.481	0.490	0.464	5.14
57)	TP	1,4-Dioxane		0.002	0.002	0.002	0.002	0.002	0.001	0.002#	7.35
58)	TP	cis-1,3-Dichlo		0.540	0.556	0.554	0.593	0.588	0.604	0.573	4.53
59)	I	Chlorobenzene-d5	----------ISTD----------								
60)	S	Toluene-d8	1.417	1.407	1.416	1.394	1.355	1.343	1.328	1.380	2.70
61)	TP	Toluene		1.542	1.497	1.488	1.463	1.443	1.430	1.477	2.76
62)	TP	4-Methyl-2-pen		0.109	0.090	0.097	0.104	0.097	0.097	0.099#	6.65
63)	TP	Tetrachloroethene		0.523	0.514	0.527	0.516	0.514	0.519	0.519	1.01
65)	TP	trans-1,3-Dich		0.593	0.572	0.571	0.603	0.600	0.613	0.592	2.91
67)	TP	Ethyl methacry		0.413	0.451	0.442	0.484	0.453	0.453	0.449	5.09
68)	TP	1,1,2-Trichlor		0.276	0.264	0.259	0.264	0.257	0.262	0.264	2.52
69)	TP	Chlorodibromom		0.318	0.324	0.333	0.372	0.370	0.383	0.350	8.03
70)	TP	1,3-Dichloropr		0.576	0.574	0.561	0.563	0.550	0.563	0.565	1.66
71)	TP	1,2-Dibromoethane		0.307	0.309	0.292	0.310	0.305	0.313	0.306	2.33
72)	TP	2-Hexanone		0.221	0.187	0.176	0.180	0.168	0.165	0.183	11.21
73)	T	Chlorobenzene		1.541	1.556	1.519	1.519	1.502	1.489	1.521	1.62
74)	TP	Ethylbenzene		2.529	2.576	2.660	2.711	2.744	2.641	2.643	3.06
75)	T	1,1,1,2-Tetrac		0.450	0.441	0.441	0.472	0.474	0.483	0.460	3.99
76)	TP	p/m Xylene		0.799	0.798	0.839	0.849	0.894	0.868	0.841	4.53
77)	TP	o Xylene		0.734	0.772	0.798	0.806	0.848	0.830	0.798	5.11
78)	TP	Styrene		1.218	1.253	1.320	1.389	1.445	1.372	1.333	6.45
79)	I	1,4-Dichlorobenzene-d4	----------ISTD----------								
80)	TP	Bromoform		0.490	0.499	0.474	0.635	0.587	0.626	0.552	13.19
82)	TP	Isopropylbenzene		6.948	6.894	6.788	7.302	7.044	7.182	7.026	2.71
83)	S	4-Bromofluorobenzene	1.374	1.394	1.359	1.290	1.405	1.327	1.390	1.363	3.03
84)	TP	Bromobenzene		1.635	1.622	1.499	1.638	1.519	1.587	1.583	3.83
85)	TP	n-Propylbenzene		7.092	7.062	7.060	7.315	7.214	7.215	7.160	1.45
86)	TP	1,4-Dichlorobu		2.457	2.379	2.065	2.262	2.002	2.041	*L	0.9978
87)	TP	1,1,2,2-Tetrac		1.229	1.175	1.056	1.165	1.007	1.029	*L	0.9969
88)	TP	4-Ethyltoluene		5.633	5.600	5.689	5.758	5.746	5.741	5.695	1.15
89)	TP	2-Chlorotoluene		5.387	5.175	4.954	5.098	5.025	5.152	5.132	2.91
90)	TP	1,3,5-Trimethy		4.327	4.454	4.332	4.182	4.181	4.073	4.258	3.22
91)	TP	1,2,3-Trichlor		1.066	0.923	0.828	0.903	0.787	0.801	*L	0.9972
92)	TP	trans-1,4-Dich		0.427	0.436	0.395	0.478	0.418	0.421	*L	0.9969

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1629226**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: QUIMBY**	**Ical Ref**	**: ICAL12824**
Calibration dates	**: 08/29/16 09:05 08/29/16 12:46**		

Calibration Files
L11 =VQ160829A03.D L1 =VQ160829A04.D L2 =VQ160829A05.D L3 =VQ160829A06.D L6 =VQ160829A08.D
L8 =VQ160829A09.D L10 =VQ160829A10.D

		Compound	L11	L1	L2	L3	L6	L8	L10	Avg	%RSD
93)	TP	4-Chlorotoluene		4.512	4.470	4.278	4.488	4.432	4.520	4.450	2.03
94)	TP	tert-Butylbenzene		3.939	3.933	4.021	4.276	4.262	4.358	4.132	4.56
97)	TP	1,2,4-Trimethy		3.976	4.388	4.081	4.070	4.040	3.895	4.075	4.13
98)	TP	sec-Butylbenzene		5.432	5.552	5.781	6.180	6.143	6.136	5.871	5.61
99)	TP	p-Isopropyltol		4.122	4.333	4.557	4.742	4.725	4.597	4.513	5.35
100)	TP	1,3-Dichlorobe		2.629	2.554	2.505	2.598	2.539	2.573	2.566	1.71
101)	TP	1,4-Dichlorobe		2.426	2.431	2.310	2.434	2.379	2.391	2.395	2.00
102)	TP	p-Diethylbenzene		2.299	2.597	2.718	2.792	2.776	2.644	2.638	6.90
103)	TP	n-Butylbenzene		3.984	4.371	4.588	4.804	4.819	4.658	4.537	6.98
104)	TP	1,2-Dichlorobe		2.183	2.252	2.159	2.231	2.150	2.159	2.189	1.95
105)	TP	1,2,4,5-Tetram		4.075	4.587	4.042	3.206	2.863	2.742	*L	0.9924
106)	TP	1,2-Dibromo-3-		0.039	0.118	0.125	0.147	0.126	0.128	*L	0.9961
107)	TP	1,3,5-Trichlor		1.165	1.295	1.259	1.266	1.225	1.171	1.230	4.33
108)	TP	Hexachlorobuta		0.461	0.485	0.501	0.556	0.549	0.558	0.518	8.01
109)	TP	1,2,4-Trichlor		0.776	0.964	0.926	0.970	0.914	0.862	0.902	8.10
110)	TP	Naphthalene		1.828	1.871	1.714	1.658	1.514	1.346	1.655	11.94
111)	TP	1,2,3-Trichlor		0.673	0.808	0.764	0.788	0.725	0.669	0.738	7.97

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1629226**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: VOA100**	**Ical Ref**	**: ICAL12815**
Calibration dates	**: 08/29/16 20:22 08/29/16 23:29**		

Calibration Files
L1 =V00160829N03.D L2 =V00160829N04.D L3 =V00160829N05.D L4 =V00160829N06.D L5 =V00160829N07.D
L6 =V00160829N08.D L7 =V00160829N09.D L8 =V00160829N10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------									
2)	T	Dichlorodifluoromethane		0.162	0.169	0.190	0.219	0.212	0.208	0.198	0.194	11.24
3)	T	Chloromethane	0.473	0.325	0.254	0.247	0.262	0.255	0.261	0.247	*L	0.9993
4)	C	Vinyl chloride	0.258	0.266	0.269	0.286	0.302	0.299	0.303	0.283	0.283	6.20
5)	T	Bromomethane	0.487	0.386	0.320	0.306	0.311	0.295	0.282		*L	0.9985
6)	T	Chloroethane	0.233	0.251	0.245	0.265	0.290	0.283	0.215	0.192	0.247	13.43
7)	T	Trichlorofluoromethane	0.347	0.441	0.443	0.512	0.586	0.612	0.633	0.567	*L	0.9951
8)	T	Ethyl ether	0.204	0.206	0.207	0.209	0.214	0.213	0.234	0.240	0.216	6.32
10)	C	1,1-Dichloroethene	0.178	0.196	0.196	0.211	0.231	0.230	0.239	0.233	0.214	10.42
11)	T	Carbon disulfide	2.375	1.228	0.737	0.743	0.807	0.808	0.809	0.785	*L	0.9985
12)	T	Freon-113	0.106	0.168	0.177	0.200	0.229	0.224	0.231	0.224	*L	0.9981
14)	T	Acrolein	0.028	0.044	0.049	0.049	0.052	0.052	0.058	0.057	*L	0.9974
15)	T	Methylene chloride	0.252	0.236	0.246	0.247	0.254	0.250	0.267	0.257	0.251	3.60
17)	T	Acetone	0.275	0.153	0.098	0.095	0.099	0.096	0.105	0.103	*L	0.9976
18)	T	trans-1,2-Dichloroethene	0.244	0.233	0.236	0.246	0.260	0.260	0.275	0.271	0.253	6.20
19)	T	Methyl acetate	0.264	0.249	0.228	0.226	0.236	0.230	0.256	0.254	0.243	5.99
20)	T	Methyl tert-butyl ether	0.722	0.731	0.760	0.773	0.815	0.806	0.890	0.883	0.798	7.96
21)	T	tert-Butyl alcohol	0.053	0.052	0.053	0.053	0.057	0.055	0.063	0.063	0.056	7.95
22)	T	Diisopropyl ether	0.715	0.717	0.760	0.774	0.813	0.804	0.878	0.869	0.791	7.83
23)	T	1,1-Dichloroethane	0.421	0.416	0.419	0.432	0.453	0.446	0.476	0.466	0.441	5.14
24)	T	Halothane	0.151	0.164	0.162	0.174	0.189	0.190	0.198	0.193	0.178	9.67
25)	T	Acrylonitrile	0.102	0.115	0.121	0.120	0.128	0.125	0.138	0.135	0.123	9.25
26)	T	Ethyl tert-butyl ether	0.675	0.712	0.782	0.797	0.841	0.838	0.936	0.942	0.815	11.66
27)	T	Vinyl acetate	0.475	0.536	0.625	0.649	0.693	0.701	0.792	0.803	*L	0.9950
28)	T	cis-1,2-Dichloroethene	0.257	0.260	0.270	0.276	0.292	0.289	0.309	0.301	0.282	6.75
29)	T	2,2-Dichloropropane	0.316	0.318	0.326	0.346	0.377	0.375	0.392	0.382	0.354	8.76
30)	T	Bromochloromethane	0.146	0.144	0.149	0.151	0.160	0.157	0.165	0.160	0.154	4.98
31)	T	Cyclohexane	0.199	0.268	0.293	0.340	0.395	0.393	0.404	0.391	*L	0.9973
32)	C	Chloroform	0.420	0.437	0.449	0.457	0.477	0.474	0.500	0.488	0.463	5.84
33)	T	Ethyl acetate	0.964	0.592	0.361	0.354	0.374	0.360	0.398	0.367	*L	0.9973
34)	T	Carbon tetrachloride	0.257	0.303	0.328	0.361	0.402	0.400	0.410	0.399	*L	0.9986
35)	T	Tetrahydrofuran	0.110	0.109	0.115	0.112	0.118	0.116	0.127	0.123	0.116	5.29
36)	S	Dibromofluoromethane	0.276	0.276	0.283	0.280	0.282	0.285	0.289	0.295	0.283	2.30
37)	T	1,1,1-Trichloroethane	0.340	0.351	0.356	0.380	0.412	0.409	0.424	0.411	0.385	8.51
39)	T	2-Butanone	0.161	0.164	0.158	0.158	0.168	0.165	0.183	0.180	0.167	5.77
40)	T	1,1-Dichloropropene	0.247	0.260	0.272	0.293	0.327	0.323	0.333	0.323	0.297	11.46
41)	T	Benzene	0.946	0.916	0.937	0.961	1.017	1.002	1.067	1.045	0.986	5.53
42)	T	tert-Amyl methyl ether	0.629	0.659	0.722	0.746	0.792	0.788	0.867	0.858	0.758	11.36
43)	S	1,2-Dichloroethane-d4	0.277	0.281	0.284	0.278	0.284	0.290	0.298	0.312	0.288	4.11
44)	T	1,2-Dichloroethane	0.339	0.339	0.350	0.350	0.366	0.360	0.386	0.377	0.358	4.76

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1629226**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: VOA100**	**Ical Ref**	**: ICAL12815**
Calibration dates	**: 08/29/16 20:22 08/29/16 23:29**		

Calibration Files
L1 =V00160829N03.D L2 =V00160829N04.D L3 =V00160829N05.D L4 =V00160829N06.D L5 =V00160829N07.D
L6 =V00160829N08.D L7 =V00160829N09.D L8 =V00160829N10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
47)	T	Methyl cyclohexane	0.184	0.274	0.295	0.347	0.412	0.407	0.421	0.411	*L	0.9968
48)	T	Trichloroethene	0.251	0.240	0.249	0.259	0.278	0.276	0.292	0.287	0.267	7.17
50)	T	Dibromomethane	0.163	0.175	0.182	0.182	0.190	0.189	0.204	0.198	0.185	6.97
51)	C	1,2-Dichloropropane	0.236	0.231	0.243	0.247	0.258	0.257	0.275	0.269	0.252	6.14
53)	T	2-Chloroethyl vinyl ether	0.023	0.044	0.053	0.046	0.056	0.046	0.043	0.039	*Q	0.9972
54)	T	Bromodichloromethane	0.318	0.333	0.351	0.355	0.371	0.366	0.395	0.385	0.359	7.09
57)	T	1,4-Dioxane	0.004	0.004	0.005	0.005	0.005	0.005	0.005	0.005	0.005	10.24
58)	T	cis-1,3-Dichloropropene	0.331	0.364	0.397	0.412	0.436	0.432	0.470	0.459	0.413	11.48
59)	I	Chlorobenzene-d5	----------ISTD----------									
60)	S	Toluene-d8	1.142	1.150	1.131	1.122	1.122	1.107	1.089	1.086	1.119	2.07
61)	C	Toluene	0.718	0.704	0.692	0.710	0.749	0.730	0.775	0.747	0.728	3.79
62)	T	4-Methyl-2-pentanone		0.131	0.149	0.153	0.167	0.164	0.182	0.178	0.161	11.02
63)	T	Tetrachloroethene	0.297	0.308	0.319	0.344	0.377	0.376	0.391	0.377	0.349	10.52
65)	T	trans-1,3-Dichloropropene	0.369	0.395	0.433	0.446	0.468	0.463	0.502	0.485	0.445	10.11
67)	T	Ethyl methacrylate	0.308	0.366	0.419	0.442	0.475	0.477	0.537	0.528	*L	0.9963
68)	T	1,1,2-Trichloroethane	0.209	0.232	0.234	0.236	0.245	0.240	0.262	0.256	0.239	6.71
69)	T	Chlorodibromomethane	0.304	0.347	0.361	0.365	0.386	0.376	0.404	0.386	0.366	8.33
70)	T	1,3-Dichloropropane	0.426	0.439	0.460	0.462	0.479	0.465	0.499	0.475	0.463	4.91
71)	T	1,2-Dibromoethane	0.259	0.282	0.298	0.307	0.317	0.311	0.333	0.317	0.303	7.75
72)	T	2-Hexanone	0.226	0.250	0.273	0.283	0.304	0.304	0.335	0.324	0.287	12.86
73)	T	Chlorobenzene	0.855	0.834	0.859	0.868	0.914	0.894	0.951	0.912	0.886	4.39
74)	C	Ethylbenzene	1.270	1.224	1.287	1.356	1.452	1.434	1.528	1.473	1.378	7.96
75)	T	1,1,1,2-Tetrachloroethane	0.305	0.322	0.330	0.340	0.354	0.345	0.367	0.347	0.339	5.69
76)	T	p/m Xylene	0.476	0.498	0.531	0.557	0.593	0.589	0.635	0.623	0.563	10.21
77)	T	o Xylene	0.455	0.480	0.529	0.552	0.585	0.582	0.640	0.630	0.557	11.88
78)	T	Styrene	0.716	0.825	0.928	0.972	1.043	1.057	1.181	1.155	*L	0.9965
79)	I	1,4-Dichlorobenzene-d4	----------ISTD----------									
80)	T	Bromoform	0.486	0.479	0.508	0.528	0.557	0.560	0.621	0.596	0.542	9.43
82)	T	Isopropylbenzene	1.873	1.990	2.098	2.238	2.433	2.446	2.609	2.495	2.273	11.64
83)	S	4-Bromofluorobenzene	0.791	0.782	0.771	0.761	0.753	0.758	0.756	0.743	0.764	2.07
84)	T	Bromobenzene	0.644	0.636	0.659	0.669	0.700	0.687	0.735	0.707	0.680	4.97
85)	T	n-Propylbenzene	2.350	2.342	2.455	2.601	2.831	2.846	3.063	2.983	2.684	10.62
86)	T	1,4-Dichlorobutane	0.784	0.825	0.825	0.840	0.883	0.893	0.987	0.949	0.873	7.84
87)	T	1,1,2,2-Tetrachloroethane	0.780	0.731	0.700	0.708	0.733	0.725	0.776	0.737	0.736	3.88
88)	T	4-Ethyltoluene	2.107	2.114	2.223	2.314	2.484	2.480	2.611	2.512	2.356	8.20
89)	T	2-Chlorotoluene	1.709	1.626	1.693	1.683	1.651	1.677	1.776	1.746	1.695	2.88
90)	T	1,3,5-Trimethylbenzene	1.730	1.778	1.870	1.927	2.066	2.062	2.230	2.190	1.981	9.32
91)	T	1,2,3-Trichloropropane	0.610	0.603	0.566	0.569	0.605	0.595	0.688	0.665	0.613	7.05
92)	T	trans-1,4-Dichloro-2-b...	0.179	0.213	0.222	0.230	0.245	0.246	0.267	0.254	0.232	11.95
93)	T	4-Chlorotoluene	1.479	1.493	1.548	1.588	1.670	1.659	1.753	1.702	1.612	6.20

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1629226**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: VOA100**	**Ical Ref**	**: ICAL12815**
Calibration dates	**: 08/29/16 20:22 08/29/16 23:29**		

Calibration Files
L1 =V00160829N03.D L2 =V00160829N04.D L3 =V00160829N05.D L4 =V00160829N06.D L5 =V00160829N07.D
L6 =V00160829N08.D L7 =V00160829N09.D L8 =V00160829N10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
94)	T	tert-Butylbenzene	1.401	1.471	1.557	1.657	1.794	1.775	1.889	1.812	1.670	10.60
97)	T	1,2,4-Trimethylbenzene	1.670	1.705	1.894	1.943	2.082	2.064	2.225	2.167	1.969	10.37
98)	T	sec-Butylbenzene	1.958	2.126	2.247	2.423	2.670	2.656	2.819	2.722	2.453	12.80
99)	T	p-Isopropyltoluene	1.652	1.762	1.991	2.117	2.321	2.303	2.467	2.409	2.128	14.23
100)	T	1,3-Dichlorobenzene	1.193	1.174	1.237	1.260	1.328	1.302	1.393	1.352	1.280	6.03
101)	T	1,4-Dichlorobenzene	1.386	1.232	1.263	1.265	1.333	1.297	1.383	1.345	1.313	4.39
102)	T	p-Diethylbenzene	1.061	1.087	1.225	1.298	1.414	1.401	1.513	1.495	1.312	13.31
103)	T	n-Butylbenzene	1.498	1.529	1.700	1.810	2.017	2.013	2.139	2.108	1.852	13.77
104)	T	1,2-Dichlorobenzene	1.117	1.138	1.191	1.200	1.256	1.238	1.340	1.303	1.223	6.29
105)	T	1,2,4,5-Tetramethylben...	1.500	1.644	1.973	2.032	2.202	2.211	2.491	2.424	*L	0.9964
106)	T	1,2-Dibromo-3-chloropr...	0.146	0.151	0.165	0.166	0.176	0.177	0.198	0.189	0.171	10.32
107)	T	1,3,5-Trichlorobenzene	0.863	0.931	0.973	0.972	1.052	1.028	1.109	1.076	1.000	8.13
108)	T	Hexachlorobutadiene	0.367	0.350	0.397	0.415	0.476	0.456	0.508	0.489	0.432	13.52
109)	T	1,2,4-Trichlorobenzene	0.788	0.777	0.851	0.858	0.920	0.913	0.990	0.962	0.882	8.75
110)	T	Naphthalene	1.933	1.993	2.220	2.251	2.377	2.413	2.701	2.638	2.316	11.87
111)	T	1,2,3-Trichlorobenzene	0.783	0.767	0.833	0.835	0.892	0.885	0.967	0.944	0.863	8.32

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1629226**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: VOA116**	**Ical Ref**	**: ICAL12812**
Calibration dates	**: 08/29/16 09:00 08/29/16 11:58**		

Calibration Files
L11 =V16160829A03.D L1 =V16160829A04.D L2 =V16160829A05.D L3 =V16160829A06.D L6 =V16160829A08.D
L8 =V16160829A09.D L10 =V16160829A10.D

		Compound	L11	L1	L2	L3	L6	L8	L10	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------								
2)	TP	Dichlorodifluo		0.275	0.255	0.254	0.266	0.232	0.213	0.249	9.11
3)	TP	Chloromethane		0.308	0.277	0.242	0.264	0.229	0.220	0.257	12.92
4)	TC	Vinyl chloride	0.317	0.288	0.270	0.265	0.314	0.281	0.269	0.286	7.40
5)	TP	Bromomethane		0.181	0.135	0.149	0.207	0.206	0.213	*L	0.9976
6)	TP	Chloroethane		0.175	0.143	0.139	0.153	0.148	0.146	0.151	8.41
7)	TP	Trichlorofluor		0.465	0.470	0.453	0.478	0.435	0.409	0.452	5.72
8)	TP	Ethyl ether		0.120	0.107	0.093	0.102	0.106	0.108	0.106	8.34
10)	TP	1,1-Dichloroet		0.212	0.215	0.209	0.215	0.210	0.224	0.214	2.48
11)	TP	Carbon disulfide		0.758	0.705	0.667	0.670	0.635	0.668	0.684	6.26
12)	TP	Freon-113		0.235	0.229	0.220	0.219	0.208	0.217	0.221	4.32
13)	TP	Iodomethane			0.275	0.324	0.393	0.364	0.380	0.347	13.82
14)	TP	Acrolein			0.014	0.015	0.018	0.019	0.020	0.017#	13.56
15)	TP	Methylene chlo			0.261	0.234	0.231	0.221	0.235	0.236	6.32
17)	TP	Acetone		0.119	0.040	0.030	0.025	0.026	0.026	*L	0.9993
18)	TP	trans-1,2-Dich		0.241	0.245	0.231	0.248	0.233	0.251	0.241	3.30
19)	TP	Methyl acetate		0.097	0.077	0.067	0.070	0.070	0.068	*L	0.9997
20)	TP	Methyl tert butyl ether		0.397	0.425	0.437	0.489	0.484	0.487	0.453	8.55
21)	TP	tert-Butyl alc			0.008	0.007	0.009	0.010	0.009	0.008#	9.24
22)	TP	Diisopropyl ether		0.445	0.470	0.484	0.538	0.513	0.526	0.496	7.22
23)	TC	1,1-Dichloroet		0.413	0.409	0.407	0.404	0.367	0.382	0.397	4.62
24)	TP	Halothane		0.184	0.179	0.186	0.184	0.175	0.188	0.183	2.66
25)	TP	Acrylonitrile		0.027	0.045	0.040	0.043	0.044	0.045	*L	0.9996
26)	TP	Ethyl tert-but		0.413	0.478	0.488	0.557	0.533	0.548	0.503	10.80
27)	TP	Vinyl acetate		0.214	0.229	0.261	0.292	0.296	0.292	0.264	13.40
28)	TP	cis-1,2-Dichlo		0.285	0.273	0.260	0.276	0.257	0.272	0.270	3.86
29)	TP	2,2-Dichloropr		0.387	0.368	0.375	0.393	0.353	0.355	0.372	4.41
30)	TP	Bromochloromet		0.125	0.141	0.133	0.131	0.118	0.123	0.129	6.41
31)	TP	Cyclohexane		0.319	0.295	0.335	0.370	0.347	0.361	0.338	8.23
32)	TC	Chloroform		0.559	0.513	0.465	0.450	0.401	0.414	0.467	12.87
33)	TP	Ethyl acetate		0.077	0.109	0.102	0.105	0.106	0.103	0.100	11.72
34)	TP	Carbon tetrach		0.446	0.439	0.422	0.428	0.377	0.381	0.415	7.18
35)	TP	Tetrahydrofuran		0.024	0.027	0.033	0.035	0.036	0.035	*L	0.9996
36)	S	Dibromofluoromethane	0.311	0.302	0.293	0.291	0.276	0.264	0.272	0.287	5.93
37)	TP	1,1,1-Trichlor		0.432	0.418	0.432	0.442	0.391	0.396	0.419	5.02
39)	TP	2-Butanone		0.083	0.043	0.042	0.044	0.044	0.043	*L	0.9996
40)	TP	1,1-Dichloropr		0.261	0.276	0.301	0.334	0.306	0.320	0.300	9.04
41)	TP	Benzene		0.935	0.957	0.950	0.979	0.908	0.948	0.946	2.52
42)	TP	Tertiary-Amyl Methyl Ether		0.400	0.412	0.440	0.528	0.521	0.530	0.472	12.96
43)	S	1,2-Dichloroethane-d4	0.289	0.291	0.295	0.272	0.260	0.253	0.239	0.271	7.89

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1629226**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: VOA116**	**Ical Ref**	**: ICAL12812**
Calibration dates	**: 08/29/16 09:00 08/29/16 11:58**		

Calibration Files
L11 =V16160829A03.D L1 =V16160829A04.D L2 =V16160829A05.D L3 =V16160829A06.D L6 =V16160829A08.D
L8 =V16160829A09.D L10 =V16160829A10.D

		Compound	L11	L1	L2	L3	L6	L8	L10	Avg	%RSD
44)	T	1,2-Dichloroet		0.325	0.286	0.277	0.296	0.258	0.252	0.282	9.51
47)	TP	Methyl cyclohe		0.323	0.345	0.377	0.426	0.404	0.421	0.383	10.94
48)	TP	Trichloroethene		0.280	0.276	0.273	0.279	0.255	0.268	0.272	3.44
50)	TP	Dibromomethane		0.142	0.150	0.129	0.137	0.131	0.130	0.137	6.12
51)	TC	1,2-Dichloropr		0.212	0.216	0.209	0.244	0.226	0.232	0.223	6.02
53)	TP	2-Chloroethyl		0.039	0.059	0.060	0.080	0.084	0.083	*L	0.9983
54)	TP	Bromodichlorom		0.391	0.390	0.352	0.342	0.309	0.310	0.349	10.38
57)	TP	1,4-Dioxane		0.001	0.001	0.001	0.001	0.001	0.001	0.001#	6.74
58)	TP	cis-1,3-Dichlo		0.339	0.318	0.339	0.395	0.395	0.399	0.364	9.87
59)	I	Chlorobenzene-d5	----------ISTD----------								
60)	S	Toluene-d8	1.253	1.244	1.261	1.250	1.179	1.244	1.233	1.238	2.22
61)	TC	Toluene		0.796	0.783	0.793	0.800	0.764	0.808	0.791	1.97
62)	TP	4-Methyl-2-pen		0.023	0.046	0.047	0.055	0.059	0.059	*L	0.9985
63)	TP	Tetrachloroethene		0.434	0.445	0.430	0.437	0.414	0.434	0.432	2.43
65)	TP	trans-1,3-Dich		0.353	0.359	0.374	0.404	0.387	0.393	0.378	5.29
67)	TP	Ethyl methacry		0.180	0.208	0.218	0.268	0.278	0.279	*L	0.9988
68)	TP	1,1,2-Trichlor		0.195	0.200	0.189	0.190	0.185	0.188	0.191	2.82
69)	TP	Chlorodibromom		0.332	0.328	0.327	0.333	0.320	0.322	0.327	1.65
70)	TP	1,3-Dichloropr		0.398	0.391	0.379	0.392	0.380	0.384	0.387	1.96
71)	TP	1,2-Dibromoethane		0.224	0.238	0.230	0.242	0.241	0.239	0.236	3.05
72)	TP	2-Hexanone		0.025	0.065	0.071	0.085	0.095	0.090	*L	0.9975
73)	TP	Chlorobenzene		0.960	0.896	0.885	0.943	0.893	0.917	0.916	3.29
74)	TC	Ethylbenzene		1.262	1.332	1.484	1.595	1.475	1.493	1.440	8.43
75)	TP	1,1,1,2-Tetrac		0.354	0.364	0.352	0.353	0.328	0.337	0.348	3.74
76)	TP	p/m Xylene		0.466	0.508	0.616	0.661	0.614	0.633	0.583	13.31
77)	TP	o Xylene		0.510	0.534	0.610	0.663	0.592	0.613	0.587	9.59
78)	TP	Styrene		0.712	0.836	0.978	1.070	0.966	0.959	0.920	13.74
79)	I	1,4-Dichlorobenzene-d4	----------ISTD----------								
80)	TP	Bromoform		0.468	0.411	0.358	0.360	0.375	0.385	0.393	10.56
82)	TP	Isopropylbenzene		2.238	2.264	2.556	2.792	2.684	2.758	2.549	9.59
83)	S	4-Bromofluorobenzene	0.769	0.753	0.770	0.734	0.700	0.737	0.742	0.744	3.22
84)	TP	Bromobenzene		0.818	0.729	0.692	0.722	0.703	0.733	0.733	6.09
85)	TP	n-Propylbenzene		2.839	2.723	3.047	3.284	3.112	3.106	3.018	6.74
86)	TP	1,4-Dichlorobu		0.653	0.604	0.583	0.563	0.564	0.556	0.587	6.24
87)	TP	1,1,2,2-Tetrac		0.538	0.473	0.444	0.427	0.448	0.443	0.462	8.62
88)	TP	4-Ethyltoluene		2.156	2.343	2.645	2.832	2.697	2.754	2.571	10.26
89)	TP	2-Chlorotoluene		1.966	2.091	2.157	2.176	2.055	2.133	2.096	3.70
90)	TP	1,3,5-Trimethy		1.716	1.943	2.196	2.299	2.180	2.243	2.096	10.62
91)	TP	1,2,3-Trichlor		0.482	0.392	0.349	0.344	0.348	0.343	0.376	14.58
92)	TP	trans-1,4-Dich			0.112	0.118	0.108	0.111	0.107	0.111	3.81

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1629226**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: VOA116**	**Ical Ref**	**: ICAL12812**
Calibration dates	**: 08/29/16 09:00 08/29/16 11:58**		

Calibration Files
L11 =V16160829A03.D L1 =V16160829A04.D L2 =V16160829A05.D L3 =V16160829A06.D L6 =V16160829A08.D
L8 =V16160829A09.D L10 =V16160829A10.D

	Compound	L11	L1	L2	L3	L6	L8	L10	Avg	%RSD
93) TP	4-Chlorotoluene		1.631	1.732	1.793	1.927	1.821	1.854	1.793	5.70
94) TP	tert-Butylbenzene		1.404	1.606	1.852	2.079	1.975	2.021	1.823	14.55
97) TP	1,2,4-Trimethy		1.679	2.194	2.141	2.762	2.623	2.648	*L	0.9989
98) TP	sec-Butylbenzene		2.146	2.353	3.314	3.009	2.878	2.812	*L	0.9986
99) TP	p-Isopropyltol		1.720	1.891	2.241	2.588	2.440	2.452	*L	0.9992
100) TP	1,3-Dichlorobe		1.452	1.403	1.426	1.469	1.396	1.430	1.429	1.96
101) TP	1,4-Dichlorobe		1.468	1.428	1.386	1.448	1.367	1.415	1.419	2.66
102) TP	p-Diethylbenzene		1.032	1.073	1.310	1.567	1.503	1.502	*L	0.9992
103) TP	n-Butylbenzene		1.596	1.680	1.955	2.173	2.046	1.990	1.907	11.66
104) TP	1,2-Dichlorobe		1.198	1.246	1.269	1.346	1.267	1.284	1.269	3.83
105) TP	1,2,4,5-Tetram		1.313	1.310	1.638	2.230	2.130	2.087	*L	0.9980
106) TP	1,2-Dibromo-3-		0.071	0.080	0.075	0.084	0.088	0.084	0.080	7.90
107) TP	1,3,5-Trichlor		0.943	0.851	0.927	1.030	0.989	0.995	0.956	6.62
108) TP	Hexachlorobuta		0.393	0.303	0.299	0.339	0.325	0.318	0.329	10.46
109) TP	1,2,4-Trichlor		0.767	0.645	0.701	0.889	0.875	0.877	0.792	13.14
110) TP	Naphthalene		1.051	1.020	1.141	1.604	1.661	1.602	*L	0.9977
111) TP	1,2,3-Trichlor		0.603	0.567	0.632	0.774	0.767	0.762	0.684	13.75

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814	
Instrument ID	: VOA111	Calibration Date	: 09/16/16 08:23	
Lab File ID	: V11160916A03	Init. Calib. Date(s)	: 08/19/16	08/19/16
Sample No	: WG932865-2	Init. Calib. Times	: 10:01	13:00
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	137	0
Dichlorodifluoromethane	0.16	0.116	-	27.5*	20	115	0
Chloromethane	20	12.529	-	37.4*	20	94	0
Vinyl chloride	0.277	0.186	-	32.9*	20	105	0
Bromomethane	0.103	0.119	-	-15.5	20	175	0
Chloroethane	0.118	0.103	-	12.7	20	125	0
Trichlorofluoromethane	0.301	0.358	-	-18.9	20	180	0
Ethyl ether	0.108	0.113	-	-4.6	20	135	0
1,1-Dichloroethene	0.16	0.162	-	-1.3	20	149	0
Carbon disulfide	20	18.811	-	5.9	20	141	0
Freon-113	0.158	0.157	-	0.6	20	147	0
Acrolein	0.045	0.028	-	37.8*	20	83	0
Methylene chloride	20	20.246	-	-1.2	20	149	0
Acetone	20	17.519	-	12.4	20	119	0
trans-1,2-Dichloroethene	0.193	0.186	-	3.6	20	139	0
Methyl acetate	0.163	0.131	-	19.6	20	104	0
Methyl tert-butyl ether	0.609	0.681	-	-11.8	20	152	0
tert-Butyl alcohol	100	68.332	-	31.7*	20	92	0
Diisopropyl ether	1.058	0.937	-	11.4	20	122	0
1,1-Dichloroethane	0.556	0.46	-	17.3	20	119	0
Halothane	0.135	0.131	-	3	20	141	0
Acrylonitrile	0.114	0.074	-	35.1*	20	86	0
Ethyl tert-butyl ether	1.206	0.95	-	21.2*	20	110	0
Vinyl acetate	0.559	0.53	-	5.2	20	123	0
cis-1,2-Dichloroethene	0.222	0.229	-	-3.2	20	147	0
2,2-Dichloropropane	0.331	0.411	-	-24.2*	20	185	0
Bromochloromethane	0.094	0.088	-	6.4	20	132	0
Cyclohexane	0.631	0.396	-	37.2*	20	94	0
Chloroform	0.405	0.486	-	-20	20	172	0
Ethyl acetate	20	10.896	-	45.5*	20	92	0
Carbon tetrachloride	0.27	0.325	-	-20.4*	20	180	0
Tetrahydrofuran	20	16.26	-	18.7	20	98	0
Dibromofluoromethane	0.226	0.24	-	-6.2	20	140	0
1,1,1-Trichloroethane	0.349	0.421	-	-20.6*	20	187	0
2-Butanone	0.111	0.09	-	18.9	20	118	0
1,1-Dichloropropene	0.272	0.294	-	-8.1	20	162	0
Benzene	0.832	0.891	-	-7.1	20	154	0
tert-Amyl methyl ether	0.637	0.723	-	-13.5	20	159	0
1,2-Dichloroethane-d4	0.329	0.384	-	-16.7	20	160	0
1,2-Dichloroethane	0.42	0.444	-	-5.7	20	140	0
Methyl cyclohexane	0.323	0.317	-	1.9	20	150	0
Trichloroethene	0.226	0.229	-	-1.3	20	150	0
Dibromomethane	0.137	0.15	-	-9.5	20	153	0
1,2-Dichloropropane	0.357	0.263	-	26.3*	20	103	0
2-Chloroethyl vinyl ether	0.193	0.134	-	30.6*	20	98	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814	
Instrument ID	: VOA111	Calibration Date	: 09/16/16 08:23	
Lab File ID	: V11160916A03	Init. Calib. Date(s)	: 08/19/16	08/19/16
Sample No	: WG932865-2	Init. Calib. Times	: 10:01	13:00
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Bromodichloromethane	0.32	0.378	-	-18.1	20	169	0
1,4-Dioxane	0.00224	0.00181	-	19.2	20	112	0
cis-1,3-Dichloropropene	0.362	0.393	-	-8.6	20	152	0
Chlorobenzene-d5	1	1	-	0	20	124	0
Toluene-d8	1.363	1.494	-	-9.6	20	137	0
Toluene	0.784	0.862	-	-9.9	20	150	0
4-Methyl-2-pentanone	0.189	0.133	-	29.6*	20	87	0
Tetrachloroethene	0.29	0.309	-	-6.6	20	147	0
trans-1,3-Dichloropropene	0.487	0.589	-	-20.9*	20	155	0
Ethyl methacrylate	0.383	0.422	-	-10.2	20	139	0
1,1,2-Trichloroethane	0.248	0.265	-	-6.9	20	135	0
Chlorodibromomethane	0.304	0.325	-	-6.9	20	143	0
1,3-Dichloropropane	0.472	0.516	-	-9.3	20	143	0
1,2-Dibromoethane	0.268	0.292	-	-9	20	140	-.01
2-Hexanone	0.241	0.218	-	9.5	20	114	0
Chlorobenzene	0.849	0.857	-	-0.9	20	136	0
Ethylbenzene	1.526	1.724	-	-13	20	153	0
1,1,1,2-Tetrachloroethane	0.289	0.304	-	-5.2	20	147	0
p/m Xylene	0.562	0.601	-	-6.9	20	143	0
o Xylene	0.554	0.597	-	-7.8	20	143	0
Styrene	0.925	1.007	-	-8.9	20	141	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	126	0
Bromoform	0.42	0.46	-	-9.5	20	140	0
Isopropylbenzene	2.986	3.192	-	-6.9	20	150	0
4-Bromofluorobenzene	1.086	1.207	-	-11.1	20	142	0
Bromobenzene	0.719	0.74	-	-2.9	20	141	0
n-Propylbenzene	3.791	4.038	-	-6.5	20	148	0
1,4-Dichlorobutane	1.967	1.545	-	21.5*	20	99	0
1,1,2,2-Tetrachloroethane	0.767	0.781	-	-1.8	20	135	0
4-Ethyltoluene	3.166	3.226	-	-1.9	20	140	0
2-Chlorotoluene	2.712	3.087	-	-13.8	20	155	0
1,3,5-Trimethylbenzene	2.61	2.805	-	-7.5	20	147	0
1,2,3-Trichloropropane	0.6	0.667	-	-11.2	20	142	0
trans-1,4-Dichloro-2-buten	0.308	0.266	-	13.6	20	107	0
4-Chlorotoluene	2.406	2.692	-	-11.9	20	151	0
tert-Butylbenzene	1.987	2.027	-	-2	20	142	0
1,2,4-Trimethylbenzene	2.667	2.91	-	-9.1	20	150	0
sec-Butylbenzene	3.24	3.269	-	-0.9	20	141	0
p-Isopropyltoluene	2.489	2.476	-	0.5	20	137	0
1,3-Dichlorobenzene	1.346	1.276	-	5.2	20	128	0
1,4-Dichlorobenzene	1.335	1.288	-	3.5	20	129	0
p-Diethylbenzene	1.624	1.469	-	9.5	20	125	0
n-Butylbenzene	2.762	2.887	-	-4.5	20	142	0
1,2-Dichlorobenzene	1.276	1.239	-	2.9	20	130	0
1,2,4,5-Tetramethylbenzene	2.742	2.664	-	2.8	20	131	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814	
Instrument ID	: VOA111	Calibration Date	: 09/16/16 08:23	
Lab File ID	: V11160916A03	Init. Calib. Date(s)	: 08/19/16	08/19/16
Sample No	: WG932865-2	Init. Calib. Times	: 10:01	13:00
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dibromo-3-chloropropan	20	19.291	-	3.5	20	131	0
1,3,5-Trichlorobenzene	1.124	1.09	-	3	20	128	0
Hexachlorobutadiene	0.524	0.574	-	-9.5	20	150	0
1,2,4-Trichlorobenzene	0.934	0.977	-	-4.6	20	135	0
Naphthalene	2.063	1.824	-	11.6	20	116	0
1,2,3-Trichlorobenzene	0.893	0.896	-	-0.3	20	136	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814	
Instrument ID	: VOA100	Calibration Date	: 09/16/16 09:14	
Lab File ID	: V00160916A02	Init. Calib. Date(s)	: 08/29/16	08/29/16
Sample No	: WG932751-2	Init. Calib. Times	: 20:22	23:29
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	153	0
Dichlorodifluoromethane	0.194	0.217	-	-11.9	20	197	0
Chloromethane	20	21.027	-	-5.1	20	166	0
Vinyl chloride	0.283	0.338	-	-19.4	20	193	0
Bromomethane	20	19.653	-	1.7	20	143	0
Chloroethane	0.247	0.263	-	-6.5	20	164	0
Trichlorofluoromethane	20	18.224	-	8.9	20	179	0
Ethyl ether	0.216	0.194	-	10.2	20	144	0
1,1-Dichloroethene	0.214	0.24	-	-12.1	20	188	0
Carbon disulfide	20	36.67	-	-83.4*	20	314	0
Freon-113	20	21.678	-	-8.4	20	204	0
Acrolein	20	20.079	-	-0.4	20	169	0
Methylene chloride	0.251	0.274	-	-9.2	20	171	0
Acetone	20	26.736	-	-33.7*	20	222	0
trans-1,2-Dichloroethene	0.253	0.265	-	-4.7	20	172	0
Methyl acetate	0.243	0.237	-	2.5	20	159	0
Methyl tert-butyl ether	0.798	0.782	-	2	20	158	0
tert-Butyl alcohol	0.056	0.061	-	-8.9	20	177	0
Diisopropyl ether	0.791	0.8	-	-1.1	20	161	0
1,1-Dichloroethane	0.441	0.488	-	-10.7	20	179	0
Halothane	0.178	0.182	-	-2.2	20	172	0
Acrylonitrile	0.123	0.132	-	-7.3	20	168	0
Ethyl tert-butyl ether	0.815	0.856	-	-5	20	168	0
Vinyl acetate	20	18.116	-	9.4	20	163	0
cis-1,2-Dichloroethene	0.282	0.284	-	-0.7	20	161	0
2,2-Dichloropropane	0.354	0.388	-	-9.6	20	182	0
Bromochloromethane	0.154	0.143	-	7.1	20	147	0
Cyclohexane	20	23.316	-	-16.6	20	230	0
Chloroform	0.463	0.485	-	-4.8	20	166	0
Ethyl acetate	20	17.89	-	10.5	20	153	0
Carbon tetrachloride	20	19.94	-	0.3	20	181	0
Tetrahydrofuran	0.116	0.116	-	0	20	154	0
Dibromofluoromethane	0.283	0.274	-	3.2	20	148	0
1,1,1-Trichloroethane	0.385	0.419	-	-8.8	20	181	0
2-Butanone	0.167	0.191	-	-14.4	20	186	0
1,1-Dichloropropene	0.297	0.333	-	-12.1	20	188	0
Benzene	0.986	1.004	-	-1.8	20	164	0
tert-Amyl methyl ether	0.758	0.736	-	2.9	20	156	0
1,2-Dichloroethane-d4	0.288	0.308	-	-6.9	20	166	0
1,2-Dichloroethane	0.358	0.383	-	-7	20	168	0
Methyl cyclohexane	20	21.368	-	-6.8	20	218	0
Trichloroethene	0.267	0.277	-	-3.7	20	170	0
Dibromomethane	0.185	0.176	-	4.9	20	149	0
1,2-Dichloropropane	0.252	0.27	-	-7.1	20	170	0
2-Chloroethyl vinyl ether	20	35.57	-	-77.8*	20	259	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814	
Instrument ID	: VOA100	Calibration Date	: 09/16/16 09:14	
Lab File ID	: V00160916A02	Init. Calib. Date(s)	: 08/29/16	08/29/16
Sample No	: WG932751-2	Init. Calib. Times	: 20:22	23:29
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Bromodichloromethane	0.359	0.365	-	-1.7	20	160	0
1,4-Dioxane	0.00474	0.00504	-	-6.3	20	168	0
cis-1,3-Dichloropropene	0.413	0.419	-	-1.5	20	162	0
Chlorobenzene-d5	1	1	-	0	20	142	0
Toluene-d8	1.119	1.215	-	-8.6	20	152	0
Toluene	0.728	0.782	-	-7.4	20	161	0
4-Methyl-2-pentanone	0.161	0.173	-	-7.5	20	164	0
Tetrachloroethene	0.349	0.347	-	0.6	20	155	0
trans-1,3-Dichloropropene	0.445	0.484	-	-8.8	20	159	0
Ethyl methacrylate	20	18.311	-	8.4	20	152	0
1,1,2-Trichloroethane	0.239	0.256	-	-7.1	20	155	0
Chlorodibromomethane	0.366	0.365	-	0.3	20	143	0
1,3-Dichloropropane	0.463	0.497	-	-7.3	20	154	0
1,2-Dibromoethane	0.303	0.319	-	-5.3	20	152	0
2-Hexanone	0.287	0.316	-	-10.1	20	164	0
Chlorobenzene	0.886	0.922	-	-4.1	20	152	0
Ethylbenzene	1.378	1.505	-	-9.2	20	166	0
1,1,1,2-Tetrachloroethane	0.339	0.345	-	-1.8	20	148	0
p/m Xylene	0.563	0.595	-	-5.7	20	159	0
o Xylene	0.557	0.576	-	-3.4	20	154	0
Styrene	40	36.313	-	9.2	20	150	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	129	0
Bromoform	0.542	0.499	-	7.9	20	127	0
Isopropylbenzene	2.273	2.651	-	-16.6	20	163	0
4-Bromofluorobenzene	0.764	0.896	-	-17.3	20	150	0
Bromobenzene	0.68	0.705	-	-3.7	20	138	0
n-Propylbenzene	2.684	3.25	-	-21.1*	20	171	0
1,4-Dichlorobutane	0.873	1.089	-	-24.7*	20	170	0
1,1,2,2-Tetrachloroethane	0.736	0.833	-	-13.2	20	153	0
4-Ethyltoluene	2.356	2.757	-	-17	20	160	0
2-Chlorotoluene	1.695	1.616	-	4.7	20	123	0
1,3,5-Trimethylbenzene	1.981	2.284	-	-15.3	20	157	0
1,2,3-Trichloropropane	0.613	0.699	-	-14	20	159	0
trans-1,4-Dichloro-2-buten	0.232	0.295	-	-27.2*	20	171	0
4-Chlorotoluene	1.612	1.887	-	-17.1	20	157	0
tert-Butylbenzene	1.67	1.981	-	-18.6	20	164	0
1,2,4-Trimethylbenzene	1.969	2.282	-	-15.9	20	155	0
sec-Butylbenzene	2.453	2.993	-	-22*	20	172	0
p-Isopropyltoluene	2.128	2.559	-	-20.3*	20	166	0
1,3-Dichlorobenzene	1.28	1.343	-	-4.9	20	140	0
1,4-Dichlorobenzene	1.313	1.359	-	-3.5	20	139	0
p-Diethylbenzene	1.312	1.557	-	-18.7	20	164	0
n-Butylbenzene	1.852	2.378	-	-28.4*	20	180	0
1,2-Dichlorobenzene	1.223	1.256	-	-2.7	20	136	0
1,2,4,5-Tetramethylbenzene	20	20.134	-	-0.7	20	150	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814	
Instrument ID	: VOA100	Calibration Date	: 09/16/16 09:14	
Lab File ID	: V00160916A02	Init. Calib. Date(s)	: 08/29/16	08/29/16
Sample No	: WG932751-2	Init. Calib. Times	: 20:22	23:29
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dibromo-3-chloropropan	0.171	0.173	-	-1.2	20	135	0
1,3,5-Trichlorobenzene	1	1.014	-	-1.4	20	134	0
Hexachlorobutadiene	0.432	0.466	-	-7.9	20	151	0
1,2,4-Trichlorobenzene	0.882	0.872	-	1.1	20	132	0
Naphthalene	2.316	2.389	-	-3.2	20	139	0
1,2,3-Trichlorobenzene	0.863	0.837	-	3	20	130	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814	
Instrument ID	: VOA104	Calibration Date	: 09/16/16 09:16	
Lab File ID	: V04160916A02	Init. Calib. Date(s)	: 08/05/16	08/06/16
Sample No	: WG932860-2	Init. Calib. Times	: 21:44	00:48
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	106	0
Dichlorodifluoromethane	0.25	0.15	-	40*	20	61	0
Chloromethane	20	16.547	-	17.3	20	80	0
Vinyl chloride	0.327	0.332	-	-1.5	20	105	0
Bromomethane	0.185	0.212	-	-14.6	20	123	0
Chloroethane	0.144	0.184	-	-27.8*	20	130	0
Trichlorofluoromethane	0.32	0.372	-	-16.2	20	119	0
Ethyl ether	0.113	0.135	-	-19.5	20	128	0
1,1-Dichloroethene	0.191	0.23	-	-20.4*	20	123	0
Carbon disulfide	20	28.923	-	-44.6*	20	139	0
Freon-113	0.21	0.238	-	-13.3	20	106	0
Acrolein	0.042	0.044	-	-4.8	20	114	0
Methylene chloride	0.305	0.327	-	-7.2	20	114	0
Acetone	20	21.962	-	-9.8	20	115	0
trans-1,2-Dichloroethene	0.275	0.304	-	-10.5	20	113	0
Methyl acetate	20	19.179	-	4.1	20	103	0
Methyl tert-butyl ether	0.73	0.771	-	-5.6	20	111	0
tert-Butyl alcohol	0.031	0.032	-	-3.2	20	114	0
Diisopropyl ether	1.149	1.216	-	-5.8	20	111	0
1,1-Dichloroethane	0.551	0.607	-	-10.2	20	113	0
Halothane	0.209	0.226	-	-8.1	20	112	0
Acrylonitrile	0.095	0.097	-	-2.1	20	108	0
Ethyl tert-butyl ether	1.024	1.092	-	-6.6	20	112	0
Vinyl acetate	20	18.069	-	9.7	20	104	0
cis-1,2-Dichloroethene	0.308	0.335	-	-8.8	20	113	0
2,2-Dichloropropane	0.398	0.439	-	-10.3	20	115	0
Bromochloromethane	0.148	0.163	-	-10.1	20	111	0
Cyclohexane	0.529	0.562	-	-6.2	20	109	0
Chloroform	0.497	0.545	-	-9.7	20	114	0
Ethyl acetate	20	18.907	-	5.5	20	97	0
Carbon tetrachloride	0.385	0.42	-	-9.1	20	114	0
Tetrahydrofuran	0.099	0.104	-	-5.1	20	134	0
Dibromofluoromethane	0.278	0.283	-	-1.8	20	110	0
1,1,1-Trichloroethane	0.424	0.468	-	-10.4	20	115	0
2-Butanone	20	19.913	-	0.4	20	115	0
1,1-Dichloropropene	0.345	0.384	-	-11.3	20	116	0
Benzene	1.063	1.17	-	-10.1	20	114	0
tert-Amyl methyl ether	0.774	0.83	-	-7.2	20	112	0
1,2-Dichloroethane-d4	0.264	0.263	-	0.4	20	108	0
1,2-Dichloroethane	0.38	0.412	-	-8.4	20	114	0
Methyl cyclohexane	0.412	0.453	-	-10	20	112	0
Trichloroethene	0.295	0.333	-	-12.9	20	117	0
Dibromomethane	0.171	0.187	-	-9.4	20	114	0
1,2-Dichloropropane	0.322	0.351	-	-9	20	115	0
2-Chloroethyl vinyl ether	0.135	0.063	-	53.3*	20	48	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814	
Instrument ID	: VOA104	Calibration Date	: 09/16/16 09:16	
Lab File ID	: V04160916A02	Init. Calib. Date(s)	: 08/05/16	08/06/16
Sample No	: WG932860-2	Init. Calib. Times	: 21:44	00:48
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Bromodichloromethane	0.383	0.413	-	-7.8	20	114	0
1,4-Dioxane	1000	1063.988	-	-6.4	20	119	0
cis-1,3-Dichloropropene	0.445	0.493	-	-10.8	20	117	0
Chlorobenzene-d5	1	1	-	0	20	111	0
Toluene-d8	1.177	1.175	-	0.2	20	111	0
Toluene	0.821	0.884	-	-7.7	20	117	0
4-Methyl-2-pentanone	0.128	0.134	-	-4.7	20	116	0
Tetrachloroethene	0.407	0.435	-	-6.9	20	114	0
trans-1,3-Dichloropropene	0.458	0.491	-	-7.2	20	120	0
Ethyl methacrylate	0.384	0.414	-	-7.8	20	120	0
1,1,2-Trichloroethane	0.244	0.266	-	-9	20	118	0
Chlorodibromomethane	0.387	0.408	-	-5.4	20	118	0
1,3-Dichloropropane	0.471	0.506	-	-7.4	20	117	0
1,2-Dibromoethane	0.318	0.332	-	-4.4	20	117	0
2-Hexanone	0.218	0.224	-	-2.8	20	117	0
Chlorobenzene	0.984	1.086	-	-10.4	20	119	0
Ethylbenzene	1.54	1.733	-	-12.5	20	121	0
1,1,1,2-Tetrachloroethane	0.373	0.403	-	-8	20	117	0
p/m Xylene	0.617	0.701	-	-13.6	20	121	0
o Xylene	0.606	0.689	-	-13.7	20	120	0
Styrene	1.009	1.175	-	-16.5	20	122	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	111	0
Bromoform	0.48	0.483	-	-0.6	20	115	0
Isopropylbenzene	2.889	3.225	-	-11.6	20	123	0
4-Bromofluorobenzene	0.854	0.85	-	0.5	20	113	0
Bromobenzene	0.826	0.898	-	-8.7	20	119	0
n-Propylbenzene	3.243	3.703	-	-14.2	20	124	0
1,4-Dichlorobutane	1.094	1.162	-	-6.2	20	120	0
1,1,2,2-Tetrachloroethane	0.652	0.691	-	-6	20	121	0
4-Ethyltoluene	3.035	3.426	-	-12.9	20	124	0
2-Chlorotoluene	1.98	2.226	-	-12.4	20	124	0
1,3,5-Trimethylbenzene	2.465	2.745	-	-11.4	20	122	0
1,2,3-Trichloropropane	0.492	0.535	-	-8.7	20	123	0
trans-1,4-Dichloro-2-buten	20	18.212	-	8.9	20	111	0
4-Chlorotoluene	2.019	2.331	-	-15.5	20	129	0
tert-Butylbenzene	2.066	2.283	-	-10.5	20	122	0
1,2,4-Trimethylbenzene	2.461	2.788	-	-13.3	20	124	0
sec-Butylbenzene	3.102	3.498	-	-12.8	20	124	0
p-Isopropyltoluene	2.59	2.964	-	-14.4	20	125	0
1,3-Dichlorobenzene	1.507	1.721	-	-14.2	20	125	0
1,4-Dichlorobenzene	1.517	1.712	-	-12.9	20	125	0
p-Diethylbenzene	1.623	1.9	-	-17.1	20	128	0
n-Butylbenzene	2.16	2.621	-	-21.3*	20	132	0
1,2-Dichlorobenzene	1.437	1.612	-	-12.2	20	123	0
1,2,4,5-Tetramethylbenzene	2.695	3.025	-	-12.2	20	125	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814	
Instrument ID	: VOA104	Calibration Date	: 09/16/16 09:16	
Lab File ID	: V04160916A02	Init. Calib. Date(s)	: 08/05/16	08/06/16
Sample No	: WG932860-2	Init. Calib. Times	: 21:44	00:48
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dibromo-3-chloropropan	0.116	0.112	-	3.4	20	116	0
1,3,5-Trichlorobenzene	1.19	1.367	-	-14.9	20	128	0
Hexachlorobutadiene	0.585	0.603	-	-3.1	20	121	0
1,2,4-Trichlorobenzene	1.03	1.157	-	-12.3	20	128	0
Naphthalene	2.192	2.285	-	-4.2	20	122	0
1,2,3-Trichlorobenzene	0.969	1.043	-	-7.6	20	124	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814	
Instrument ID	: QUIMBY	Calibration Date	: 09/20/16 06:07	
Lab File ID	: VQ160920A03	Init. Calib. Date(s)	: 08/29/16	08/29/16
Sample No	: WG933853-2	Init. Calib. Times	: 09:05	12:46
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	64	0
Methyl tert-butyl ether	0.686	0.574	-	16.3	20	54	0
Dibromofluoromethane	0.191	0.186	-	2.6	20	61	0
Benzene	1.571	1.598	-	-1.7	20	64	0
1,2-Dichloroethane-d4	0.221	0.228	-	-3.2	20	65	0
Chlorobenzene-d5	1	1	-	0	20	64	0
Toluene-d8	1.38	1.431	-	-3.7	20	66	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	65	0
4-Bromofluorobenzene	1.363	1.222	-	10.3	20	61	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814	
Instrument ID	: QUIMBY	Calibration Date	: 09/22/16 05:09	
Lab File ID	: VQ160922A02	Init. Calib. Date(s)	: 08/29/16	08/29/16
Sample No	: WG933853-14	Init. Calib. Times	: 09:05	12:46
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	72	0
Vinyl chloride	0.457	0.493	-	-7.9	20	77	.01
1,1-Dichloroethene	0.309	0.283	-	8.4	20	63	0
Chloroform	0.625	0.585	-	6.4	20	66	0
Carbon tetrachloride	0.484	0.351	-	27.5*	20	52	0
Dibromofluoromethane	0.191	0.192	-	-0.5	20	70	0
2-Butanone	0.075	0.071*	-	5.3	20	68	0
Benzene	1.571	1.512	-	3.8	20	68	0
1,2-Dichloroethane-d4	0.221	0.225	-	-1.8	20	72	0
1,2-Dichloroethane	0.433	0.418	-	3.5	20	70	0
Trichloroethene	0.411	0.368	-	10.5	20	64	0
Chlorobenzene-d5	1	1	-	0	20	71	0
Toluene-d8	1.38	1.405	-	-1.8	20	71	0
Tetrachloroethene	0.519	0.473	-	8.9	20	64	0
Chlorobenzene	1.521	1.407	-	7.5	20	66	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	73	0
4-Bromofluorobenzene	1.363	1.21	-	11.2	20	68	0
1,4-Dichlorobenzene	2.395	2.17	-	9.4	20	68	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814	
Instrument ID	: QUIMBY	Calibration Date	: 09/23/16 06:42	
Lab File ID	: VQ160922A02	Init. Calib. Date(s)	: 08/29/16	08/29/16
Sample No	: WG933853-19	Init. Calib. Times	: 09:05	12:46
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	72	0
Vinyl chloride	0.457	0.493	-	-7.9	20	77	.01
1,1-Dichloroethene	0.309	0.283	-	8.4	20	63	0
Chloroform	0.625	0.585	-	6.4	20	66	0
Carbon tetrachloride	0.484	0.351	-	27.5*	20	52	0
Dibromofluoromethane	0.191	0.192	-	-0.5	20	70	0
2-Butanone	0.075	0.071*	-	5.3	20	68	0
Benzene	1.571	1.512	-	3.8	20	68	0
1,2-Dichloroethane-d4	0.221	0.225	-	-1.8	20	72	0
1,2-Dichloroethane	0.433	0.418	-	3.5	20	70	0
Trichloroethene	0.411	0.368	-	10.5	20	64	0
Chlorobenzene-d5	1	1	-	0	20	71	0
Toluene-d8	1.38	1.405	-	-1.8	20	71	0
Tetrachloroethene	0.519	0.473	-	8.9	20	64	0
Chlorobenzene	1.521	1.407	-	7.5	20	66	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	73	0
4-Bromofluorobenzene	1.363	1.21	-	11.2	20	68	0
1,4-Dichlorobenzene	2.395	2.17	-	9.4	20	68	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814	
Instrument ID	: VOA116	Calibration Date	: 09/28/16 04:09	
Lab File ID	: V16160928A02	Init. Calib. Date(s)	: 08/29/16	08/29/16
Sample No	: WG936703-2	Init. Calib. Times	: 09:00	11:58
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	71	0
Vinyl chloride	0.286	0.326	-	-14	20	87	0
1,1-Dichloroethene	0.214	0.25	-	-16.8	20	85	0
Chloroform	0.467	0.485	-	-3.9	20	74	0
Carbon tetrachloride	0.415	0.429	-	-3.4	20	72	0
Dibromofluoromethane	0.287	0.292	-	-1.7	20	71	0
2-Butanone	10	10.831	-	-8.3	20	81	0
Benzene	0.946	1.02	-	-7.8	20	76	0
1,2-Dichloroethane-d4	0.271	0.28	-	-3.3	20	73	0
1,2-Dichloroethane	0.282	0.3	-	-6.4	20	77	-.01
Trichloroethene	0.272	0.288	-	-5.9	20	75	0
Chlorobenzene-d5	1	1	-	0	20	80	0
Toluene-d8	1.238	1.182	-	4.5	20	75	0
Tetrachloroethene	0.432	0.386	-	10.6	20	72	0
Chlorobenzene	0.916	0.843	-	8	20	76	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	81	0
4-Bromofluorobenzene	0.744	0.78	-	-4.8	20	87	0
1,4-Dichlorobenzene	1.419	1.212	-	14.6	20	71	0

* Value outside of QC limits.

Surrogate Summary

Form 2
Surrogate Recovery
VOLATILES

Client: Haley & Aldrich, Inc.
Project Name: EWING TOWNSHIP INDUSTRIAL LAND

Lab Number: L1629226
Project Number: 70613-814
Matrix:

CLIENT ID (LAB SAMPLE NO.)	SMC1 TOL	SMC2 BFB	SMC3 DCA	SMC4 DBFM	TOT OUT
4479-091516-1020 (L1629226-07D)	88	97	114	117	0
WG936703-4LCSD	95	103	99	103	0
WG936703-3LCS	95	105	103	102	0
WG936703-5BLANK	93	104	116	124	0
4479-091516-1020MS	92	98	102	103	0
4479-091516-1020MSD	94	101	99	99	0
4479-091516-0840 (L1629226-03)	99	80	111	103	0
4479-091516-0855 (L1629226-04D)	100	85	109	101	0
4479-091516-0855 (L1629226-04D2)	102	82	103	99	0
4479-091516-0945 (L1629226-05)	99	85	111	101	0
4479-091516-1000 (L1629226-06D)	98	85	111	102	0
4479-091516-1045 (L1629226-08D)	100	88	109	99	0
4479-091516-1055 (L1629226-09)	100	88	109	99	0
4479-091516-1110 (L1629226-10)	99	88	108	96	0
4479-091516-1415 (L1629226-16)	101	86	108	99	0
SB-02_2.0-2.5DUP	102	83	109	104	0
WG933853-4LCSD	103	91	104	100	0
WG933853-16LCSD	104	85	103	98	0
WG933853-21LCSD	101	87	103	99	0
WG933853-3LCS	104	90	103	98	0
WG933853-15LCS	103	86	104	98	0
WG933853-20LCS	102	89	102	101	0
WG933853-5BLANK	103	82	111	103	0
WG933853-17BLANK	104	80	109	104	0
WG933853-22BLANK	103	82	103	100	0
SB-03_5.5-6.0MS	104	87	108	101	0

	QC LIMITS
TOL = TOLUENE-D8	(70-130)
BFB = 4-BROMOFLUOROBENZENE	(70-130)
DCA = 1,2-DICHLOROETHANE-D4	(70-130)
DBFM = DIBROMOFLUOROMETHANE)	(70-130)

* Values outside of QC limits

FORM II NJ-SPLP-VOA

Form 2
Surrogate Recovery
VOLATILES

Client: Haley & Aldrich, Inc.
Project Name: EWING TOWNSHIP INDUSTRIAL LAND

Lab Number: L1629226
Project Number: 70613-814
Matrix:

CLIENT ID (LAB SAMPLE NO.)	SMC1 TOL	SMC2 BFB	SMC3 DCA	SMC4 DBFM	TOT OUT
4479-091516-0830 (L1629226-02)	103	120	106	95	0
4479-091516-1345 (L1629226-15)	107	118	107	97	0
4479-091516-1500 (L1629226-19)	107	119	106	96	0
SP-1DUP	110	119	106	96	0
WG932751-4LCSD	109	116	107	97	0
WG932751-3LCS	109	117	107	97	0
WG932751-5BLANK	108	119	105	92	0
SP-2MS	111	121	108	97	0
4479-091516-1045 (L1629226-08D)	98	101	103	102	0
4479-091516-1055 (L1629226-09)	98	109	102	98	0
4479-091516-1110 (L1629226-10)	99	112	101	98	0
4479-091516-1415 (L1629226-16)	99	116	99	98	0
WG932860-4LCSD	100	101	99	102	0
WG932860-3LCS	100	99	100	102	0
WG932860-5BLANK	98	102	102	102	0
4479-091516-0840 (L1629226-03D)	109	125	106	101	0
4479-091516-0855 (L1629226-04D)	110	122	104	101	0
4479-091516-0945 (L1629226-05D)	113	124	106	106	0
4479-091516-1000 (L1629226-06D)	109	129	104	106	0
4479-091516-1020 (L1629226-07D)	110	126	103	105	0
WG932865-4LCSD	110	119	112	104	0
WG932865-3LCS	110	111	117	106	0
WG932865-5BLANK	107	117	114	100	0

	QC LIMITS
TOL = TOLUENE-D8	(70-130)
BFB = 4-BROMOFLUOROBENZENE	(70-130)
DCA = 1,2-DICHLOROETHANE-D4	(70-130)
DBFM = DIBROMOFLUOROMETHANE)	(70-130)

* Values outside of QC limits

FORM II

Batch QC Summary

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1629226	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG932751-3	**Analysis Date :** 09/16/16 09:14	**File ID**	: V00160916A02	
LCSD Sample ID	: WG932751-4	**Analysis Date :** 09/16/16 09:40	**File ID**	: V00160916A03	

	Laboratory Control Sample				Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R		True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,2-Dibromo-3-chloropropane	0.02	0.020	101		0.02	0.020	98	3	40-160	30
1,4-Dioxane	1	1.1	106		1	0.98	98	8	40-160	30
1,2-Dibromoethane	0.02	0.021	105		0.02	0.021	103	2	70-130	30
Methylene chloride	0.02	0.022	109		0.02	0.021	106	3	70-130	30
1,1-Dichloroethane	0.02	0.022	110		0.02	0.022	111	1	70-130	30
Chloroform	0.02	0.021	105		0.02	0.021	104	1	70-130	30
Carbon tetrachloride	0.02	0.020	100		0.02	0.020	99	1	70-130	30
1,2-Dichloropropane	0.02	0.021	107		0.02	0.022	107	0	70-130	30
Dibromochloromethane	0.02	0.020	100		0.02	0.020	98	2	70-130	30
1,1,2-Trichloroethane	0.02	0.021	107		0.02	0.021	106	1	70-130	30
2-Chloroethylvinyl ether	0.02	0.036	178 Q		0.02	0.035	174 Q	2	40-160	30
Tetrachloroethene	0.02	0.020	100		0.02	0.020	98	2	70-130	30
Chlorobenzene	0.02	0.021	104		0.02	0.020	102	2	70-130	30
Trichlorofluoromethane	0.02	0.018	91		0.02	0.018	91	0	40-160	30
1,2-Dichloroethane	0.02	0.021	107		0.02	0.021	105	2	70-130	30
1,1,1-Trichloroethane	0.02	0.022	109		0.02	0.021	107	2	70-130	30
Bromodichloromethane	0.02	0.020	102		0.02	0.020	101	1	70-130	30
trans-1,3-Dichloropropene	0.02	0.022	109		0.02	0.022	108	1	70-130	30
cis-1,3-Dichloropropene	0.02	0.020	101		0.02	0.020	102	1	40-160	30
1,1-Dichloropropene	0.02	0.022	112		0.02	0.022	111	1	70-130	30
Bromoform	0.02	0.018	92		0.02	0.018	91	1	40-160	30
1,1,2,2-Tetrachloroethane	0.02	0.023	113		0.02	0.022	111	2	40-160	30
Benzene	0.02	0.020	102		0.02	0.020	100	2	70-130	30
Toluene	0.02	0.022	107		0.02	0.021	107	0	70-130	30
Ethylbenzene	0.02	0.022	109		0.02	0.021	106	3	70-130	30
Chloromethane	0.02	0.021	105		0.02	0.021	106	1	40-160	30
Bromomethane	0.02	0.020	98		0.02	0.013	64	42 Q	40-160	30
Vinyl chloride	0.02	0.024	119		0.02	0.019	95	22	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		Lab Number	: L1629226	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		Project Number	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG932751-3	Analysis Date : 09/16/16 09:14	File ID	: V00160916A02	
LCSD Sample ID	: WG932751-4	Analysis Date : 09/16/16 09:40	File ID	: V00160916A03	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
Chloroethane	0.02	0.021	106	0.02	0.017	86	21	40-160	30
1,1-Dichloroethene	0.02	0.022	112	0.02	0.022	111	1	70-130	30
trans-1,2-Dichloroethene	0.02	0.021	104	0.02	0.020	103	1	70-130	30
Trichloroethene	0.02	0.021	104	0.02	0.021	103	1	70-130	30
1,2-Dichlorobenzene	0.02	0.020	103	0.02	0.020	101	2	70-130	30
1,3-Dichlorobenzene	0.02	0.021	105	0.02	0.021	104	1	70-130	30
1,4-Dichlorobenzene	0.02	0.021	103	0.02	0.020	102	1	70-130	30
Methyl tert butyl ether	0.02	0.020	98	0.02	0.019	97	1	70-130	30
p/m-Xylene	0.04	0.042	106	0.04	0.042	104	2	70-130	30
o-Xylene	0.04	0.041	103	0.04	0.040	101	2	70-130	30
cis-1,2-Dichloroethene	0.02	0.020	101	0.02	0.020	100	1	70-130	30
Dibromomethane	0.02	0.019	95	0.02	0.019	94	1	70-130	30
1,4-Dichlorobutane	0.02	0.025	125	0.02	0.024	122	2	70-130	30
1,2,3-Trichloropropane	0.02	0.023	114	0.02	0.022	111	3	70-130	30
Styrene	0.04	0.036	91	0.04	0.036	90	1	40-160	30
Dichlorodifluoromethane	0.02	0.022	112	0.02	0.014	71	45 Q	40-160	30
Acetone	0.02	0.027	134	0.02	0.024	118	13	40-160	30
Carbon disulfide	0.02	0.037	183 Q	0.02	0.040	198 Q	8	40-160	30
2-Butanone	0.02	0.023	114	0.02	0.020	101	12	40-160	30
Vinyl acetate	0.02	0.018	91	0.02	0.018	91	0	70-130	30
4-Methyl-2-pentanone	0.02	0.022	107	0.02	0.021	106	1	40-160	30
2-Hexanone	0.02	0.022	110	0.02	0.021	103	7	40-160	30
Ethyl methacrylate	0.02	0.018	92	0.02	0.018	91	1	70-130	30
Acrolein	0.02	0.020	100	0.02	0.026	132	28	40-160	30
Acrylonitrile	0.02	0.022	108	0.02	0.021	103	5	70-130	30
Bromochloromethane	0.02	0.019	93	0.02	0.018	91	2	70-130	30
Tetrahydrofuran	0.02	0.020	99	0.02	0.019	96	3	70-130	30
2,2-Dichloropropane	0.02	0.022	110	0.02	0.021	107	3	40-160	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Matrix	: SOIL		
LCS Sample ID	: WG932751-3	**Analysis Date :** 09/16/16 09:14	**File ID** : V00160916A02
LCSD Sample ID	: WG932751-4	**Analysis Date :** 09/16/16 09:40	**File ID** : V00160916A03

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,3-Dichloropropane	0.02	0.022	107	0.02	0.021	105	2	70-130	30
1,1,1,2-Tetrachloroethane	0.02	0.020	102	0.02	0.020	100	2	70-130	30
Bromobenzene	0.02	0.021	104	0.02	0.020	102	2	70-130	30
n-Butylbenzene	0.02	0.026	128	0.02	0.025	126	2	70-130	30
sec-Butylbenzene	0.02	0.024	122	0.02	0.024	120	2	70-130	30
tert-Butylbenzene	0.02	0.024	119	0.02	0.023	117	2	70-130	30
o-Chlorotoluene	0.02	0.019	95	0.02	0.018	92	3	70-130	30
p-Chlorotoluene	0.02	0.023	117	0.02	0.023	116	1	70-130	30
Hexachlorobutadiene	0.02	0.022	108	0.02	0.021	104	4	70-130	30
Isopropylbenzene	0.02	0.023	117	0.02	0.023	115	2	70-130	30
p-Isopropyltoluene	0.02	0.024	120	0.02	0.024	119	1	70-130	30
Naphthalene	0.02	0.021	103	0.02	0.020	103	0	40-160	30
n-Propylbenzene	0.02	0.024	121	0.02	0.024	118	3	70-130	30
1,2,3-Trichlorobenzene	0.02	0.019	97	0.02	0.020	98	1	70-130	30
1,2,4-Trichlorobenzene	0.02	0.020	99	0.02	0.020	99	0	70-130	30
1,3,5-Trimethylbenzene	0.02	0.023	115	0.02	0.023	114	1	70-130	30
1,2,4-Trimethylbenzene	0.02	0.023	116	0.02	0.023	113	3	70-130	30
trans-1,4-Dichloro-2-butene	0.02	0.025	127	0.02	0.024	119	7	70-130	30
Ethyl ether	0.02	0.018	90	0.02	0.018	91	1	70-130	30
Methyl Acetate	0.02	0.020	98	0.02	0.018	93	5	70-130	30
Ethyl Acetate	0.02	0.018	89	0.02	0.017	87	2	70-130	30
Isopropyl Ether	0.02	0.020	101	0.02	0.020	100	1	70-130	30
Cyclohexane	0.02	0.023	116	0.02	0.023	115	1	70-130	30
tert-Butyl Alcohol	0.1	0.11	109	0.1	0.10	105	4	40-160	30
Ethyl-Tert-Butyl-Ether	0.02	0.021	105	0.02	0.021	104	1	70-130	30
Tertiary-Amyl Methyl Ether	0.02	0.019	97	0.02	0.019	97	0	70-130	30
Methyl cyclohexane	0.02	0.021	107	0.02	0.021	106	1	70-130	30
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.02	0.022	108	0.02	0.021	105	3	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1629226	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG932751-3	**Analysis Date :** 09/16/16 09:14	**File ID**	: V00160916A02	
LCSD Sample ID	: WG932751-4	**Analysis Date :** 09/16/16 09:40	**File ID**	: V00160916A03	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,2,4,5-Tetramethylbenzene	0.02	0.020	101	0.02	0.020	100	1	70-130	30
1,4-Diethylbenzene	0.02	0.024	119	0.02	0.024	117	2	70-130	30
4-Ethyltoluene	0.02	0.023	117	0.02	0.023	115	2	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1629226	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG932860-3	**Analysis Date :** 09/16/16 09:16	**File ID**	: V04160916A02	
LCSD Sample ID	: WG932860-4	**Analysis Date :** 09/16/16 09:42	**File ID**	: V04160916A03	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,2-Dibromo-3-chloropropane	1	0.97	97	1	0.94	94	3	40-160	30
1,4-Dioxane	50	53.	106	50	52.	103	3	40-160	30
1,2-Dibromoethane	1	1.0	104	1	1.0	101	3	70-130	30
Methylene chloride	1	1.1	107	1	1.0	100	7	70-130	30
1,1-Dichloroethane	1	1.1	110	1	1.0	102	8	70-130	30
Chloroform	1	1.1	110	1	1.0	102	8	70-130	30
Carbon tetrachloride	1	1.1	109	1	1.0	102	7	70-130	30
1,2-Dichloropropane	1	1.1	109	1	1.0	100	9	70-130	30
Dibromochloromethane	1	1.0	105	1	1.0	100	5	70-130	30
1,1,2-Trichloroethane	1	1.1	109	1	1.0	104	5	70-130	30
2-Chloroethylvinyl ether	1	0.47	47	1	0.49	49	4	40-160	30
Tetrachloroethene	1	1.1	107	1	1.0	100	7	70-130	30
Chlorobenzene	1	1.1	110	1	1.0	105	5	70-130	30
Trichlorofluoromethane	1	1.2	116	1	1.1	107	8	40-160	30
1,2-Dichloroethane	1	1.1	108	1	1.0	104	4	70-130	30
1,1,1-Trichloroethane	1	1.1	110	1	1.0	103	7	70-130	30
Bromodichloromethane	1	1.1	108	1	1.0	103	5	70-130	30
trans-1,3-Dichloropropene	1	1.1	107	1	1.0	102	5	70-130	30
cis-1,3-Dichloropropene	1	1.1	111	1	1.1	106	5	40-160	30
1,1-Dichloropropene	1	1.1	111	1	1.0	103	7	70-130	30
Bromoform	1	1.0	100	1	0.98	98	2	40-160	30
1,1,2,2-Tetrachloroethane	1	1.1	106	1	1.0	101	5	40-160	30
Benzene	1	1.1	110	1	1.0	103	7	70-130	30
Toluene	1	1.1	108	1	1.0	102	6	70-130	30
Ethylbenzene	1	1.1	112	1	1.0	104	7	70-130	30
Chloromethane	1	0.83	83	1	0.76	76	9	40-160	30
Bromomethane	1	1.1	114	1	1.1	107	6	40-160	30
Vinyl chloride	1	1.0	102	1	0.92	92	10	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Matrix	: SOIL		
LCS Sample ID	: WG932860-3	**Analysis Date :** 09/16/16 09:16	**File ID** : V04160916A02
LCSD Sample ID	: WG932860-4	**Analysis Date :** 09/16/16 09:42	**File ID** : V04160916A03

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
Chloroethane	1	1.3	128	1	1.2	119	7	40-160	30
1,1-Dichloroethene	1	1.2	120	1	1.1	109	10	70-130	30
trans-1,2-Dichloroethene	1	1.1	110	1	1.0	101	9	70-130	30
Trichloroethene	1	1.1	113	1	1.0	105	7	70-130	30
1,2-Dichlorobenzene	1	1.1	112	1	1.1	107	5	70-130	30
1,3-Dichlorobenzene	1	1.1	114	1	1.1	108	5	70-130	30
1,4-Dichlorobenzene	1	1.1	113	1	1.1	107	5	70-130	30
Methyl tert butyl ether	1	1.1	106	1	1.0	101	5	70-130	30
p/m-Xylene	2	2.3	114	2	2.1	106	7	70-130	30
o-Xylene	2	2.3	114	2	2.1	106	7	70-130	30
cis-1,2-Dichloroethene	1	1.1	109	1	1.0	103	6	70-130	30
Dibromomethane	1	1.1	109	1	1.0	104	5	70-130	30
1,4-Dichlorobutane	1	1.1	106	1	1.0	103	3	70-130	30
1,2,3-Trichloropropane	1	1.1	109	1	1.0	105	4	70-130	30
Styrene	2	2.3	116	2	2.2	110	5	40-160	30
Dichlorodifluoromethane	1	0.60	60	1	0.55	55	9	40-160	30
Acetone	1	1.1	110	1	0.98	98	12	40-160	30
Carbon disulfide	1	1.4	145	1	1.4	135	7	40-160	30
2-Butanone	1	1.0	100	1	0.96	96	4	40-160	30
Vinyl acetate	1	0.90	90	1	0.86	86	5	70-130	30
4-Methyl-2-pentanone	1	1.0	105	1	1.0	101	4	40-160	30
2-Hexanone	1	1.0	102	1	0.98	98	4	40-160	30
Ethyl methacrylate	1	1.1	108	1	1.0	103	5	70-130	30
Acrolein	1	1.0	105	1	1.1	106	1	40-160	30
Acrylonitrile	1	1.0	102	1	0.98	98	4	70-130	30
Bromochloromethane	1	1.1	110	1	1.1	106	4	70-130	30
Tetrahydrofuran	1	1.0	104	1	0.99	99	5	70-130	30
2,2-Dichloropropane	1	1.1	110	1	1.0	102	8	40-160	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1629226	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG932860-3	**Analysis Date :** 09/16/16 09:16	**File ID**	: V04160916A02	
LCSD Sample ID	: WG932860-4	**Analysis Date :** 09/16/16 09:42	**File ID**	: V04160916A03	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,3-Dichloropropane	1	1.1	107	1	1.0	103	4	70-130	30
1,1,1,2-Tetrachloroethane	1	1.1	108	1	1.0	103	5	70-130	30
Bromobenzene	1	1.1	109	1	1.0	102	7	70-130	30
n-Butylbenzene	1	1.2	121	1	1.1	112	8	70-130	30
sec-Butylbenzene	1	1.1	113	1	1.0	105	7	70-130	30
tert-Butylbenzene	1	1.1	110	1	1.0	104	6	70-130	30
o-Chlorotoluene	1	1.1	112	1	1.1	106	6	70-130	30
p-Chlorotoluene	1	1.2	115	1	1.1	106	8	70-130	30
Hexachlorobutadiene	1	1.0	103	1	0.97	97	6	70-130	30
Isopropylbenzene	1	1.1	112	1	1.0	104	7	70-130	30
p-Isopropyltoluene	1	1.1	114	1	1.1	106	7	70-130	30
Naphthalene	1	1.0	104	1	1.0	101	3	40-160	30
n-Propylbenzene	1	1.1	114	1	1.1	106	7	70-130	30
1,2,3-Trichlorobenzene	1	1.1	108	1	1.0	103	5	70-130	30
1,2,4-Trichlorobenzene	1	1.1	112	1	1.1	106	6	70-130	30
1,3,5-Trimethylbenzene	1	1.1	111	1	1.0	104	7	70-130	30
1,2,4-Trimethylbenzene	1	1.1	113	1	1.1	107	5	70-130	30
trans-1,4-Dichloro-2-butene	1	0.91	91	1	0.94	94	3	70-130	30
Ethyl ether	1	1.2	120	1	1.1	114	5	70-130	30
Methyl Acetate	1	0.96	96	1	0.92	92	4	70-130	30
Ethyl Acetate	1	0.94	94	1	0.92	92	2	70-130	30
Isopropyl Ether	1	1.1	106	1	1.0	101	5	70-130	30
Cyclohexane	1	1.1	106	1	0.98	98	8	70-130	30
tert-Butyl Alcohol	5	5.1	102	5	4.8	97	5	40-160	30
Ethyl-Tert-Butyl-Ether	1	1.1	107	1	1.0	102	5	70-130	30
Tertiary-Amyl Methyl Ether	1	1.1	107	1	1.0	104	3	70-130	30
Methyl cyclohexane	1	1.1	110	1	1.0	101	9	70-130	30
1,1,2-Trichloro-1,2,2-Trifluoroethane	1	1.1	113	1	1.0	101	11	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1629226	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG932860-3	**Analysis Date :** 09/16/16 09:16	**File ID**	: V04160916A02	
LCSD Sample ID	: WG932860-4	**Analysis Date :** 09/16/16 09:42	**File ID**	: V04160916A03	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,2,4,5-Tetramethylbenzene	1	1.1	112	1	1.1	106	6	70-130	30
1,4-Diethylbenzene	1	1.2	117	1	1.1	109	7	70-130	30
4-Ethyltoluene	1	1.1	113	1	1.1	106	6	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1629226	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG932865-3	**Analysis Date :** 09/16/16 08:23	**File ID**	: V11160916A03	
LCSD Sample ID	: WG932865-4	**Analysis Date :** 09/16/16 08:48	**File ID**	: V11160916A04	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,2-Dibromo-3-chloropropane	1	0.96	96	1	1.2	118	21	40-160	30
1,4-Dioxane	50	40.	81	50	47.	94	15	40-160	30
1,2-Dibromoethane	1	1.1	109	1	1.1	111	2	70-130	30
Methylene chloride	1	1.0	101	1	1.0	102	1	70-130	30
1,1-Dichloroethane	1	0.83	83	1	0.86	86	4	70-130	30
Chloroform	1	1.2	120	1	1.2	121	1	70-130	30
Carbon tetrachloride	1	1.2	120	1	1.2	115	4	70-130	30
1,2-Dichloropropane	1	0.74	74	1	0.73	73	1	70-130	30
Dibromochloromethane	1	1.1	107	1	1.2	116	8	70-130	30
1,1,2-Trichloroethane	1	1.1	107	1	1.2	116	8	70-130	30
2-Chloroethylvinyl ether	1	0.69	69	1	0.75	75	8	40-160	30
Tetrachloroethene	1	1.1	106	1	1.1	112	6	70-130	30
Chlorobenzene	1	1.0	101	1	1.1	109	8	70-130	30
Trichlorofluoromethane	1	1.2	119	1	1.1	114	4	40-160	30
1,2-Dichloroethane	1	1.1	106	1	1.1	108	2	70-130	30
1,1,1-Trichloroethane	1	1.2	120	1	1.2	122	2	70-130	30
Bromodichloromethane	1	1.2	118	1	1.2	124	5	70-130	30
trans-1,3-Dichloropropene	1	1.2	121	1	1.3	133 Q	9	70-130	30
cis-1,3-Dichloropropene	1	1.1	108	1	1.2	115	6	40-160	30
1,1-Dichloropropene	1	1.1	108	1	1.1	106	2	70-130	30
Bromoform	1	1.1	109	1	1.3	131	18	40-160	30
1,1,2,2-Tetrachloroethane	1	1.0	102	1	1.1	112	9	40-160	30
Benzene	1	1.1	107	1	1.1	106	1	70-130	30
Toluene	1	1.1	110	1	1.2	116	5	70-130	30
Ethylbenzene	1	1.1	113	1	1.2	119	5	70-130	30
Chloromethane	1	0.63	63	1	0.60	60	5	40-160	30
Bromomethane	1	1.2	116	1	1.2	119	3	40-160	30
Vinyl chloride	1	0.67	67 Q	1	0.66	66 Q	2	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		Lab Number	: L1629226	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		Project Number	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG932865-3	Analysis Date : 09/16/16 08:23	File ID	: V11160916A03	
LCSD Sample ID	: WG932865-4	Analysis Date : 09/16/16 08:48	File ID	: V11160916A04	

	Laboratory Control Sample				Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R		True (mg/kg)	Found (mg/kg)	%R		RPD	Recovery Limits	RPD Limit
Chloroethane	1	0.88	88		1	0.84	84		5	40-160	30
1,1-Dichloroethene	1	1.0	101		1	0.95	95		6	70-130	30
trans-1,2-Dichloroethene	1	0.97	97		1	1.0	102		5	70-130	30
Trichloroethene	1	1.0	101		1	1.0	105		4	70-130	30
1,2-Dichlorobenzene	1	0.97	97		1	1.1	113		15	70-130	30
1,3-Dichlorobenzene	1	0.95	95		1	1.1	114		18	70-130	30
1,4-Dichlorobenzene	1	0.96	96		1	1.1	113		16	70-130	30
Methyl tert butyl ether	1	1.1	112		1	1.1	113		1	70-130	30
p/m-Xylene	2	2.1	107		2	2.3	114		6	70-130	30
o-Xylene	2	2.2	108		2	2.4	118		9	70-130	30
cis-1,2-Dichloroethene	1	1.0	103		1	1.0	102		1	70-130	30
Dibromomethane	1	1.1	110		1	1.1	108		2	70-130	30
1,4-Dichlorobutane	1	0.78	78		1	0.90	90		14	70-130	30
1,2,3-Trichloropropane	1	1.1	111		1	1.2	121		9	70-130	30
Styrene	2	2.2	109		2	2.3	117		7	40-160	30
Dichlorodifluoromethane	1	0.72	72		1	0.70	70		3	40-160	30
Acetone	1	0.88	88		1	1.0	100		13	40-160	30
Carbon disulfide	1	0.94	94		1	1.2	121		25	40-160	30
2-Butanone	1	0.82	82		1	0.82	82		0	40-160	30
Vinyl acetate	1	0.95	95		1	1.0	100		5	70-130	30
4-Methyl-2-pentanone	1	0.71	71		1	0.71	71		0	40-160	30
2-Hexanone	1	0.90	90		1	0.98	98		9	40-160	30
Ethyl methacrylate	1	1.1	110		1	1.3	127		14	70-130	30
Acrolein	1	0.61	61		1	0.83	83		31 Q	40-160	30
Acrylonitrile	1	0.65	65 Q		1	0.66	66 Q		2	70-130	30
Bromochloromethane	1	0.94	94		1	0.87	87		8	70-130	30
Tetrahydrofuran	1	0.81	81		1	0.85	85		5	70-130	30
2,2-Dichloropropane	1	1.2	124		1	1.2	124		0	40-160	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1629226	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG932865-3	**Analysis Date :** 09/16/16 08:23	**File ID**	: V11160916A03	
LCSD Sample ID	: WG932865-4	**Analysis Date :** 09/16/16 08:48	**File ID**	: V11160916A04	

	Laboratory Control Sample				Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R		True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,3-Dichloropropane	1	1.1	109		1	1.2	120	10	70-130	30
1,1,1,2-Tetrachloroethane	1	1.0	105		1	1.2	116	10	70-130	30
Bromobenzene	1	1.0	103		1	1.2	117	13	70-130	30
n-Butylbenzene	1	1.0	104		1	1.2	124	18	70-130	30
sec-Butylbenzene	1	1.0	101		1	1.1	114	12	70-130	30
tert-Butylbenzene	1	1.0	102		1	1.1	113	10	70-130	30
o-Chlorotoluene	1	1.1	114		1	1.3	130	13	70-130	30
p-Chlorotoluene	1	1.1	112		1	1.3	133 Q	17	70-130	30
Hexachlorobutadiene	1	1.1	110		1	1.3	131 Q	17	70-130	30
Isopropylbenzene	1	1.1	107		1	1.2	119	11	70-130	30
p-Isopropyltoluene	1	1.0	100		1	1.2	115	14	70-130	30
Naphthalene	1	0.88	88		1	1.0	101	14	40-160	30
n-Propylbenzene	1	1.1	106		1	1.2	123	15	70-130	30
1,2,3-Trichlorobenzene	1	1.0	100		1	1.2	119	17	70-130	30
1,2,4-Trichlorobenzene	1	1.0	105		1	1.3	126	18	70-130	30
1,3,5-Trimethylbenzene	1	1.1	107		1	1.2	122	13	70-130	30
1,2,4-Trimethylbenzene	1	1.1	109		1	1.2	124	13	70-130	30
trans-1,4-Dichloro-2-butene	1	0.86	86		1	1.1	107	22	70-130	30
Ethyl ether	1	1.0	104		1	0.99	99	5	70-130	30
Methyl Acetate	1	0.81	81		1	0.82	82	1	70-130	30
Ethyl Acetate	1	0.54	54 Q		1	0.66	66 Q	20	70-130	30
Isopropyl Ether	1	0.89	89		1	0.89	89	0	70-130	30
Cyclohexane	1	0.63	63 Q		1	0.62	62 Q	2	70-130	30
tert-Butyl Alcohol	5	3.4	68		5	3.7	74	8	40-160	30
Ethyl-Tert-Butyl-Ether	1	0.79	79		1	0.80	80	1	70-130	30
Tertiary-Amyl Methyl Ether	1	1.1	114		1	1.2	116	2	70-130	30
Methyl cyclohexane	1	0.98	98		1	0.94	94	4	70-130	30
1,1,2-Trichloro-1,2,2-Trifluoroethane	1	0.99	99		1	0.98	98	1	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1629226	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG932865-3	**Analysis Date :** 09/16/16 08:23	**File ID**	: V11160916A03	
LCSD Sample ID	: WG932865-4	**Analysis Date :** 09/16/16 08:48	**File ID**	: V11160916A04	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,2,4,5-Tetramethylbenzene	1	0.97	97	1	1.2	120	21	70-130	30
1,4-Diethylbenzene	1	0.90	90	1	1.1	113	23	70-130	30
4-Ethyltoluene	1	1.0	102	1	1.2	122	18	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1629226	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG936703-3	**Analysis Date :** 09/28/16 04:09	**File ID**	: V16160928A02	
LCSD Sample ID	: WG936703-4	**Analysis Date :** 09/28/16 04:34	**File ID**	: V16160928A03	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Chloroform	10	10.	100	10	10.	100	0	70-130	20
Carbon tetrachloride	10	10.	100	10	10.	100	0	70-130	20
Tetrachloroethene	10	8.9	89	10	8.8	88	1	70-130	20
Chlorobenzene	10	9.2	92	10	9.0	90	2	70-130	20
1,2-Dichloroethane	10	11.	110	10	10.	100	10	70-130	20
Benzene	10	11.	110	10	10.	100	10	70-130	20
Vinyl chloride	10	11.	110	10	11.	110	0	70-130	20
1,1-Dichloroethene	10	12.	120	10	10.	100	18	70-130	20
Trichloroethene	10	10.	100	10	10.	100	0	70-130	20
1,4-Dichlorobenzene	10	8.5	85	10	8.6	86	1	70-130	20
2-Butanone	10	11.	110	10	11.	110	0	40-160	20

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1629226	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG933853-15	**Analysis Date :** 09/22/16 05:09	**File ID**	: VQ160922A02	
LCSD Sample ID	: WG933853-16	**Analysis Date :** 09/22/16 05:40	**File ID**	: VQ160922A03	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Chloroform	10	10.	100	10	10.	100	0	70-130	20
Carbon tetrachloride	10	7.8	78	10	8.1	81	4	70-130	20
Chlorobenzene	10	9.7	97	10	10.	100	3	70-130	20
1,2-Dichloroethane	10	10.	100	10	11.	110	10	70-130	20
Benzene	10	10.	100	10	10.	100	0	70-130	20
Vinyl chloride	10	13.	130	10	12.	120	8	70-130	20
1,1-Dichloroethene	10	9.7	97	10	9.7	97	0	70-130	20
Trichloroethene	10	9.6	96	10	9.7	97	1	70-130	20
1,4-Dichlorobenzene	10	9.7	97	10	9.9	99	2	70-130	20
2-Butanone	10	9.9	99	10	10.	100	1	40-160	20

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1629226	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG933853-20	**Analysis Date :** 09/23/16 06:42	**File ID**	: VQ160922A02	
LCSD Sample ID	: WG933853-21	**Analysis Date :** 09/23/16 07:13	**File ID**	: VQ160922A03	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Chloroform	10	9.4	94	10	9.8	98	4	70-130	20
Carbon tetrachloride	10	7.2	72	10	7.8	78	8	70-130	20
Tetrachloroethene	10	9.1	91	10	9.4	94	3	70-130	20
Chlorobenzene	10	9.2	92	10	9.4	94	2	70-130	20
1,2-Dichloroethane	10	9.6	96	10	9.9	99	3	70-130	20
Benzene	10	9.6	96	10	9.9	99	3	70-130	20
Vinyl chloride	10	11.	110	10	11.	110	0	70-130	20
1,1-Dichloroethene	10	9.2	92	10	9.0	90	2	70-130	20
Trichloroethene	10	9.0	90	10	9.2	92	2	70-130	20
1,4-Dichlorobenzene	10	9.0	90	10	9.3	93	3	70-130	20
2-Butanone	10	9.5	95	10	8.9	89	7	40-160	20

Matrix Spike
Form 3

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Client Sample ID	: 4479-091516-1020	Matrix	: SOIL
Lab Sample ID	: L1629226-07	Analysis Date	: 09/28/16 11:13
Matrix Spike	: WG936703-6	MS Analysis Date	: 09/28/16 12:03
Matrix Spike Dup	: WG936703-7	MSD Analysis Date	: 09/28/16 12:28

		Matrix Spike Sample				Matrix Spike Duplicate						
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R		Spike Added (ug/l)	Spike Conc. (ug/l)	%R		RPD	Recovery Limits	RPD Limit
Chloroform	ND	100	100	100		100	100	100		0	70-130	20
Carbon tetrachloride	ND	100	100	100		100	100	100		0	70-130	20
Tetrachloroethene	ND	100	88.	88		100	90.	90		2	70-130	20
Chlorobenzene	280	100	340	60	Q	100	340	60	Q	0	70-130	20
1,2-Dichloroethane	ND	100	100	100		100	100	100		0	70-130	20
Benzene	9.6	100	120	110		100	120	110		0	70-130	20
Vinyl chloride	ND	100	110	110		100	120	120		9	70-130	20
1,1-Dichloroethene	ND	100	110	110		100	110	110		0	70-130	20
Trichloroethene	ND	100	100	100		100	100	100		0	70-130	20
1,4-Dichlorobenzene	19.J	100	100	100		100	100	100		0	70-130	20
2-Butanone	ND	100	120	120		100	120	120		0	40-160	20

Internal Standard Summary

Internal Standard Area and RT Summary
Form 8

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: VOA111	**Analysis Date**	: 09/16/16 08:23
Sample No	: WG932865-2	**Lab File ID**	: V11160916A03

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG932865-2	312820	5.79	198023	9.28	96448	12.05
Upper Limit	625640	6.29	396046	9.78	192896	12.55
Lower Limit	156410	5.29	99012	8.78	48224	11.55
Sample ID						
WG932865-3 LCS	312820	5.79	198023	9.28	96448	12.05
WG932865-4 LCSD	307825	5.79	191371	9.28	88784	12.05
WG932865-5 BLANK	306503	5.78	190067	9.28	86934	12.05
4479-091516-0840	368974	5.79	227006	9.28	101236	12.05
4479-091516-0855	396212	5.79	245287	9.28	108799	12.05
4479-091516-0945	395853	5.79	245618	9.28	110886	12.05
4479-091516-1000	411025	5.79	257685	9.28	111716	12.05
4479-091516-1020	415189	5.79	261230	9.28	111260	12.05

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: VOA100	**Analysis Date**	: 09/16/16 09:14
Sample No	: WG932751-2	**Lab File ID**	: V00160916A02

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG932751-2	380360	6.56	314073	10.14	175322	12.72
Upper Limit	760720	7.06	628146	10.64	350644	13.22
Lower Limit	190180	6.06	157037	9.64	87661	12.22
Sample ID						
WG932751-3 LCS	380360	6.56	314073	10.14	175322	12.72
WG932751-4 LCSD	378218	6.56	316411	10.14	176967	12.72
WG932751-5 BLANK	343667	6.54	281936	10.14	148109	12.72
4479-091516-0830	364860	6.56	310069	10.14	159620	12.73
4479-091516-1345	353850	6.56	294064	10.14	153107	12.73
4479-091516-1500	370142	6.56	307567	10.14	162030	12.72
SP-1 DUP	356013	6.56	283687	10.14	140170	12.72
SP-2 MS	355149	6.56	287599	10.14	152617	12.72

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: VOA104	**Analysis Date**	: 09/16/16 09:16
Sample No	: WG932860-2	**Lab File ID**	: V04160916A02

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG932860-2	328987	5.93	286090	9.46	159832	12.18
Upper Limit	657974	6.43	572180	9.96	319664	12.68
Lower Limit	164494	5.43	143045	8.96	79916	11.68
Sample ID						
WG932860-3 LCS	328987	5.93	286090	9.46	159832	12.18
WG932860-4 LCSD	335612	5.93	289791	9.46	161350	12.18
WG932860-5 BLANK	316091	5.93	277085	9.46	151976	12.18
4479-091516-1045	318520	5.93	281547	9.46	157673	12.18
4479-091516-1055	312861	5.93	273856	9.46	154831	12.18
4479-091516-1110	314407	5.93	276929	9.46	154050	12.18
4479-091516-1415	315385	5.93	275101	9.46	152029	12.18

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: QUIMBY	**Analysis Date**	: 09/20/16 06:07
Sample No	: WG933853-2	**Lab File ID**	: VQ160920A03

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG933853-2	177641	9.63	139227	14.72	48263	19.01
Upper Limit	355282	10.13	278454	15.22	96526	19.51
Lower Limit	88821	9.13	69614	14.22	24132	18.51
Sample ID						
WG933853-4 LCSD	178655	9.63	138610	14.71	47832	19.01
WG933853-5 BLANK	167722	9.63	127337	14.71	46632	19.01
SB-02_2.0-2.5 DUP	166079	9.63	128276	14.72	46776	19.00
SB-03_5.5-6.0 MS	171747	9.63	128474	14.71	47651	19.01
WG933853-13 BFB	-	-	-	-	-	-

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: QUIMBY	**Analysis Date**	: 09/22/16 05:09
Sample No	: WG933853-14	**Lab File ID**	: VQ160922A02

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG933853-14	171856	9.63	131116	14.72	47309	19.01
Upper Limit	343712	10.13	262232	15.22	94618	19.51
Lower Limit	85928	9.13	65558	14.22	23655	18.51
Sample ID						
WG933853-16 LCSD	172183	9.63	129273	14.72	48196	19.01
WG933853-17 BLANK	153331	9.63	114013	14.72	41642	19.01
4479-091516-0840	164949	9.63	138631	14.72	62414	19.01
4479-091516-0945	177237	9.63	145968	14.72	62279	19.01
4479-091516-1055	184414	9.63	148132	14.72	59905	19.01
4479-091516-1110	187005	9.63	147864	14.71	57210	19.01
4479-091516-1415	192630	9.63	152524	14.72	62372	19.01
4479-091516-0855	195673	9.63	157649	14.72	63840	19.01
4479-091516-1000	195208	9.63	158387	14.72	61692	19.01
4479-091516-1045	188089	9.63	149728	14.72	55118	19.01
WG933853-18 BFB	-	-	-	-	-	-

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: QUIMBY	**Analysis Date**	: 09/23/16 06:42
Sample No	: WG933853-19	**Lab File ID**	: VQ160922A02

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG933853-19	197805	9.63	154269	14.72	54189	19.01
Upper Limit	395610	10.13	308538	15.22	108378	19.51
Lower Limit	98903	9.13	77135	14.22	27095	18.51
Sample ID						
WG933853-20 LCS	197805	9.63	154269	14.72	54189	19.01
WG933853-21 LCSD	193504	9.63	150226	14.72	54953	19.01
WG933853-22 BLANK	186879	9.63	135639	14.72	49393	19.01
4479-091516-0855	182977	9.63	141819	14.72	52444	19.01

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: VOA116	**Analysis Date**	: 09/28/16 04:09
Sample No	: WG936703-2	**Lab File ID**	: V16160928A02

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG936703-2	158418	6.08	138010	9.65	85421	12.34
Upper Limit	316836	6.58	276020	10.15	170842	12.84
Lower Limit	79209	5.58	69005	9.15	42711	11.84
Sample ID						
WG936703-3 LCS	158418	6.08	138010	9.65	85421	12.34
WG936703-4 LCSD	163655	6.08	143466	9.65	87968	12.35
WG936703-5 BLANK	133327	6.08	121155	9.65	65852	12.34
4479-091516-1020	131328	6.08	123539	9.65	81047	12.34
4479-091516-1020 MS	157140	6.08	139749	9.65	90026	12.34
4479-091516-1020 MSD	165177	6.08	145608	9.65	94421	12.35

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Chromatograms

Sample Raw Data

Quantitation Report (QT/LSC Reviewed)

Data Path : I:\VOLATILES\VOA104\2016\160916A\
Data File : V04160916A12.D
Acq On : 16 Sep 2016 1:35 pm
Operator : VOA104:BD
Sample : l1629226-08D,31H,5.7,5,0.025,,x
Misc : WG932860,ICAL12726
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 16 14:05:15 2016
Quant Method : I:\VOLATILES\VOA104\2016\160916A\V104_160805N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Aug 06 08:04:57 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA104\2016\160916A\V04160916A02.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.933	96	318520	20.000	ug/L	0.00
Standard Area 1 = 328987			Recovery = 96.82%			
59) Chlorobenzene-d5	9.456	117	281547	20.000	ug/L	0.00
Standard Area 1 = 286090			Recovery = 98.41%			
79) 1,4-Dichlorobenzene-d4	12.177	152	157673	20.000	ug/L	0.00
Standard Area 1 = 159832			Recovery = 98.65%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.136	113	89847	20.315	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 101.58%			
43) 1,2-Dichloroethane-d4	5.660	65	87113	20.694	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 103.47%			
60) Toluene-d8	7.611	98	325957	19.668	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 98.34%			
83) 4-Bromofluorobenzene	10.961	95	135861	20.173	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 100.86%			
Target Compounds						Qvalue
73) Chlorobenzene	9.477	112	253554	18.296	ug/L	97

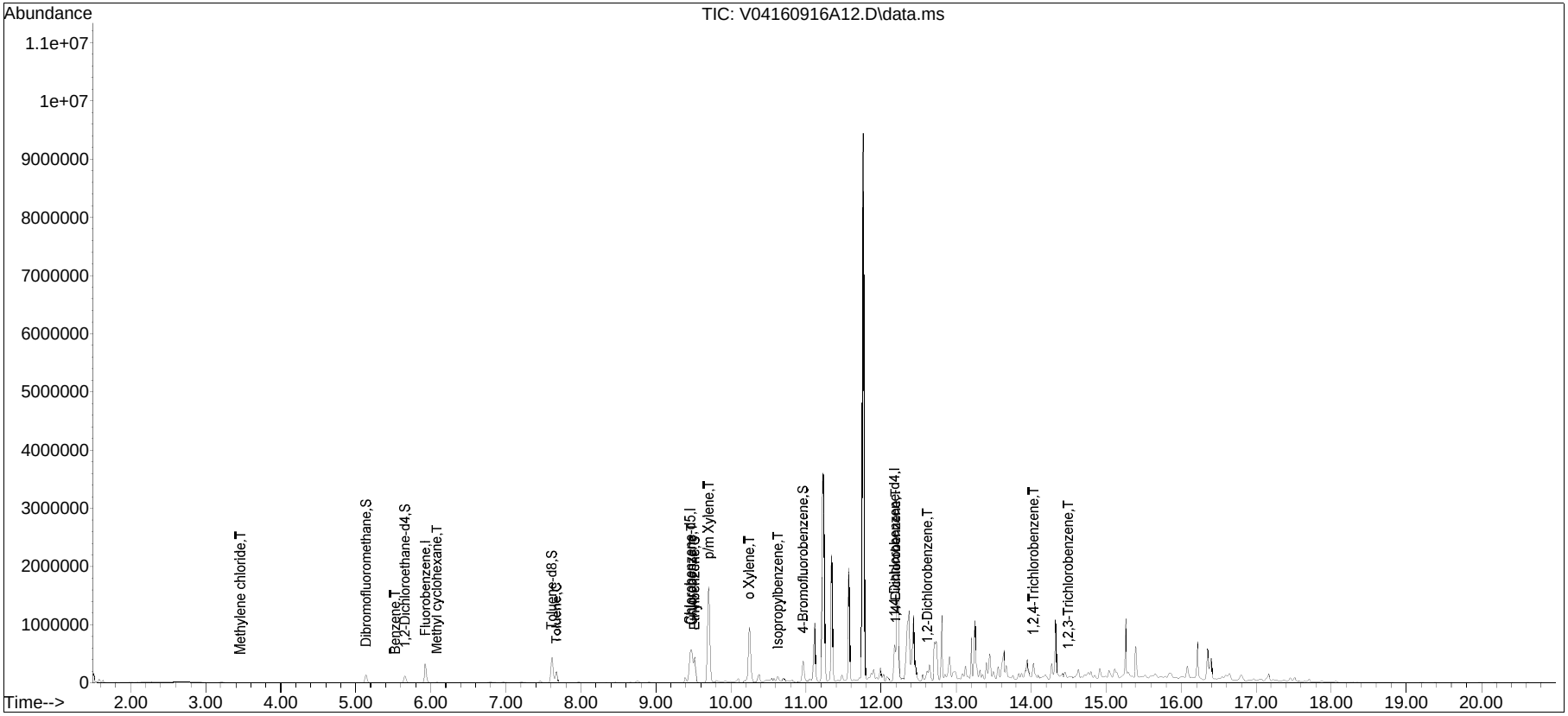
(#) = qualifier out of range (m) = manual integration (+) = signals summed

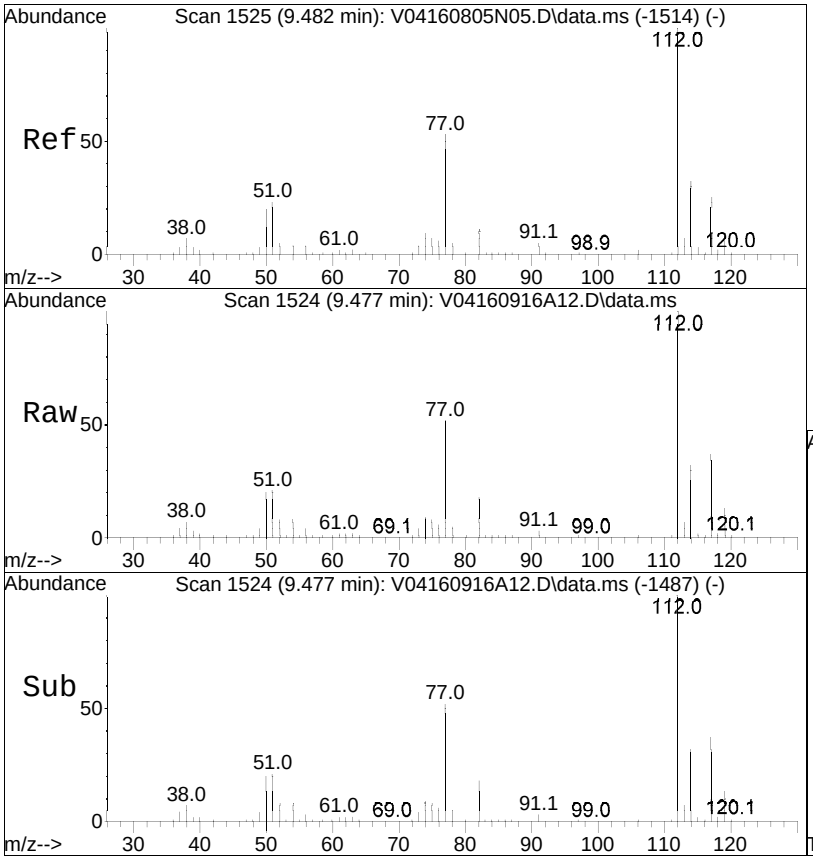
Quantitation Report (QT/LSC Reviewed)

Data Path : I:\VOLATILES\VOA104\2016\160916A\
Data File : V04160916A12.D
Acq On : 16 Sep 2016 1:35 pm
Operator : VOA104:BD
Sample : l1629226-08D,31H,5.7,5,0.025,,x
Misc : WG932860,ICAL12726
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 16 14:05:15 2016
Quant Method : I:\VOLATILES\VOA104\2016\160916A\V104_160805N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Aug 06 08:04:57 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist916A\V04160916A02.D•

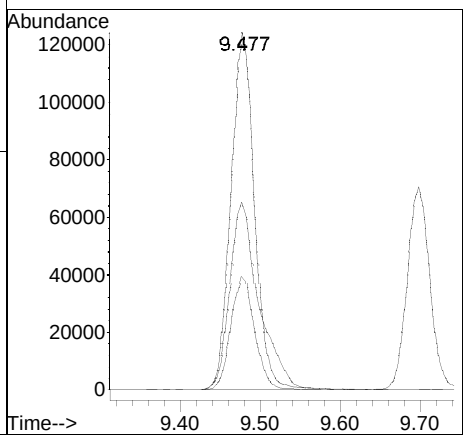




#73
Chlorobenzene
Concen: 18.30 ug/L
RT: 9.477 min Scan# 1524
Delta R.T. -0.005 min
Lab File: V04160916A12.D
Acq: 16 Sep 2016 1:35 pm

Tgt Ion:112 Resp: 253554

Ion	Ratio	Lower	Upper
112	100		
77	65.5	54.7	82.1
114	32.2	25.4	38.2



Manual Integration Report

Data Path	: I:\VOLATILES\VOA104\2016\1Q	Method	: V104_160805N_8260.m
Data File	: V04160916A12.D	Operator	: VOA104:BD
Date Inj'd	: 9/16/2016 1:35 pm	Instrument	: VOA 104
Sample	: l1629226-08D,31H,5.7,5,0.0	Quant Date	: 9/16/2016 1:58 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA104\2016\160916A\
Data File : V04160916A13.D
Acq On : 16 Sep 2016 2:01 pm
Operator : VOA104:PP
Sample : l1629226-09,31H,5.5,5,0.100,,x
Misc : WG932860,ICAL12726
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 16 16:02:18 2016
Quant Method : I:\VOLATILES\VOA104\2016\160916A\V104_160805N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Aug 06 08:04:57 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA104\2016\160916A\V04160916A02.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.933	96	312861	20.000	ug/L	0.00
Standard Area 1 = 328987			Recovery =	95.10%		
59) Chlorobenzene-d5	9.456	117	273856	20.000	ug/L	0.00
Standard Area 1 = 286090			Recovery =	95.72%		
79) 1,4-Dichlorobenzene-d4	12.177	152	154831	20.000	ug/L	0.00
Standard Area 1 = 159832			Recovery =	96.87%		
System Monitoring Compounds						
36) Dibromofluoromethane	5.136	113	85171	19.606	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery =	98.03%		
43) 1,2-Dichloroethane-d4	5.655	65	83740	20.252	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery =	101.26%		
60) Toluene-d8	7.611	98	317420	19.691	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery =	98.45%		
83) 4-Bromofluorobenzene	10.961	95	143777	21.740	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery =	108.70%		
Target Compounds						Qvalue
41) Benzene	5.513	78	19331	1.162	ug/L	99
73) Chlorobenzene	9.477	112	564906	41.907	ug/L	97

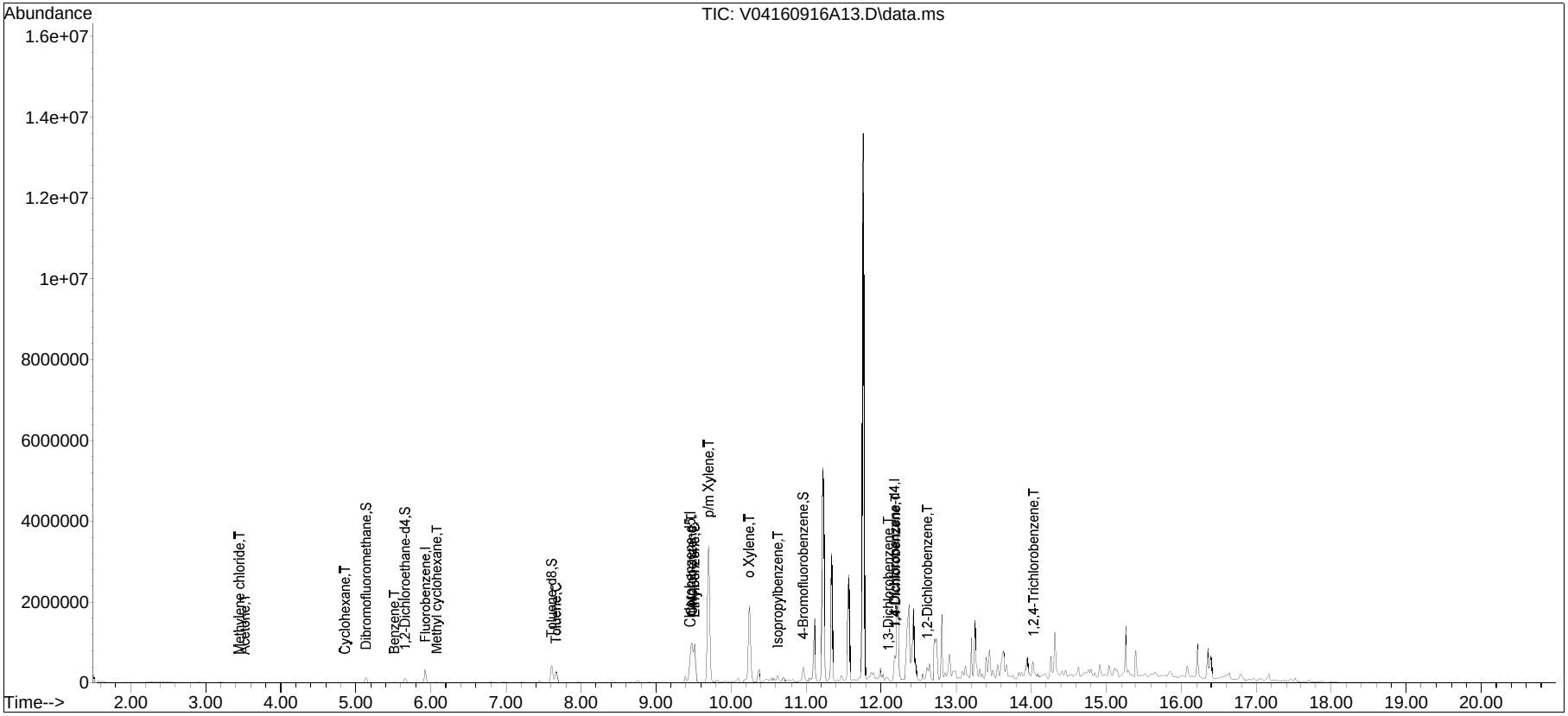
(#) = qualifier out of range (m) = manual integration (+) = signals summed

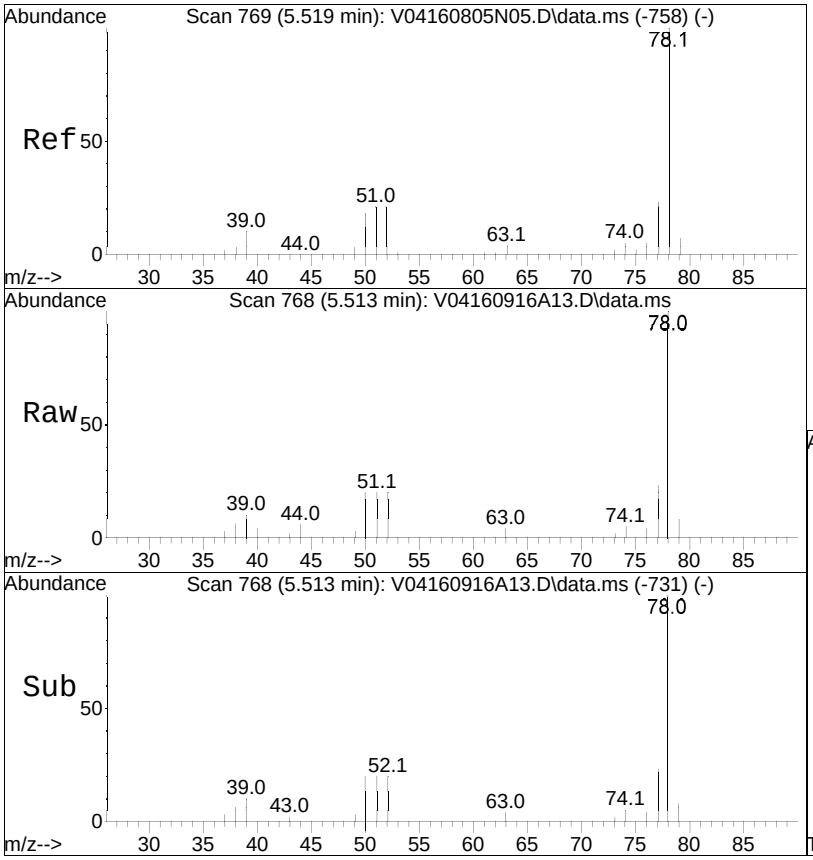
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA104\2016\160916A\
Data File : V04160916A13.D
Acq On : 16 Sep 2016 2:01 pm
Operator : VOA104:PP
Sample : l1629226-09,31H,5.5,5,0.100,,x
Misc : WG932860,ICAL12726
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 16 16:02:18 2016
Quant Method : I:\VOLATILES\VOA104\2016\160916A\V104_160805N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Aug 06 08:04:57 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist916A\V04160916A02.D•

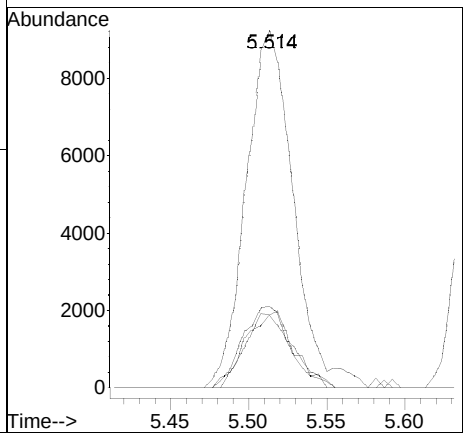


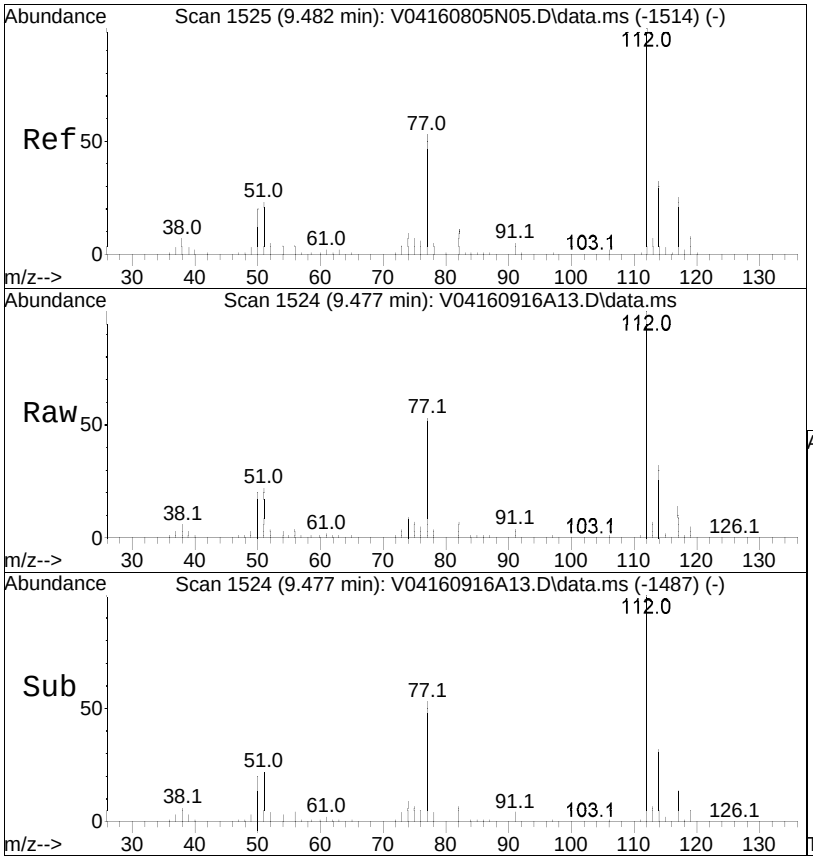


#41
Benzene
Concen: 1.16 ug/L
RT: 5.513 min Scan# 768
Delta R.T. -0.006 min
Lab File: V04160916A13.D
Acq: 16 Sep 2016 2:01 pm

Tgt Ion: 78 Resp: 19331

Ion	Ratio	Lower	Upper
78	100		
77	23.9	15.2	31.6
51	21.3	14.1	29.3
52	20.5	14.0	29.2

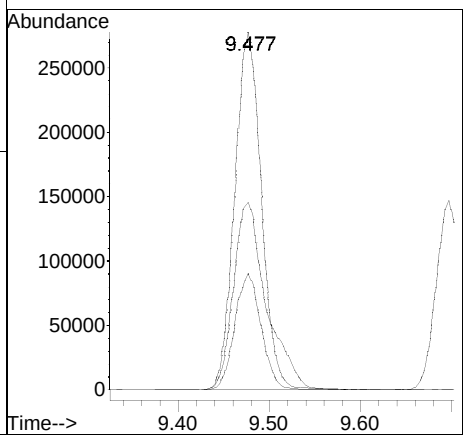




#73
Chlorobenzene
Concen: 41.91 ug/L
RT: 9.477 min Scan# 1524
Delta R.T. -0.005 min
Lab File: V04160916A13.D
Acq: 16 Sep 2016 2:01 pm

Tgt Ion:112 Resp: 564906

Ion	Ratio	Lower	Upper
112	100		
77	65.1	54.7	82.1
114	32.3	25.4	38.2



Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA104\2016\160916A\
Data File : V04160916A14.D
Acq On : 16 Sep 2016 2:27 pm
Operator : VOA104:PP
Sample : l1629226-10,31H,4.5,5,0.100,,x
Misc : WG932860,ICAL12726
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 16 16:03:40 2016
Quant Method : I:\VOLATILES\VOA104\2016\160916A\V104_160805N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Aug 06 08:04:57 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA104\2016\160916A\V04160916A02.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.933	96	314407	20.000	ug/L	0.00
Standard Area 1 = 328987			Recovery = 95.57%			
59) Chlorobenzene-d5	9.456	117	276929	20.000	ug/L	0.00
Standard Area 1 = 286090			Recovery = 96.80%			
79) 1,4-Dichlorobenzene-d4	12.177	152	154050	20.000	ug/L	0.00
Standard Area 1 = 159832			Recovery = 96.38%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.136	113	85657	19.621	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 98.11%			
43) 1,2-Dichloroethane-d4	5.655	65	83616	20.123	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 100.62%			
60) Toluene-d8	7.611	98	324979	19.936	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 99.68%			
83) 4-Bromofluorobenzene	10.966	95	147435	22.406	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 112.03%			
Target Compounds						Qvalue
41) Benzene	5.508	78	31178	1.865	ug/L	98
48) Trichloroethene	0.000		0	N.D.	d	

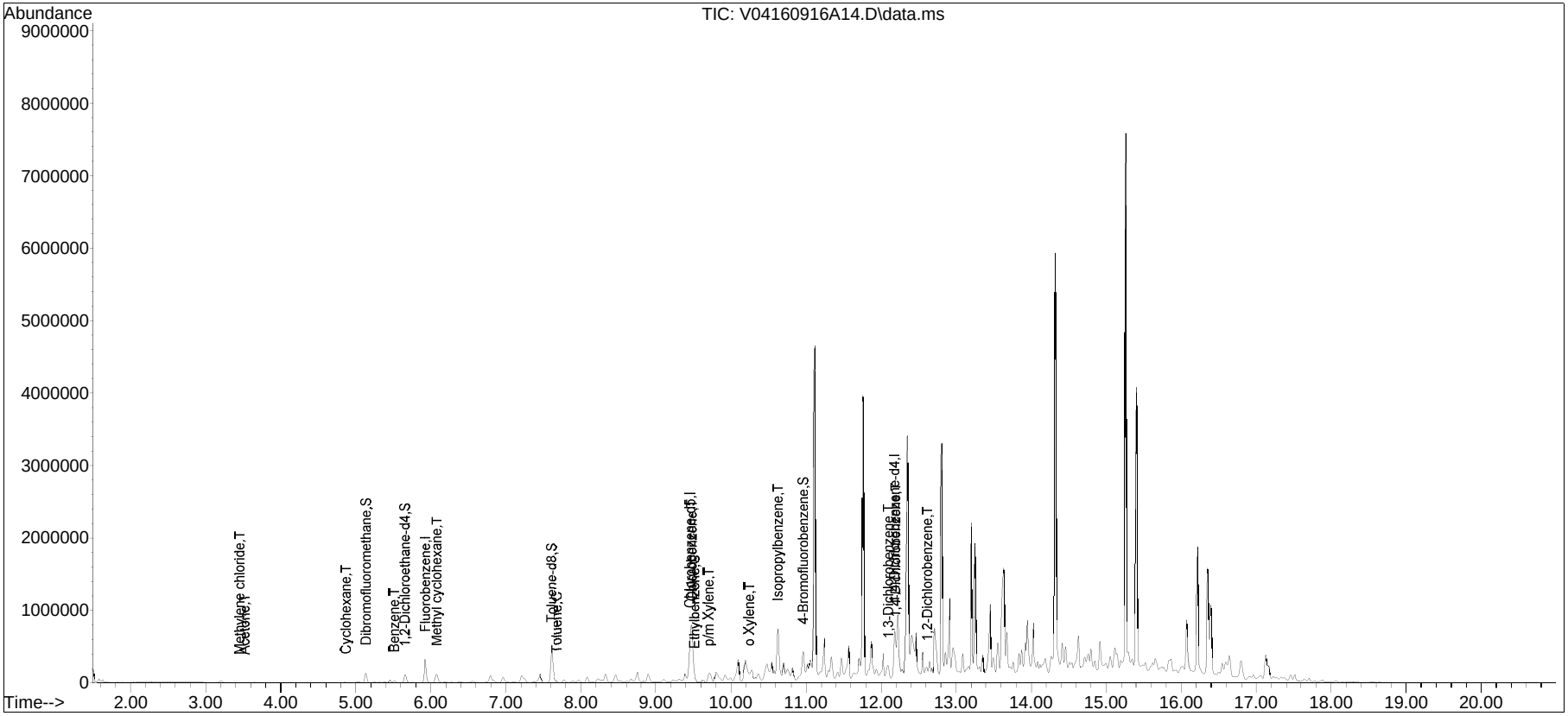
(#) = qualifier out of range (m) = manual integration (+) = signals summed

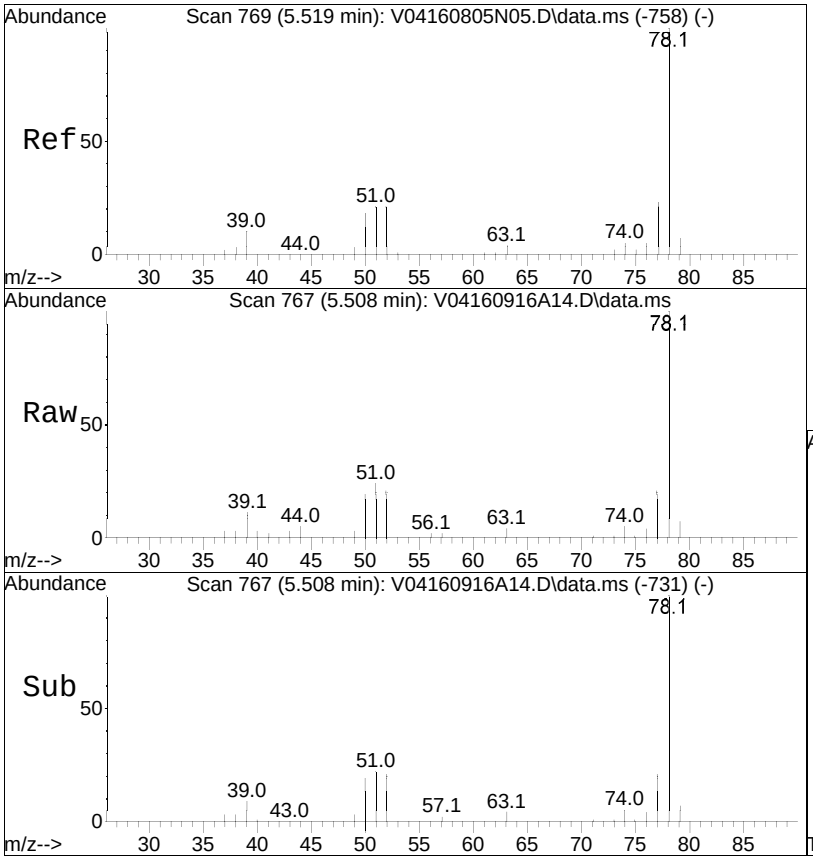
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA104\2016\160916A\
Data File : V04160916A14.D
Acq On : 16 Sep 2016 2:27 pm
Operator : VOA104:PP
Sample : l1629226-10,31H,4.5,5,0.100,,x
Misc : WG932860,ICAL12726
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 16 16:03:40 2016
Quant Method : I:\VOLATILES\VOA104\2016\160916A\V104_160805N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Aug 06 08:04:57 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist916A\V04160916A02.D•

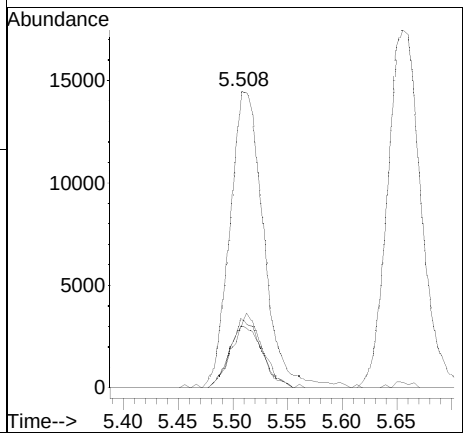




#41
Benzene
Concen: 1.87 ug/L
RT: 5.508 min Scan# 767
Delta R.T. -0.011 min
Lab File: V04160916A14.D
Acq: 16 Sep 2016 2:27 pm

Tgt Ion: 78 Resp: 31178

Ion	Ratio	Lower	Upper
78	100		
77	22.7	15.2	31.6
51	21.5	14.1	29.3
52	19.9	14.0	29.2



Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA100\2016\160916A\
Data File : V00160916A14.D
Acq On : 16 Sep 2016 2:34 pm
Operator : VOA100:BD
Sample : l1629226-02,31,3.0,5,,z
Misc : WG932751,ICAL12815
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 16 16:01:20 2016
Quant Method : I:\VOLATILES\VOA100\2016\160916A\V100_160829N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 06:21:02 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA100\2016\160916A\V00160916A02.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.558	96	364860	20.000	ug/L	0.00
Standard Area 1 = 380360			Recovery = 95.92%			
59) Chlorobenzene-d5	10.144	117	310069	20.000	ug/L	0.00
Standard Area 1 = 314073			Recovery = 98.73%			
79) 1,4-Dichlorobenzene-d4	12.729	152	159620	20.000	ug/L	0.00
Standard Area 1 = 175322			Recovery = 91.04%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.724	113	97907	18.951	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 94.75%			
43) 1,2-Dichloroethane-d4	6.264	65	111073	21.137	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 105.69%			
60) Toluene-d8	8.278	98	358000	20.644	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 103.22%			
83) 4-Bromofluorobenzene	11.555	95	146692	24.047	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 120.24%			
Target Compounds						Qvalue
48) Trichloroethene	6.637	95	100	N.D.		

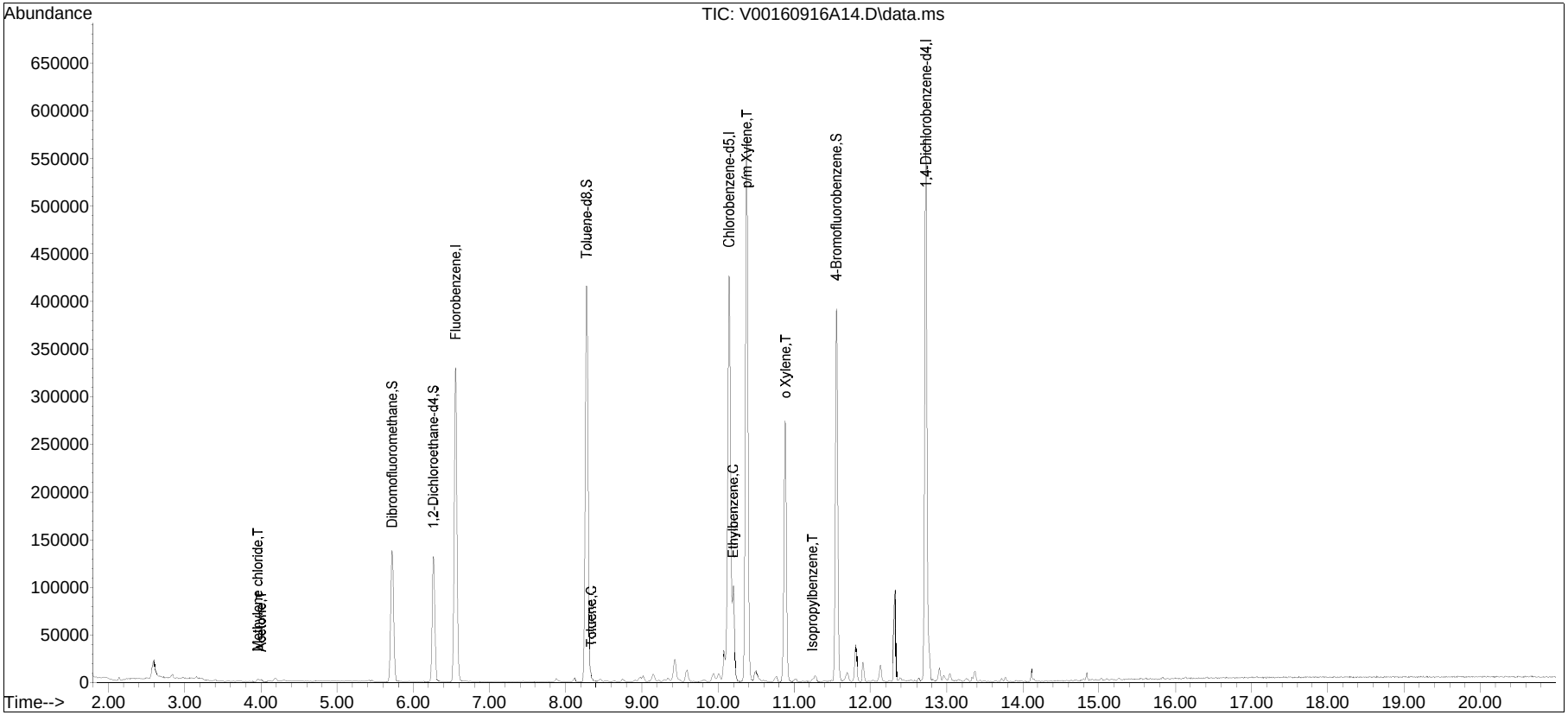
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA100\2016\160916A\
Data File : V00160916A14.D
Acq On : 16 Sep 2016 2:34 pm
Operator : VOA100:BD
Sample : l1629226-02,31,3.0,5,,z
Misc : WG932751,ICAL12815
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 16 16:01:20 2016
Quant Method : I:\VOLATILES\VOA100\2016\160916A\V100_160829N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 06:21:02 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist916A\V00160916A02.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA100\2016\1Q	Method	: V100_160829N_8260.m
Data File	: V00160916A14.D	Operator	: VOA100:BD
Date Inj'd	: 9/16/2016 2:34 pm	Instrument	: VOA 100
Sample	: l1629226-02,31,3.0,5,,z	Quant Date	: 9/16/2016 3:58 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA104\2016\160916A\
Data File : V04160916A15.D
Acq On : 16 Sep 2016 2:53 pm
Operator : VOA104:PP
Sample : l1629226-16,31H,4.9,5,0.100,,x
Misc : WG932860,ICAL12726
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 16 16:04:50 2016
Quant Method : I:\VOLATILES\VOA104\2016\160916A\V104_160805N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Aug 06 08:04:57 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA104\2016\160916A\V04160916A02.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.928	96	315385	20.000	ug/L	-0.01
Standard Area 1 = 328987			Recovery = 95.87%			
59) Chlorobenzene-d5	9.456	117	275101	20.000	ug/L	0.00
Standard Area 1 = 286090			Recovery = 96.16%			
79) 1,4-Dichlorobenzene-d4	12.177	152	152029	20.000	ug/L	0.00
Standard Area 1 = 159832			Recovery = 95.12%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.131	113	85853	19.605	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 98.03%			
43) 1,2-Dichloroethane-d4	5.655	65	83233	19.969	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 99.84%			
60) Toluene-d8	7.611	98	320743	19.807	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 99.03%			
83) 4-Bromofluorobenzene	10.961	95	151257	23.293	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 116.47%			
Target Compounds						Qvalue
41) Benzene	5.513	78	23466	1.399	ug/L	98

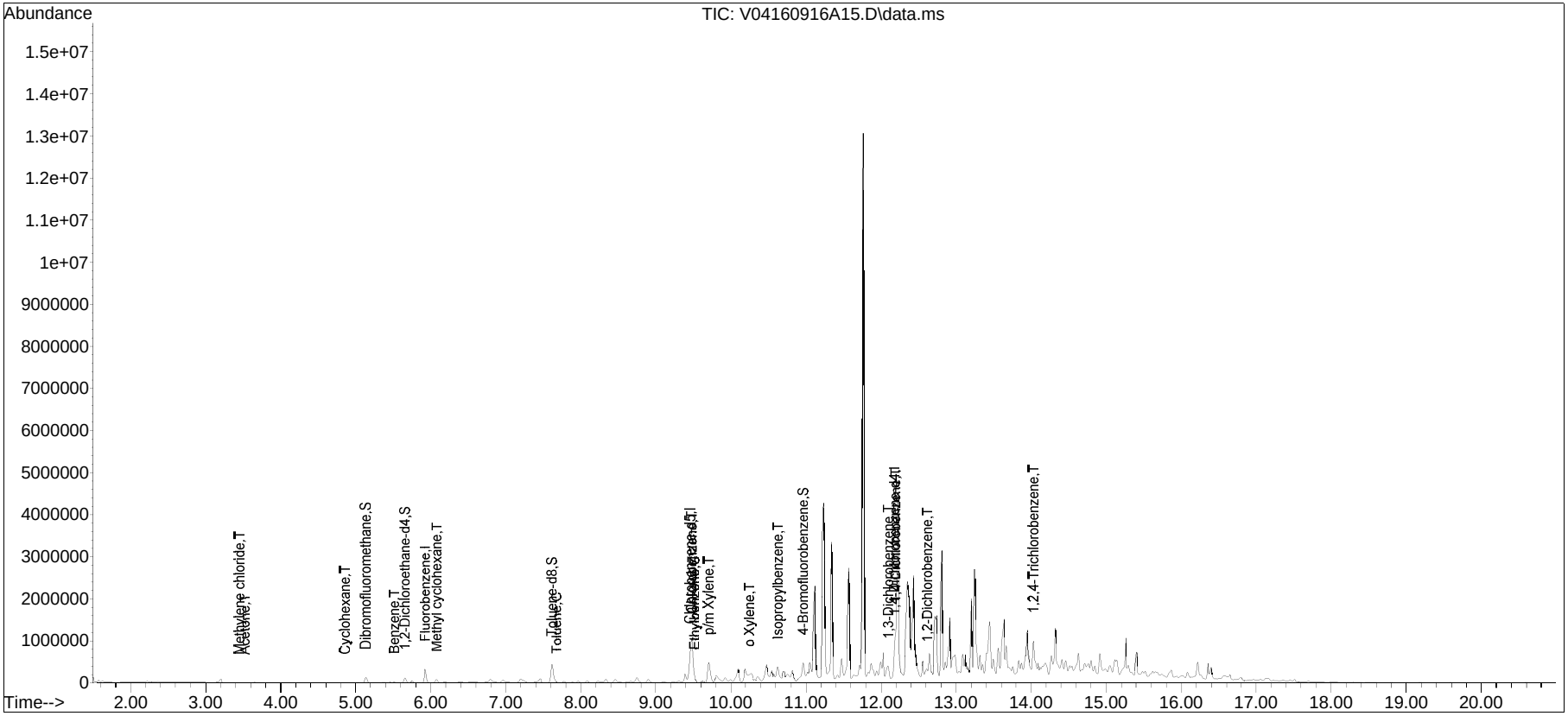
(#) = qualifier out of range (m) = manual integration (+) = signals summed

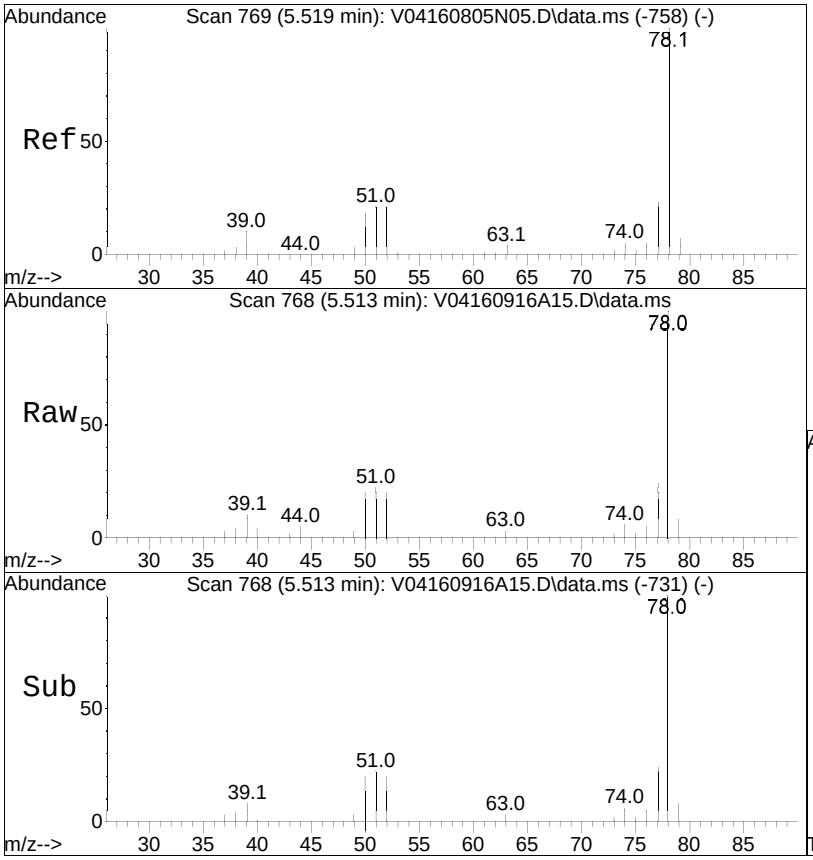
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA104\2016\160916A\
Data File : V04160916A15.D
Acq On : 16 Sep 2016 2:53 pm
Operator : VOA104:PP
Sample : l1629226-16,31H,4.9,5,0.100,,x
Misc : WG932860,ICAL12726
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 16 16:04:50 2016
Quant Method : I:\VOLATILES\VOA104\2016\160916A\V104_160805N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Aug 06 08:04:57 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist916A\V04160916A02.D•

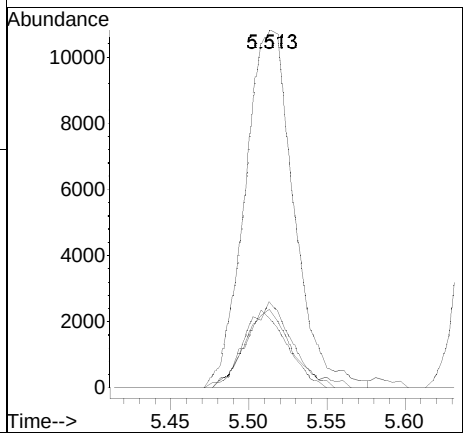




#41
Benzene
Concen: 1.40 ug/L
RT: 5.513 min Scan# 768
Delta R.T. -0.006 min
Lab File: V04160916A15.D
Acq: 16 Sep 2016 2:53 pm

Tgt Ion: 78 Resp: 23466

Ion	Ratio	Lower	Upper
78	100		
77	23.5	15.2	31.6
51	20.9	14.1	29.3
52	19.1	14.0	29.2



Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA100\2016\160916A\
Data File : V00160916A15.D
Acq On : 16 Sep 2016 3:00 pm
Operator : VOA100:BD
Sample : l1629226-15,31,4.7,5,,y
Misc : WG932751,ICAL12815
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 16 16:03:21 2016
Quant Method : I:\VOLATILES\VOA100\2016\160916A\V100_160829N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 06:21:02 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA100\2016\160916A\V00160916A02.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.558	96	353850	20.000	ug/L	0.00
Standard Area 1 = 380360			Recovery = 93.03%			
59) Chlorobenzene-d5	10.144	117	294064	20.000	ug/L	0.00
Standard Area 1 = 314073			Recovery = 93.63%			
79) 1,4-Dichlorobenzene-d4	12.729	152	153107	20.000	ug/L	0.00
Standard Area 1 = 175322			Recovery = 87.33%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.719	113	97656	19.490	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 97.45%			
43) 1,2-Dichloroethane-d4	6.264	65	108932	21.374	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 106.87%			
60) Toluene-d8	8.278	98	353135	21.472	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 107.36%			
83) 4-Bromofluorobenzene	11.555	95	138080	23.598	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 117.99%			
Target Compounds						Qvalue
73) Chlorobenzene	10.165	112	286	N.D.		

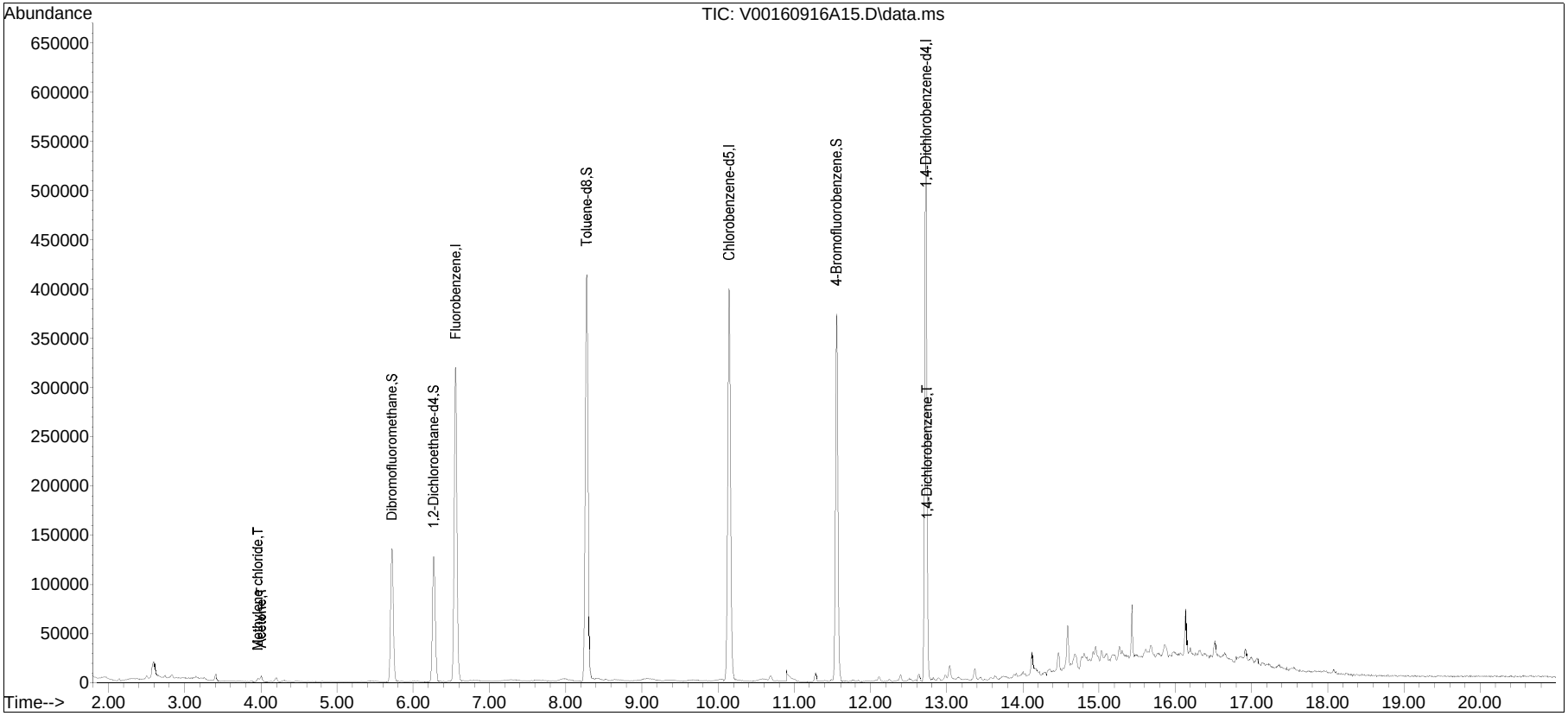
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA100\2016\160916A\
Data File : V00160916A15.D
Acq On : 16 Sep 2016 3:00 pm
Operator : VOA100:BD
Sample : l1629226-15,31,4.7,5,,y
Misc : WG932751,ICAL12815
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 16 16:03:21 2016
Quant Method : I:\VOLATILES\VOA100\2016\160916A\V100_160829N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 06:21:02 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist916A\V00160916A02.D•



V100_160829N_8260.m Fri Sep 16 17:04:27 2016 Page 2 : 3

Manual Integration Report

Data Path	: I:\VOLATILES\VOA100\2016\1Q	Method	: V100_160829N_8260.m
Data File	: V00160916A15.D	Operator	: VOA100:BD
Date Inj'd	: 9/16/2016 3:00 pm	Instrument	: VOA 100
Sample	: l1629226-15,31,4.7,5,,y	Quant Date	: 9/16/2016 3:58 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160916A\
Data File : V11160916A16.D
Acq On : 16 Sep 2016 03:13 pm
Operator : VOA111:BD
Sample : l1629226-03D,31H,5.6,5,0.025,,x
Misc : WG932865,ICAL12787
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 16 15:49:27 2016
Quant Method : I:\VOLATILES\VOA111\2016\160916A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA111\2016\160916A\V11160916A03.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.786	96	368974	20.000	ug/L	0.00
Standard Area 1 = 312820			Recovery = 117.95%			
59) Chlorobenzene-d5	9.284	117	227006	20.000	ug/L	0.00
Standard Area 1 = 198023			Recovery = 114.64%			
79) 1,4-Dichlorobenzene-d4	12.047	152	101236	20.000	ug/L	0.00
Standard Area 1 = 96448			Recovery = 104.96%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.995	113	84677	20.279	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 101.40%			
43) 1,2-Dichloroethane-d4	5.503	65	128969	21.227	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 106.14%			
60) Toluene-d8	7.454	98	338063	21.857	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 109.28%			
83) 4-Bromofluorobenzene	10.809	95	137145	24.941	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 124.71%			
Target Compounds						Qvalue
41) Benzene	5.372	78	4150	0.270	ug/L #	80
73) Chlorobenzene	9.304	112	79203	8.223	ug/L #	85

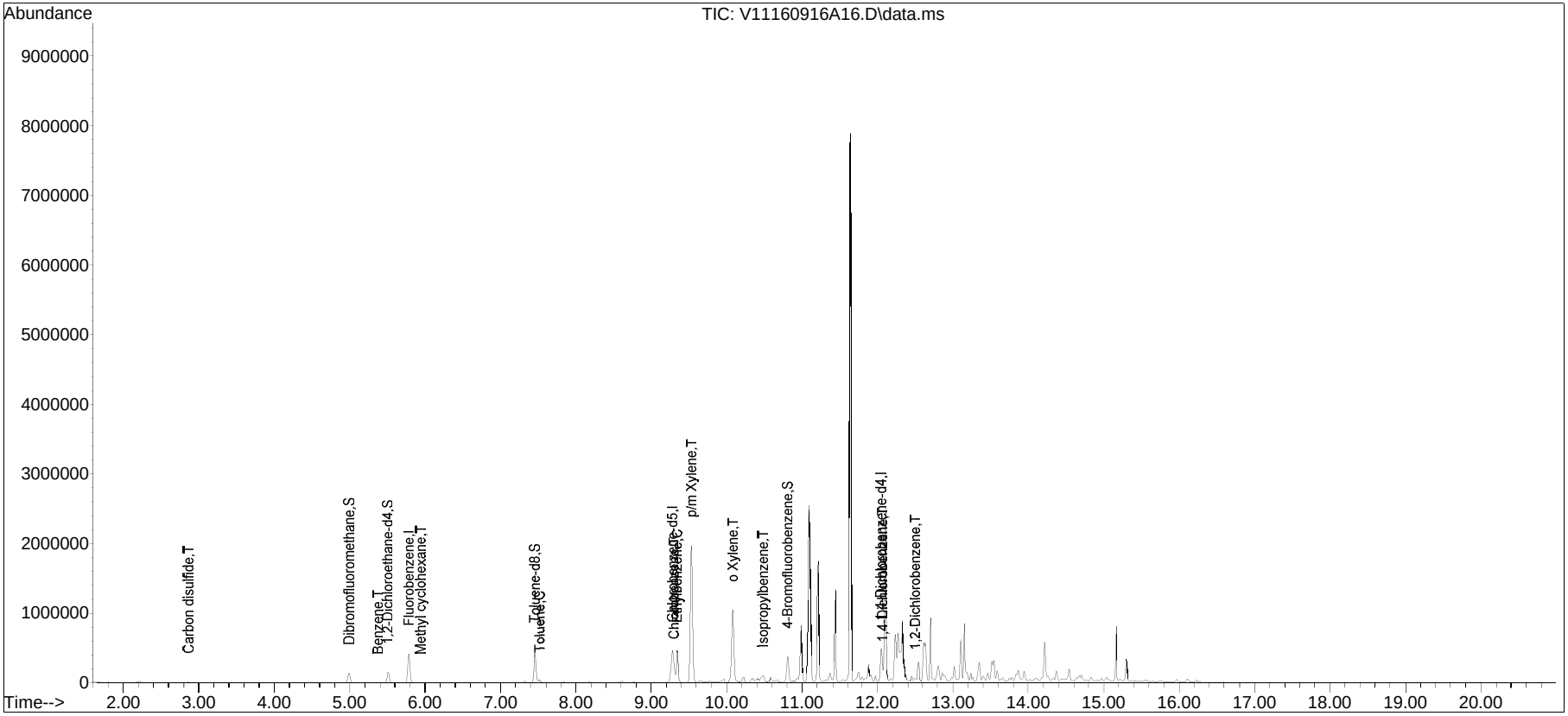
(#) = qualifier out of range (m) = manual integration (+) = signals summed

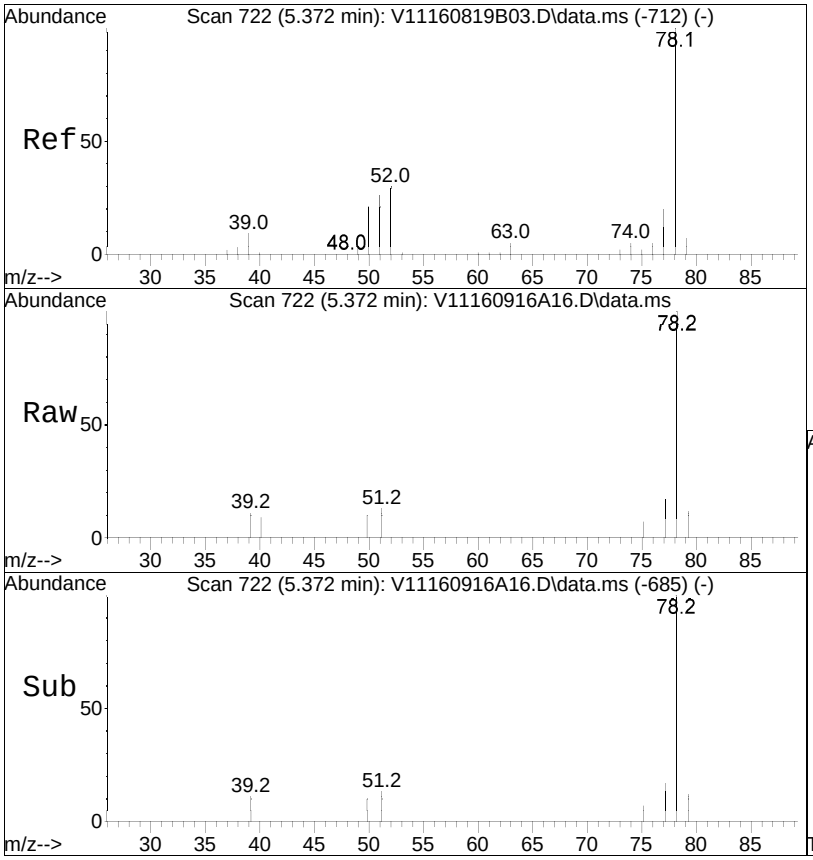
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160916A\
Data File : V11160916A16.D
Acq On : 16 Sep 2016 03:13 pm
Operator : VOA111:BD
Sample : l1629226-03D,31H,5.6,5,0.025,,x
Misc : WG932865,ICAL12787
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 16 15:49:27 2016
Quant Method : I:\VOLATILES\VOA111\2016\160916A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist916A\V11160916A03.D•

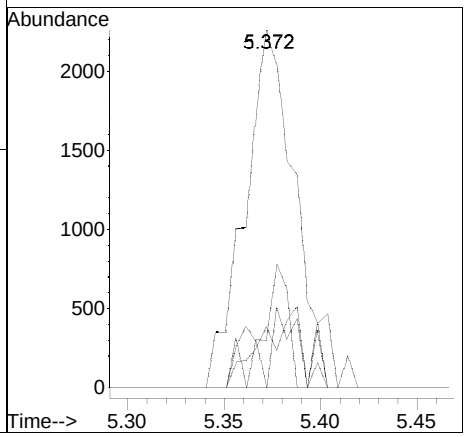


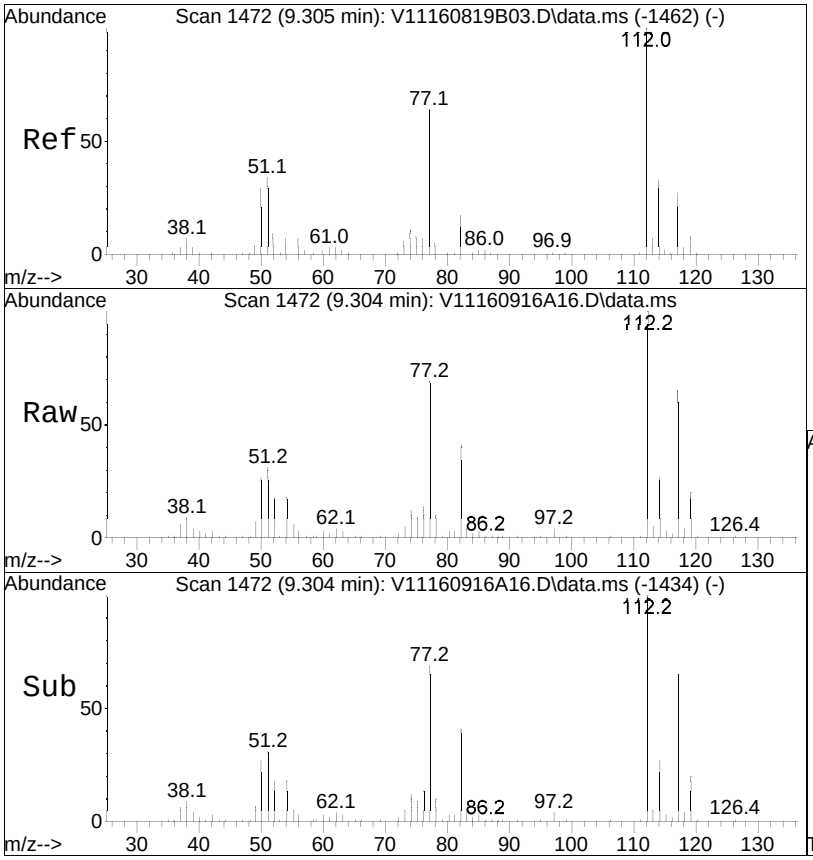


#41
Benzene
Concen: 0.27 ug/L
RT: 5.372 min Scan# 722
Delta R.T. -0.006 min
Lab File: V11160916A16.D
Acq: 16 Sep 2016 03:13 pm

Tgt Ion: 78 Resp: 4150

Ion	Ratio	Lower	Upper
78	100		
77	17.5	15.3	31.7
51	0.0	11.2	23.2#
52	12.7	11.1	23.0

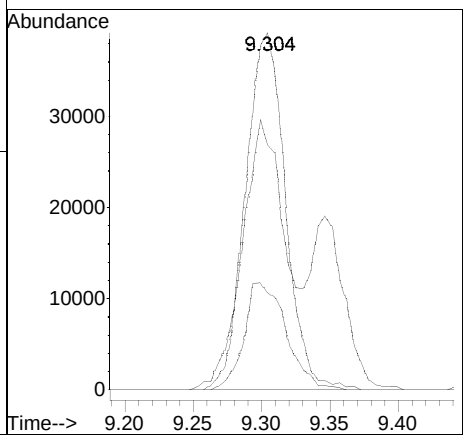




#73
Chlorobenzene
Concen: 8.22 ug/L
RT: 9.304 min Scan# 1472
Delta R.T. -0.001 min
Lab File: V11160916A16.D
Acq: 16 Sep 2016 03:13 pm

Tgt Ion:112 Resp: 79203

Ion	Ratio	Lower	Upper
112	100		
77	82.8	52.1	78.1#
114	31.7	25.4	38.2



Manual Integration Report

Data Path	: I:\VOLATILES\VOA111\2016\1	QMethod	: V111_160819_8260.m
Data File	: V11160916A16.D	Operator	: VOA111:BD
Date Inj'd	: 9/16/2016 3:13 pm	Instrument	: VOA111
Sample	: l1629226-03D,31H,5.6,5,0.0	Quant Date	: 9/16/2016 3:48 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA100\2016\160916A\
Data File : V00160916A16.D
Acq On : 16 Sep 2016 3:27 pm
Operator : VOA100:BD
Sample : l1629226-19,31,3.7,5,,z
Misc : WG932751,ICAL12815
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 16 16:04:23 2016
Quant Method : I:\VOLATILES\VOA100\2016\160916A\V100_160829N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 06:21:02 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA100\2016\160916A\V00160916A02.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.558	96	370142	20.000	ug/L	0.00
Standard Area 1 = 380360			Recovery = 97.31%			
59) Chlorobenzene-d5	10.144	117	307567	20.000	ug/L	0.00
Standard Area 1 = 314073			Recovery = 97.93%			
79) 1,4-Dichlorobenzene-d4	12.724	152	162030	20.000	ug/L	0.00
Standard Area 1 = 175322			Recovery = 92.42%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.719	113	100409	19.158	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 95.79%			
43) 1,2-Dichloroethane-d4	6.264	65	113073	21.210	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 106.05%			
60) Toluene-d8	8.273	98	369113	21.458	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 107.29%			
83) 4-Bromofluorobenzene	11.555	95	147212	23.773	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 118.86%			
Target Compounds						Qvalue
48) Trichloroethene	0.000		0	N.D.	d	

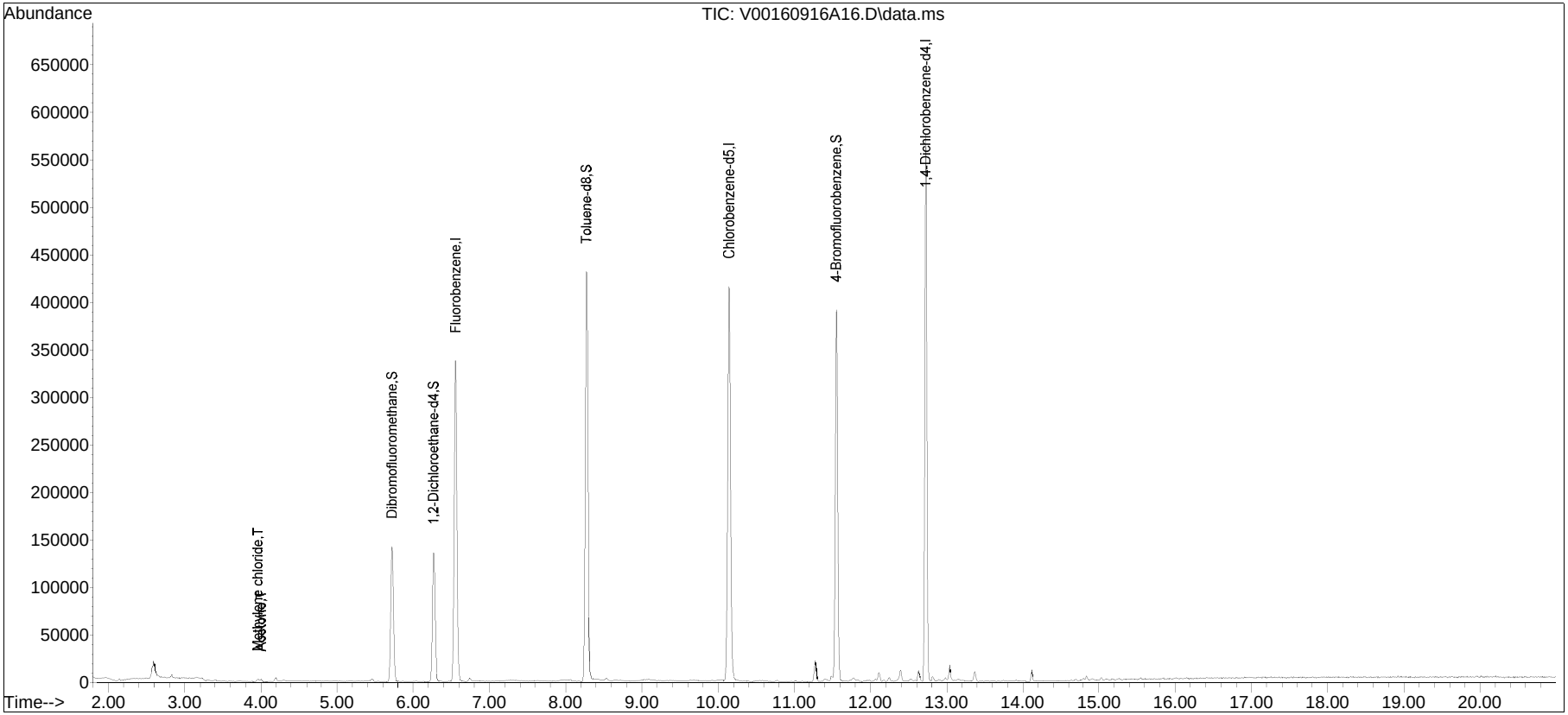
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA100\2016\160916A\
Data File : V00160916A16.D
Acq On : 16 Sep 2016 3:27 pm
Operator : VOA100:BD
Sample : l1629226-19,31,3.7,5,,z
Misc : WG932751,ICAL12815
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 16 16:04:23 2016
Quant Method : I:\VOLATILES\VOA100\2016\160916A\V100_160829N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 06:21:02 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist916A\V00160916A02.D•



V100_160829N_8260.m Fri Sep 16 17:04:36 2016 Page 2 : 3

Manual Integration Report

Data Path	: I:\VOLATILES\VOA100\2016\1Q	Method	: V100_160829N_8260.m
Data File	: V00160916A16.D	Operator	: VOA100:BD
Date Inj'd	: 9/16/2016 3:27 pm	Instrument	: VOA 100
Sample	: l1629226-19,31,3.7,5,,z	Quant Date	: 9/16/2016 3:58 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160916A\
Data File : V11160916A19.D
Acq On : 16 Sep 2016 04:30 pm
Operator : VOA111:BD
Sample : l1629226-04D,31H,2.3,5,0.010,,x
Misc : WG932865,ICAL12787
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 16 17:26:50 2016
Quant Method : I:\VOLATILES\VOA111\2016\160916A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA111\2016\160916A\V11160916A03.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	5.787	96	396212	20.000 ug/L	0.00
Standard Area 1 = 312820			Recovery = 126.66%		
59) Chlorobenzene-d5	9.284	117	245287	20.000 ug/L	0.00
Standard Area 1 = 198023			Recovery = 123.87%		
79) 1,4-Dichlorobenzene-d4	12.052	152	108799	20.000 ug/L	0.00
Standard Area 1 = 96448			Recovery = 112.81%		
System Monitoring Compounds					
36) Dibromofluoromethane	4.995	113	90708	20.230 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 101.15%		
43) 1,2-Dichloroethane-d4	5.509	65	135821	20.818 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 104.09%		
60) Toluene-d8	7.459	98	369017	22.081 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 110.41%		
83) 4-Bromofluorobenzene	10.809	95	143535	24.288 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 121.44%		
Target Compounds					Qvalue
41) Benzene	5.383	78	17795	1.080 ug/L #	89
73) Chlorobenzene	9.299	112	356093	34.215 ug/L	92

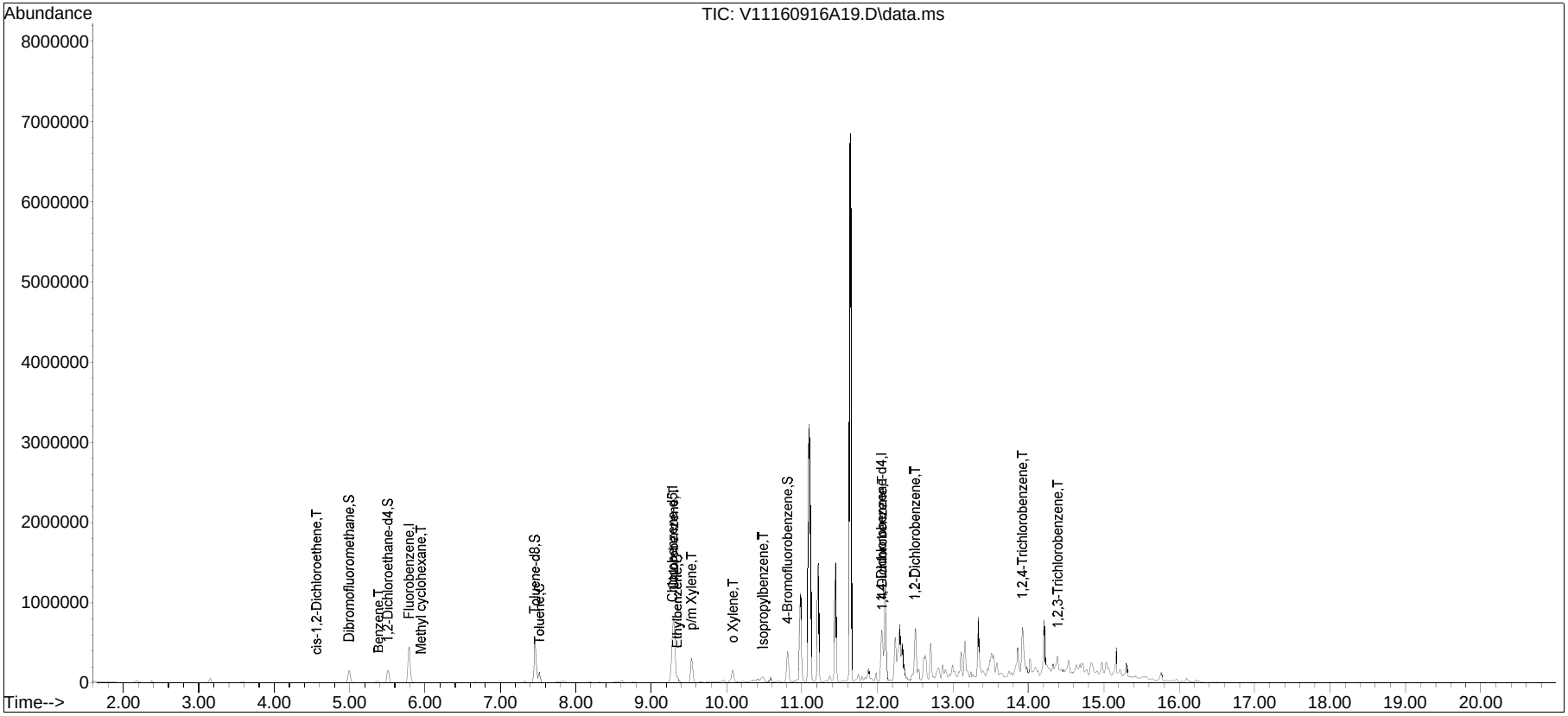
(#) = qualifier out of range (m) = manual integration (+) = signals summed

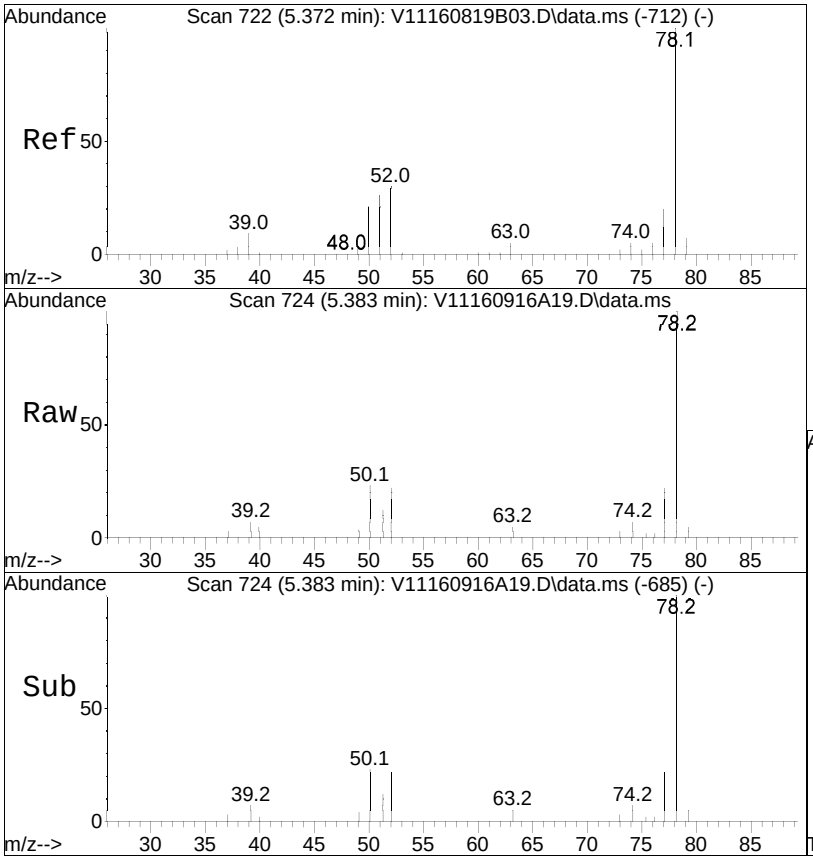
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160916A\
Data File : V11160916A19.D
Acq On : 16 Sep 2016 04:30 pm
Operator : VOA111:BD
Sample : l1629226-04D,31H,2.3,5,0.010,,x
Misc : WG932865,ICAL12787
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 16 17:26:50 2016
Quant Method : I:\VOLATILES\VOA111\2016\160916A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist916A\V11160916A03.D•

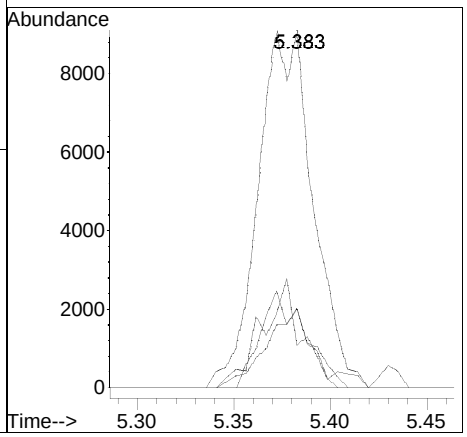


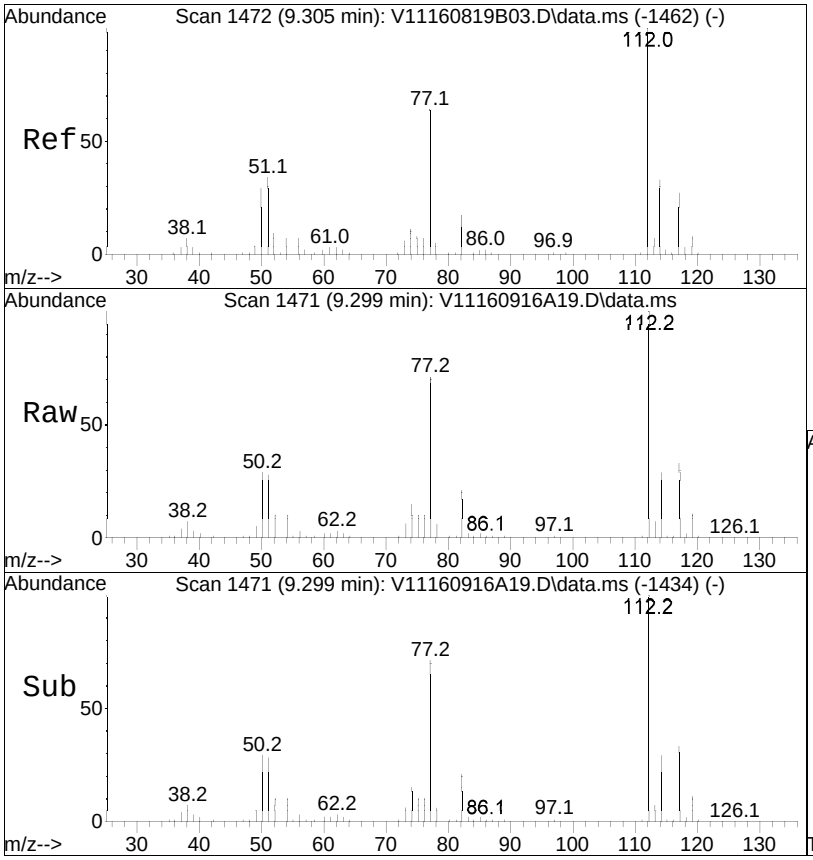


#41
Benzene
Concen: 1.08 ug/L
RT: 5.383 min Scan# 724
Delta R.T. 0.005 min
Lab File: V11160916A19.D
Acq: 16 Sep 2016 04:30 pm

Tgt Ion: 78 Resp: 17795

Ion	Ratio	Lower	Upper
78	100		
77	19.3	15.3	31.7
51	23.8	11.2	23.2#
52	20.9	11.1	23.0

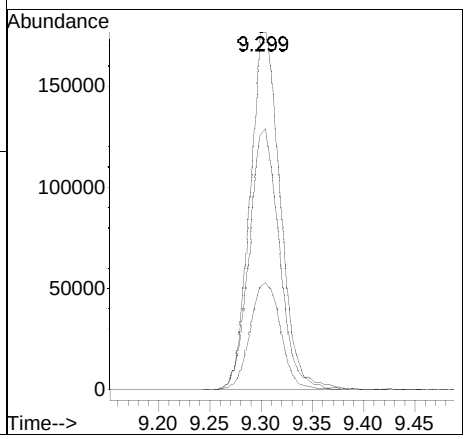




#73
Chlorobenzene
Concen: 34.22 ug/L
RT: 9.299 min Scan# 1471
Delta R.T. -0.006 min
Lab File: V11160916A19.D
Acq: 16 Sep 2016 04:30 pm

Tgt Ion:112 Resp: 356093

Ion	Ratio	Lower	Upper
112	100		
77	74.0	52.1	78.1
114	30.9	25.4	38.2



Manual Integration Report

Data Path	: I:\VOLATILES\VOA111\2016\1	QMethod	: V111_160819_8260.m
Data File	: V11160916A19.D	Operator	: VOA111:BD
Date Inj'd	: 9/16/2016 4:30 pm	Instrument	: VOA111
Sample	: l1629226-04D,31H,2.3,5,0.0	Quant Date	: 9/16/2016 5:25 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160916A\
Data File : V11160916A20.D
Acq On : 16 Sep 2016 04:56 pm
Operator : VOA111:BD
Sample : l1629226-05D,31H,4.6,5,0.025,,x
Misc : WG932865,ICAL12787
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 16 17:28:04 2016
Quant Method : I:\VOLATILES\VOA111\2016\160916A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA111\2016\160916A\V11160916A03.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.787	96	395853	20.000	ug/L	0.00
Standard Area 1 = 312820			Recovery = 126.54%			
59) Chlorobenzene-d5	9.284	117	245618	20.000	ug/L	0.00
Standard Area 1 = 198023			Recovery = 124.04%			
79) 1,4-Dichlorobenzene-d4	12.052	152	110886	20.000	ug/L	0.00
Standard Area 1 = 96448			Recovery = 114.97%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.990	113	94725	21.145	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 105.73%			
43) 1,2-Dichloroethane-d4	5.503	65	137432	21.084	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 105.42%			
60) Toluene-d8	7.454	98	378394	22.611	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 113.05%			
83) 4-Bromofluorobenzene	10.809	95	149403	24.805	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 124.03%			
Target Compounds						Qvalue
73) Chlorobenzene	9.299	112	107406	10.306	ug/L	89

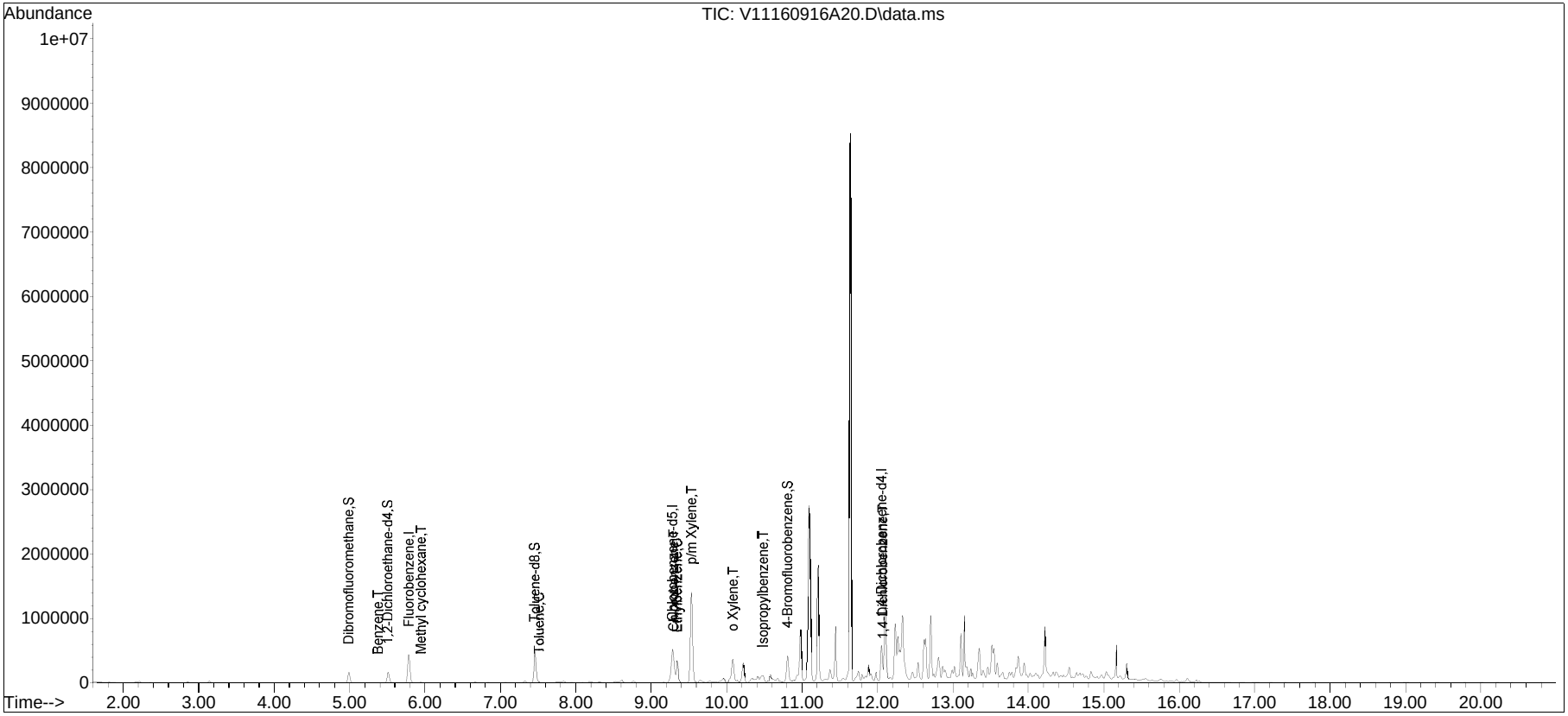
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

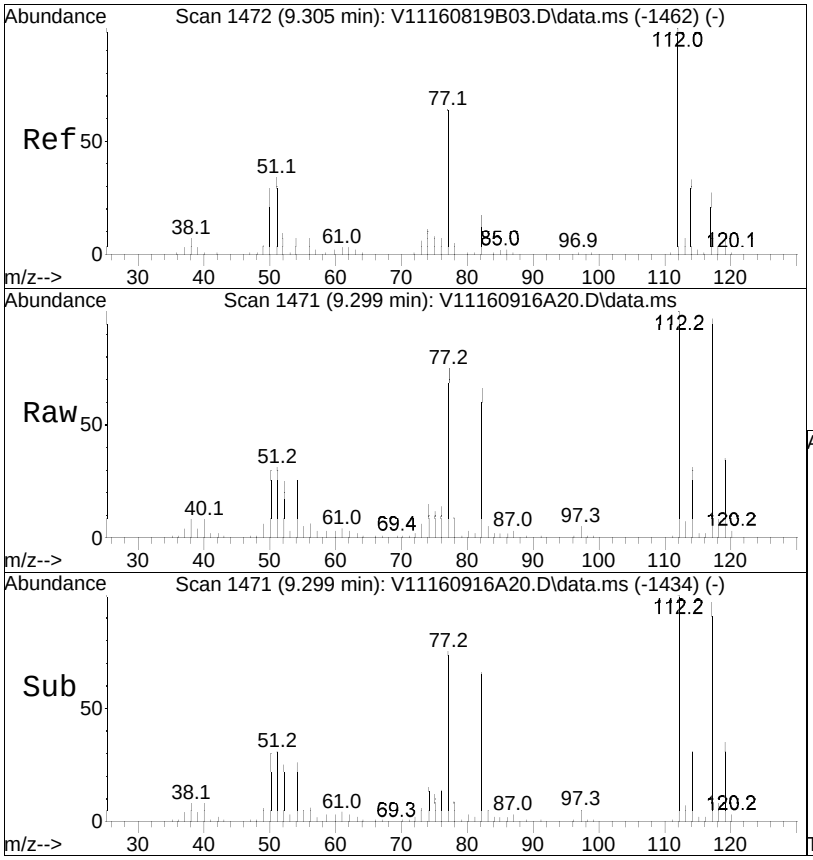
Data Path : I:\VOLATILES\VOA111\2016\160916A\
Data File : V11160916A20.D
Acq On : 16 Sep 2016 04:56 pm
Operator : VOA111:BD
Sample : l1629226-05D,31H,4.6,5,0.025,,x
Misc : WG932865,ICAL12787
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 16 17:28:04 2016
Quant Method : I:\VOLATILES\VOA111\2016\160916A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist916A\V11160916A03.D•



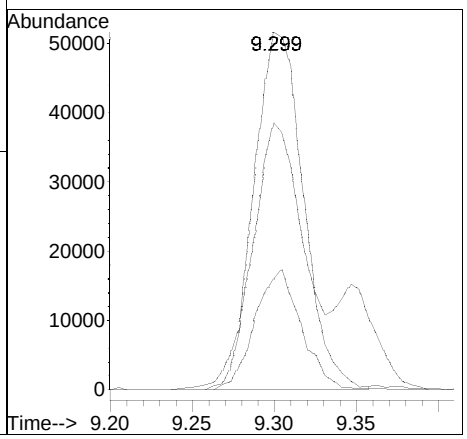
V111_160819_8260.m Fri Sep 16 17:32:47 2016 Page 2 : 3



#73
Chlorobenzene
Concen: 10.31 ug/L
RT: 9.299 min Scan# 1471
Delta R.T. -0.006 min
Lab File: V11160916A20.D
Acq: 16 Sep 2016 04:56 pm

Tgt Ion:112 Resp: 107406

Ion	Ratio	Lower	Upper
112	100		
77	77.6	52.1	78.1
114	31.8	25.4	38.2



Manual Integration Report

Data Path	: I:\VOLATILES\VOA111\2016\1	QMethod	: V111_160819_8260.m
Data File	: V11160916A20.D	Operator	: VOA111:BD
Date Inj'd	: 9/16/2016 4:56 pm	Instrument	: VOA111
Sample	: l1629226-05D,31H,4.6,5,0.0	Quant Date	: 9/16/2016 5:25 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160916A\
Data File : V11160916A21.D
Acq On : 16 Sep 2016 05:21 pm
Operator : VOA111:MS
Sample : l1629226-06D,31H,4.3,5,0.010,,x
Misc : WG932865,ICAL12787
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 16 18:44:32 2016
Quant Method : I:\VOLATILES\VOA111\2016\160916A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA111\2016\160916A\V11160916A03.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.792	96	411025	20.000	ug/L	0.00
Standard Area 1 = 312820			Recovery = 131.39%			
59) Chlorobenzene-d5	9.284	117	257685	20.000	ug/L	0.00
Standard Area 1 = 198023			Recovery = 130.13%			
79) 1,4-Dichlorobenzene-d4	12.052	152	111716	20.000	ug/L	0.00
Standard Area 1 = 96448			Recovery = 115.83%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.995	113	98365	21.147	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 105.74%			
43) 1,2-Dichloroethane-d4	5.509	65	140876	20.815	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 104.08%			
60) Toluene-d8	7.459	98	384906	21.923	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 109.61%			
83) 4-Bromofluorobenzene	10.810	95	157206	25.907	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 129.54%			
Target Compounds						Qvalue
73) Chlorobenzene	9.300	112	101363	9.271	ug/L	91

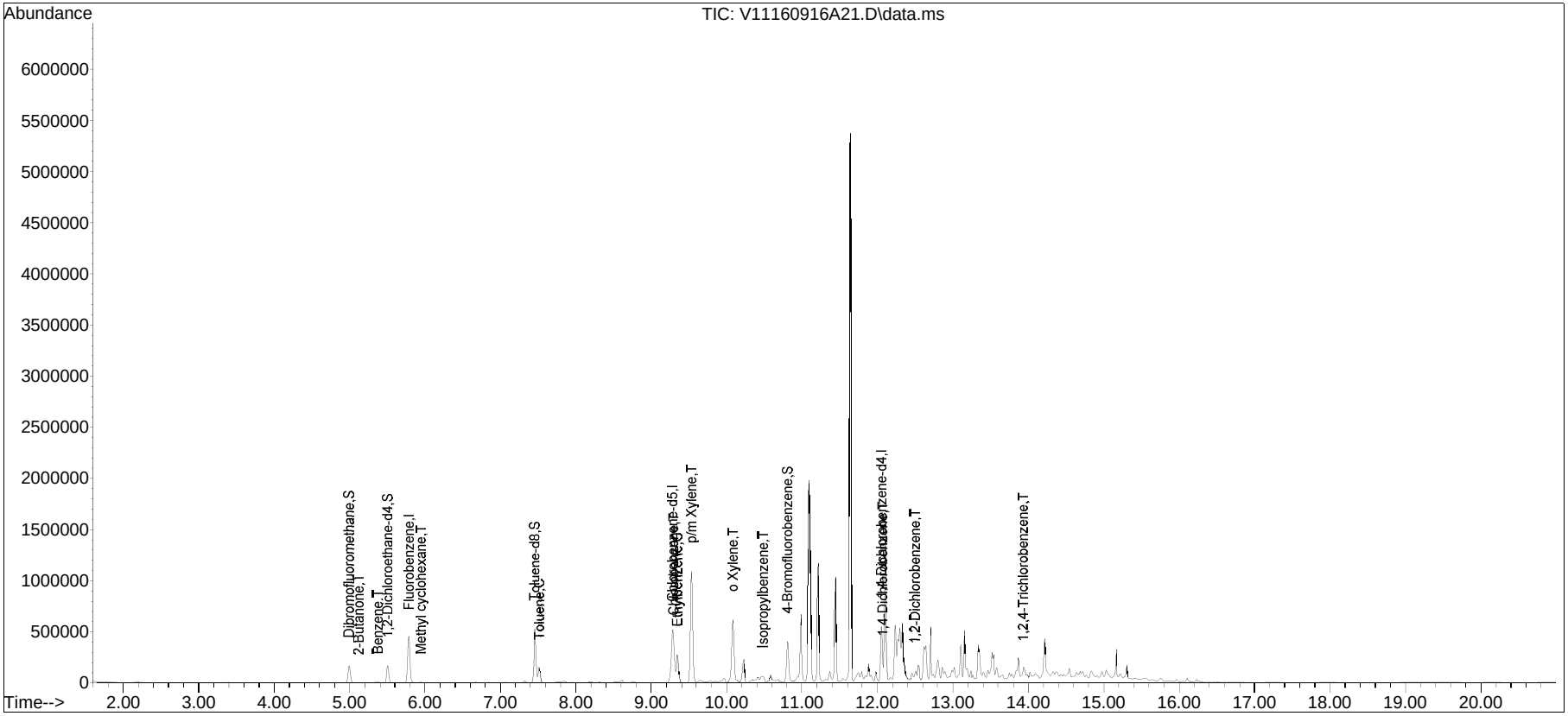
(#) = qualifier out of range (m) = manual integration (+) = signals summed

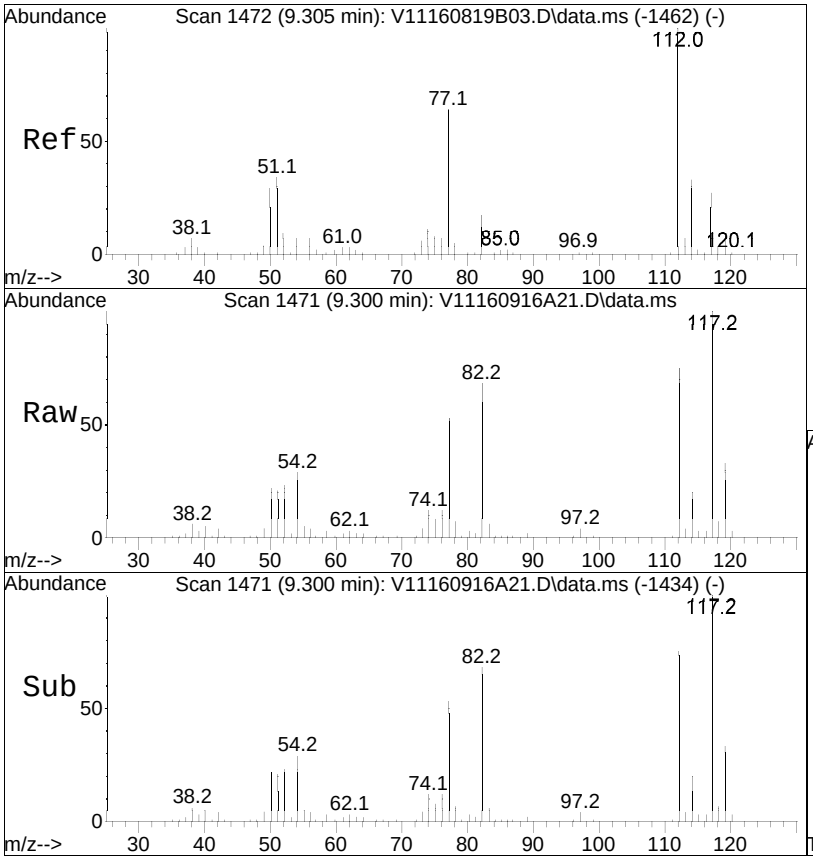
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160916A\
Data File : V11160916A21.D
Acq On : 16 Sep 2016 05:21 pm
Operator : VOA111:MS
Sample : l1629226-06D,31H,4.3,5,0.010,,x
Misc : WG932865,ICAL12787
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 16 18:44:32 2016
Quant Method : I:\VOLATILES\VOA111\2016\160916A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist916A\V11160916A03.D•

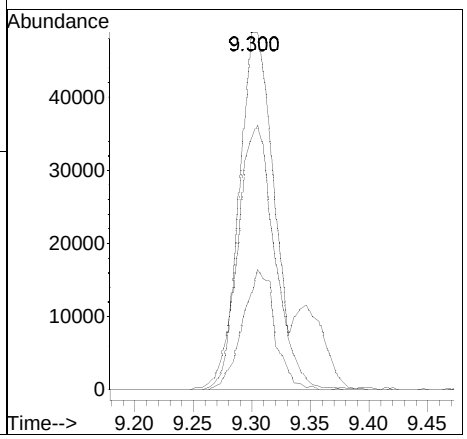




#73
Chlorobenzene
Concen: 9.27 ug/L
RT: 9.300 min Scan# 1471
Delta R.T. -0.005 min
Lab File: V11160916A21.D
Acq: 16 Sep 2016 05:21 pm

Tgt Ion:112 Resp: 101363

Ion	Ratio	Lower	Upper
112	100		
77	75.6	52.1	78.1
114	31.5	25.4	38.2



Manual Integration Report

Data Path	: I:\VOLATILES\VOA111\2016\1	QMethod	: V111_160819_8260.m
Data File	: V11160916A21.D	Operator	: VOA111:MS
Date Inj'd	: 9/16/2016 5:21 pm	Instrument	: VOA111
Sample	: l1629226-06D,31H,4.3,5,0.0	Quant Date	: 9/16/2016 6:41 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160916A\
Data File : V11160916A22.D
Acq On : 16 Sep 2016 05:47 pm
Operator : VOA111:MS
Sample : l1629226-07D,31H,4.0,5,0.010,,x
Misc : WG932865,ICAL12787
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 16 19:08:53 2016
Quant Method : I:\VOLATILES\VOA111\2016\160916A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA111\2016\160916A\V11160916A03.D
Sub List : 8260-NJTCL - Standard NJ Sublist

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	5.786	96	415189	20.000 ug/L	0.00
Standard Area 1 = 312820			Recovery = 132.72%		
59) Chlorobenzene-d5	9.284	117	261230	20.000 ug/L	0.00
Standard Area 1 = 198023			Recovery = 131.92%		
79) 1,4-Dichlorobenzene-d4	12.047	152	111260	20.000 ug/L	0.00
Standard Area 1 = 96448			Recovery = 115.36%		
System Monitoring Compounds					
36) Dibromofluoromethane	4.995	113	98666	20.999 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 104.99%		
43) 1,2-Dichloroethane-d4	5.508	65	140634	20.571 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 102.86%		
60) Toluene-d8	7.459	98	389913	21.907 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 109.54%		
83) 4-Bromofluorobenzene	10.809	95	151686	25.100 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 125.50%		
Target Compounds					Qvalue
41) Benzene	5.372	78	8845	0.512 ug/L #	85
48) Trichloroethene	0.000		0	N.D.	
73) Chlorobenzene	9.305	112	271334	24.480 ug/L	90

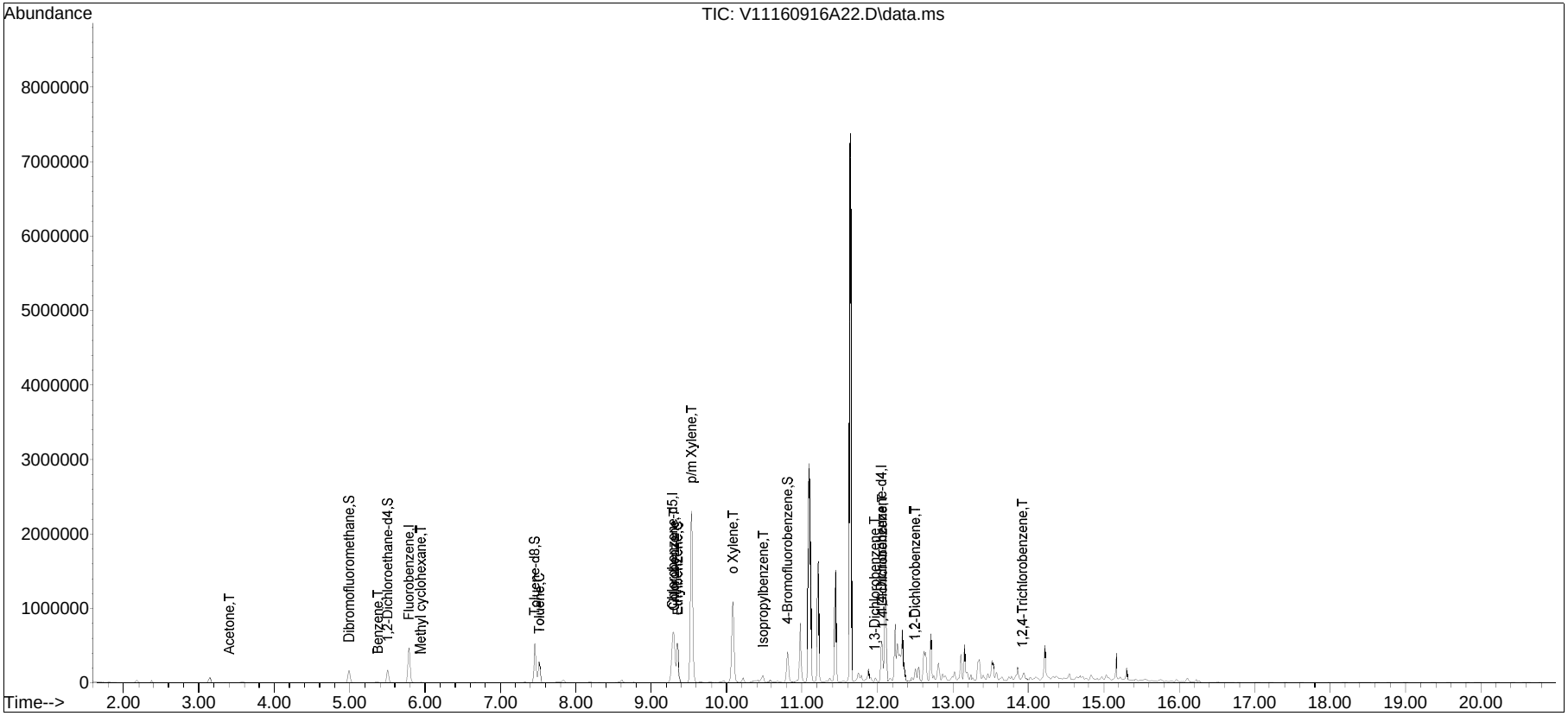
(#) = qualifier out of range (m) = manual integration (+) = signals summed

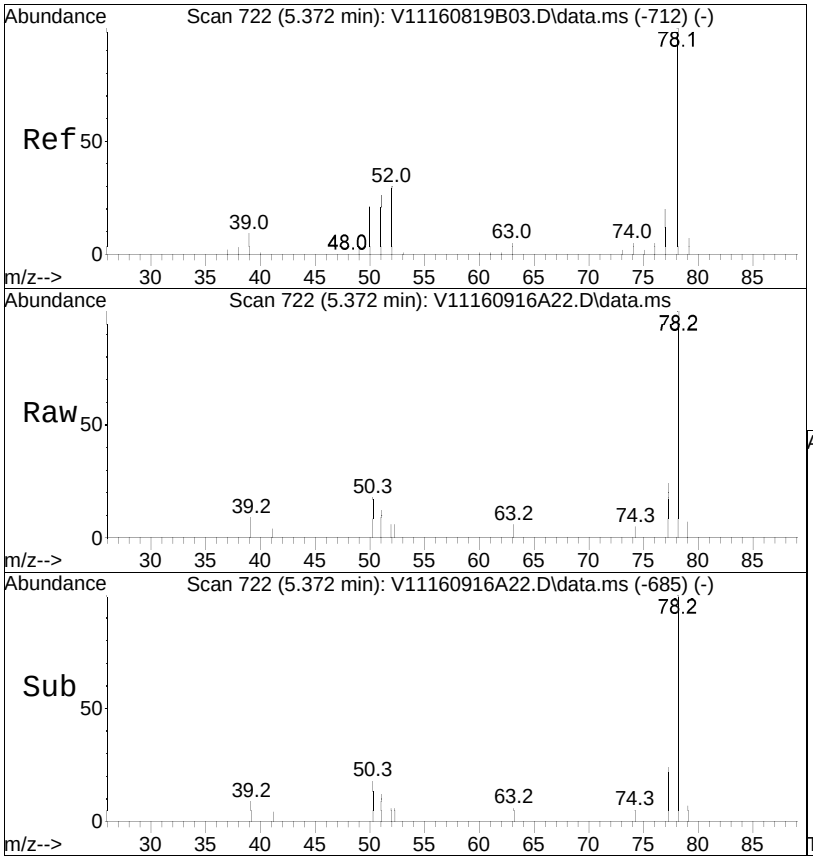
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160916A\
Data File : V11160916A22.D
Acq On : 16 Sep 2016 05:47 pm
Operator : VOA111:MS
Sample : l1629226-07D,31H,4.0,5,0.010,,x
Misc : WG932865,ICAL12787
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 16 19:08:53 2016
Quant Method : I:\VOLATILES\VOA111\2016\160916A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

Sub List : 8260-NJTCL - Standard NJ Sublist916A\V11160916A03.D•

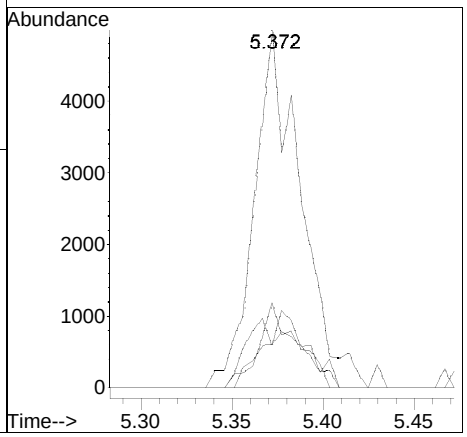


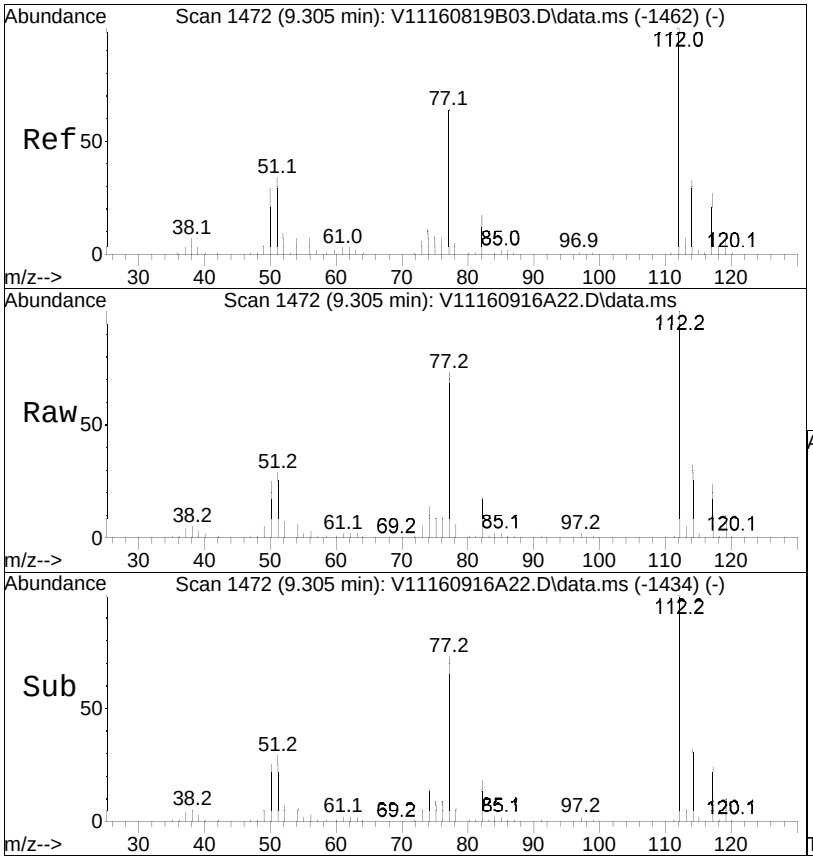


#41
Benzene
Concen: 0.51 ug/L
RT: 5.372 min Scan# 722
Delta R.T. -0.006 min
Lab File: V11160916A22.D
Acq: 16 Sep 2016 05:47 pm

Tgt Ion: 78 Resp: 8845

Ion	Ratio	Lower	Upper
78	100		
77	19.7	15.3	31.7
51	0.0	11.2	23.2#
52	17.3	11.1	23.0

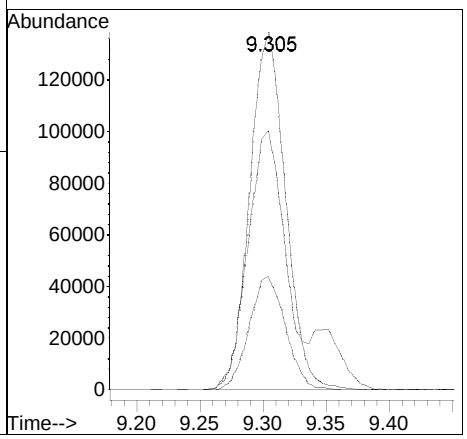




#73
Chlorobenzene
Concen: 24.48 ug/L
RT: 9.305 min Scan# 1472
Delta R.T. -0.000 min
Lab File: V11160916A22.D
Acq: 16 Sep 2016 05:47 pm

Tgt Ion:112 Resp: 271334

Ion	Ratio	Lower	Upper
112	100		
77	76.2	52.1	78.1
114	32.3	25.4	38.2



Manual Integration Report

Data Path	: I:\VOLATILES\VOA111\2016\1	QMethod	: V111_160819_8260.m
Data File	: V11160916A22.D	Operator	: VOA111:MS
Date Inj'd	: 9/16/2016 5:47 pm	Instrument	: VOA111
Sample	: l1629226-07D,31H,4.0,5,0.0	Quant Date	: 9/16/2016 6:43 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160922\
Data File : VQ160922A14.D
Acq On : 22 Sep 2016 11:25 am
Operator : QUIMBY:PK
Sample : l1629226-03,31,10,10,,v
Misc : WG933853,ICAL12824
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 22 14:54:28 2016
Quant Method : I:\VOLATILES\Quimby\2016\160922\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Quimby\2016\160922\VQ160922A02.D
Sub List : 8260-TCLP - TCLP

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.629	96	164949	10.000 ug/L	0.00
Standard Area 1 = 171856			Recovery = 95.98%		
59) Chlorobenzene-d5	14.715	117	138631	10.000 ug/L	0.00
Standard Area 1 = 131116			Recovery = 105.73%		
79) 1,4-Dichlorobenzene-d4	19.011	152	62414	10.000 ug/L	# 0.00
Standard Area 1 = 47309			Recovery = 131.93%		
System Monitoring Compounds					
36) Dibromofluoromethane	8.386	113	32226	10.253 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.53%		
43) 1,2-Dichloroethane-d4	9.140	65	40522	11.139 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 111.39%		
60) Toluene-d8	12.160	98	189675	9.914 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.14%		
83) 4-Bromofluorobenzene	16.851	95	68249	8.024 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 80.24%		
Target Compounds					Qvalue
41) Benzene	9.305	78	33967	1.311 ug/L	96
73) Chlorobenzene	14.781	112	881004	41.783 ug/L	97

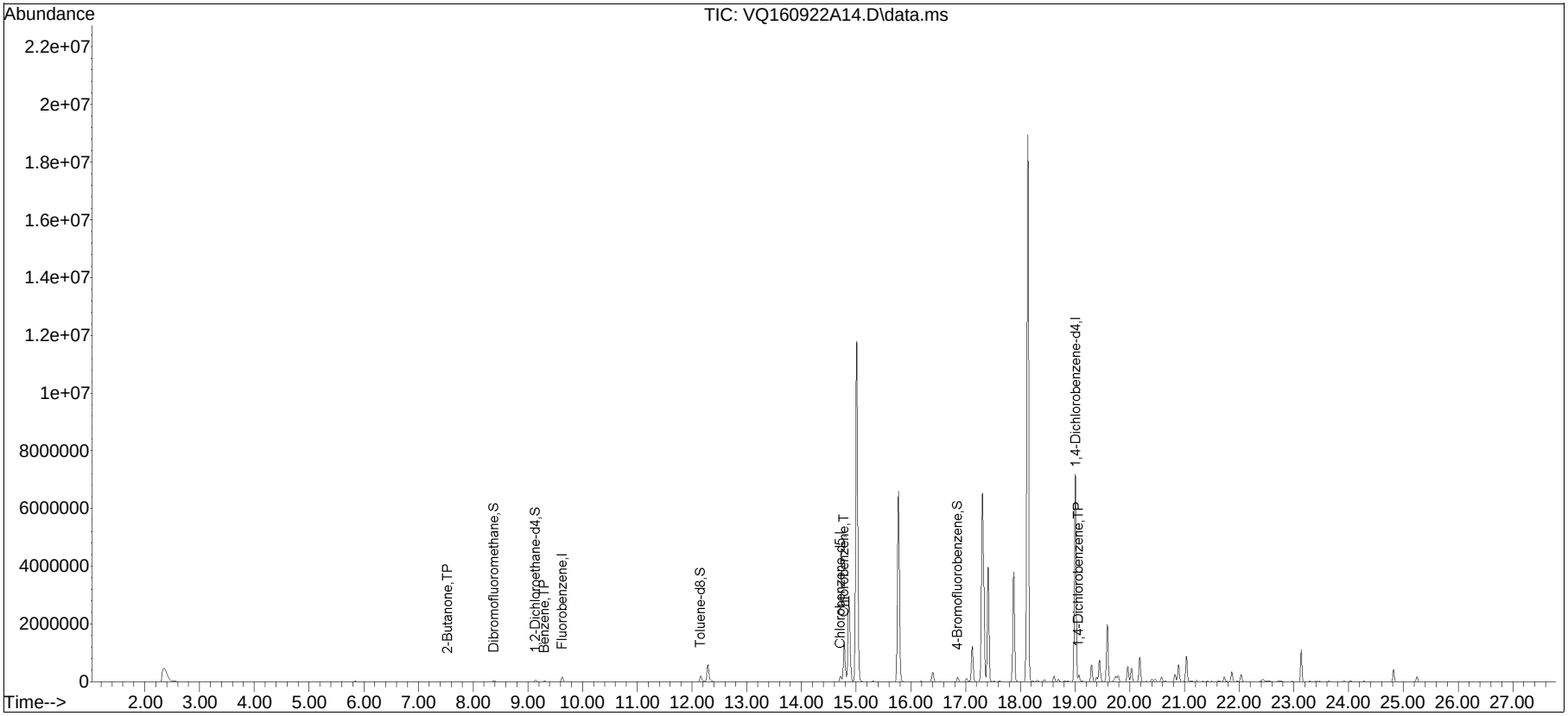
(#) = qualifier out of range (m) = manual integration (+) = signals summed

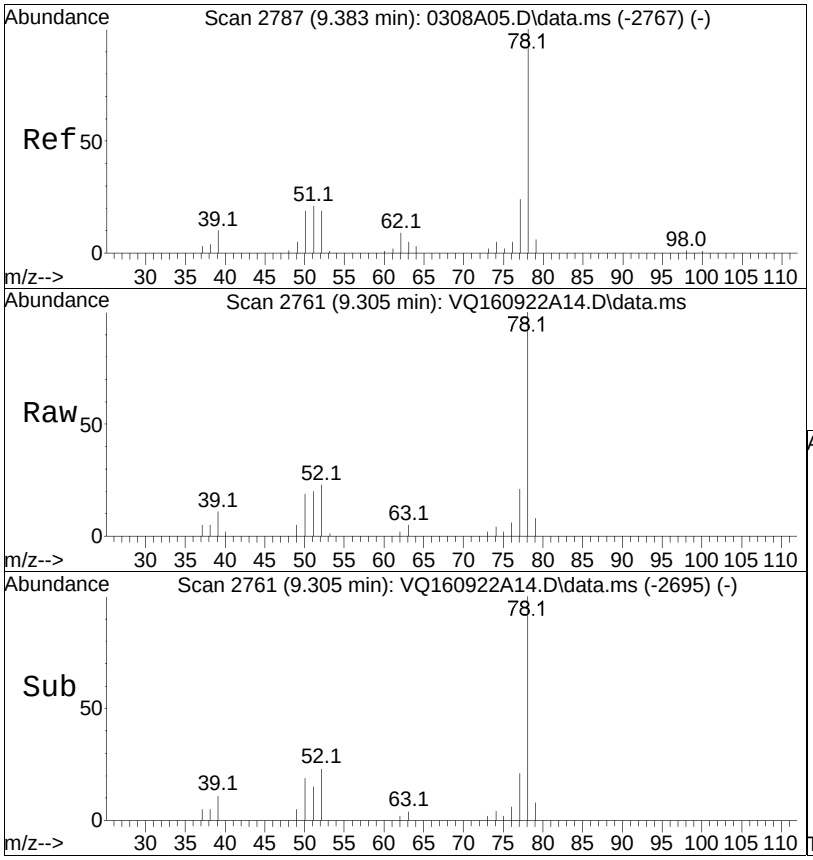
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160922\
Data File : VQ160922A14.D
Acq On : 22 Sep 2016 11:25 am
Operator : QUIMBY:PK
Sample : l1629226-03,31,10,10,,v
Misc : WG933853,ICAL12824
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 22 14:54:28 2016
Quant Method : I:\VOLATILES\Quimby\2016\160922\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

Sub List : 8260-TCLP - TCLP\Quimby\2016\160922\VQ160922A02.D•

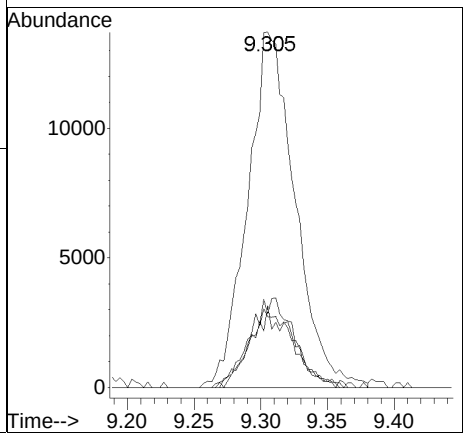


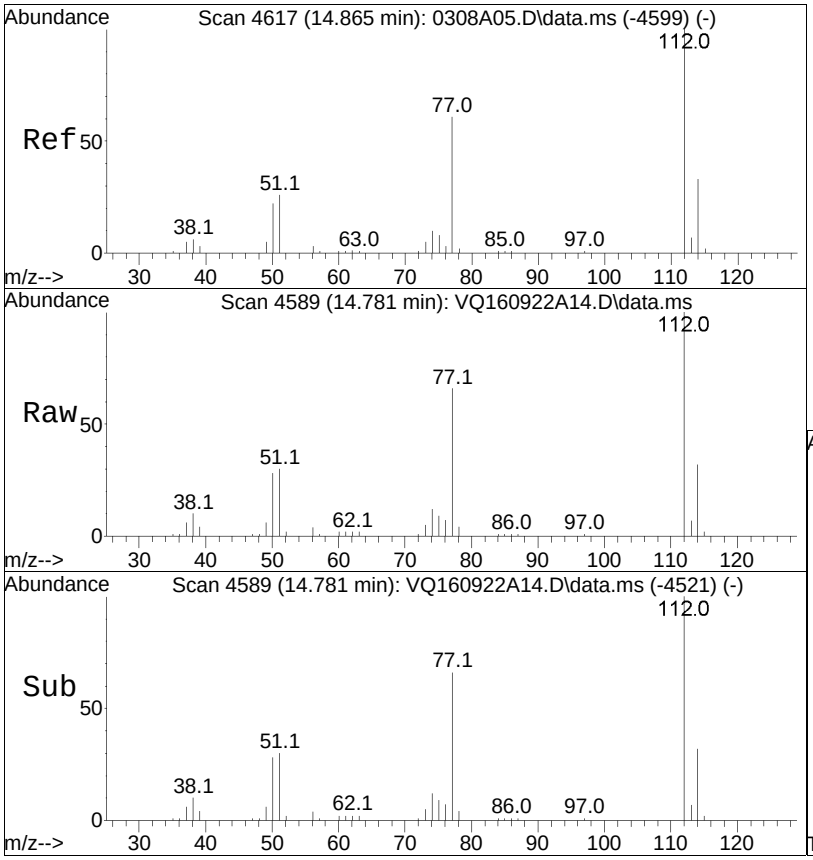


#41
Benzene
Concen: 1.31 ug/L
RT: 9.305 min Scan# 2761
Delta R.T. -0.003 min
Lab File: VQ160922A14.D
Acq: 22 Sep 2016 11:25 am

Tgt Ion: 78 Resp: 33967

Ion	Ratio	Lower	Upper
78	100		
77	23.5	15.3	31.9
51	21.7	14.1	29.3
52	12.8	11.8	24.6

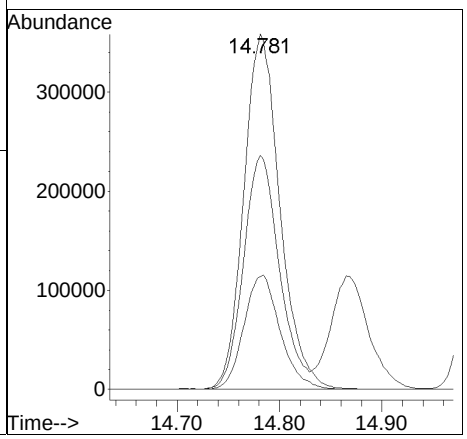




#73
Chlorobenzene
Concen: 41.78 ug/L
RT: 14.781 min Scan# 4589
Delta R.T. 0.003 min
Lab File: VQ160922A14.D
Acq: 22 Sep 2016 11:25 am

Tgt Ion:112 Resp: 881004

Ion	Ratio	Lower	Upper
112	100		
77	64.8	49.0	73.4
114	32.3	25.8	38.6



Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160922\
Data File : VQ160922A15.D
Acq On : 22 Sep 2016 11:56 am
Operator : QUIMBY:PK
Sample : l1629226-05,31,10,10,,v
Misc : WG933853,ICAL12824
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 22 14:54:56 2016
Quant Method : I:\VOLATILES\Quimby\2016\160922\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Quimby\2016\160922\VQ160922A02.D
Sub List : 8260-TCLP - TCLP

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.626	96	177237	10.000 ug/L	0.00
Standard Area 1 = 171856			Recovery = 103.13%		
59) Chlorobenzene-d5	14.715	117	145968	10.000 ug/L	0.00
Standard Area 1 = 131116			Recovery = 111.33%		
79) 1,4-Dichlorobenzene-d4	19.014	152	62279	10.000 ug/L	# 0.00
Standard Area 1 = 47309			Recovery = 131.64%		
System Monitoring Compounds					
36) Dibromofluoromethane	8.383	113	34166	10.117 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.17%		
43) 1,2-Dichloroethane-d4	9.138	65	43396	11.102 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 111.02%		
60) Toluene-d8	12.160	98	199635	9.910 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.10%		
83) 4-Bromofluorobenzene	16.860	95	71896	8.471 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 84.71%		
Target Compounds					Qvalue
73) Chlorobenzene	14.784	112	1179688	53.136 ug/L	97

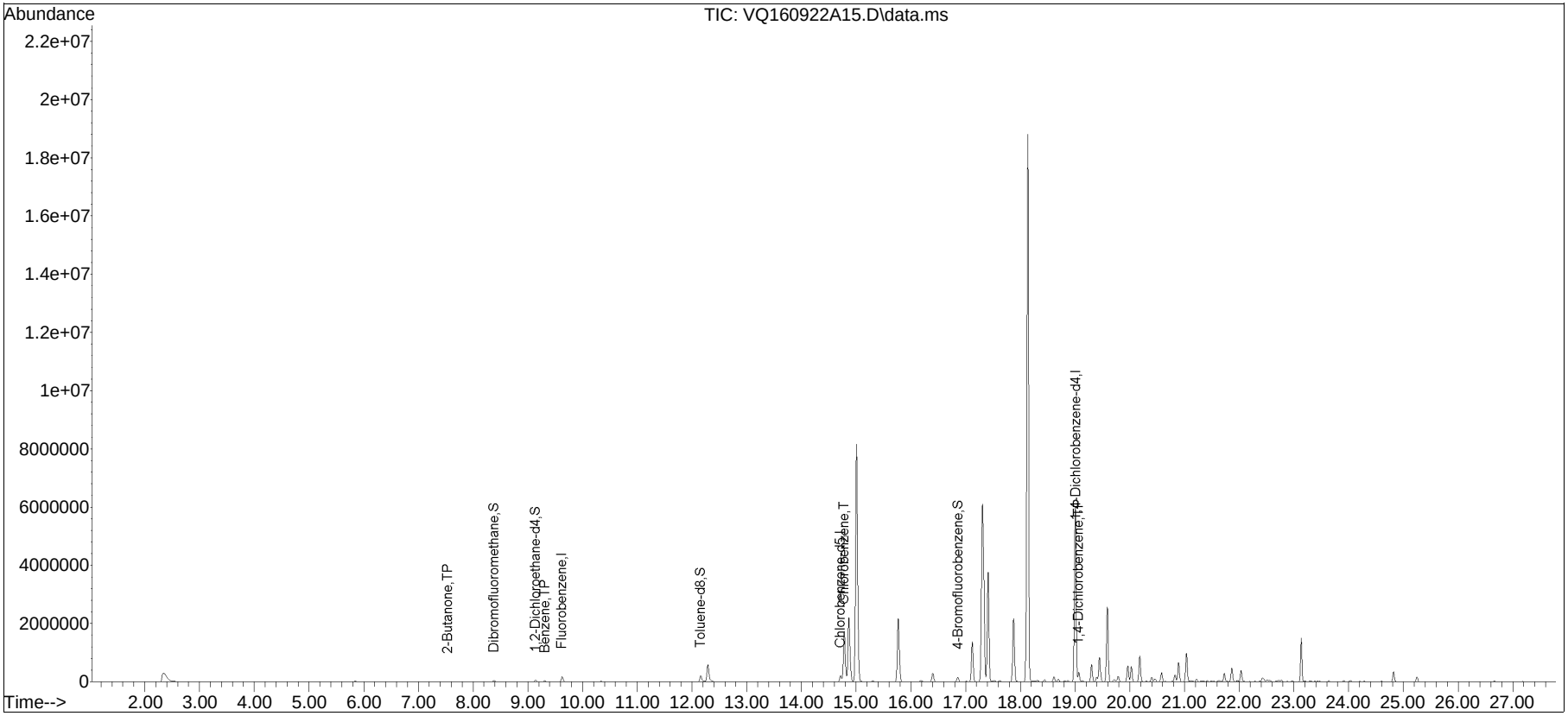
(#) = qualifier out of range (m) = manual integration (+) = signals summed

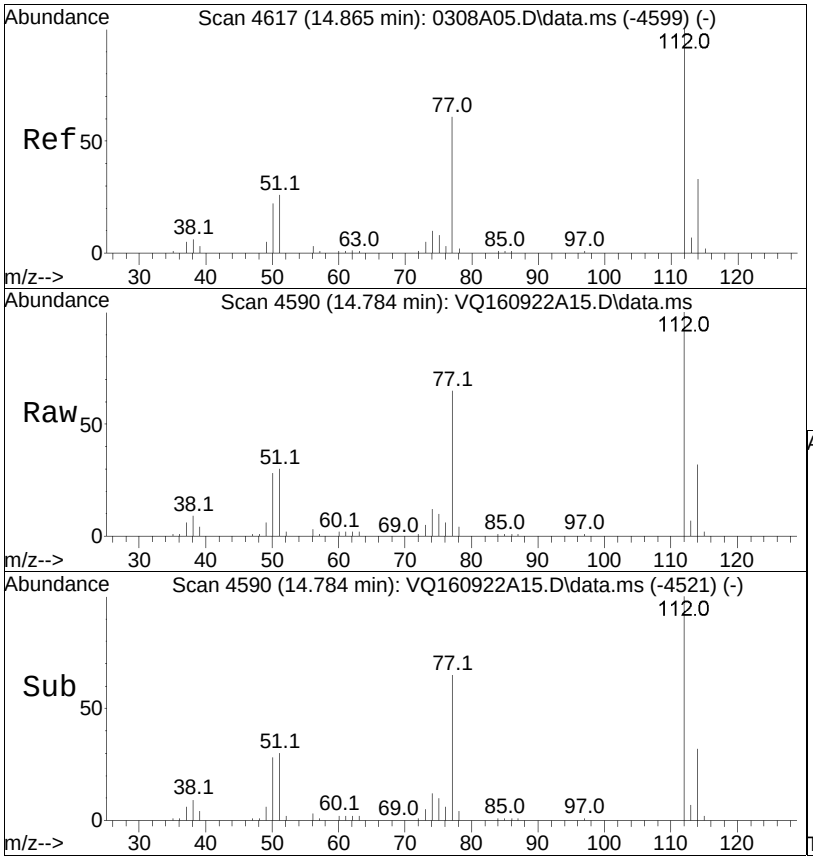
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160922\
Data File : VQ160922A15.D
Acq On : 22 Sep 2016 11:56 am
Operator : QUIMBY:PK
Sample : l1629226-05,31,10,10,,v
Misc : WG933853,ICAL12824
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 22 14:54:56 2016
Quant Method : I:\VOLATILES\Quimby\2016\160922\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

Sub List : 8260-TCLP - TCLP\Quimby\2016\160922\VQ160922A02.D•

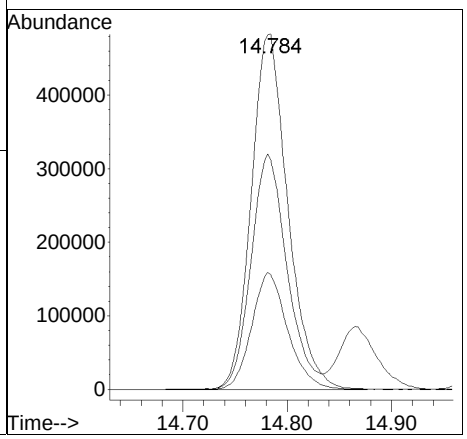




#73
Chlorobenzene
Concen: 53.14 ug/L
RT: 14.784 min Scan# 4590
Delta R.T. 0.006 min
Lab File: VQ160922A15.D
Acq: 22 Sep 2016 11:56 am

Tgt Ion:112 Resp: 1179688

Ion	Ratio	Lower	Upper
112	100		
77	65.1	49.0	73.4
114	32.3	25.8	38.6



Manual Integration Report

Data Path	: I:\VOLATILES\Quimby\2016\1	QMethod	: VQ_160829_8260.m
Data File	: VQ160922A15.D	Operator	: QUIMBY:PK
Date Inj'd	: 9/22/2016 11:56 am	Instrument	: Quimby
Sample	: l1629226-05,31,10,10,,v	Quant Date	: 9/22/2016 2:53 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160922\
Data File : VQ160922A16.D
Acq On : 22 Sep 2016 12:27 pm
Operator : QUIMBY:PK
Sample : l1629226-09,31,10,10,,
Misc : WG933853,ICAL12824
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 22 14:55:10 2016
Quant Method : I:\VOLATILES\Quimby\2016\160922\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Quimby\2016\160922\VQ160922A02.D
Sub List : 8260-TCLP - TCLP

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.626	96	184414	10.000 ug/L	0.00
Standard Area 1 = 171856			Recovery = 107.31%		
59) Chlorobenzene-d5	14.715	117	148132	10.000 ug/L	0.00
Standard Area 1 = 131116			Recovery = 112.98%		
79) 1,4-Dichlorobenzene-d4	19.008	152	59905	10.000 ug/L	# 0.00
Standard Area 1 = 47309			Recovery = 126.62%		
System Monitoring Compounds					
36) Dibromofluoromethane	8.386	113	34731	9.884 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.84%		
43) 1,2-Dichloroethane-d4	9.143	65	44348	10.904 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 109.04%		
60) Toluene-d8	12.157	98	205327	10.044 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.44%		
83) 4-Bromofluorobenzene	16.851	95	71434	8.750 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 87.50%		
Target Compounds					Qvalue
41) Benzene	9.308	78	32171	1.110 ug/L #	91
73) Chlorobenzene	14.781	112	763987	33.909 ug/L	96

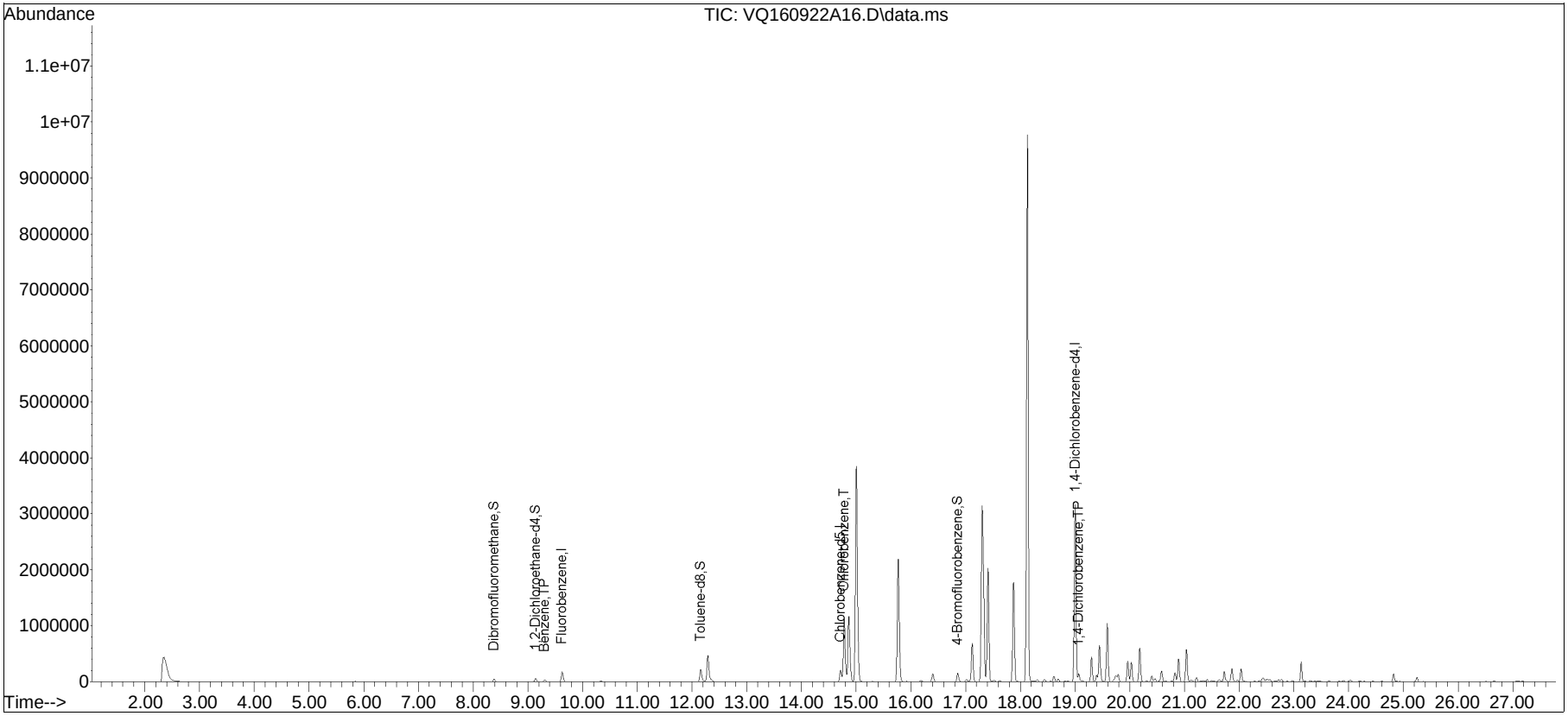
(#) = qualifier out of range (m) = manual integration (+) = signals summed

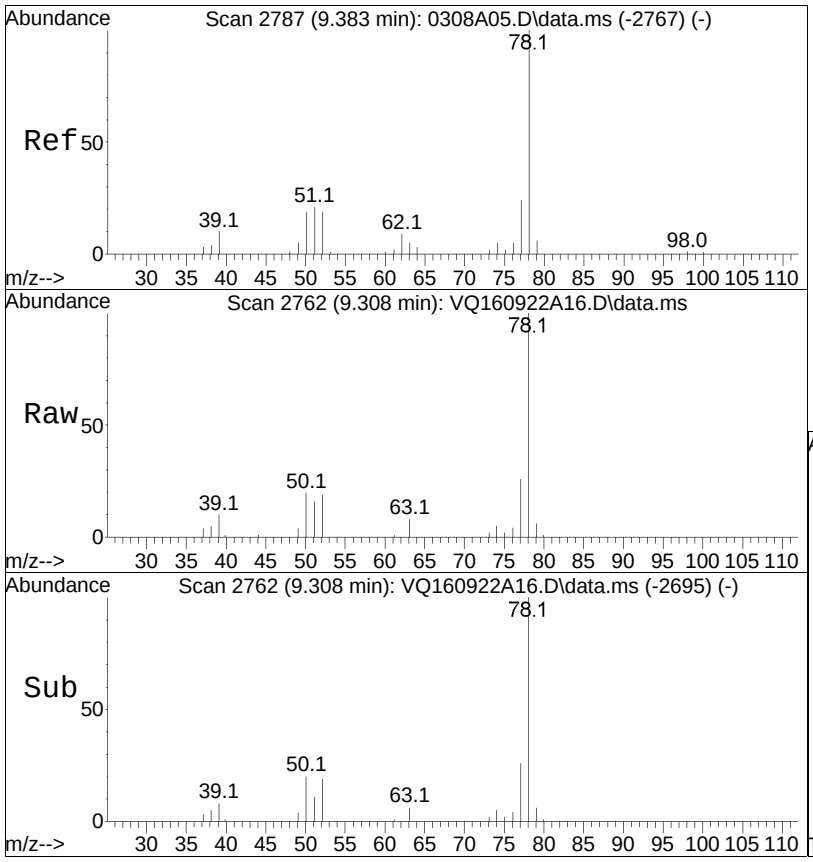
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160922\
Data File : VQ160922A16.D
Acq On : 22 Sep 2016 12:27 pm
Operator : QUIMBY:PK
Sample : l1629226-09,31,10,10,,
Misc : WG933853,ICAL12824
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 22 14:55:10 2016
Quant Method : I:\VOLATILES\Quimby\2016\160922\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

Sub List : 8260-TCLP - TCLP\Quimby\2016\160922\VQ160922A02.D•

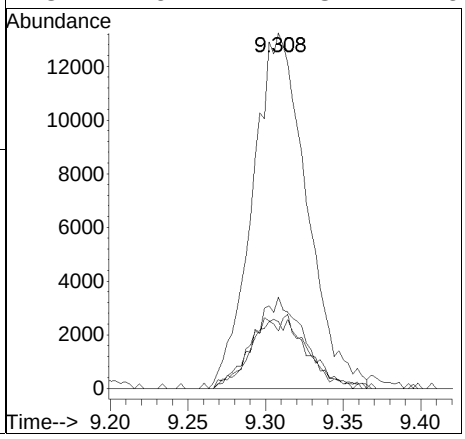


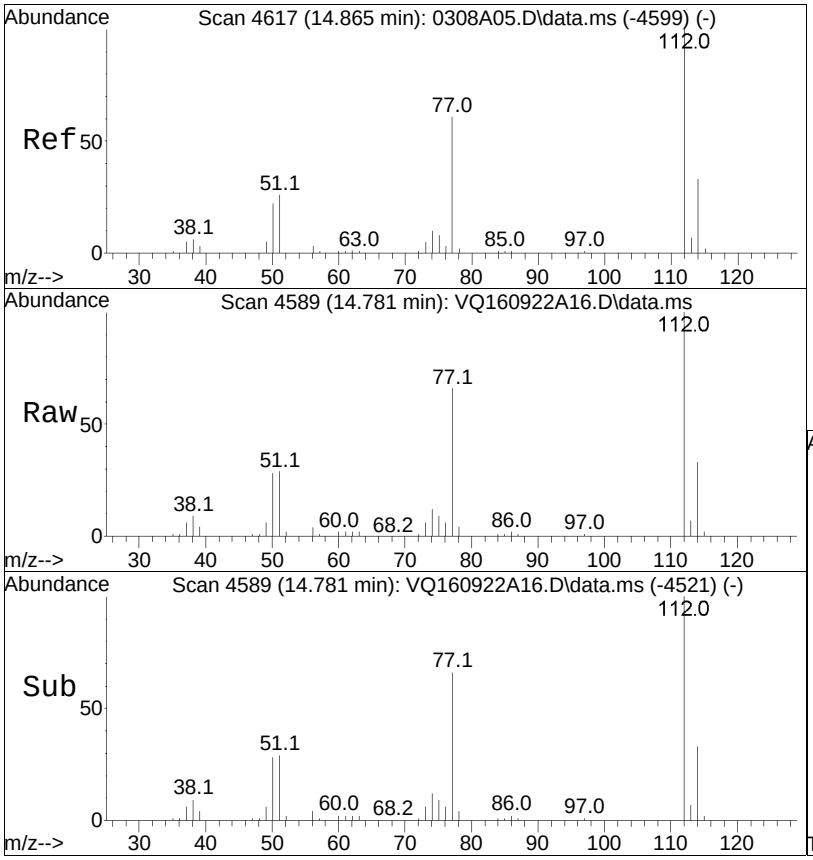


#41
Benzene
Concen: 1.11 ug/L
RT: 9.308 min Scan# 2762
Delta R.T. 0.000 min
Lab File: VQ160922A16.D
Acq: 22 Sep 2016 12:27 pm

Tgt Ion: 78 Resp: 32171

Ion	Ratio	Lower	Upper
78	100		
77	24.2	15.3	31.9
51	11.0	14.1	29.3#
52	20.1	11.8	24.6

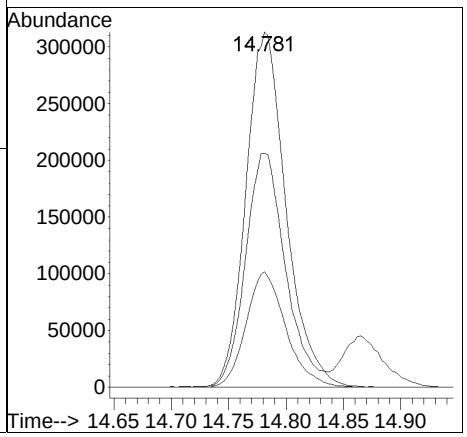




#73
Chlorobenzene
Concen: 33.91 ug/L
RT: 14.781 min Scan# 4589
Delta R.T. 0.003 min
Lab File: VQ160922A16.D
Acq: 22 Sep 2016 12:27 pm

Tgt Ion:112 Resp: 763987

Ion	Ratio	Lower	Upper
112	100		
77	65.5	49.0	73.4
114	32.3	25.8	38.6



Manual Integration Report

Data Path	: I:\VOLATILES\Quimby\2016\1	QMethod	: VQ_160829_8260.m
Data File	: VQ160922A16.D	Operator	: QUIMBY:PK
Date Inj'd	: 9/22/2016 12:27 pm	Instrument	: Quimby
Sample	: l1629226-09,31,10,10,,	Quant Date	: 9/22/2016 2:53 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160922\
Data File : VQ160922A17.D
Acq On : 22 Sep 2016 12:59 pm
Operator : QUIMBY:PK
Sample : l1629226-10,31,10,10,,v
Misc : WG933853,ICAL12824
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 22 14:55:45 2016
Quant Method : I:\VOLATILES\Quimby\2016\160922\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Quimby\2016\160922\VQ160922A02.D
Sub List : 8260-TCLP - TCLP

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.626	96	187005	10.000 ug/L	0.00
Standard Area 1 = 171856			Recovery = 108.81%		
59) Chlorobenzene-d5	14.712	117	147864	10.000 ug/L	0.00
Standard Area 1 = 131116			Recovery = 112.77%		
79) 1,4-Dichlorobenzene-d4	19.008	152	57210	10.000 ug/L	# 0.00
Standard Area 1 = 47309			Recovery = 120.93%		
System Monitoring Compounds					
36) Dibromofluoromethane	8.386	113	34112	9.573 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 95.73%		
43) 1,2-Dichloroethane-d4	9.143	65	44479	10.785 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 107.85%		
60) Toluene-d8	12.157	98	202436	9.921 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.21%		
83) 4-Bromofluorobenzene	16.860	95	68777	8.822 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 88.22%		
Target Compounds					Qvalue
41) Benzene	9.305	78	113455	3.862 ug/L	98
48) Trichloroethene	10.243	95	1311M1	0.171 ug/L	

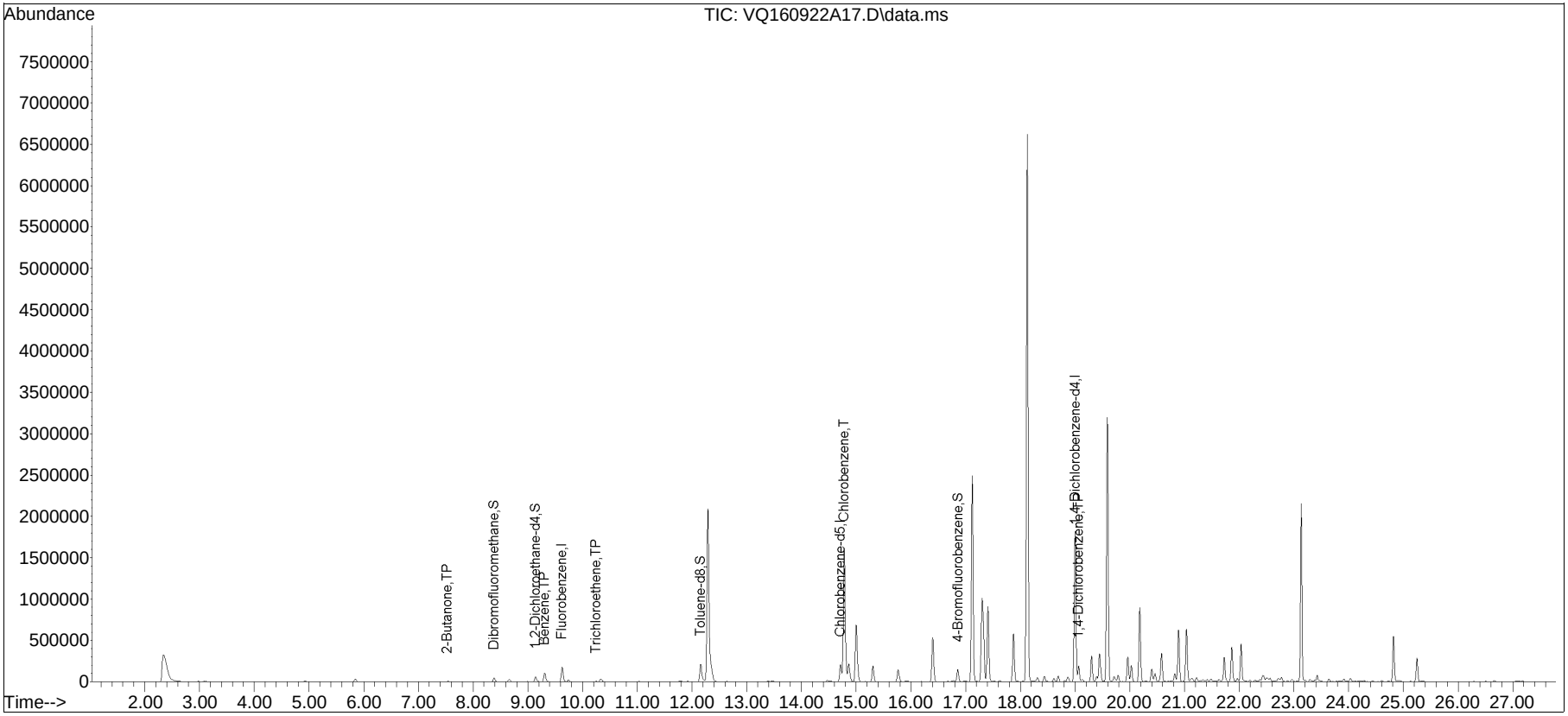
(#) = qualifier out of range (m) = manual integration (+) = signals summed

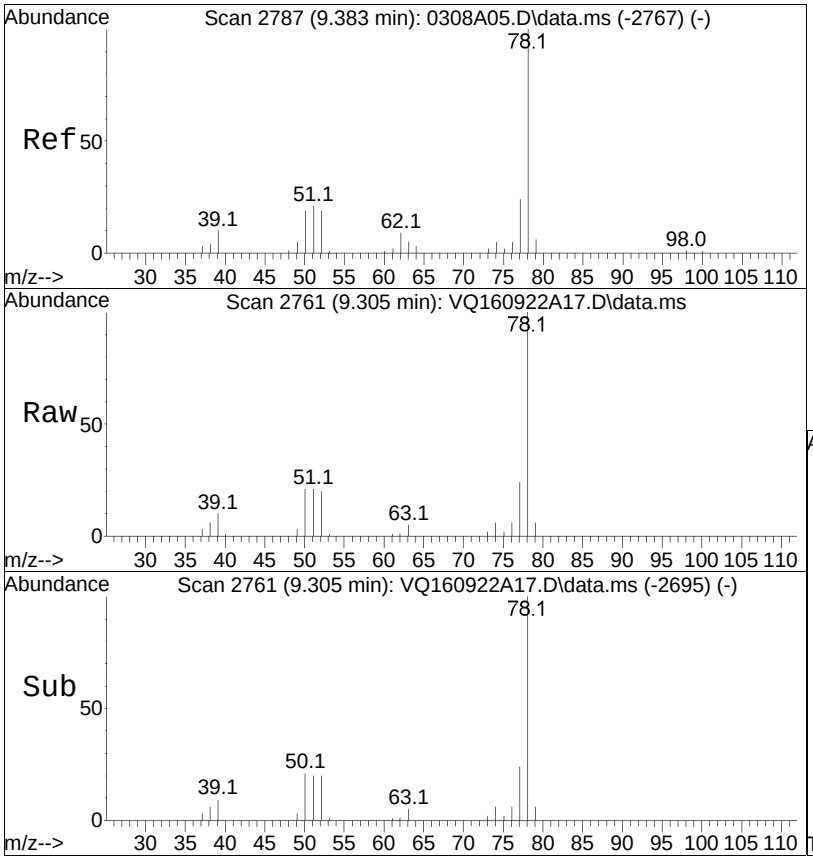
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160922\
Data File : VQ160922A17.D
Acq On : 22 Sep 2016 12:59 pm
Operator : QUIMBY:PK
Sample : l1629226-10,31,10,10,,v
Misc : WG933853,ICAL12824
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 22 14:55:45 2016
Quant Method : I:\VOLATILES\Quimby\2016\160922\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

Sub List : 8260-TCLP - TCLP\Quimby\2016\160922\VQ160922A02.D•

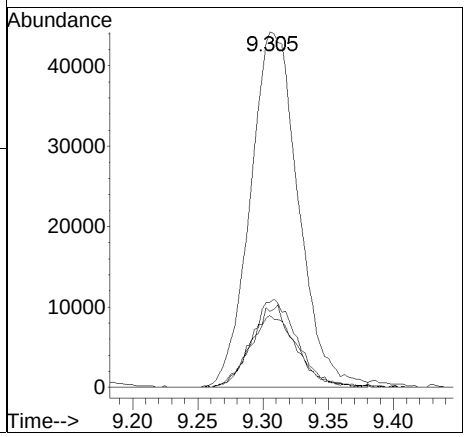


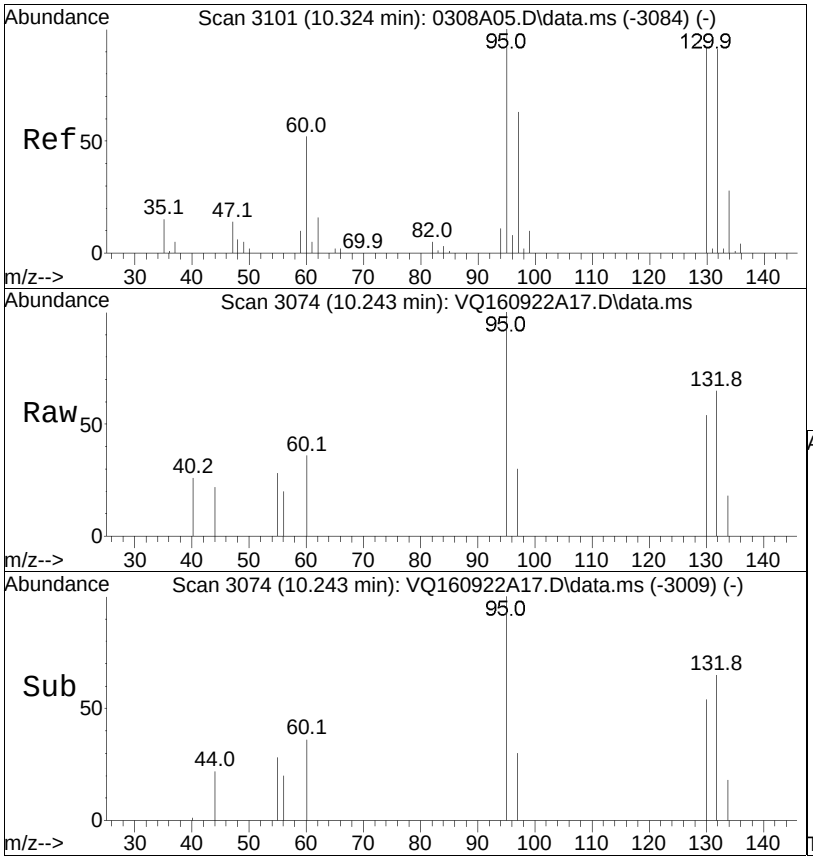


#41
Benzene
Concen: 3.86 ug/L
RT: 9.305 min Scan# 2761
Delta R.T. -0.003 min
Lab File: VQ160922A17.D
Acq: 22 Sep 2016 12:59 pm

Tgt Ion: 78 Resp: 113455

Ion	Ratio	Lower	Upper
78	100		
77	23.8	15.3	31.9
51	21.1	14.1	29.3
52	19.9	11.8	24.6

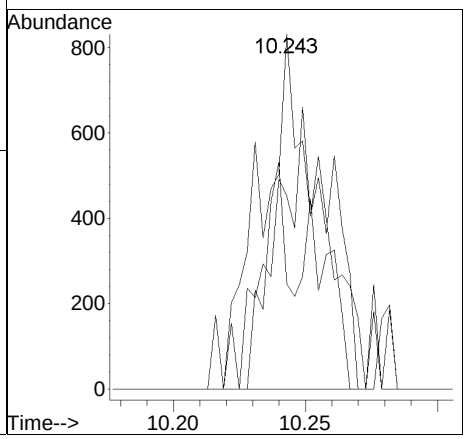




#48
Trichloroethene
Concen: 0.17 ug/L M1
RT: 10.243 min Scan# 3074
Delta R.T. -0.006 min
Lab File: VQ160922A17.D
Acq: 22 Sep 2016 12:59 pm

Tgt Ion: 95 Resp: 1311

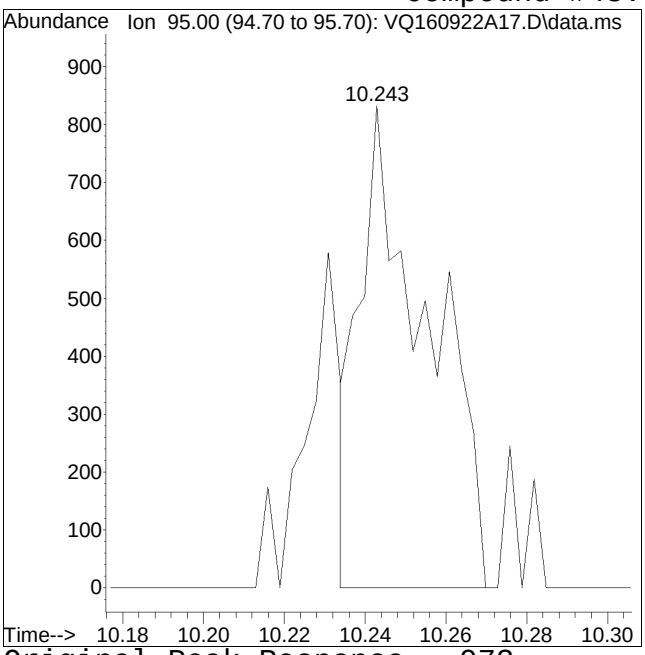
Ion	Ratio	Lower	Upper
95	100		
97	25.5	51.0	76.6#
130	0.0	75.0	112.6#



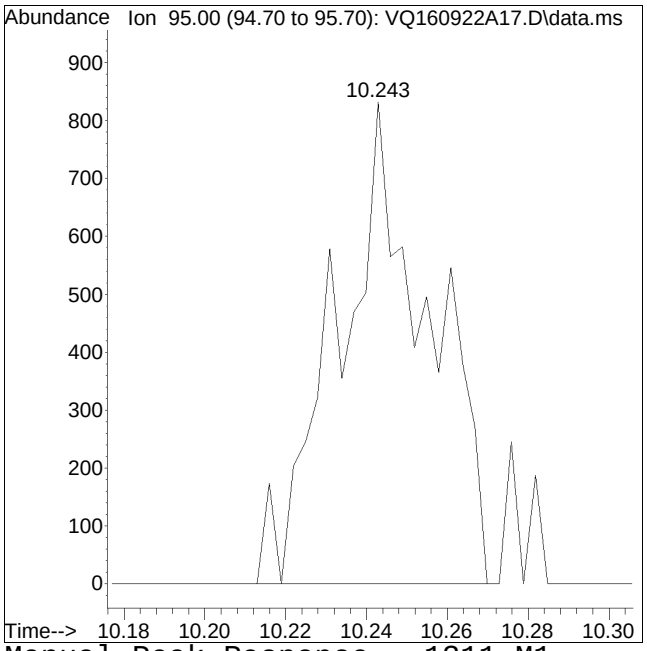
Manual Integration Report

Data Path : I:\VOLATILES\Quimby\2016\1QMethod : VQ_160829_8260.m
Data File : VQ160922A17.D Operator : QUIMBY:PK
Date Inj'd : 9/22/2016 12:59 pm Instrument : Quimby
Sample : l1629226-10,31,10,10,,v Quant Date : 9/22/2016 2:53 pm

Compound #48: Trichloroethene



Original Peak Response = 973



Manual Peak Response = 1311 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160922\
Data File : VQ160922A18.D
Acq On : 22 Sep 2016 1:30 pm
Operator : QUIMBY:PK
Sample : l1629226-16,31,10,10,,v
Misc : WG933853,ICAL12824
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 22 14:53:31 2016
Quant Method : I:\VOLATILES\Quimby\2016\160922\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Quimby\2016\160922\VQ160922A02.D
Sub List : 8260-TCLP - TCLP

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.626	96	192630	10.000 ug/L	0.00
Standard Area 1 = 171856			Recovery = 112.09%		
59) Chlorobenzene-d5	14.715	117	152524	10.000 ug/L	0.00
Standard Area 1 = 131116			Recovery = 116.33%		
79) 1,4-Dichlorobenzene-d4	19.011	152	62372	10.000 ug/L	# 0.00
Standard Area 1 = 47309			Recovery = 131.84%		
System Monitoring Compounds					
36) Dibromofluoromethane	8.385	113	36364	9.907 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.07%		
43) 1,2-Dichloroethane-d4	9.146	65	45848	10.792 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 107.92%		
60) Toluene-d8	12.160	98	211599	10.053 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.53%		
83) 4-Bromofluorobenzene	16.857	95	72678	8.550 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 85.50%		
Target Compounds					Qvalue
41) Benzene	9.308	78	104857	3.465 ug/L	98

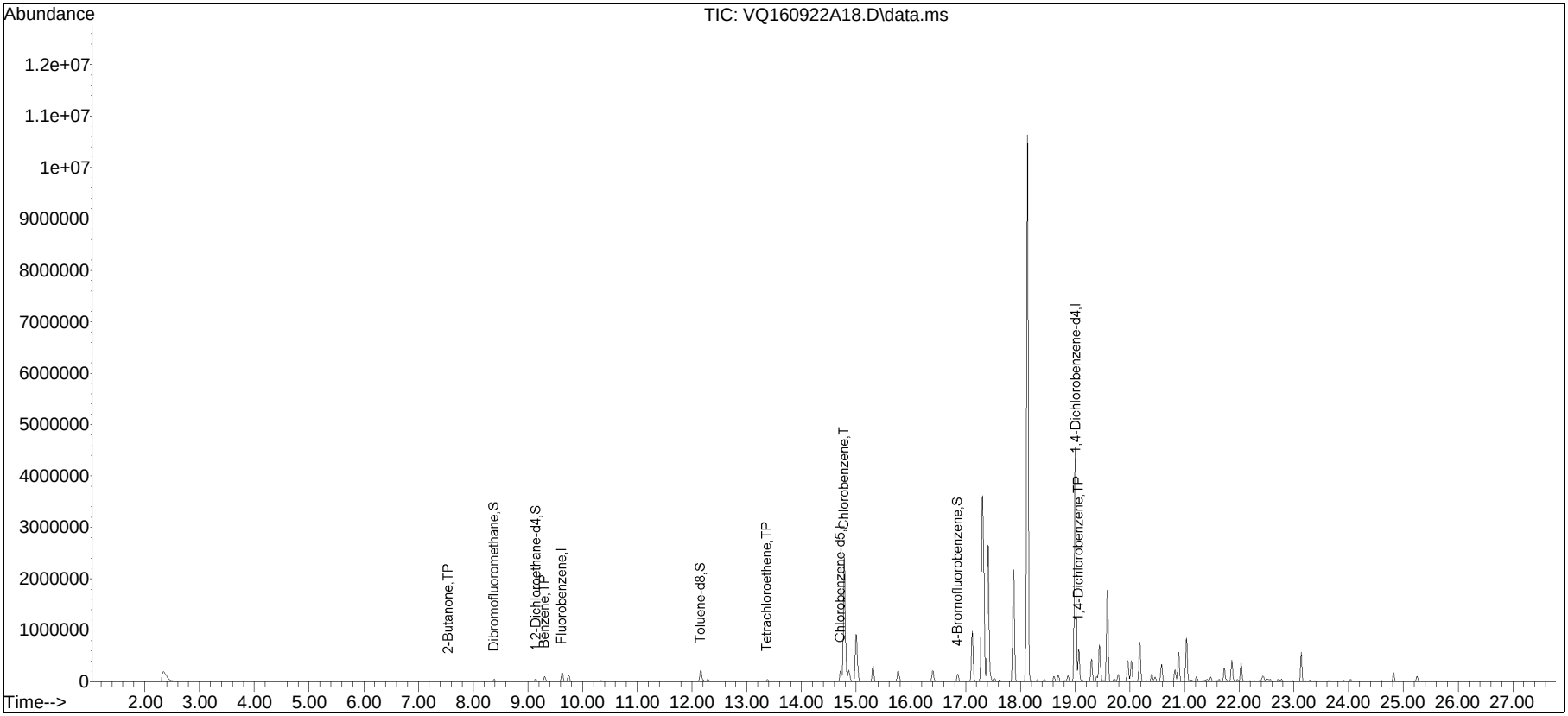
(#) = qualifier out of range (m) = manual integration (+) = signals summed

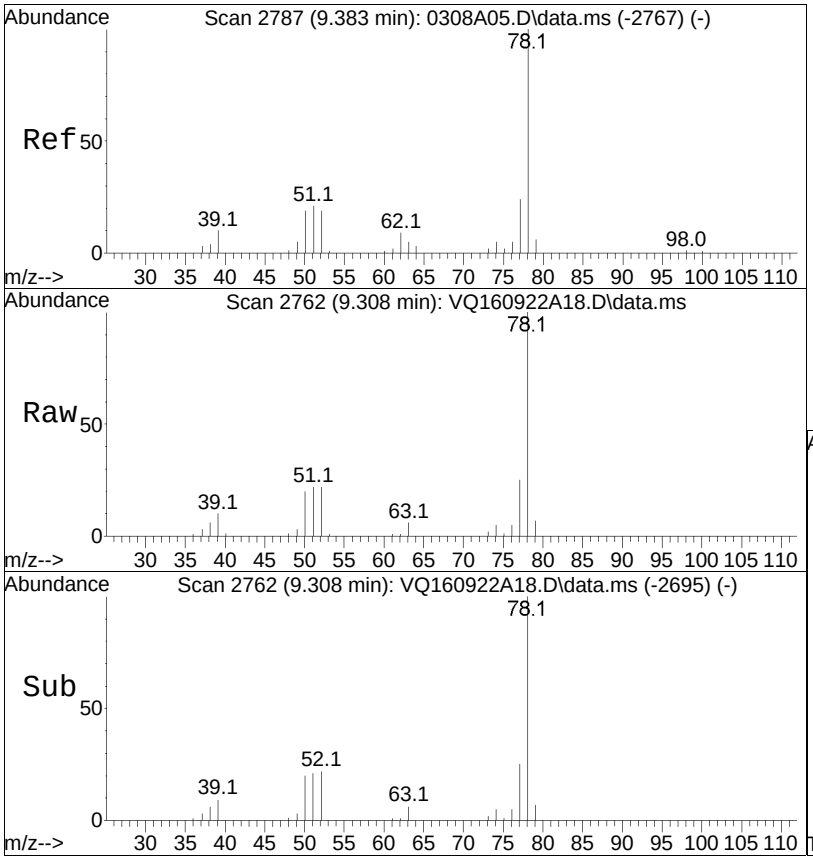
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160922\
Data File : VQ160922A18.D
Acq On : 22 Sep 2016 1:30 pm
Operator : QUIMBY:PK
Sample : l1629226-16,31,10,10,,v
Misc : WG933853,ICAL12824
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 22 14:53:31 2016
Quant Method : I:\VOLATILES\Quimby\2016\160922\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

Sub List : 8260-TCLP - TCLP\Quimby\2016\160922\VQ160922A02.D•

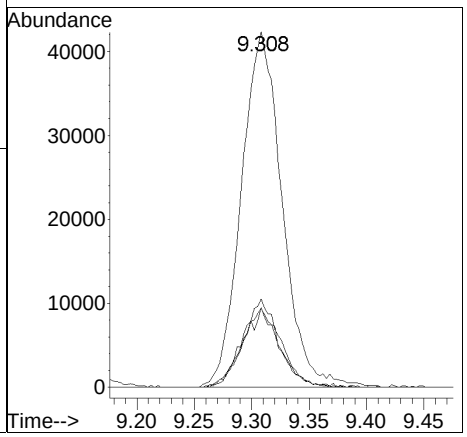




#41
Benzene
Concen: 3.47 ug/L
RT: 9.308 min Scan# 2762
Delta R.T. 0.000 min
Lab File: VQ160922A18.D
Acq: 22 Sep 2016 1:30 pm

Tgt Ion: 78 Resp: 104857

Ion	Ratio	Lower	Upper
78	100		
77	23.0	15.3	31.9
51	20.8	14.1	29.3
52	20.0	11.8	24.6



Manual Integration Report

Data Path	: I:\VOLATILES\Quimby\2016\1	QMethod	: VQ_160829_8260.m
Data File	: VQ160922A18.D	Operator	: QUIMBY:PK
Date Inj'd	: 9/22/2016 1:30 pm	Instrument	: Quimby
Sample	: l1629226-16,31,10,10,,v	Quant Date	: 9/22/2016 2:53 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160922\
Data File : VQ160922A19.D
Acq On : 22 Sep 2016 2:01 pm
Operator : QUIMBY:PK
Sample : l1629226-04D,31,4,10,,v
Misc : WG933853,ICAL12824
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 22 14:56:33 2016
Quant Method : I:\VOLATILES\Quimby\2016\160922\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Quimby\2016\160922\VQ160922A02.D
Sub List : 8260-TCLP - TCLP

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.626	96	195673	10.000 ug/L	0.00
Standard Area 1 = 171856			Recovery = 113.86%		
59) Chlorobenzene-d5	14.715	117	157649	10.000 ug/L	0.00
Standard Area 1 = 131116			Recovery = 120.24%		
79) 1,4-Dichlorobenzene-d4	19.008	152	63840	10.000 ug/L	# 0.00
Standard Area 1 = 47309			Recovery = 134.94%		
System Monitoring Compounds					
36) Dibromofluoromethane	8.383	113	37642	10.096 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.96%		
43) 1,2-Dichloroethane-d4	9.137	65	47026	10.897 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 108.97%		
60) Toluene-d8	12.157	98	216635	9.958 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.58%		
83) 4-Bromofluorobenzene	16.854	95	74140	8.522 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 85.22%		
Target Compounds					Qvalue
41) Benzene	9.308	78	358681	11.668 ug/L	99
73) Chlorobenzene	14.784	112	4956438	206.707 ug/L	94

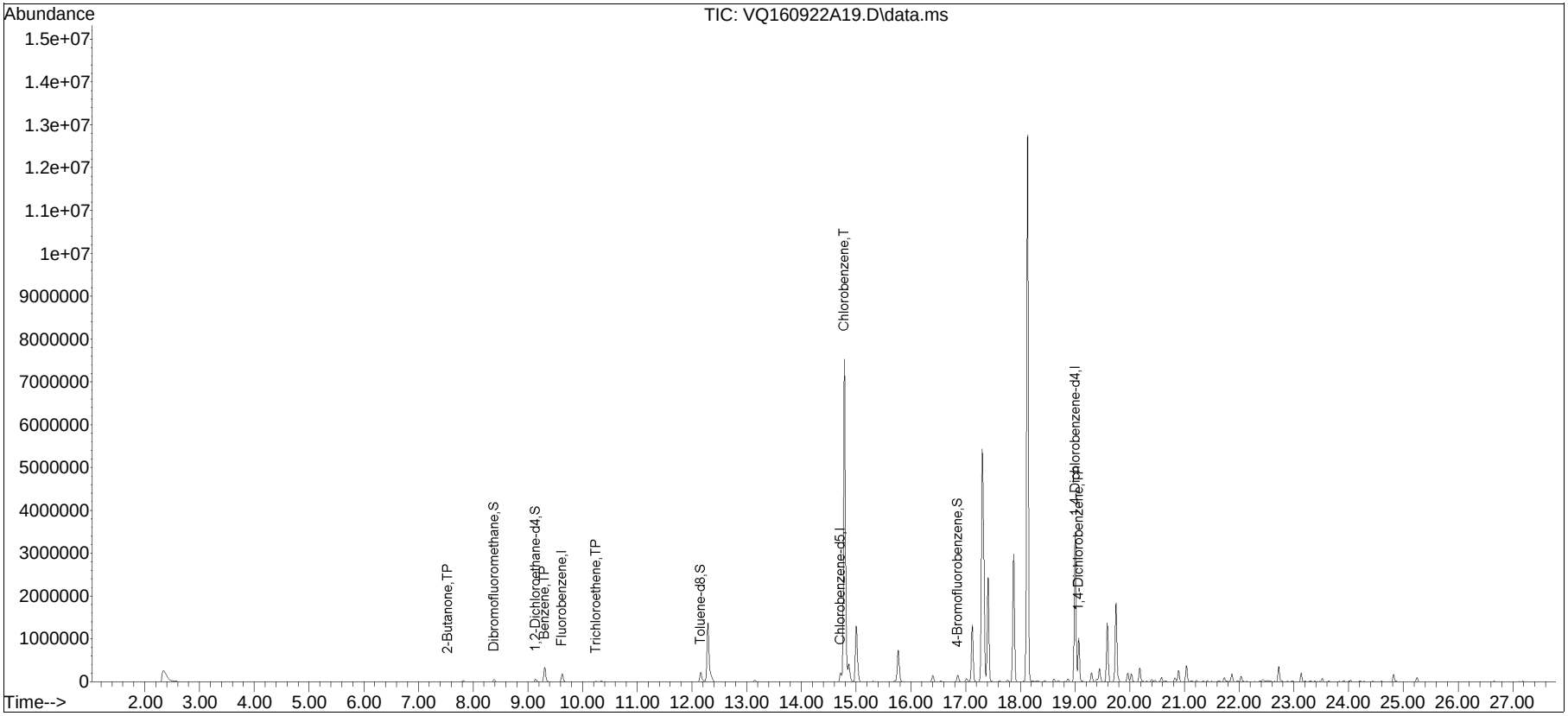
(#) = qualifier out of range (m) = manual integration (+) = signals summed

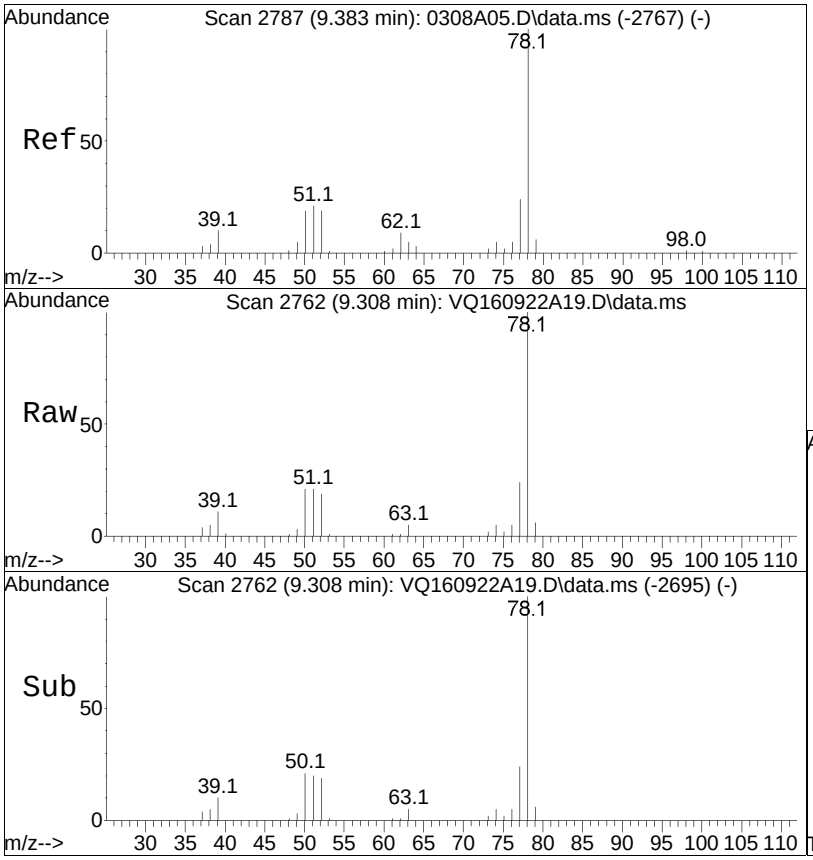
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160922\
Data File : VQ160922A19.D
Acq On : 22 Sep 2016 2:01 pm
Operator : QUIMBY:PK
Sample : l1629226-04D,31,4,10,,v
Misc : WG933853,ICAL12824
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 22 14:56:33 2016
Quant Method : I:\VOLATILES\Quimby\2016\160922\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

Sub List : 8260-TCLP - TCLP\Quimby\2016\160922\VQ160922A02.D•

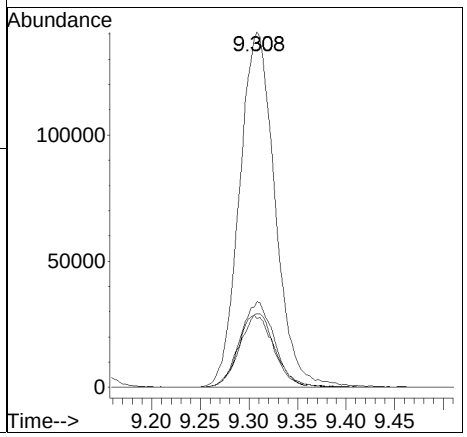


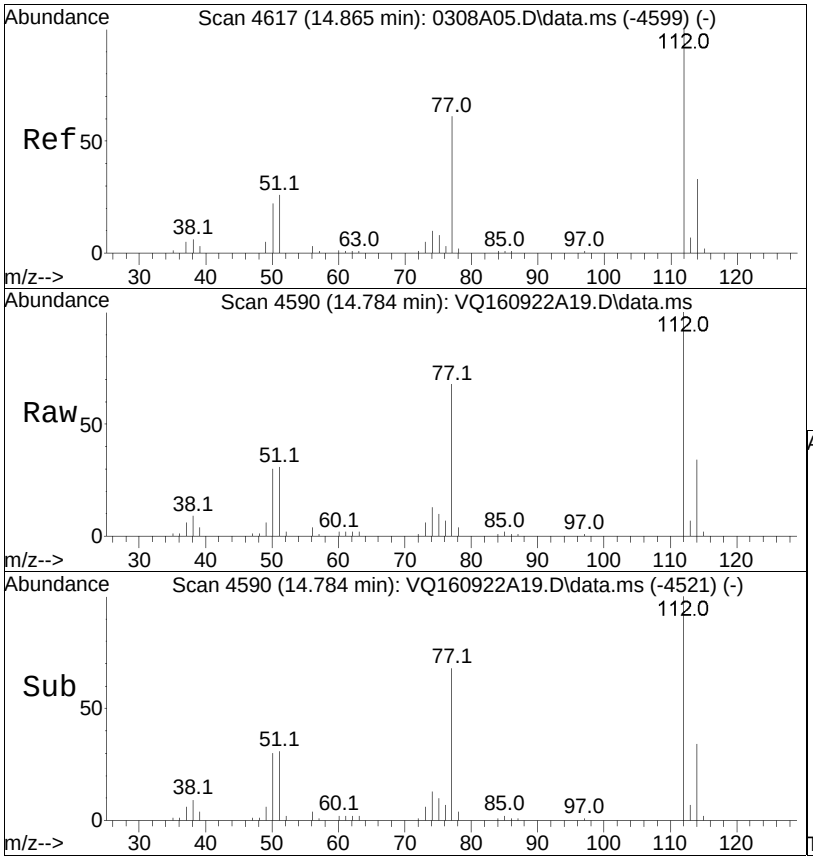


#41
Benzene
Concen: 11.67 ug/L
RT: 9.308 min Scan# 2762
Delta R.T. 0.000 min
Lab File: VQ160922A19.D
Acq: 22 Sep 2016 2:01 pm

Tgt Ion: 78 Resp: 358681

Ion	Ratio	Lower	Upper
78	100		
77	23.7	15.3	31.9
51	21.3	14.1	29.3
52	19.7	11.8	24.6

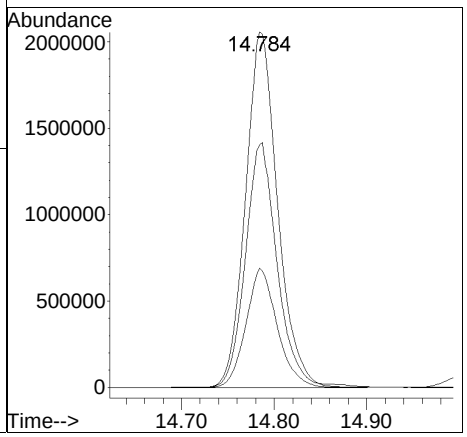




#73
Chlorobenzene
Concen: 206.71 ug/L
RT: 14.784 min Scan# 4590
Delta R.T. 0.006 min
Lab File: VQ160922A19.D
Acq: 22 Sep 2016 2:01 pm

Tgt Ion:112 Resp: 4956438

Ion	Ratio	Lower	Upper
112	100		
77	68.4	49.0	73.4
114	32.7	25.8	38.6



Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160922\
Data File : VQ160922A20.D
Acq On : 22 Sep 2016 2:33 pm
Operator : QUIMBY:PK
Sample : l1629226-06D,31,2,10,,u
Misc : WG933853,ICAL12824
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 22 15:14:44 2016
Quant Method : I:\VOLATILES\Quimby\2016\160922\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Quimby\2016\160922\VQ160922A02.D
Sub List : 8260-TCLP - TCLP

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.626	96	195208	10.000 ug/L	0.00
Standard Area 1 = 171856			Recovery = 113.59%		
59) Chlorobenzene-d5	14.715	117	158387	10.000 ug/L	0.00
Standard Area 1 = 131116			Recovery = 120.80%		
79) 1,4-Dichlorobenzene-d4	19.008	152	61692	10.000 ug/L	# 0.00
Standard Area 1 = 47309			Recovery = 130.40%		
System Monitoring Compounds					
36) Dibromofluoromethane	8.383	113	38009	10.219 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.19%		
43) 1,2-Dichloroethane-d4	9.137	65	47870	11.119 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 111.19%		
60) Toluene-d8	12.157	98	214286	9.804 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.04%		
83) 4-Bromofluorobenzene	16.854	95	71611	8.518 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 85.18%		
Target Compounds					Qvalue
73) Chlorobenzene	14.778	112	757688	31.452 ug/L	97

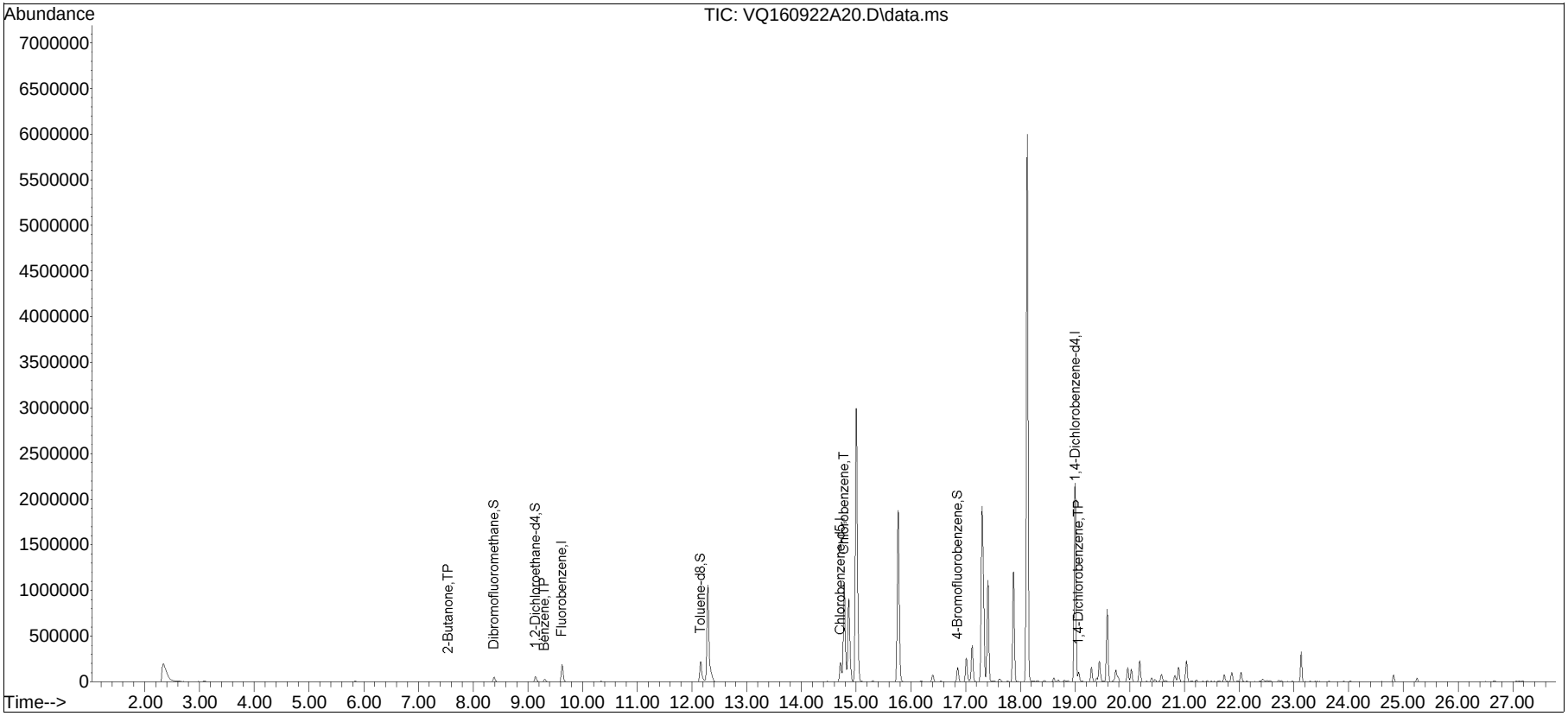
(#) = qualifier out of range (m) = manual integration (+) = signals summed

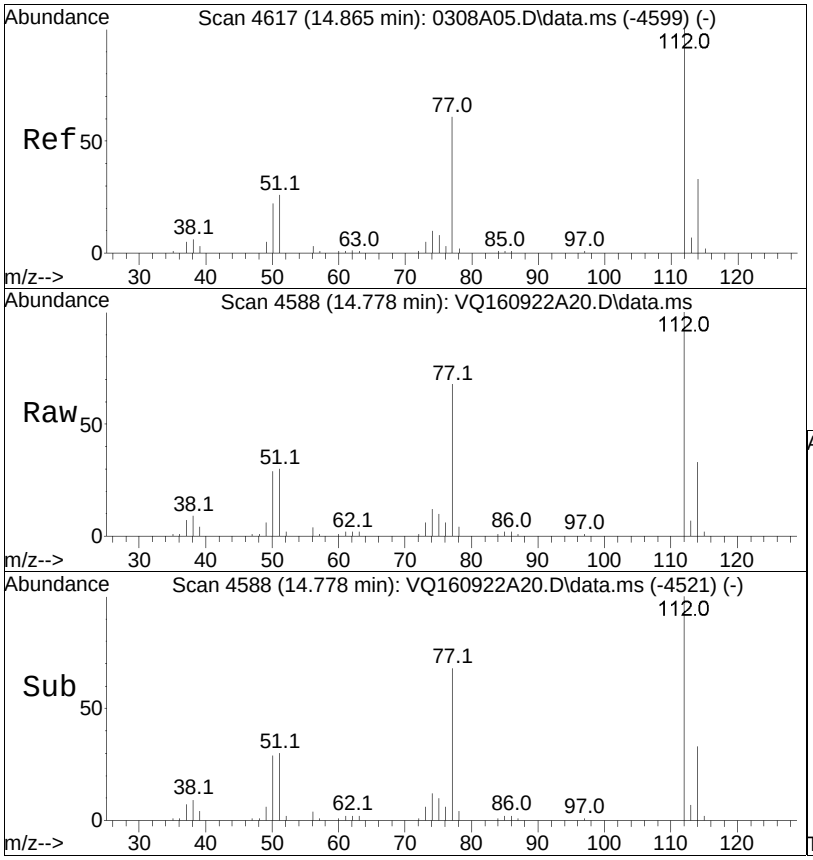
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160922\
Data File : VQ160922A20.D
Acq On : 22 Sep 2016 2:33 pm
Operator : QUIMBY:PK
Sample : l1629226-06D,31,2,10,,u
Misc : WG933853,ICAL12824
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 22 15:14:44 2016
Quant Method : I:\VOLATILES\Quimby\2016\160922\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

Sub List : 8260-TCLP - TCLP\Quimby\2016\160922\VQ160922A02.D•

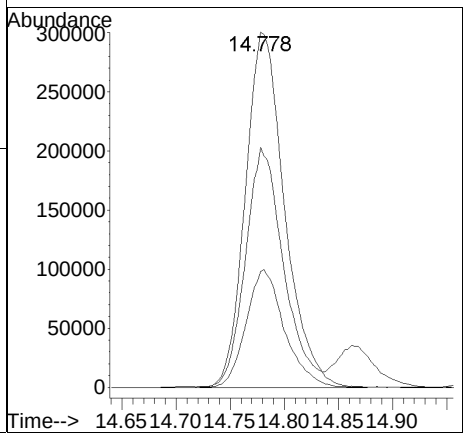




#73
Chlorobenzene
Concen: 31.45 ug/L
RT: 14.778 min Scan# 4588
Delta R.T. 0.000 min
Lab File: VQ160922A20.D
Acq: 22 Sep 2016 2:33 pm

Tgt Ion:112 Resp: 757688

Ion	Ratio	Lower	Upper
112	100		
77	65.1	49.0	73.4
114	32.4	25.8	38.6



Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160922\
Data File : VQ160922A21.D
Acq On : 22 Sep 2016 3:04 pm
Operator : QUIMBY:MM
Sample : l1629226-08D,31,2,10,,v
Misc : WG933853,ICAL12824
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 23 04:01:32 2016
Quant Method : I:\VOLATILES\Quimby\2016\160922\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Quimby\2016\160922\VQ160922A02.D
Sub List : 8260-TCLP - TCLP

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.629	96	188089	10.000 ug/L	0.00
Standard Area 1 = 171856			Recovery = 109.45%		
59) Chlorobenzene-d5	14.715	117	149728	10.000 ug/L	0.00
Standard Area 1 = 131116			Recovery = 114.20%		
79) 1,4-Dichlorobenzene-d4	19.005	152	55118	10.000 ug/L	# 0.00
Standard Area 1 = 47309			Recovery = 116.51%		
System Monitoring Compounds					
36) Dibromofluoromethane	8.379	113	35564	9.923 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.23%		
43) 1,2-Dichloroethane-d4	9.140	65	45360	10.935 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 109.35%		
60) Toluene-d8	12.157	98	206225	9.980 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.80%		
83) 4-Bromofluorobenzene	16.857	95	66315	8.829 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 88.29%		
Target Compounds					Qvalue
73) Chlorobenzene	14.781	112	503044	22.089 ug/L	98

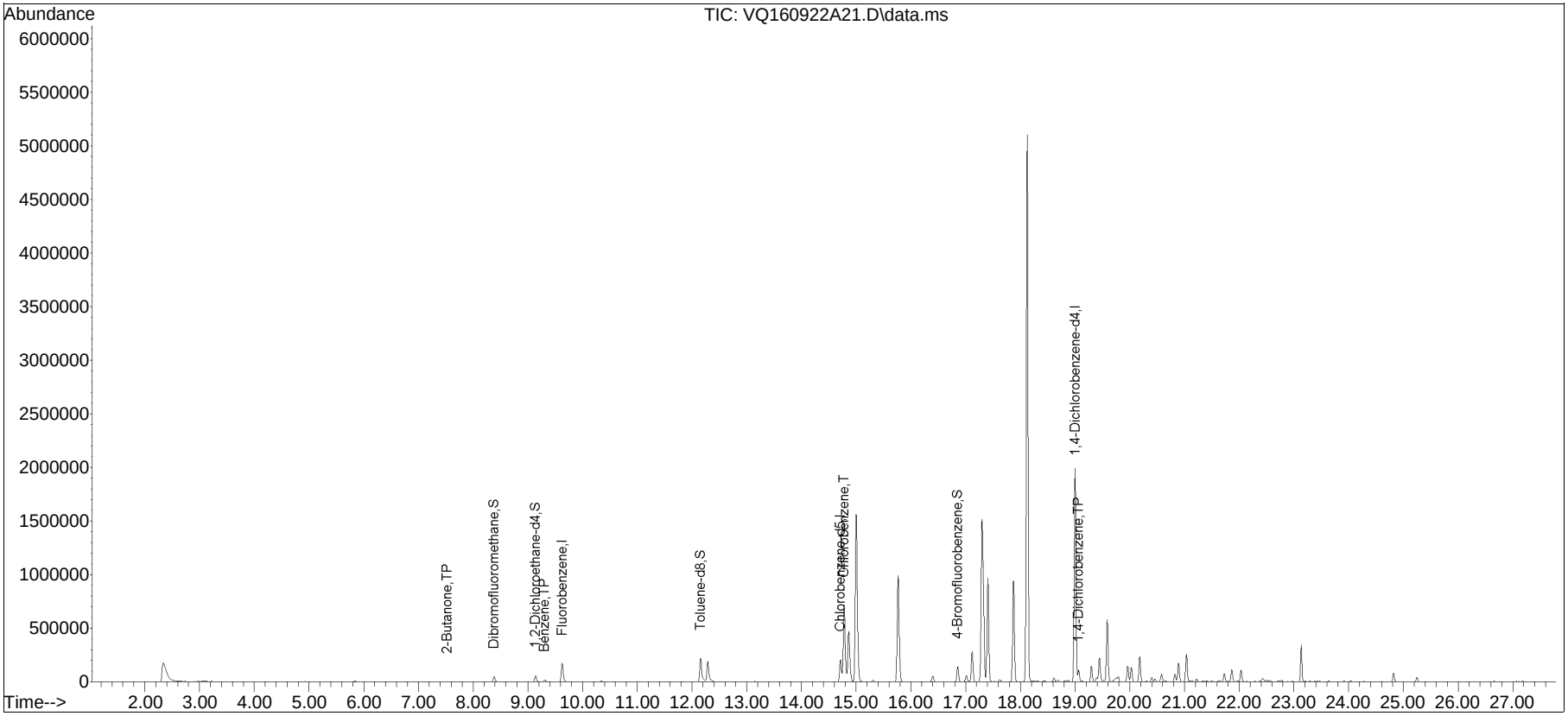
(#) = qualifier out of range (m) = manual integration (+) = signals summed

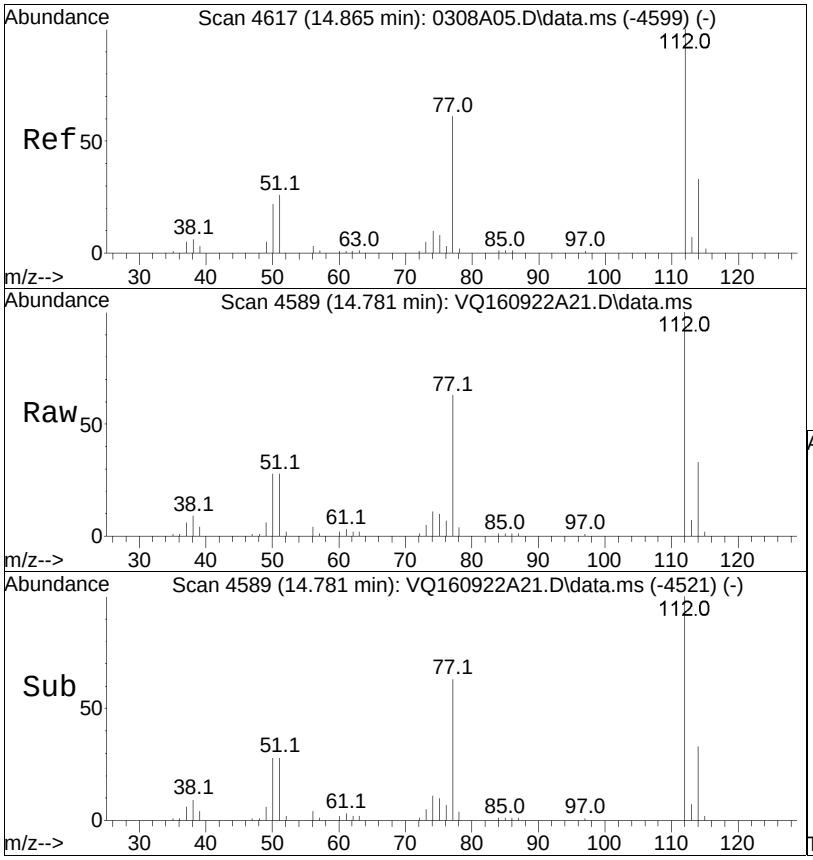
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160922\
Data File : VQ160922A21.D
Acq On : 22 Sep 2016 3:04 pm
Operator : QUIMBY:MM
Sample : l1629226-08D,31,2,10,,v
Misc : WG933853,ICAL12824
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 23 04:01:32 2016
Quant Method : I:\VOLATILES\Quimby\2016\160922\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

Sub List : 8260-TCLP - TCLP\Quimby\2016\160922\VQ160922A02.D•

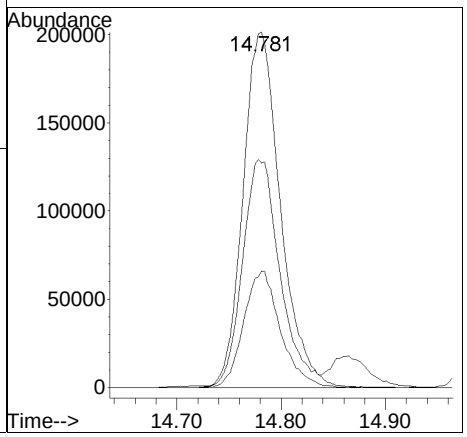




#73
Chlorobenzene
Concen: 22.09 ug/L
RT: 14.781 min Scan# 4589
Delta R.T. 0.003 min
Lab File: VQ160922A21.D
Acq: 22 Sep 2016 3:04 pm

Tgt Ion:112 Resp: 503044

Ion	Ratio	Lower	Upper
112	100		
77	63.5	49.0	73.4
114	32.1	25.8	38.6



Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160923\
Data File : VQ160922A07.D
Acq On : 23 Sep 2016 9:18 am
Operator : QUIMBY:MM
Sample : l1629226-04D2,31,1,10,,u
Misc : WG933853,ICAL12824
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 23 12:04:00 2016
Quant Method : I:\VOLATILES\Quimby\2016\160923\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Quimby\2016\160923\VQ160922A02.D
Sub List : 8260-TCLP - TCLP

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.629	96	182977	10.000 ug/L	0.00
Standard Area 1 = 197805			Recovery = 92.50%		
59) Chlorobenzene-d5	14.715	117	141819	10.000 ug/L	0.00
Standard Area 1 = 154269			Recovery = 91.93%		
79) 1,4-Dichlorobenzene-d4	19.008	152	52444	10.000 ug/L	# 0.00
Standard Area 1 = 54189			Recovery = 96.78%		
System Monitoring Compounds					
36) Dibromofluoromethane	8.389	113	34594	9.922 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.22%		
43) 1,2-Dichloroethane-d4	9.140	65	41574	10.302 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.02%		
60) Toluene-d8	12.160	98	200066	10.222 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.22%		
83) 4-Bromofluorobenzene	16.857	95	58761	8.222 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 82.22%		
Target Compounds					Qvalue
41) Benzene	9.308	78	79376	2.761 ug/L	99
73) Chlorobenzene	14.781	112	1015062	47.058 ug/L	97

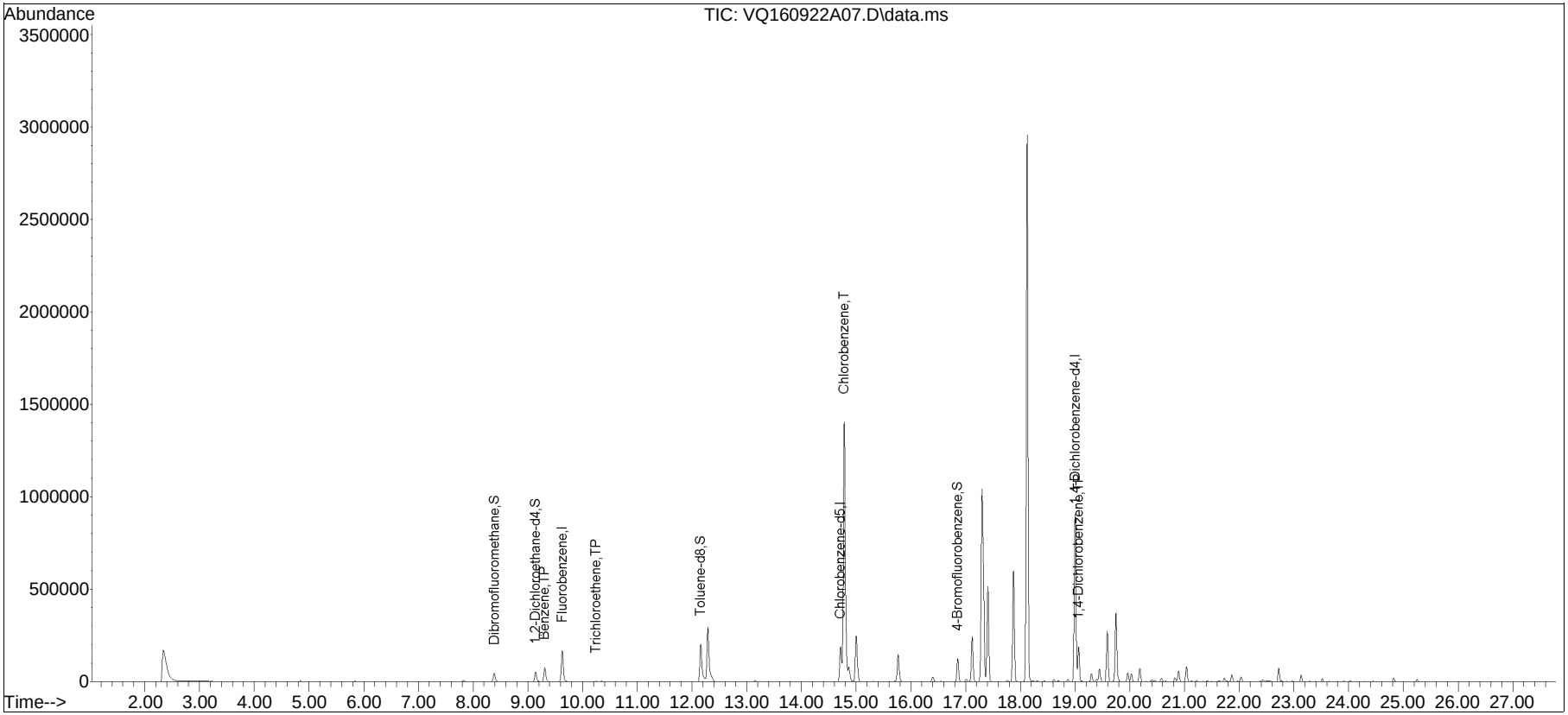
(#) = qualifier out of range (m) = manual integration (+) = signals summed

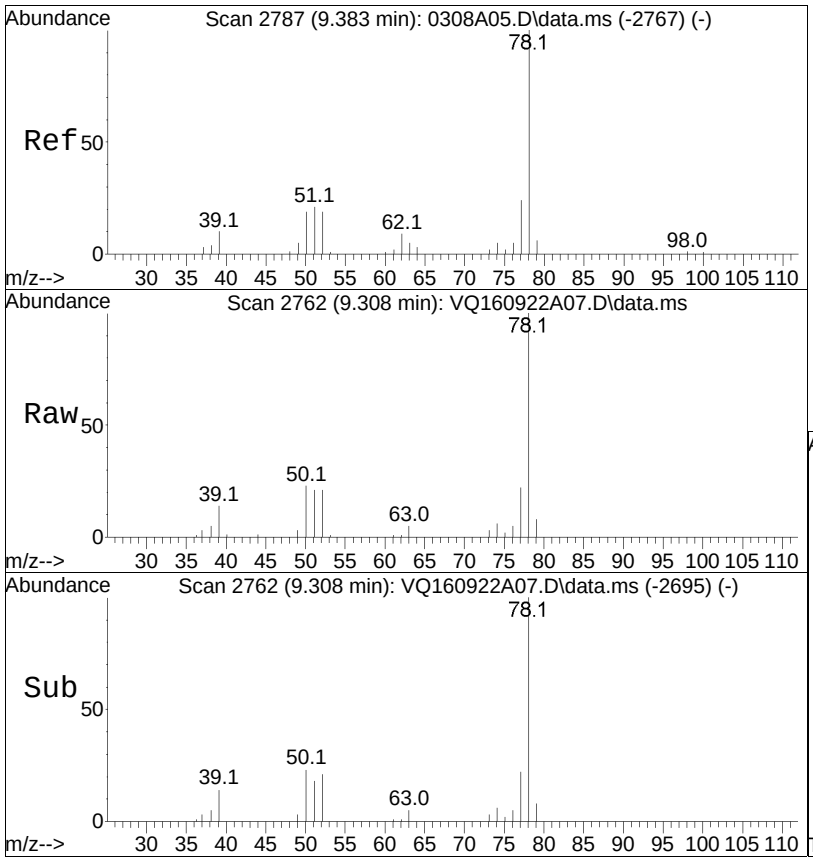
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160923\
Data File : VQ160922A07.D
Acq On : 23 Sep 2016 9:18 am
Operator : QUIMBY:MM
Sample : l1629226-04D2,31,1,10,,u
Misc : WG933853,ICAL12824
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 23 12:04:00 2016
Quant Method : I:\VOLATILES\Quimby\2016\160923\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

Sub List : 8260-TCLP - TCLP\Quimby\2016\160923\VQ160922A02.D•

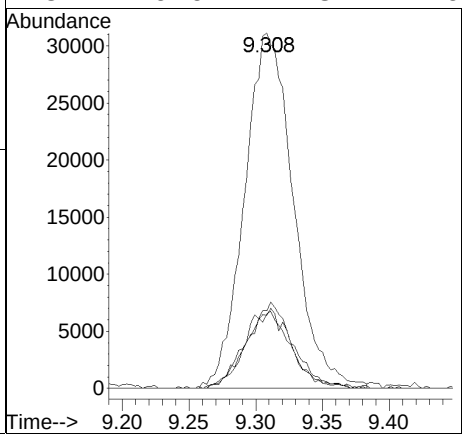


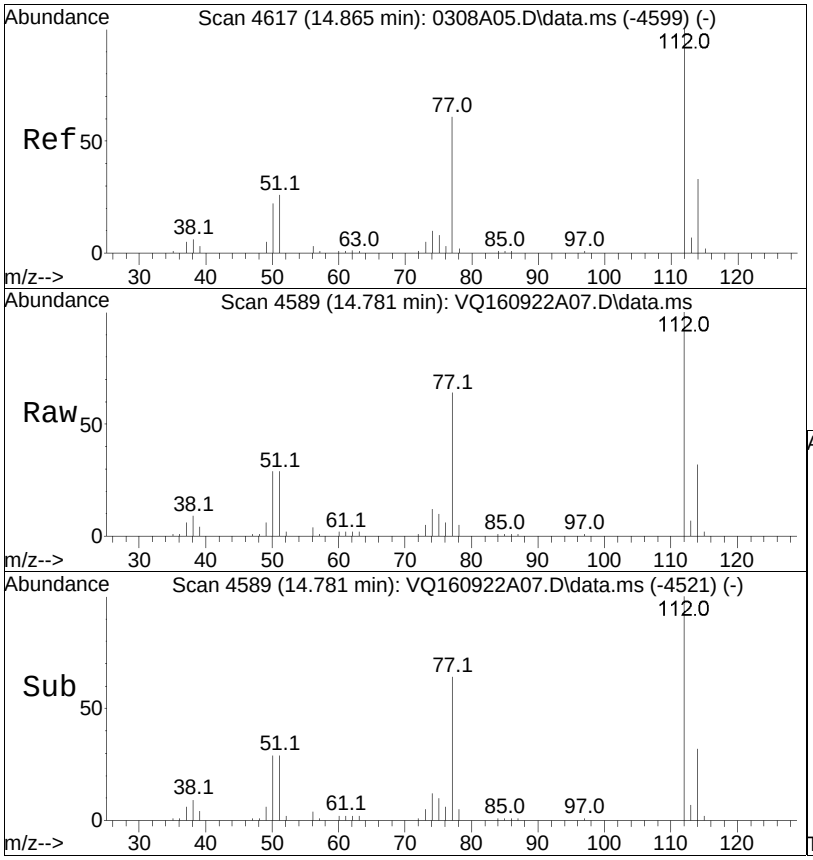


#41
Benzene
Concen: 2.76 ug/L
RT: 9.308 min Scan# 2762
Delta R.T. 0.000 min
Lab File: VQ160922A07.D
Acq: 23 Sep 2016 9:18 am

Tgt Ion: 78 Resp: 79376

Ion	Ratio	Lower	Upper
78	100		
77	23.7	15.3	31.9
51	21.4	14.1	29.3
52	20.0	11.8	24.6

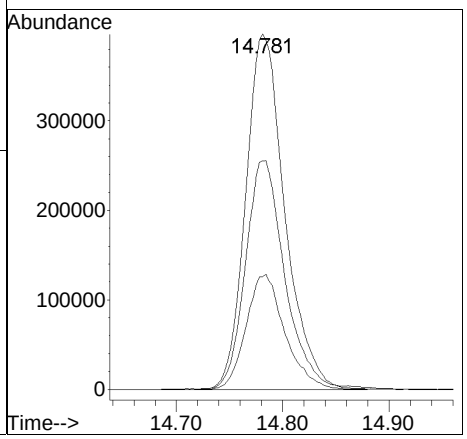




#73
Chlorobenzene
Concen: 47.06 ug/L
RT: 14.781 min Scan# 4589
Delta R.T. 0.003 min
Lab File: VQ160922A07.D
Acq: 23 Sep 2016 9:18 am

Tgt Ion:112 Resp: 1015062

Ion	Ratio	Lower	Upper
112	100		
77	64.1	49.0	73.4
114	32.1	25.8	38.6



Manual Integration Report

Data Path	: I:\VOLATILES\Quimby\2016\1	QMethod	: VQ_160829_8260.m
Data File	: VQ160922A07.D	Operator	: QUIMBY:MM
Date Inj'd	: 9/23/2016 9:18 am	Instrument	: Quimby
Sample	: l1629226-04D2,31,1,10,,u	Quant Date	: 9/23/2016 12:03 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA116\2016\160928\
Data File : V16160928A19.D
Acq On : 28 Sep 2016 11:13 am
Operator : VOA116:MM
Sample : l1629226-07D,31,1,10,,t
Misc : WG936703,ICAL12812
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 28 12:05:31 2016
Quant Method : I:\VOLATILES\VOA116\2016\160928\V116_0829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 04:55:58 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA116\2016\160928\V16160928A02.D
Sub List : 8260-TCLP - TCLP

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.083	96	131328	10.000 ug/L	0.00
Standard Area 1 = 158418			Recovery = 82.90%		
59) Chlorobenzene-d5	9.649	117	123539	10.000 ug/L	0.00
Standard Area 1 = 138010			Recovery = 89.51%		
79) 1,4-Dichlorobenzene-d4	12.344	152	81047	10.000 ug/L	0.00
Standard Area 1 = 85421			Recovery = 94.88%		
System Monitoring Compounds					
36) Dibromofluoromethane	5.260	113	43954	11.667 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 116.67%		
43) 1,2-Dichloroethane-d4	5.796	65	40406	11.350 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 113.50%		
60) Toluene-d8	7.792	98	134899	8.823 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 88.23%		
83) 4-Bromofluorobenzene	11.144	95	58188	9.652 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.52%		
Target Compounds					Qvalue
41) Benzene	5.652	78	11950	0.962 ug/L	99
73) Chlorobenzene	9.672	112	319719	28.264 ug/L	94

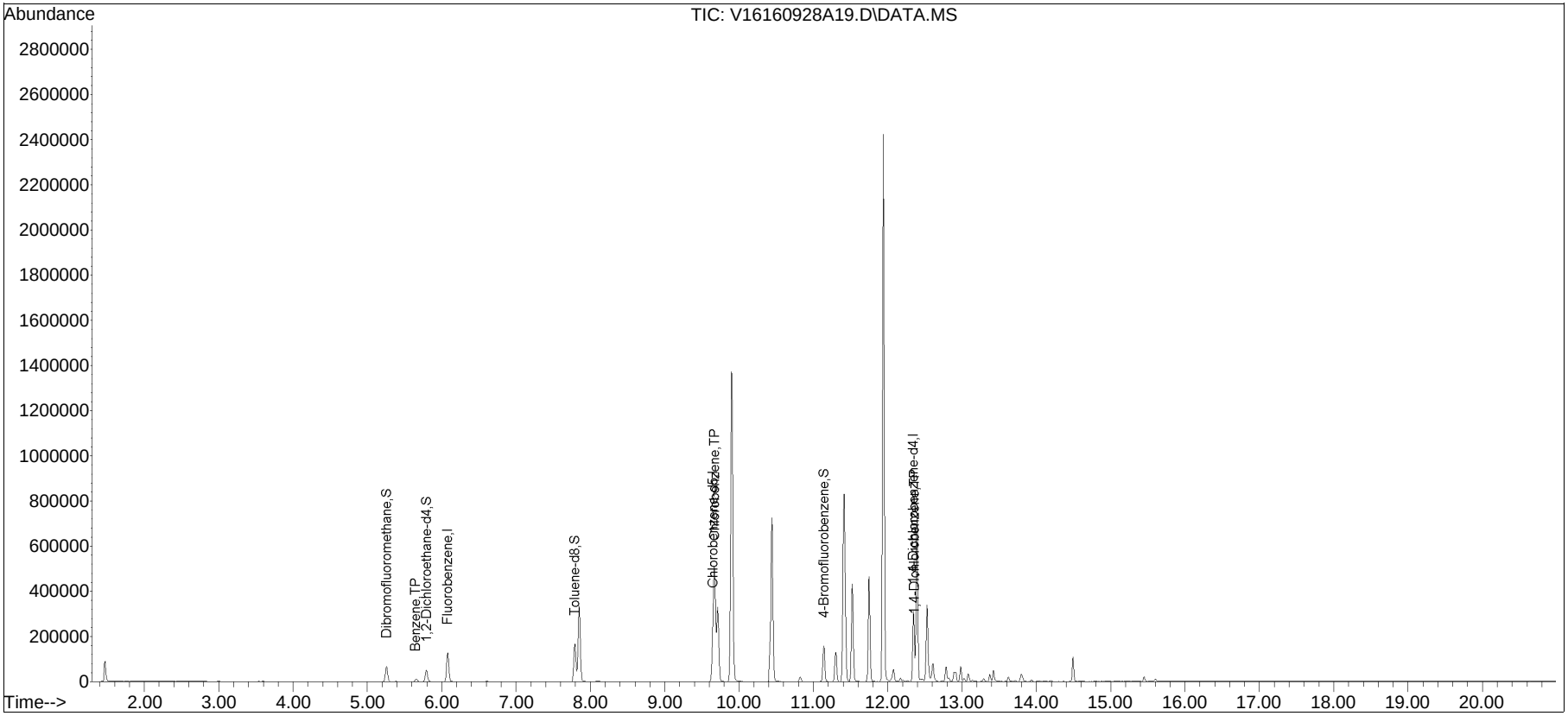
(#) = qualifier out of range (m) = manual integration (+) = signals summed

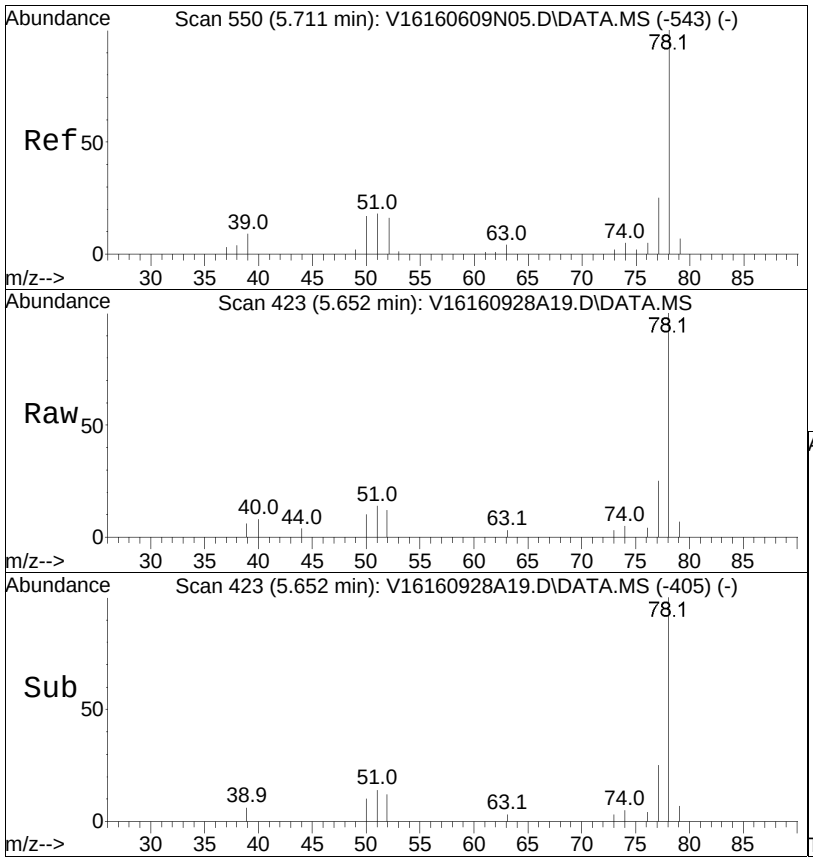
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA116\2016\160928\
Data File : V16160928A19.D
Acq On : 28 Sep 2016 11:13 am
Operator : VOA116:MM
Sample : l1629226-07D,31,1,10,,t
Misc : WG936703,ICAL12812
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 28 12:05:31 2016
Quant Method : I:\VOLATILES\VOA116\2016\160928\V116_0829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 04:55:58 2016
Response via : Initial Calibration

Sub List : 8260-TCLP - TCLP\VOA116\2016\160928\V16160928A02.D•

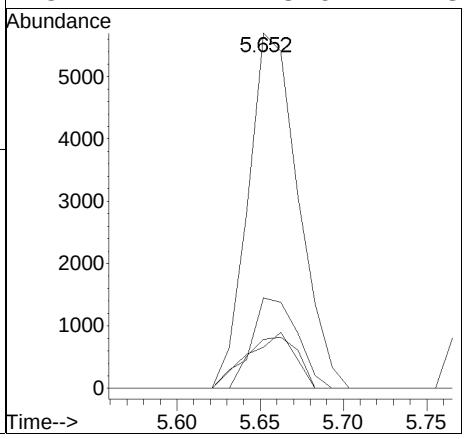


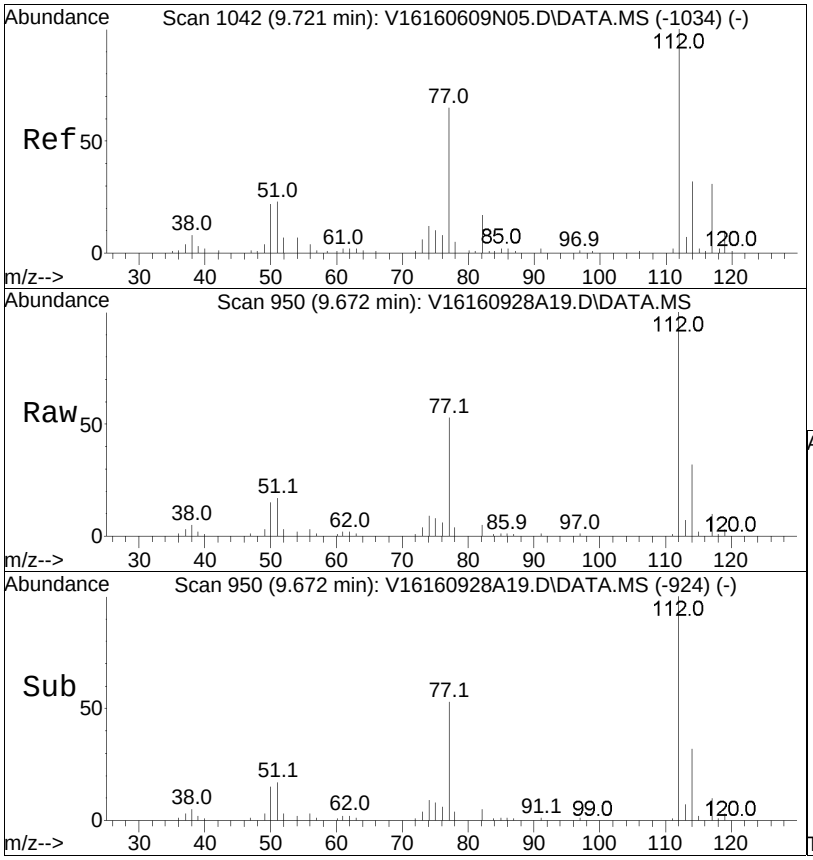


#41
Benzene
Concen: 0.96 ug/L
RT: 5.652 min Scan# 423
Delta R.T. -0.010 min
Lab File: V16160928A19.D
Acq: 28 Sep 2016 11:13 am

Tgt Ion: 78 Resp: 11950

Ion	Ratio	Lower	Upper
78	100		
77	24.2	15.5	32.1
51	14.2	9.3	19.3
52	14.7	8.6	17.8

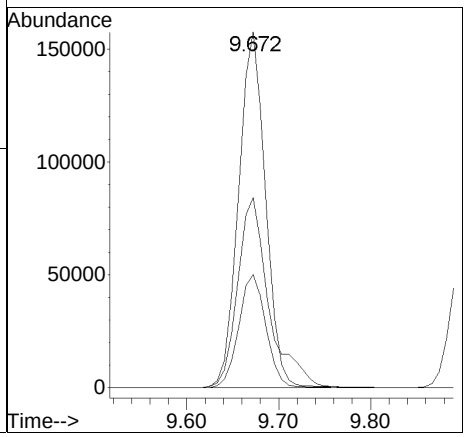




#73
Chlorobenzene
Concen: 28.26 ug/L
RT: 9.672 min Scan# 950
Delta R.T. 0.000 min
Lab File: V16160928A19.D
Acq: 28 Sep 2016 11:13 am

Tgt Ion:112 Resp: 319719

Ion	Ratio	Lower	Upper
112	100		
77	62.2	55.4	83.2
114	31.9	26.0	39.0



Manual Integration Report

Data Path	: I:\VOLATILES\VOA116\2016\1	QMethod	: V116_0829_8260.m
Data File	: V16160928A19.D	Operator	: VOA116:MM
Date Inj'd	: 9/28/2016 11:13 am	Instrument	: VOA 116
Sample	: l1629226-07D,31,1,10,,t	Quant Date	: 9/28/2016 12:03 pm

There are no manual integrations or false positives in this file.

Method Blank
Raw Data

Quantitation Report (QT/LSC Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160916A\
Data File : V11160916A06.D
Acq On : 16 Sep 2016 09:38 am
Operator : VOA111:MV
Sample : WG932865-5,31h,15,15,0.1
Misc : WG932865,ICAL12787
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 16 11:16:48 2016
Quant Method : I:\VOLATILES\VOA111\2016\160916A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA111\2016\160916A\V11160916A03.D
Sub List : 8260-CurveSoil - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.781	96	306503	20.000	ug/L	0.00
Standard Area 1 = 312820			Recovery = 97.98%			
59) Chlorobenzene-d5	9.284	117	190067	20.000	ug/L	0.00
Standard Area 1 = 198023			Recovery = 95.98%			
79) 1,4-Dichlorobenzene-d4	12.052	152	86934	20.000	ug/L	0.00
Standard Area 1 = 96448			Recovery = 90.14%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.990	113	69423	20.015	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 100.08%			
43) 1,2-Dichloroethane-d4	5.503	65	115655	22.916	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 114.58%			
60) Toluene-d8	7.454	98	276418	21.345	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 106.73%			
83) 4-Bromofluorobenzene	10.809	95	110642	23.431	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 117.16%			
Target Compounds						Qvalue
41) Benzene	5.362	78	604	N.D.		
48) Trichloroethene	5.844	95	154	N.D.		
73) Chlorobenzene	0.000		0	N.D.		

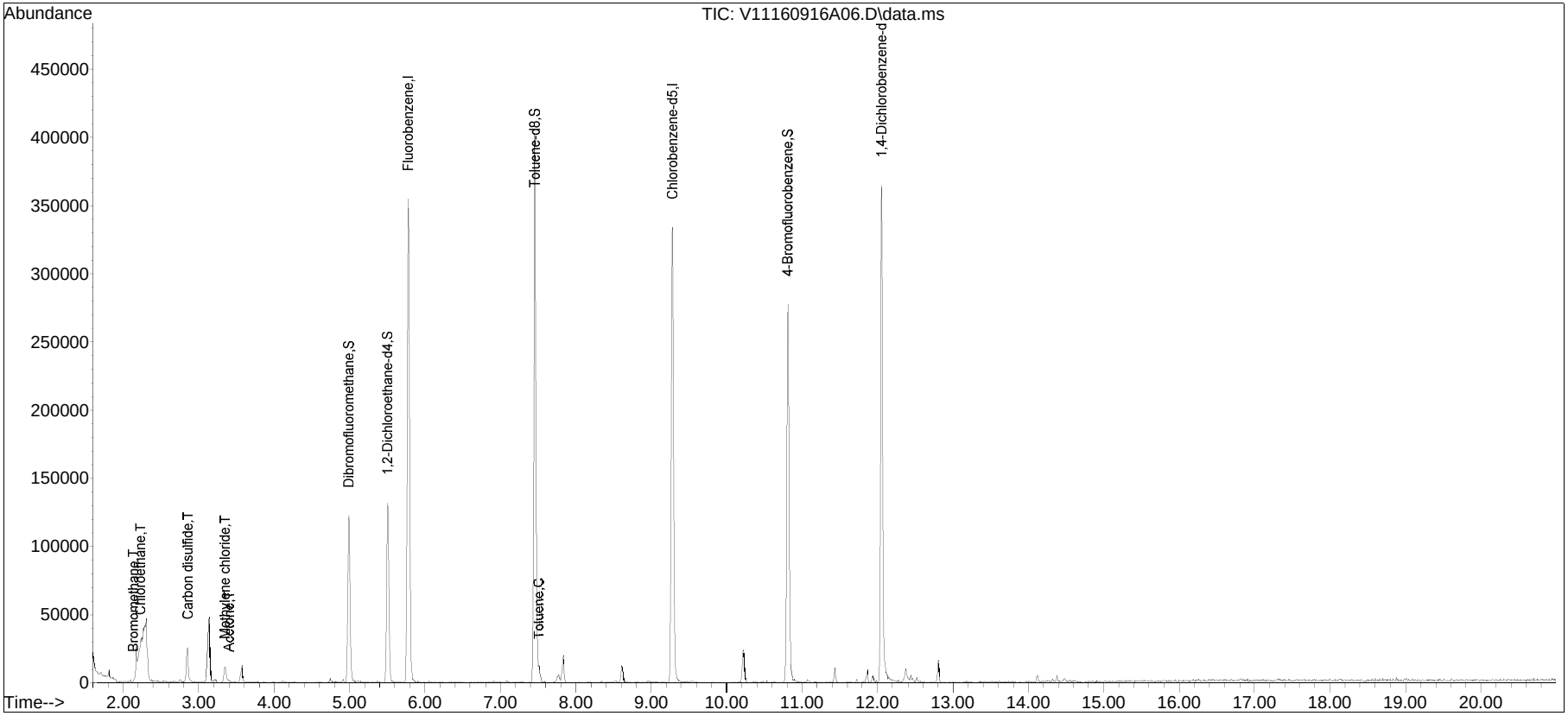
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : I:\VOLATILES\VOA111\2016\160916A\
Data File : V11160916A06.D
Acq On : 16 Sep 2016 09:38 am
Operator : VOA111:MV
Sample : WG932865-5,31h,15,15,0.1
Misc : WG932865,ICAL12787
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 16 11:16:48 2016
Quant Method : I:\VOLATILES\VOA111\2016\160916A\V111_160819_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 19 16:47:29 2016
Response via : Initial Calibration

Sub List : 8260-CurveSoil - Megamix plus Diox6A\V11160916A03.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA111\2016\1	QMethod	: V111_160819_8260.m
Data File	: V11160916A06.D	Operator	: VOA111:MV
Date Inj'd	: 9/16/2016 9:38 am	Instrument	: VOA111
Sample	: WG932865-5,31h,15,15,0.1	Quant Date	: 9/16/2016 11:14 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA100\2016\160916A\
Data File : V00160916A05.D
Acq On : 16 Sep 2016 10:33
Operator : VOA100:MV
Sample : WG932751-5,31,5,5
Misc : WG932751,ICAL12815
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 16 12:42:41 2016
Quant Method : I:\VOLATILES\VOA100\2016\160916A\V100_160829N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 06:21:02 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA100\2016\160916A\V00160916A02.D
Sub List : 8260-CurveSoil - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.542	96	343667	20.000	ug/L	-0.02
Standard Area 1 = 380360			Recovery = 90.35%			
59) Chlorobenzene-d5	10.144	117	281936	20.000	ug/L	0.00
Standard Area 1 = 314073			Recovery = 89.77%			
79) 1,4-Dichlorobenzene-d4	12.724	152	148109	20.000	ug/L	0.00
Standard Area 1 = 175322			Recovery = 84.48%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.714	113	89902	18.474	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 92.37%			
43) 1,2-Dichloroethane-d4	6.254	65	104400	21.092	ug/L	-0.01
Spiked Amount 20.000	Range 70 - 130		Recovery = 105.46%			
60) Toluene-d8	8.272	98	340964	21.624	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 108.12%			
83) 4-Bromofluorobenzene	11.555	95	135136	23.874	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 119.37%			
Target Compounds						Qvalue
48) Trichloroethene	0.000		0	N.D.		
73) Chlorobenzene	10.155	112	189	N.D.		

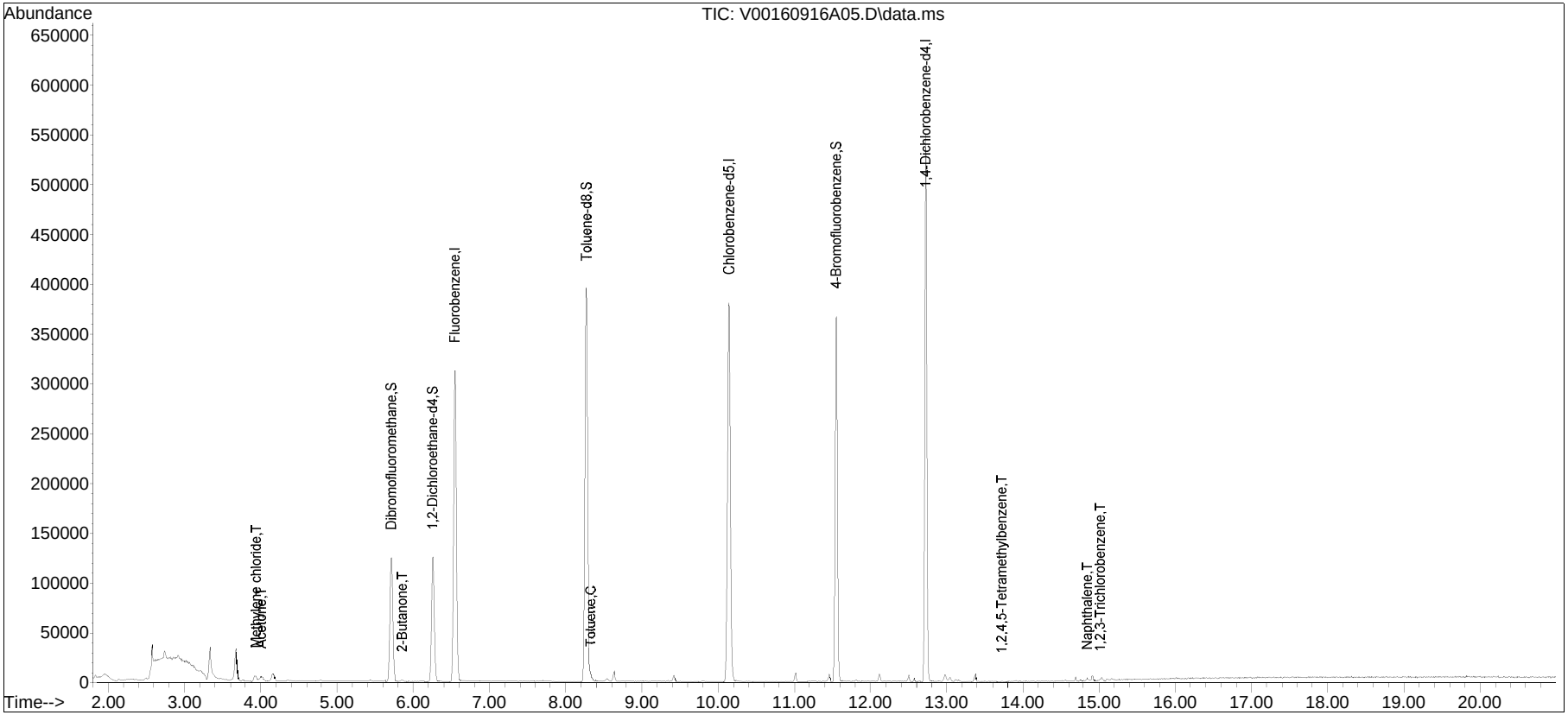
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA100\2016\160916A\
Data File : V00160916A05.D
Acq On : 16 Sep 2016 10:33
Operator : VOA100:MV
Sample : WG932751-5,31,5,5
Misc : WG932751,ICAL12815
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 16 12:42:41 2016
Quant Method : I:\VOLATILES\VOA100\2016\160916A\V100_160829N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 06:21:02 2016
Response via : Initial Calibration

Sub List : 8260-CurveSoil - Megamix plus Diox6A\V00160916A02.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA100\2016\1Q	Method	: V100_160829N_8260.m
Data File	: V00160916A05.D	Operator	: VOA100:MV
Date Inj'd	: 9/16/2016 10:33	Instrument	: VOA 100
Sample	: WG932751-5,31,5,5	Quant Date	: 9/16/2016 12:37 pm

There are no manual integrations or false positives in this file.

LSC Area Percent Report

Data Path : I:\VOLATILES\VOA100\2016\160916A\
Data File : V00160916A05.D
Acq On : 16 Sep 2016 10:33
Operator : VOA100:MV
Sample : WG932751-5,31,5,5
Misc : WG932751,ICAL12815
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\VOLATILES\VOA100\2016\160916A\V100_160829N_8260.m
Title : VOLATILES BY GC/MS

Signal : TIC: V00160916A05.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.579	140	151	157	rBV3	34186	83588	9.03%	1.687%
2	3.339	289	296	315	rVB	31597	75412	8.14%	1.522%
3	3.669	345	359	372	rVB	32166	85151	9.20%	1.719%
4	5.714	738	749	768	rBV	124415	297837	32.17%	6.011%
5	6.259	843	853	870	rBV	125127	291303	31.46%	5.879%
6	6.542	896	907	927	rBV	312728	731820	79.04%	14.770%
7	8.267	1224	1236	1257	rBV	395836	914853	98.80%	18.464%
8	10.144	1580	1594	1611	rBV	380500	864873	93.40%	17.455%
9	11.555	1852	1863	1882	rBV	367142	684071	73.88%	13.806%
10	12.724	2076	2086	2106	rBV	551149	925943	100.00%	18.688%

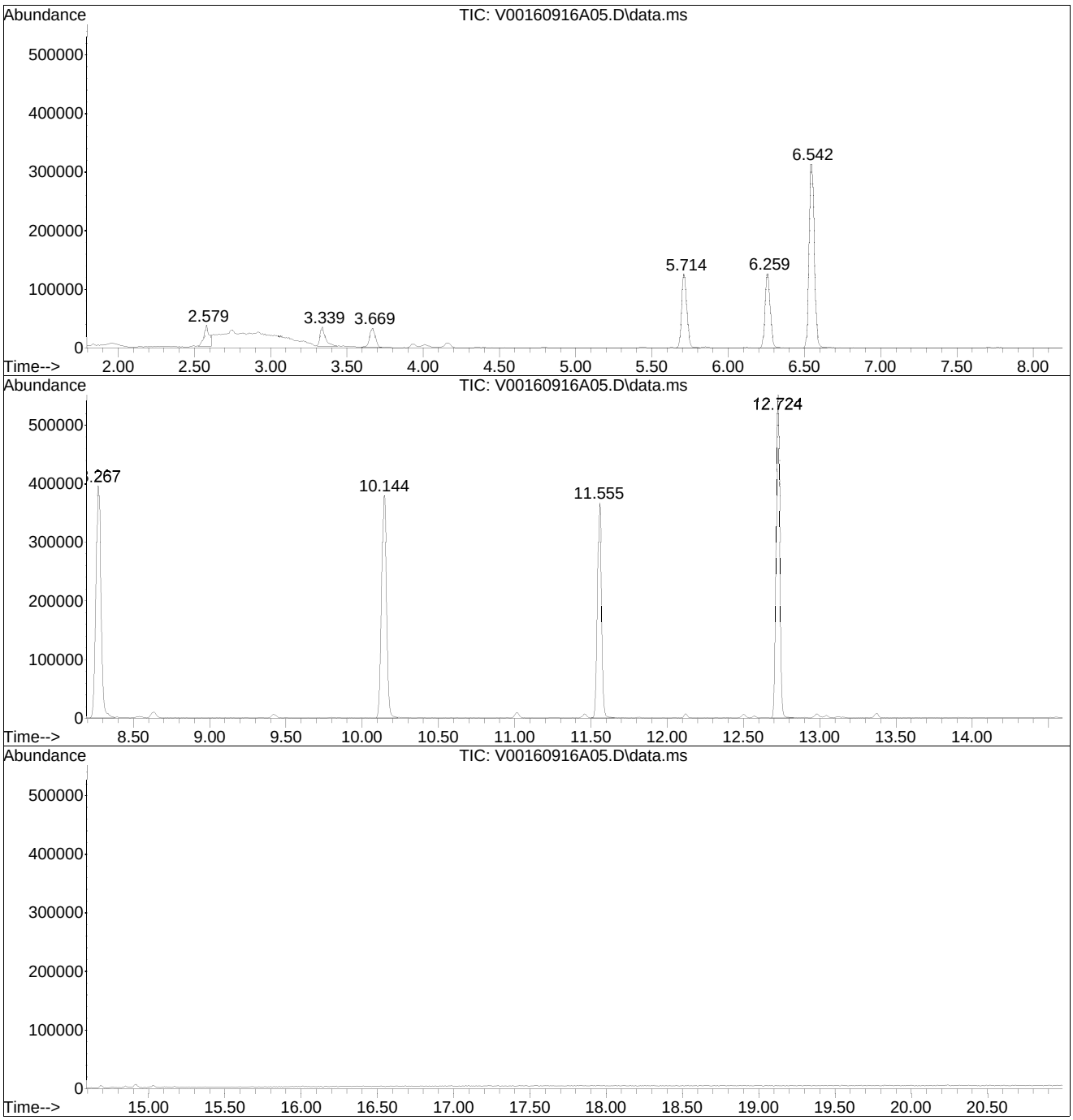
Sum of corrected areas: 4954851

LSC Report - Integrated Chromatogram

Data Path : I:\VOLATILES\VOA100\2016\160916A\
Data File : V00160916A05.D
Acq On : 16 Sep 2016 10:33
Operator : VOA100:MV
Sample : WG932751-5,31,5,5
Misc : WG932751,ICAL12815
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA100\2016\160916A\V100_160829N_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p



Library Search Compound Report

Data Path : I:\VOLATILES\VOA100\2016\160916A\
Data File : V00160916A05.D
Acq On : 16 Sep 2016 10:33
Operator : VOA100:MV
Sample : WG932751-5,31,5,5
Misc : WG932751,ICAL12815
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA100\2016\160916A\V100_160829N_8260.m
Quant Title : VOLATILES BY GC/MS

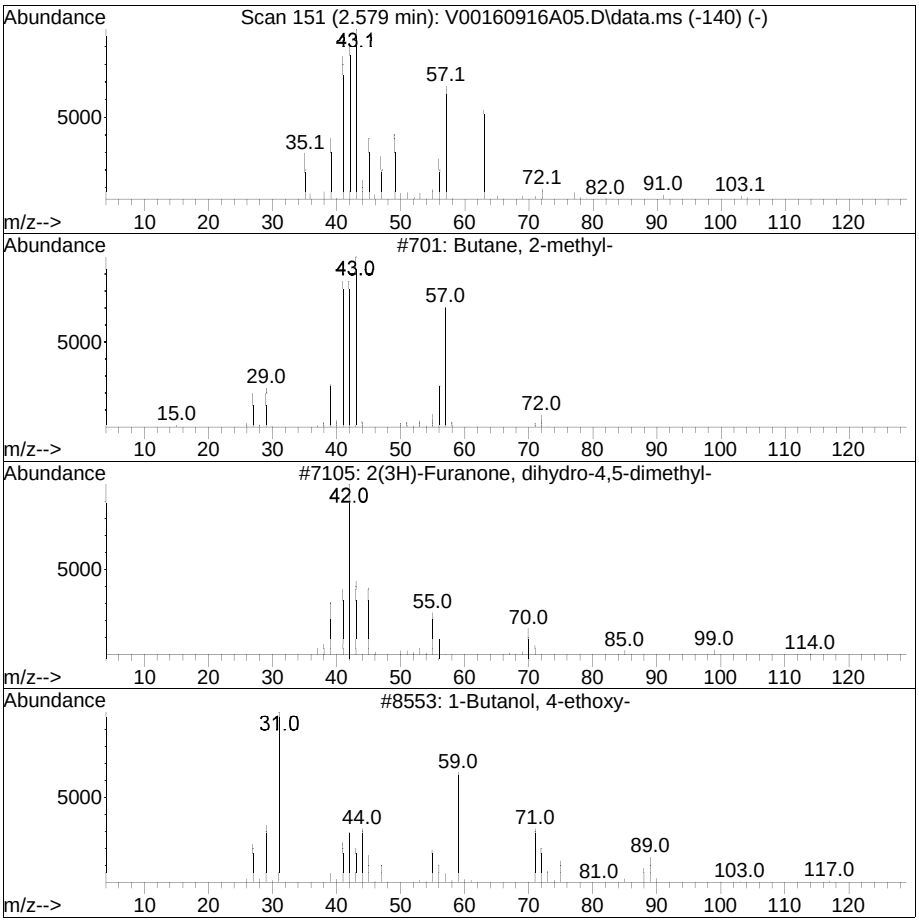
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

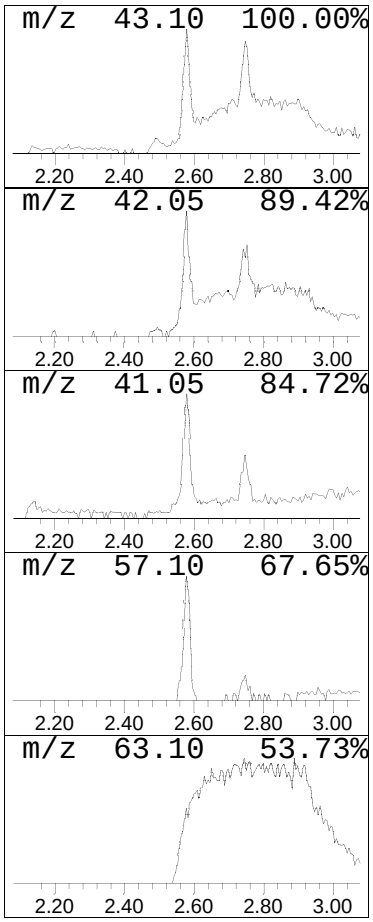
****

Peak Number 1 Unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.579	2.28 ug/L	83588	Fluorobenzene	6.542

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2-methyl-	72	C5H12	000078-78-4	11
2	2(3H)-Furanone, dihydro-4,5-dime...	114	C6H10O2	006971-63-7	9
3	1-Butanol, 4-ethoxy-	118	C6H14O2	000111-73-9	9
4	Azetidine, 1-chloro-	91	C3H6ClN	032115-53-0	9
5	Allyl chloroformate	120	C4H5ClO2	002937-50-0	9





Library Search Compound Report

Data Path : I:\VOLATILES\VOA100\2016\160916A\
Data File : V00160916A05.D
Acq On : 16 Sep 2016 10:33
Operator : VOA100:MV
Sample : WG932751-5,31,5,5
Misc : WG932751,ICAL12815
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA100\2016\160916A\V100_160829N_8260.m
Quant Title : VOLATILES BY GC/MS

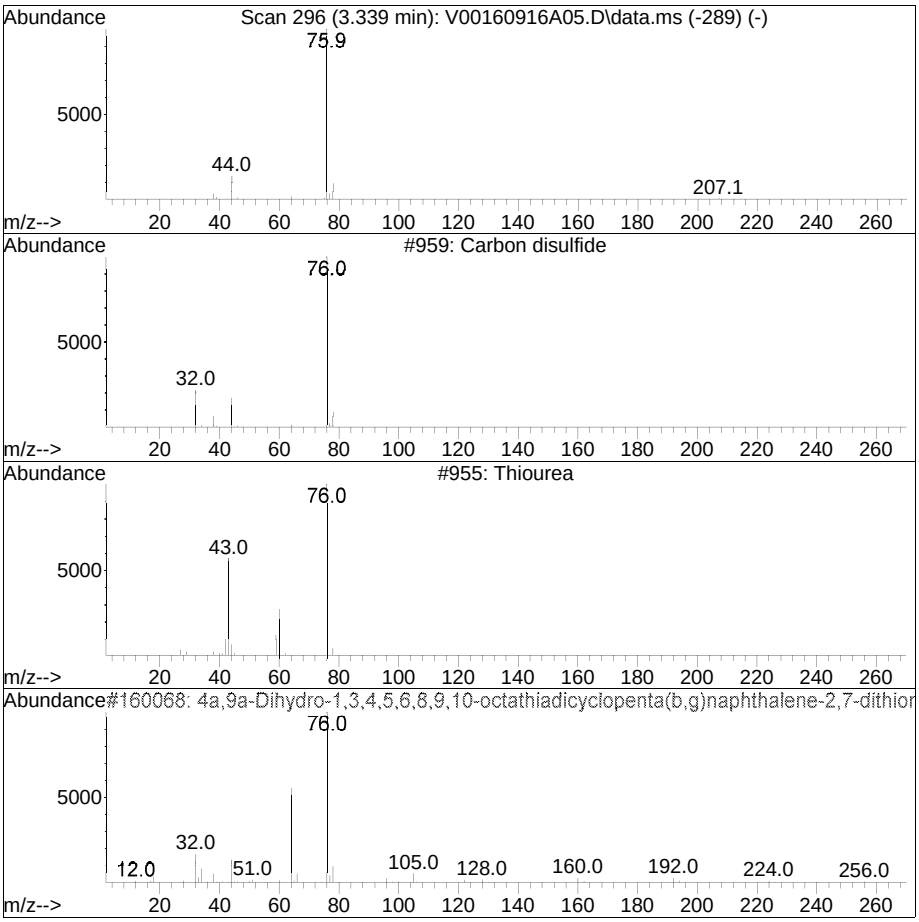
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

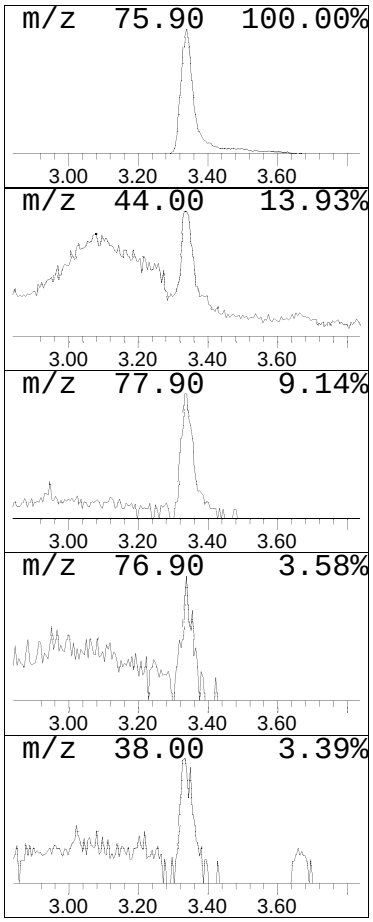
****

Peak Number 2 Unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.339	2.06 ug/L	75412	Fluorobenzene	6.542

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Carbon disulfide	76	CS2	000075-15-0	83
2	Thiourea	76	CH4N2S	000062-56-6	9
3	4a,9a-Dihydro-1,3,4,5,6,8,9,10-o...	418	C8H2S10	1000233-38-1	9
4	1-Propanethiol	76	C3H8S	000107-03-9	4
5	4,4'-Diisothiocyanatostilbene-2,...	454	C16H10N2O6S4	053005-05-3	4





Data Path : I:\VOLATILES\VOA100\2016\160916A\
Data File : V00160916A05.D
Acq On : 16 Sep 2016 10:33
Operator : VOA100:MV
Sample : WG932751-5,31,5,5
Misc : WG932751,ICAL12815
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA100\2016\160916A\V100_160829N_8260.m
Quant Title : VOLATILES BY GC/MS

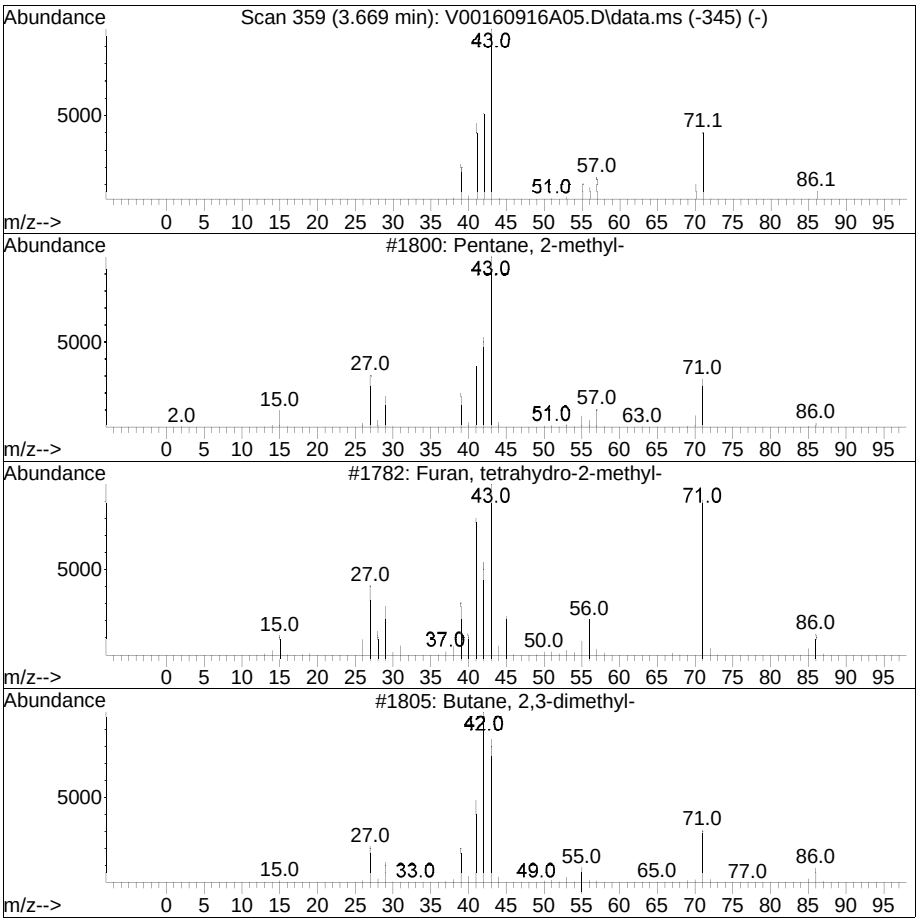
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

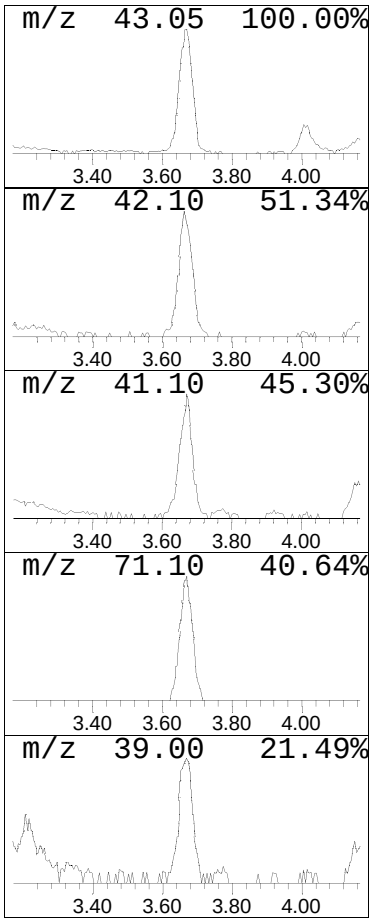
****

Peak Number 3 Pentane, 2-methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.669	2.33 ug/L	85151	Fluorobenzene	6.542

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
2	Furan, tetrahydro-2-methyl-	86	C5H10O	000096-47-9	50
3	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	47
4	Ether, hexyl pentyl	172	C11H24O	032357-83-8	28
5	Hexane, 2,3-dimethyl-	114	C8H18	000584-94-1	28





Tentatively Identified Compound (LSC) summary

Data Path : I:\VOLATILES\VOA100\2016\160916A\
Data File : V00160916A05.D
Acq On : 16 Sep 2016 10:33
Operator : VOA100:MV
Sample : WG932751-5,31,5,5
Misc : WG932751,ICAL12815
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA100\2016\160916A\V100_160829N_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Unknown	2.579	2.3	ug/L	83588	1	6.542	731820	20.0
Unknown	3.339	2.1	ug/L	75412	1	6.542	731820	20.0
Pentane, 2-methyl-	3.669	2.3	ug/L	85151	1	6.542	731820	20.0

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA104\2016\160916A\
Data File : V04160916A05.D
Acq On : 16 Sep 2016 10:34 am
Operator : VOA104:MV
Sample : WG932860-5,31H,5,5,0.1
Misc : WG932860,ICAL12726
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 16 12:32:14 2016
Quant Method : I:\VOLATILES\VOA104\2016\160916A\V104_160805N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Aug 06 08:04:57 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA104\2016\160916A\V04160916A02.D
Sub List : 8260-CurveSoil - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.928	96	316091	20.000	ug/L	-0.01
Standard Area 1 = 328987			Recovery = 96.08%			
59) Chlorobenzene-d5	9.456	117	277085	20.000	ug/L	0.00
Standard Area 1 = 286090			Recovery = 96.85%			
79) 1,4-Dichlorobenzene-d4	12.177	152	151976	20.000	ug/L	0.00
Standard Area 1 = 159832			Recovery = 95.08%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.136	113	89284	20.343	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 101.72%			
43) 1,2-Dichloroethane-d4	5.655	65	85692	20.513	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 102.57%			
60) Toluene-d8	7.611	98	321127	19.689	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 98.45%			
83) 4-Bromofluorobenzene	10.961	95	132327	20.385	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 101.93%			
Target Compounds						Qvalue
41) Benzene	5.514	78	725	N.D.		
48) Trichloroethene	0.000		0	N.D.		
73) Chlorobenzene	9.488	112	49	N.D.		

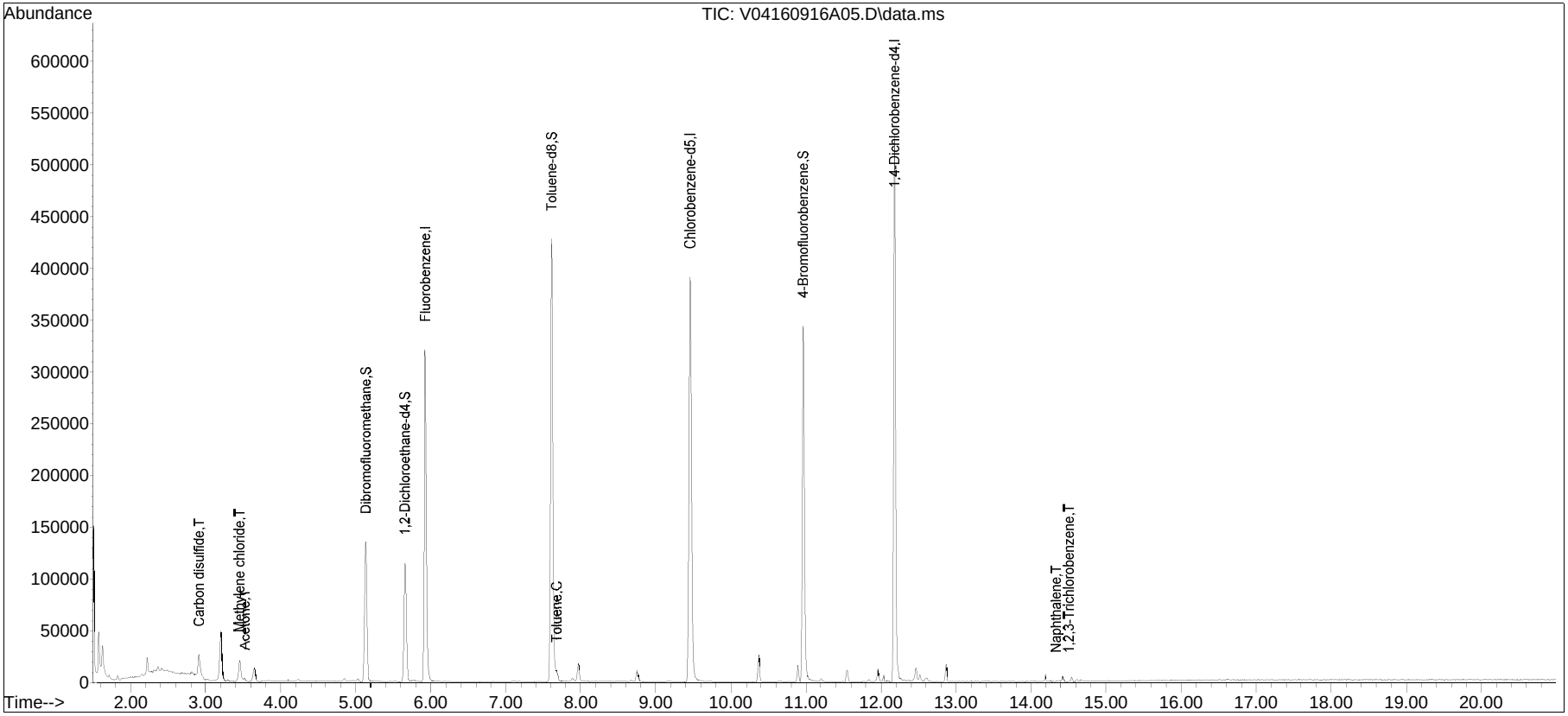
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA104\2016\160916A\
Data File : V04160916A05.D
Acq On : 16 Sep 2016 10:34 am
Operator : VOA104:MV
Sample : WG932860-5,31H,5,5,0.1
Misc : WG932860,ICAL12726
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 16 12:32:14 2016
Quant Method : I:\VOLATILES\VOA104\2016\160916A\V104_160805N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Aug 06 08:04:57 2016
Response via : Initial Calibration

Sub List : 8260-CurveSoil - Megamix plus Diox6A\V04160916A02.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA104\2016\1Q	Method	: V104_160805N_8260.m
Data File	: V04160916A05.D	Operator	: VOA104:MV
Date Inj'd	: 9/16/2016 10:34 am	Instrument	: VOA 104
Sample	: WG932860-5,31H,5,5,0.1	Quant Date	: 9/16/2016 12:25 pm

There are no manual integrations or false positives in this file.

LSC Area Percent Report

Data Path : I:\VOLATILES\VOA104\2016\160916A\
Data File : V04160916A05.D
Acq On : 16 Sep 2016 10:34 am
Operator : VOA104:MV
Sample : WG932860-5,31H,5,5,0.1
Misc : WG932860,ICAL12726
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\VOLATILES\VOA104\2016\160916A\V104_160805N_8260.m
Title : VOLATILES BY GC/MS

Signal : TIC: V04160916A05.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.581	14	18	22	rBV	39609	48741	5.54%	0.996%
2	1.628	23	27	41	rVB2	30618	56730	6.45%	1.159%
3	2.913	266	272	291	rVB	24864	59804	6.80%	1.222%
4	3.201	314	327	340	rBV	47388	101144	11.50%	2.067%
5	3.448	364	374	382	rBV2	20406	41554	4.72%	0.849%
6	3.647	403	412	425	rVB3	13298	29577	3.36%	0.604%
7	5.136	683	696	714	rBV	135282	282777	32.15%	5.779%
8	5.655	782	795	814	rBV	114704	240332	27.33%	4.911%
9	5.928	836	847	872	rBV	320792	666747	75.81%	13.625%
10	7.611	1154	1168	1189	rBV	428074	879461	100.00%	17.972%
11	7.967	1228	1236	1249	rVB3	17494	39131	4.45%	0.800%
12	9.456	1510	1520	1549	rBV	391287	817379	92.94%	16.703%
13	10.369	1679	1694	1705	rBV3	25750	54792	6.23%	1.120%
14	10.893	1785	1794	1800	rBV4	16491	30898	3.51%	0.631%
15	10.961	1800	1807	1833	rBV	343977	637996	72.54%	13.038%
16	12.177	2031	2039	2061	rBV	530077	877127	99.73%	17.924%
17	12.870	2163	2171	2180	rVB	16730	29276	3.33%	0.598%

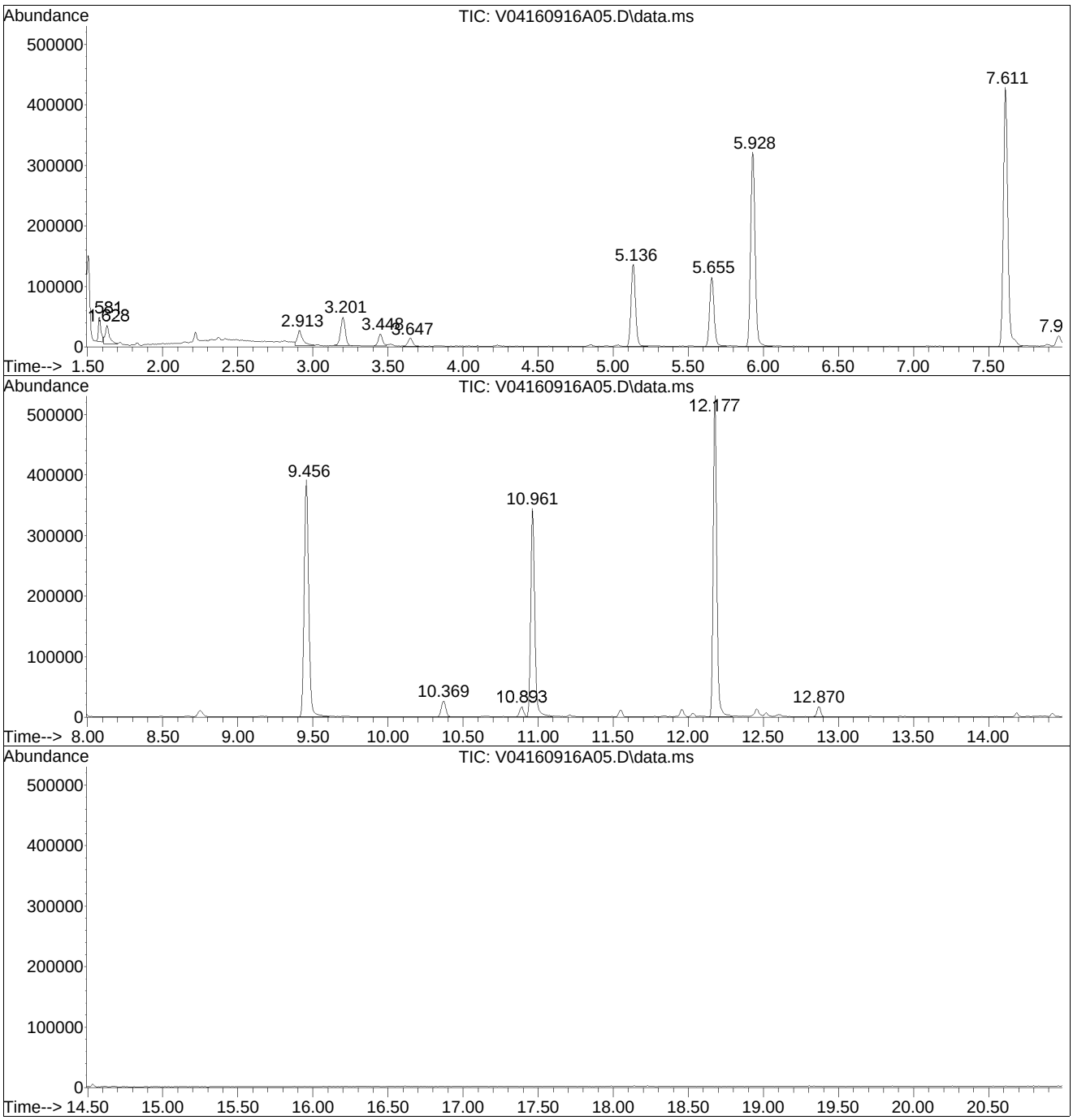
Sum of corrected areas: 4893466

LSC Report - Integrated Chromatogram

Data Path : I:\VOLATILES\VOA104\2016\160916A\
Data File : V04160916A05.D
Acq On : 16 Sep 2016 10:34 am
Operator : VOA104:MV
Sample : WG932860-5,31H,5,5,0.1
Misc : WG932860,ICAL12726
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA104\2016\160916A\V104_160805N_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p



Library Search Compound Report

Data Path : I:\VOLATILES\VOA104\2016\160916A\
Data File : V04160916A05.D
Acq On : 16 Sep 2016 10:34 am
Operator : VOA104:MV
Sample : WG932860-5,31H,5,5,0.1
Misc : WG932860,ICAL12726
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA104\2016\160916A\V104_160805N_8260.m
Quant Title : VOLATILES BY GC/MS

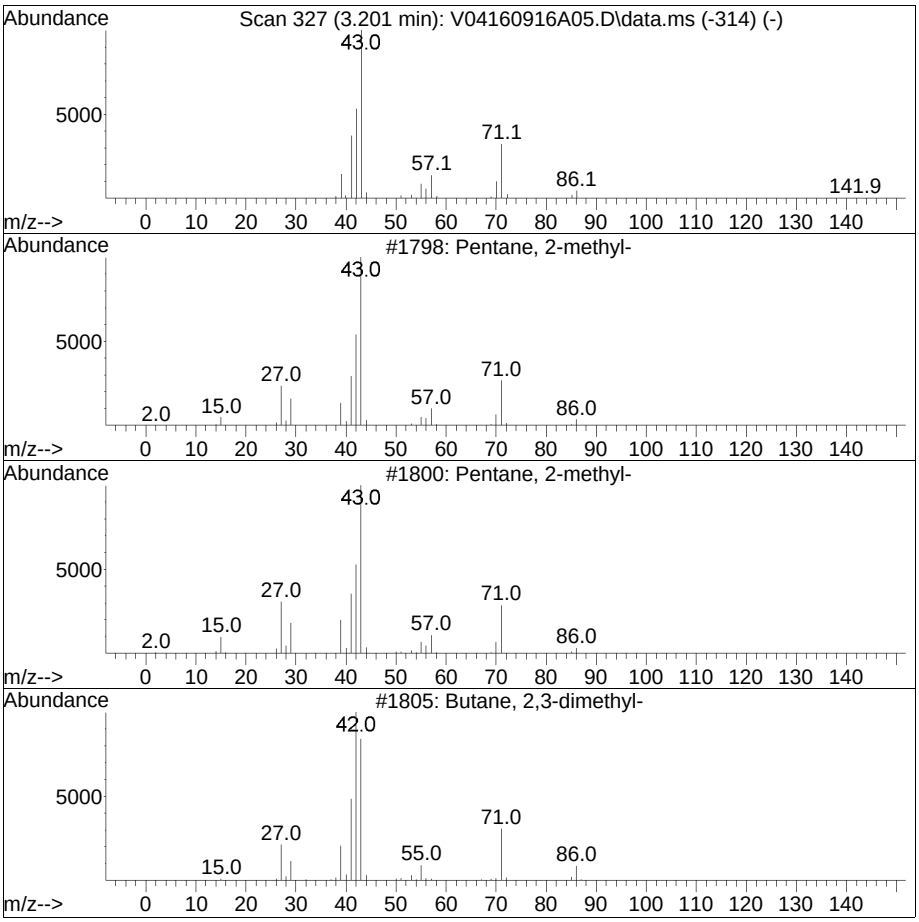
TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

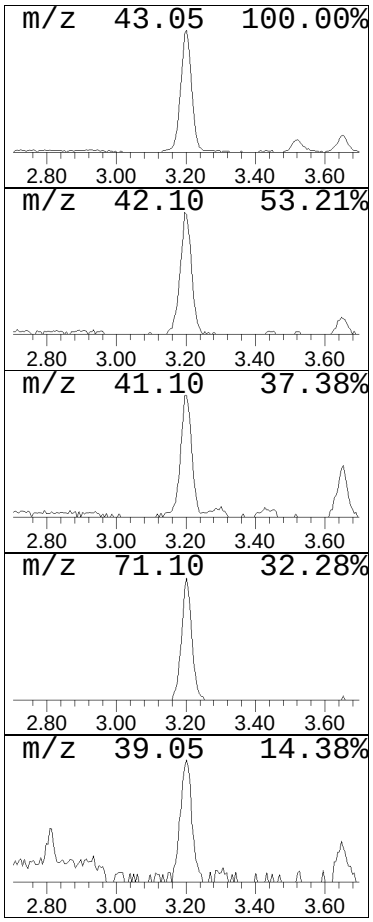
****

Peak Number 1 Pentane, 2-methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.201	3.03 ug/L	101144	Fluorobenzene	5.928

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
2	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
3	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	58
4	Pentane	72	C5H12	000109-66-0	50
5	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	47





Tentatively Identified Compound (LSC) summary

Data Path : I:\VOLATILES\VOA104\2016\160916A\
Data File : V04160916A05.D
Acq On : 16 Sep 2016 10:34 am
Operator : VOA104:MV
Sample : WG932860-5,31H,5,5,0.1
Misc : WG932860,ICAL12726
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\VOLATILES\VOA104\2016\160916A\V104_160805N_8260.m
Quant Title : VOLATILES BY GC/MS

TIC Library : I:\nist-db\NIST02.L
TIC Integration Parameters: rteint.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Pentane, 2-methyl-	3.201	3.0	ug/L	101144	1	5.928	666747	20.0

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160920\
Data File : VQ160920A09.D
Acq On : 20 Sep 2016 9:15 am
Operator : QUIMBY:MM
Sample : WG933853-5,31,10,10
Misc : WG933853,ICAL12824
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 20 10:07:47 2016
Quant Method : I:\VOLATILES\Quimby\2016\160920\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Quimby\2016\160920\VQ160920A03.D
Sub List : 8260-Benzene+MTBE - benzene only

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.629	96	167722	10.000 ug/L	0.00
Standard Area 1 = 177641			Recovery = 94.42%		
59) Chlorobenzene-d5	14.709	117	127337	10.000 ug/L	0.00
Standard Area 1 = 139227			Recovery = 91.46%		
79) 1,4-Dichlorobenzene-d4	19.005	152	46632	10.000 ug/L	0.00
Standard Area 1 = 48263			Recovery = 96.62%		
System Monitoring Compounds					
36) Dibromofluoromethane	8.386	113	32831	10.273 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.73%		
43) 1,2-Dichloroethane-d4	9.140	65	40938	11.067 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 110.67%		
60) Toluene-d8	12.163	98	180447	10.269 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.69%		
83) 4-Bromofluorobenzene	16.854	95	51866	8.162 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 81.62%		
Target Compounds					Qvalue
20) Methyl tert-butyl ether	0.000		0	N.D.	
41) Benzene	9.302	78	110	N.D.	

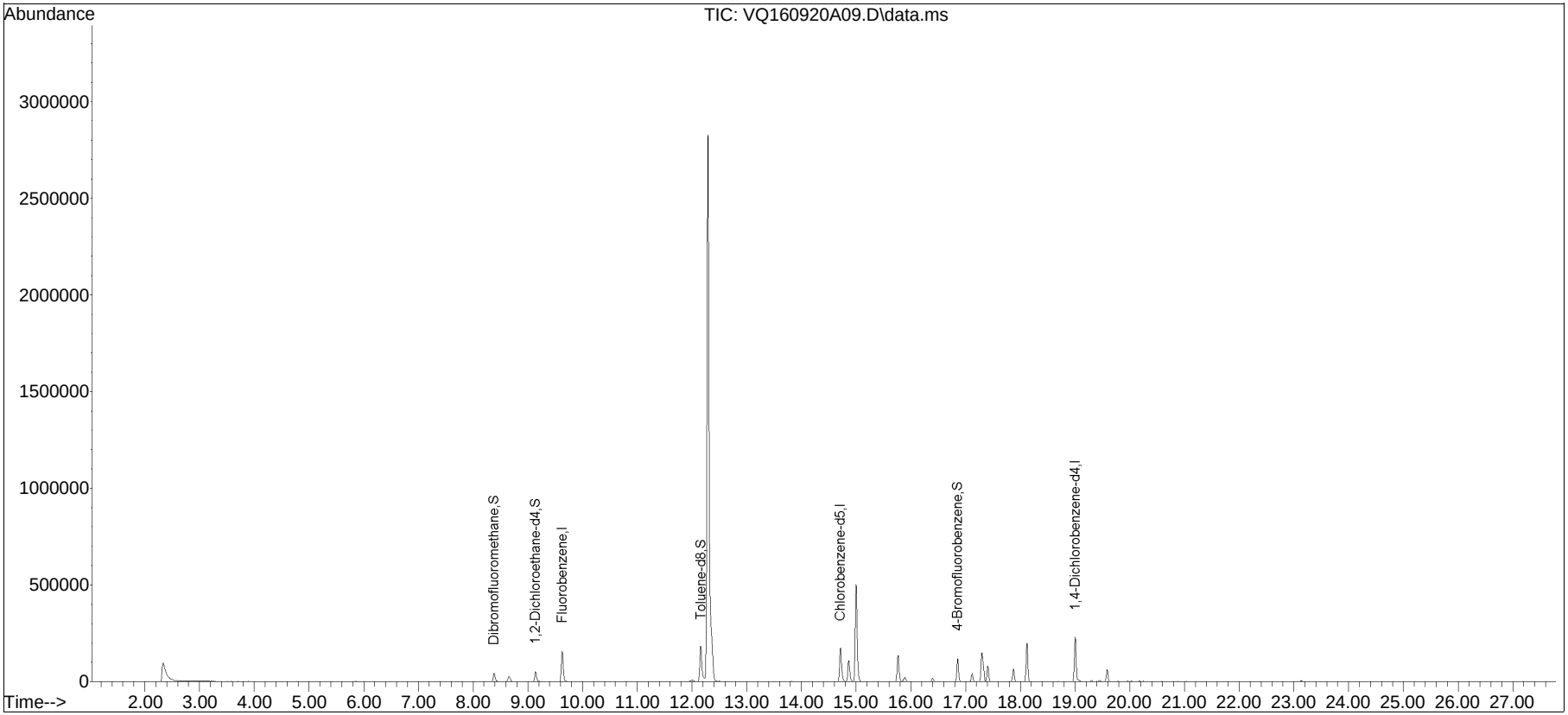
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160920\
Data File : VQ160920A09.D
Acq On : 20 Sep 2016 9:15 am
Operator : QUIMBY:MM
Sample : WG933853-5,31,10,10
Misc : WG933853,ICAL12824
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 20 10:07:47 2016
Quant Method : I:\VOLATILES\Quimby\2016\160920\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

Sub List : 8260-Benzene+MTBE - benzene only920\VQ160920A03.D•



Manual Integration Report

Data Path	: I:\VOLATILES\Quimby\2016\1Q	Method	: VQ_160829_8260.m
Data File	: VQ160920A09.D	Operator	: QUIMBY:MM
Date Inj'd	: 9/20/2016 9:15 am	Instrument	: Quimby
Sample	: WG933853-5,31,10,10	Quant Date	: 9/20/2016 10:07 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160922\
Data File : VQ160922A10.D
Acq On : 22 Sep 2016 9:19 am
Operator : QUIMBY:MM
Sample : WG933853-17,31,10,10
Misc : WG933853,ICAL12824
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 22 09:48:01 2016
Quant Method : I:\VOLATILES\Quimby\2016\160922\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Quimby\2016\160922\VQ160922A02.D
Sub List : 8260-TCLP - TCLP

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.626	96	153331	10.000 ug/L	0.00
Standard Area 1 = 171856			Recovery = 89.22%		
59) Chlorobenzene-d5	14.715	117	114013	10.000 ug/L	0.00
Standard Area 1 = 131116			Recovery = 86.96%		
79) 1,4-Dichlorobenzene-d4	19.005	152	41642	10.000 ug/L	0.00
Standard Area 1 = 47309			Recovery = 88.02%		
System Monitoring Compounds					
36) Dibromofluoromethane	8.380	113	30437	10.418 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 104.18%		
43) 1,2-Dichloroethane-d4	9.140	65	37022	10.948 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 109.48%		
60) Toluene-d8	12.157	98	163536	10.394 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.94%		
83) 4-Bromofluorobenzene	16.854	95	45113	7.950 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 79.50%		
Target Compounds					Qvalue
41) Benzene	0.000		0	N.D.	
48) Trichloroethene	10.249	95	1539M1	0.244 ug/L	
73) Chlorobenzene	0.000		0	N.D.	

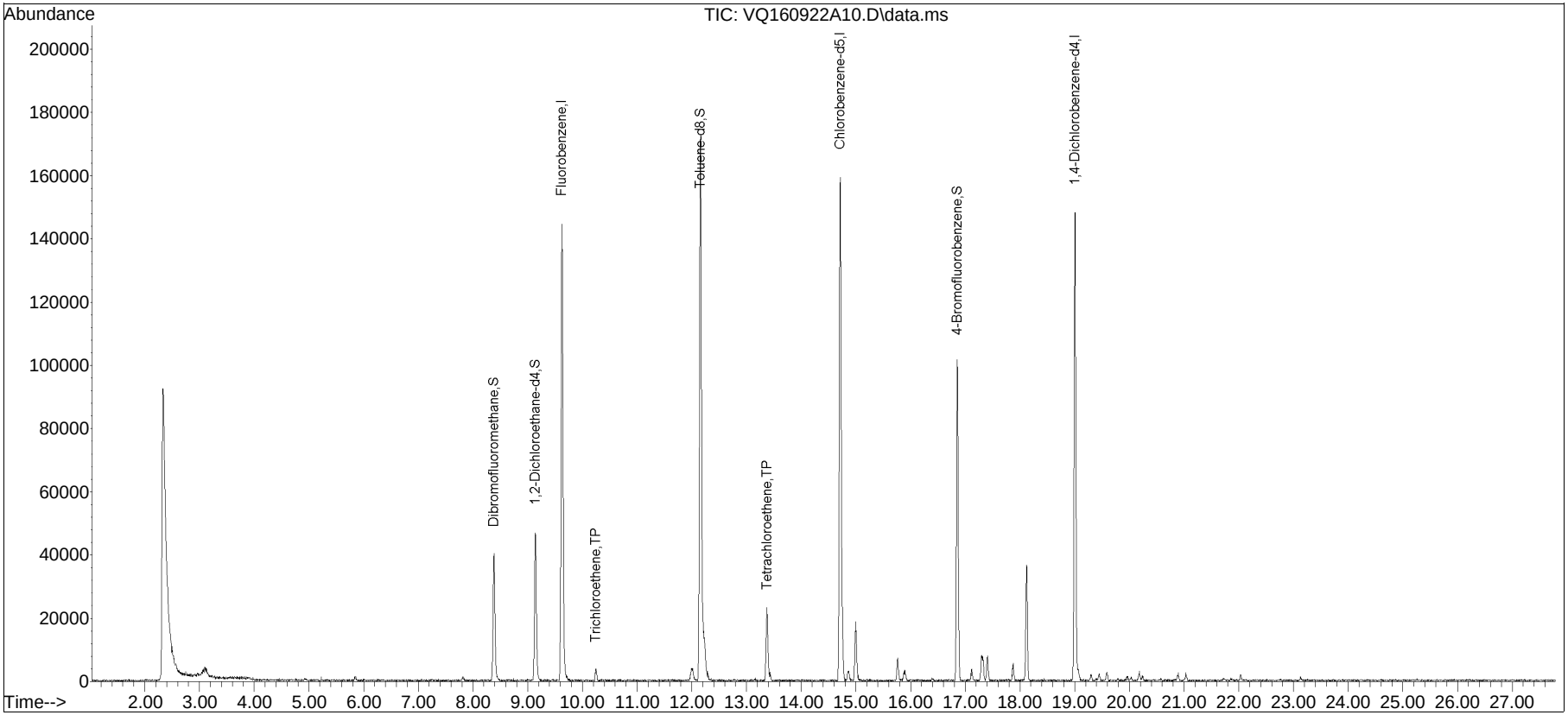
(#) = qualifier out of range (m) = manual integration (+) = signals summed

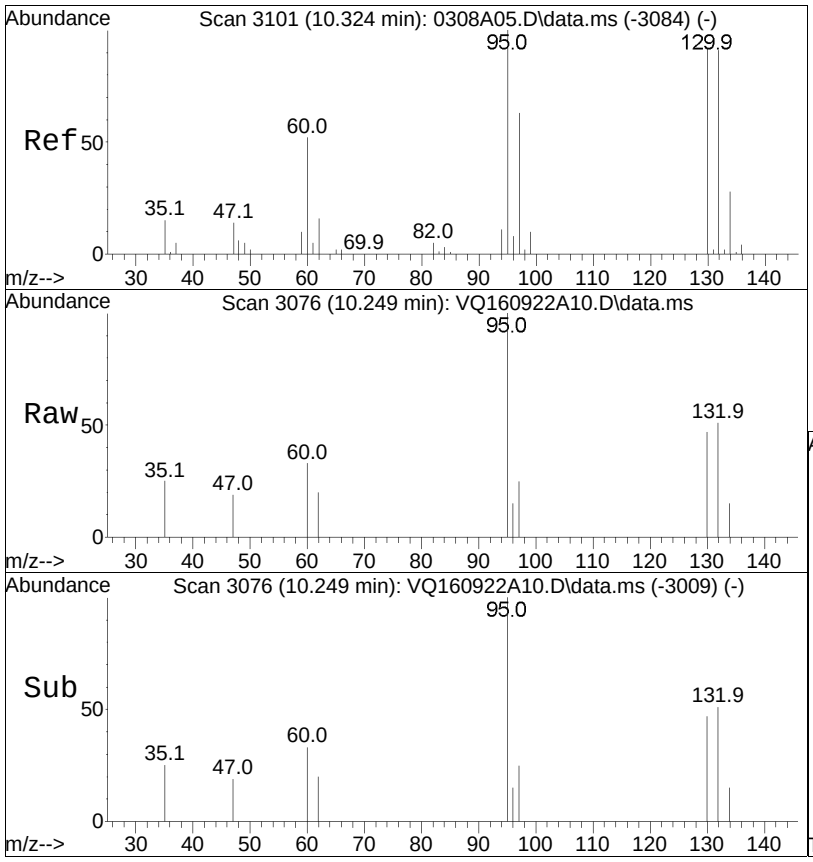
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160922\
Data File : VQ160922A10.D
Acq On : 22 Sep 2016 9:19 am
Operator : QUIMBY:MM
Sample : WG933853-17,31,10,10
Misc : WG933853,ICAL12824
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 22 09:48:01 2016
Quant Method : I:\VOLATILES\Quimby\2016\160922\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

Sub List : 8260-TCLP - TCLP\Quimby\2016\160922\VQ160922A02.D•

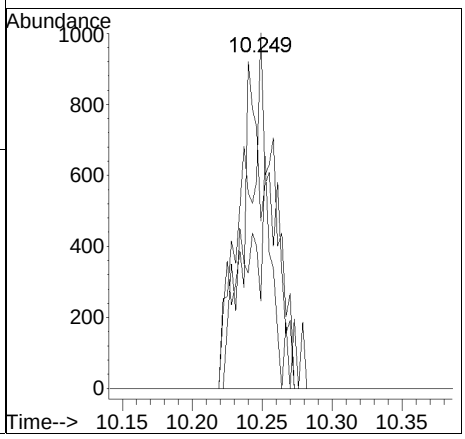




#48
Trichloroethene
Concen: 0.24 ug/L M1
RT: 10.249 min Scan# 3076
Delta R.T. -0.000 min
Lab File: VQ160922A10.D
Acq: 22 Sep 2016 9:19 am

Tgt Ion: 95 Resp: 1539

Ion	Ratio	Lower	Upper
95	100		
97	17.9	51.0	76.6#
130	0.0	75.0	112.6#



Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160923\
Data File : VQ160922A05.D
Acq On : 23 Sep 2016 8:16 am
Operator : QUIMBY:MM
Sample : WG933853-22,31,10,10
Misc : WG933853,ICAL12824
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 23 12:02:48 2016
Quant Method : I:\VOLATILES\Quimby\2016\160923\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Quimby\2016\160923\VQ160922A02.D
Sub List : 8260-TCLP - TCLP

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.629	96	186879	10.000 ug/L	0.00
Standard Area 1 = 197805			Recovery = 94.48%		
59) Chlorobenzene-d5	14.715	117	135639	10.000 ug/L	0.00
Standard Area 1 = 154269			Recovery = 87.92%		
79) 1,4-Dichlorobenzene-d4	19.008	152	49393	10.000 ug/L	0.00
Standard Area 1 = 54189			Recovery = 91.15%		
System Monitoring Compounds					
36) Dibromofluoromethane	8.385	113	35447	9.955 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.55%		
43) 1,2-Dichloroethane-d4	9.143	65	42605	10.337 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.37%		
60) Toluene-d8	12.160	98	193543	10.340 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.40%		
83) 4-Bromofluorobenzene	16.851	95	55288	8.214 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 82.14%		
Target Compounds					Qvalue
41) Benzene	9.302	78	66	N.D.	
48) Trichloroethene	0.000		0	N.D.	
73) Chlorobenzene	14.790	112	312	N.D.	

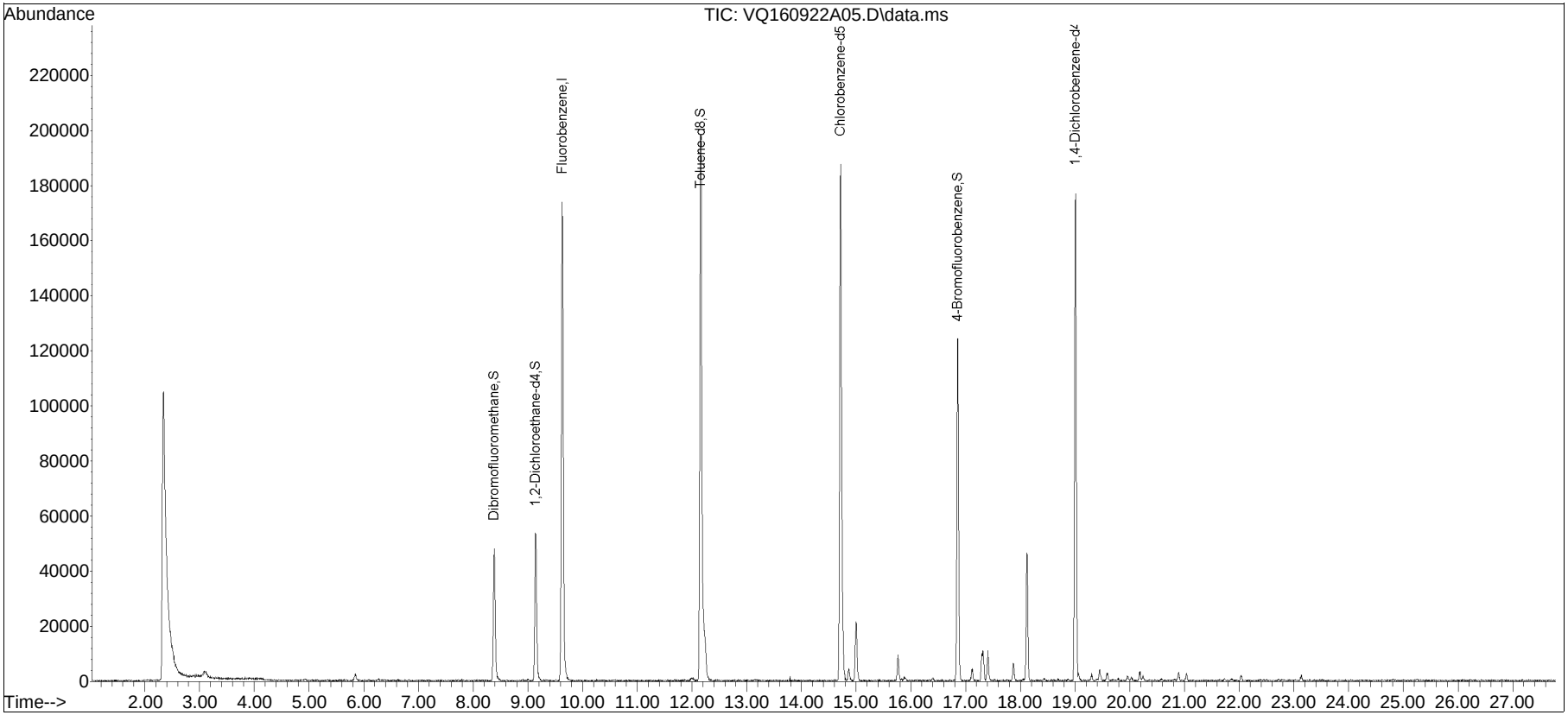
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160923\
Data File : VQ160922A05.D
Acq On : 23 Sep 2016 8:16 am
Operator : QUIMBY:MM
Sample : WG933853-22,31,10,10
Misc : WG933853,ICAL12824
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 23 12:02:48 2016
Quant Method : I:\VOLATILES\Quimby\2016\160923\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

Sub List : 8260-TCLP - TCLP\Quimby\2016\160923\VQ160922A02.D•



Manual Integration Report

Data Path	: I:\VOLATILES\Quimby\2016\1Q	Method	: VQ_160829_8260.m
Data File	: VQ160922A05.D	Operator	: QUIMBY:MM
Date Inj'd	: 9/23/2016 8:16 am	Instrument	: Quimby
Sample	: WG933853-22,31,10,10	Quant Date	: 9/23/2016 12:02 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA116\2016\160928\
Data File : V16160928A18.D
Acq On : 28 Sep 2016 10:48 am
Operator : VOA116:MM
Sample : WG936703-5,31,10,10
Misc : WG936703,ICAL12812
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 28 12:03:32 2016
Quant Method : I:\VOLATILES\VOA116\2016\160928\V116_0829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 04:55:58 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA116\2016\160928\V16160928A02.D
Sub List : 8260-TCLP - TCLP

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.083	96	133327	10.000 ug/L	0.00
Standard Area 1 = 158418			Recovery = 84.16%		
59) Chlorobenzene-d5	9.649	117	121155	10.000 ug/L	0.00
Standard Area 1 = 138010			Recovery = 87.79%		
79) 1,4-Dichlorobenzene-d4	12.344	152	65852	10.000 ug/L	0.00
Standard Area 1 = 85421			Recovery = 77.09%		
System Monitoring Compounds					
36) Dibromofluoromethane	5.260	113	47380	12.387 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 123.87%		
43) 1,2-Dichloroethane-d4	5.796	65	42081	11.643 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 116.43%		
60) Toluene-d8	7.792	98	139711	9.318 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 93.18%		
83) 4-Bromofluorobenzene	11.144	95	50754	10.361 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.61%		
Target Compounds					Qvalue
41) Benzene	0.000		0	N.D.	
73) Chlorobenzene	9.664	112	89	N.D.	

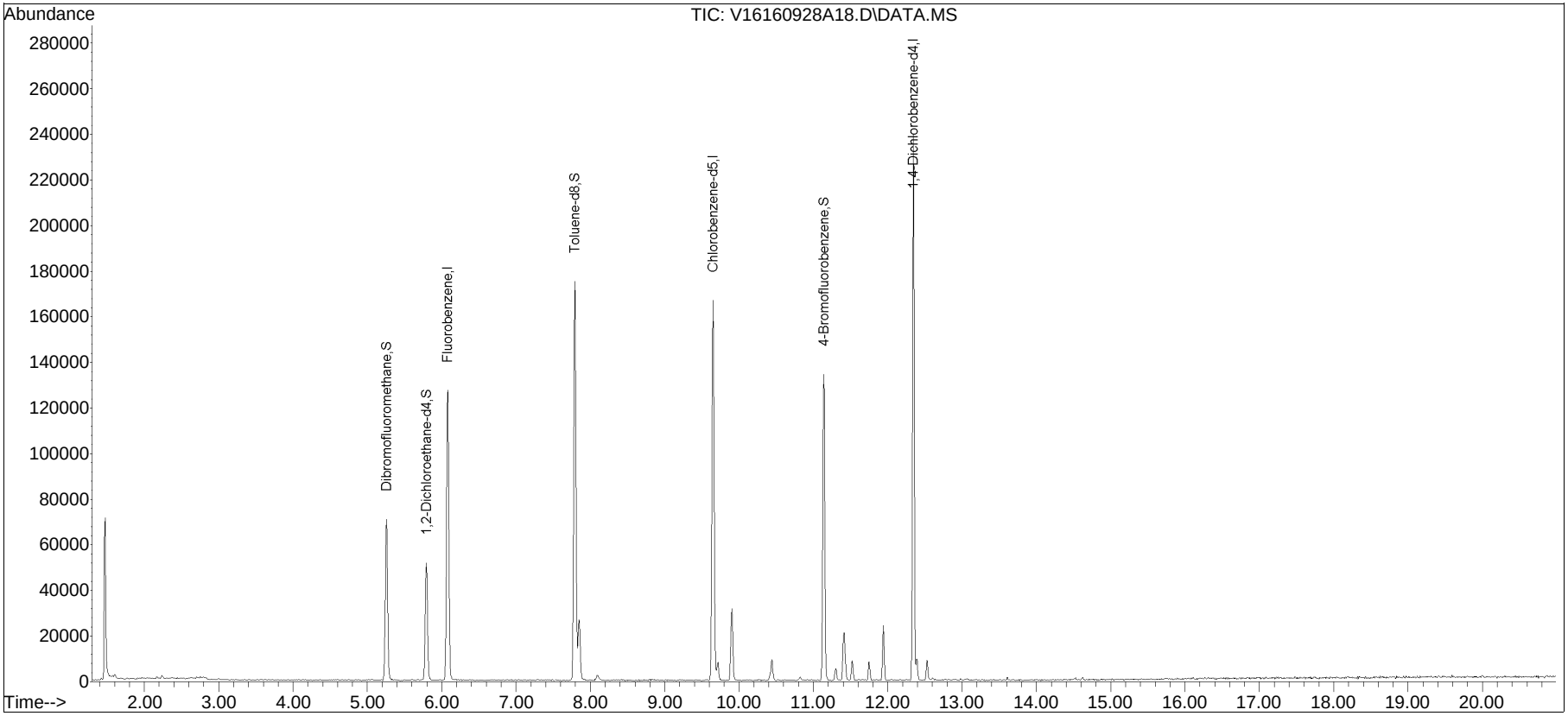
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA116\2016\160928\
Data File : V16160928A18.D
Acq On : 28 Sep 2016 10:48 am
Operator : VOA116:MM
Sample : WG936703-5,31,10,10
Misc : WG936703,ICAL12812
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 28 12:03:32 2016
Quant Method : I:\VOLATILES\VOA116\2016\160928\V116_0829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 04:55:58 2016
Response via : Initial Calibration

Sub List : 8260-TCLP - TCLP\VOA116\2016\160928\V16160928A02.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA116\2016\1	QMethod	: V116_0829_8260.m
Data File	: V16160928A18.D	Operator	: VOA116:MM
Date Inj'd	: 9/28/2016 10:48 am	Instrument	: VOA 116
Sample	: WG936703-5,31,10,10	Quant Date	: 9/28/2016 11:59 am

There are no manual integrations or false positives in this file.

Metals

Inorganic Data
(ICP Analysis)

Sample Results Summary

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-01	**Date Collected**	: 09/15/16 08:10
Client ID	: 4479-091516-0810	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 11:02
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG932571.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.262g	**%Solids**	: 77
Digestion Method	: EPA 3050B	**Date Digested**	: 09/16/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, Total	4200	13	2.0	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-05	**Date Collected**	: 09/15/16 09:45
Client ID	: 4479-091516-0945	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 11:15
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG932571.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.277g	**%Solids**	: 86
Digestion Method	: EPA 3050B	**Date Digested**	: 09/16/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, Total	480	1.1	0.18	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-06	**Date Collected**	: 09/15/16 10:00
Client ID	: 4479-091516-1000	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 11:56
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG932571.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.257g	**%Solids**	: 60
Digestion Method	: EPA 3050B	**Date Digested**	: 09/16/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, Total	5000	16	2.6	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629226-10	Date Collected	: 09/15/16 11:10
Client ID	: 4479-091516-1110	Date Received	: 09/15/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/16/16 11:23
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,6010C	Analyst	: PS
Lab File ID	: WG932571.pdf	Instrument ID	: TRACE7
Sample Amount	: 1.295g	%Solids	: 72
Digestion Method	: EPA 3050B	Date Digested	: 09/16/16

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-02-0	Nickel, Total	550	1.3	0.22	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629226-11	Date Collected	: 09/15/16 13:05
Client ID	: 4479-091516-1305	Date Received	: 09/15/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/16/16 11:28
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,6010C	Analyst	: PS
Lab File ID	: WG932571.pdf	Instrument ID	: TRACE7
Sample Amount	: 1.302g	%Solids	: 93
Digestion Method	: EPA 3050B	Date Digested	: 09/16/16

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-38-2	Arsenic, Total	50	0.41	0.14	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-12	**Date Collected**	: 09/15/16 13:00
Client ID	: 4479-091516-1300	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 11:32
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG932571.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.309g	**%Solids**	: 94
Digestion Method	: EPA 3050B	**Date Digested**	: 09/16/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	69	0.41	0.13	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-13	**Date Collected**	: 09/15/16 13:30
Client ID	: 4479-091516-1330	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 11:35
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG932571.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.26g	**%Solids**	: 85
Digestion Method	: EPA 3050B	**Date Digested**	: 09/16/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, Total	16	1.2	0.19	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629226-14	Date Collected	: 09/15/16 13:40
Client ID	: 4479-091516-1340	Date Received	: 09/15/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/16/16 09:08
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,6010C	Analyst	: PS
Lab File ID	: WG932571.pdf	Instrument ID	: TRACE7
Sample Amount	: 1.283g	%Solids	: 91
Digestion Method	: EPA 3050B	Date Digested	: 09/16/16

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-02-0	Nickel, Total	9.7	1.1	0.17	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629226-15	Date Collected	: 09/15/16 13:45
Client ID	: 4479-091516-1345	Date Received	: 09/15/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/16/16 09:12
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,6010C	Analyst	: PS
Lab File ID	: WG932571.pdf	Instrument ID	: TRACE7
Sample Amount	: 1.314g	%Solids	: 85
Digestion Method	: EPA 3050B	Date Digested	: 09/16/16

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-02-0	Nickel, Total	49	1.1	0.18	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-17	**Date Collected**	: 09/15/16 14:35
Client ID	: 4479-091516-1435	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 09:16
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG932571.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.282g	**%Solids**	: 91
Digestion Method	: EPA 3050B	**Date Digested**	: 09/16/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, Total	860	1.1	0.17	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-18	**Date Collected**	: 09/15/16 14:40
Client ID	: 4479-091516-1440	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 11:52
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG932571.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.261g	**%Solids**	: 88
Digestion Method	: EPA 3050B	**Date Digested**	: 09/16/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	62	0.45	0.15	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-19	**Date Collected**	: 09/15/16 15:00
Client ID	: 4479-091516-1500	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 12:00
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG932571.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.298g	**%Solids**	: 92
Digestion Method	: EPA 3050B	**Date Digested**	: 09/16/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, Total	11	1.0	0.17	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: WG932535-1	Date Collected	: NA
Client ID	: WG932535-1BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 09/16/16 10:22
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,6010C	Analyst	: PS
Lab File ID	: WG932571.pdf	Instrument ID	: TRACE7
Sample Amount	: 1.25g	%Solids	: NA
Digestion Method	: EPA 3050B	Date Digested	: 09/16/16

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-38-2	Arsenic, Total	ND	0.40	0.13	U
7440-02-0	Nickel, Total	ND	1.0	0.16	U

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: WG932535-3	**Date Collected**	: 09/15/16 08:10
Client ID	: 4479-091516-0810DUP	**Date Received**	: 09/15/16
Sample Location	:	**Date Analyzed**	: 09/16/16 11:07
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,6010C	**Analyst**	: PS
Lab File ID	: WG932571.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.268g	**%Solids**	: 77
Digestion Method	: EPA 3050B	**Date Digested**	: 09/16/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, Total	4800	13	2.0	

Blank Results Summary

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TRACE7		

		Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID	:	R900908-2		R900908-7		R900908-9		R900908-11		WG932535-1	
Date Analyzed	:	09/16/16 07:46		09/16/16 08:23		09/16/16 09:24		09/16/16 09:48		09/16/16 10:22	
Parameter		mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q	mg/kg	Q
Arsenic		0.00330	U	0.00330	U	0.00330	U	0.00330	U	0.13	U
Nickel		0.00400	U	0.00400	U	0.00400	U	0.00400	U	0.16	U

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TRACE7		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R900908-13		R900908-15		R900908-17		R900908-19			
Date Analyzed :	09/16/16 10:14		09/16/16 10:58		09/16/16 11:47		09/16/16 12:36			
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Arsenic	0.00330	U	0.00330	U	0.00330	U	0.00330	U		
Nickel	0.00400	U	0.00400	U	0.00400	U	0.00400	U		

Calibration Summary

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TRACE7	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R900908-1			R900908-6			R900908-8		R900908-10	
Date Analyzed :	09/16/16 07:42			09/16/16 08:19			09/16/16 09:20		09/16/16 09:44	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic	0.5000	0.5110	102.	0.5000	0.5080	102.	0.5110	102.	0.5110	102.
Nickel	0.5000	0.4940	99.	0.5000	0.4930	98.	0.5000	100.	0.4980	100

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TRACE7	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R900908-12			R900908-14			R900908-16		R900908-18	
Date Analyzed :	09/16/16 10:10			09/16/16 10:54			09/16/16 11:43		09/16/16 12:32	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic	0.5000	0.5060	101.	0.5000	0.4970	99.	0.4930	98.	0.5000	100
Nickel	0.5000	0.4880	98.	0.5000	0.4780	96.	0.4780	96.	0.4820	96.

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2B
CRI Check Standard

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TRACE7	**Units**	: mg/L

		Initial	Final
Lab ID	:	R900908-5	
Date Analyzed	:	09/16/16 08:15	

Parameter	True	Found	%R	Found	%R
Arsenic	0.020	0.021	104		
Nickel	0.080	0.083	103		

Acceptance Criteria: Methods 200.7, 6010

CRI: 70-130%

ICP Interference Check Sample Results Summary

Form 4a
Interference Check Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TRACE7	**Concentration Units**	: mg/L

	True		Initial Found				Final Found			
Lab ID :			R900908-3		R900908-4					
Analysis Date :			09/16/16 08:07		09/16/16 08:11					
	Sol.	Sol.	Sol.		Sol.		Sol.		Sol.	
Analyte	A	AB	A	%R	AB	%R	A	%R	AB	%R
Arsenic		1	-0.000800		1.02	102				
Nickel		0.3	-0.00110		0.294	98				

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

Spike Sample Results

Form 5a
Matrix Spike

Client	: Haley & Aldrich, Inc.		**Lab Number**	:	L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	:	70613-814
Client Sample ID	: 4479-091516-0810		**Matrix**	:	SOIL
Lab Sample ID	: L1629226-01				
Matrix Spike	: WG932535-4		**MS Analysis Date**	:	09/16/16 11:11
Matrix Spike Dup	:		**MSD Analysis Date**	:	

		Matrix Spike Sample				Matrix Spike Duplicate					
Parameter	**Sample Conc. (mg/kg)**	**Spike Added (mg/kg)**	**Spike Conc. (mg/kg)**	**%R**		**Spike Added (mg/kg)**	**Spike Conc. (mg/kg)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Arsenic, Total	8.7	12.2	31.	182	Q					75-125	20
Nickel, Total	4200	50.9	8100	7660	Q					75-125	20

Duplicate Sample Results Summary

Form 6
Lab Duplicates

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Client Sample ID	: 4479-091516-0810	**Matrix**	: SOIL
Lab Sample ID	: L1629226-01	**Analysis Date**	: 09/16/16 11:02
Dup Sample ID	: WG932535-3	**DUP Analysis Date**	: 09/16/16 11:07

Parameter	Sample Concentration (mg/kg)	Duplicate Concentration (mg/kg)	RPD	RPD Limit
Nickel, Total	4200	4800	13	20

LCS Sample Results Summary

Form 7
Laboratory Control Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Client Sample ID	: NA	**Matrix**	: SOIL
Lab Sample ID	: WG932535-2	**LCS Analysis Date**	: 09/16/16 10:35
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
Arsenic, Total	145.	140.	96.					80-121	20
Nickel, Total	129.	120.	93.					83-117	20

Serial Dilution Summary

Form 8
Serial Dilutions

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Client Sample ID	: 4479-091516-0810	**Matrix**	: SOIL
Lab Sample ID	: L1629226-01	**Analysis Date**	: 09/16/16 11:02
Serial Dilution ID	: WG932535-6	**Analysis Date**	: 09/16/16 11:39

Parameter	Initial Sample Result (mg/kg)	Serial Dilution Result (mg/kg)	% Difference	%D Limit
Nickel, Total	4200	4400	5	10

Run Logs

Form 13
Analysis Run Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TRACE7	**Analysis Method**	: 1,6010C
Start Date	: 09/16/16 07:42	**End Date**	: 09/16/16 12:36

Sample Number	Dilution Factor	Analysis Time	Arsenic, Total	Nickel, Total
R900908-1 ICV	1	07:42:00	X	X
R900908-2 ICB	1	07:46:00	X	X
R900908-3 ICSA	1	08:07:00	X	X
R900908-4 ICSAB	1	08:11:00	X	X
R900908-5 CRI	1	08:15:00	X	X
R900908-6 CCV	1	08:19:00	X	X
R900908-7 CCB	1	08:23:00	X	X
L1629226-14	1	09:08:00		X
L1629226-15	1	09:12:00		X
L1629226-17	1	09:16:00		X
R900908-8 CCV	1	09:20:00	X	X
R900908-9 CCB	1	09:24:00	X	X
R900908-10 CCV	1	09:44:00	X	X
R900908-11 CCB	1	09:48:00	X	X
R900908-12 ICV	1	10:10:00	X	X
R900908-13 ICB	1	10:14:00	X	X
WG932535-1 BLANK	1	10:22:00	X	X
WG932535-2 LCS	8	10:35:00	X	X
R900908-14 CCV	1	10:54:00	X	X
R900908-15 CCB	1	10:58:00	X	X
L1629226-01	10	11:02:00		X
WG932535-3 DUP	10	11:07:00	X	X
WG932535-4 MS	10	11:11:00	X	X
L1629226-05	1	11:15:00		X
L1629226-10	1	11:23:00		X
L1629226-11	1	11:28:00	X	
L1629226-12	1	11:32:00	X	

Form 13
Analysis Run Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TRACE7	**Analysis Method**	: 1,6010C
Start Date	: 09/16/16 07:42	**End Date**	: 09/16/16 12:36

Sample Number	Dilution Factor	Analysis Time	Arsenic, Total	Nickel, Total
L1629226-13	1	11:35:00		X
WG932535-6 SERDIL	50	11:39:00		X
R900908-16 CCV	1	11:43:00	X	X
R900908-17 CCB	1	11:47:00	X	X
L1629226-18	1	11:52:00	X	
L1629226-06	10	11:56:00		X
L1629226-19	1	12:00:00		X
R900908-18 CCV	1	12:32:00	X	X
R900908-19 CCB	1	12:36:00	X	X

Digestion Logs
ICP

Form 12
Preparation Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Matrix	: SOIL	**Prep Method**	: EPA 3050B

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L1629226-01	09/16/16 06:25	1.26	-
L1629226-05	09/16/16 06:25	1.28	-
L1629226-06	09/16/16 06:25	1.26	-
L1629226-10	09/16/16 06:25	1.30	-
L1629226-11	09/16/16 06:25	1.30	-
L1629226-12	09/16/16 06:25	1.31	-
L1629226-13	09/16/16 06:25	1.26	-
L1629226-14	09/16/16 06:25	1.28	-
L1629226-15	09/16/16 06:25	1.31	-
L1629226-17	09/16/16 06:25	1.28	-
L1629226-18	09/16/16 06:25	1.26	-
L1629226-19	09/16/16 06:25	1.30	-
WG932535-1	09/16/16 06:25	1.25	-
WG932535-2	09/16/16 06:25	0.39	-
WG932535-3	09/16/16 06:25	1.27	-
WG932535-4	09/16/16 06:25	1.27	-
WG932535-6	09/16/16 06:25	1.26	-

Inorganic Data
(ICPMS Analysis)

Sample Results Summary

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629226-01	Date Collected	: 09/15/16 08:10
Client ID	: 4479-091516-0810	Date Received	: 09/15/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/22/16 10:00
Sample Matrix	: SOIL	Dilution Factor	: 10
Analytical Method	: 1,6020A	Analyst	: AM
Lab File ID	: WG934589.pdf	Instrument ID	: ICPMSQ
Sample Amount	: 50ml	%Solids	: 77
Digestion Method	: EPA 3005A	Date Digested	: 09/22/16

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-02-0	Nickel, SPLP	69.8	5.00	0.865	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629226-05	Date Collected	: 09/15/16 09:45
Client ID	: 4479-091516-0945	Date Received	: 09/15/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/22/16 10:03
Sample Matrix	: SOIL	Dilution Factor	: 10
Analytical Method	: 1,6020A	Analyst	: AM
Lab File ID	: WG934589.pdf	Instrument ID	: ICPMSQ
Sample Amount	: 50ml	%Solids	: 86
Digestion Method	: EPA 3005A	Date Digested	: 09/22/16

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-02-0	Nickel, SPLP	122.	5.00	0.865	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-06	**Date Collected**	: 09/15/16 10:00
Client ID	: 4479-091516-1000	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/22/16 10:06
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,6020A	**Analyst**	: AM
Lab File ID	: WG934589.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: 60
Digestion Method	: EPA 3005A	**Date Digested**	: 09/22/16

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, SPLP	127.	5.00	0.865	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629226-10	Date Collected	: 09/15/16 11:10
Client ID	: 4479-091516-1110	Date Received	: 09/15/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/22/16 10:09
Sample Matrix	: SOIL	Dilution Factor	: 10
Analytical Method	: 1,6020A	Analyst	: AM
Lab File ID	: WG934589.pdf	Instrument ID	: ICPMSQ
Sample Amount	: 50ml	%Solids	: 72
Digestion Method	: EPA 3005A	Date Digested	: 09/22/16

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-02-0	Nickel, SPLP	162.	5.00	0.865	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629226-11	Date Collected	: 09/15/16 13:05
Client ID	: 4479-091516-1305	Date Received	: 09/15/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/22/16 10:12
Sample Matrix	: SOIL	Dilution Factor	: 10
Analytical Method	: 1,6020A	Analyst	: AM
Lab File ID	: WG934589.pdf	Instrument ID	: ICPMSQ
Sample Amount	: 50ml	%Solids	: 93
Digestion Method	: EPA 3005A	Date Digested	: 09/22/16

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-38-2	Arsenic, SPLP	24.6	5.00	1.23	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-12	**Date Collected**	: 09/15/16 13:00
Client ID	: 4479-091516-1300	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/22/16 10:15
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,6020A	**Analyst**	: AM
Lab File ID	: WG934589.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: 94
Digestion Method	: EPA 3005A	**Date Digested**	: 09/22/16

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, SPLP	17.6	5.00	1.23	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629226-17	Date Collected	: 09/15/16 14:35
Client ID	: 4479-091516-1435	Date Received	: 09/15/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/22/16 10:18
Sample Matrix	: SOIL	Dilution Factor	: 10
Analytical Method	: 1,6020A	Analyst	: AM
Lab File ID	: WG934589.pdf	Instrument ID	: ICPMSQ
Sample Amount	: 50ml	%Solids	: 91
Digestion Method	: EPA 3005A	Date Digested	: 09/22/16

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-02-0	Nickel, SPLP	0.962	5.00	0.865	J

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629226-18	Date Collected	: 09/15/16 14:40
Client ID	: 4479-091516-1440	Date Received	: 09/15/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/22/16 10:27
Sample Matrix	: SOIL	Dilution Factor	: 10
Analytical Method	: 1,6020A	Analyst	: AM
Lab File ID	: WG934589.pdf	Instrument ID	: ICPMSQ
Sample Amount	: 50ml	%Solids	: 88
Digestion Method	: EPA 3005A	Date Digested	: 09/22/16

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-38-2	Arsenic, SPLP	8.42	5.00	1.23	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: WG934572-1	Date Collected	: NA
Client ID	: WG934572-1BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 09/22/16 09:15
Sample Matrix	: SOIL	Dilution Factor	: 10
Analytical Method	: 1,6020A	Analyst	: AM
Lab File ID	: WG934589.pdf	Instrument ID	: ICPMSQ
Sample Amount	: 50ml	%Solids	: NA
Digestion Method	: EPA 3005A	Date Digested	: 09/22/16

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-38-2	Arsenic, SPLP	ND	5.00	1.23	U
7440-02-0	Nickel, SPLP	ND	5.00	0.865	U

Blank Results Summary

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: ICPMSQ		

		Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID	:	R902788-2		R902788-6		R902788-8		R902788-10		WG934572-1	
Date Analyzed	:	09/22/16 08:52		09/22/16 09:12		09/22/16 09:50		09/22/16 10:35		09/22/16 09:15	
Parameter		ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q
Arsenic		0.123	U	0.123	U	0.123	U	0.123	U	1.23	U
Nickel		0.0865	U	0.0865	U	0.0865	U	0.0865	U	0.865	U

Calibration Summary

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R902788-1			R902788-5			R902788-7		R902788-9	
Date Analyzed :	09/22/16 08:46			09/22/16 09:07			09/22/16 09:45		09/22/16 10:30	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic	100.0000	103.0000	103	100.0000	97.2000	97	92.6000	93	92.3000	92
Nickel	100.0000	110.0000	110	100.0000	101.0000	101	96.5000	96	102.0000	102

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

ICP Interference Check Sample Results Summary

Form 4a
Interference Check Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: ICPMSQ	**Concentration Units**	: ug/l

	True		Initial Found			Final Found			
Lab ID :			R902788-3		R902788-4				
Analysis Date :			09/22/16 08:58		09/22/16 09:01				
	Sol.	Sol.	Sol.		Sol.		Sol.		Sol.	
Analyte	**A**	**AB**	**A**	**%R**	**AB**	**%R**	**A**	**%R**	**AB**	**%R**
Arsenic		20	0.0814		19.6	98				
Nickel		40	0.748		37.9	95				

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

LCS Sample Results Summary

Form 7
Laboratory Control Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Client Sample ID	: NA	**Matrix**	: SOIL
Lab Sample ID	: WG934572-2	**LCS Analysis Date**	: 09/22/16 09:18
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Arsenic, SPLP	120.	113.	94.					80-120	20
Nickel, SPLP	500.	496.	99.					80-120	20

Internal Standard Summary

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020A
Start Date	: 09/22/16	**End Date**	: 09/22/16

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R902788-1 ICV	08:46:56	138	115	108	103	102
R902788-2 ICB	08:52:01	141	126	119	113	108
R902788-3 ICSA	08:58:14	131	135	126	117	109
R902788-4 ICSAB	09:01:20	130	144	129	119	111
R902788-5 CCV	09:07:21	138	132	123	112	106
R902788-6 CCB	09:12:17	137	138	128	120	109
WG934572-1 BLANK	09:15:24	123	139	126	118	114
WG934572-2 LCS	09:18:26	111	117	112	106	107
R902788-7 CCV	09:45:46	97	101	101	100	102
R902788-8 CCB	09:50:54	103	106	104	106	104
L1629226-01	10:00:08	87	98	96	95	102
L1629226-05	10:03:10	85	102	102	102	106
L1629226-06	10:06:12	86	101	100	102	106
L1629226-10	10:09:14	82	95	92	94	101
L1629226-11	10:12:17	81	94	95	94	102
L1629226-12	10:15:20	83	94	92	96	102
L1629226-17	10:18:24	83	102	100	100	105
L1629226-18	10:27:47	88	93	93	94	103
R902788-9 CCV	10:30:51	97	93	96	93	100
R902788-10 CCB	10:35:07	101	108	104	104	99

Run Logs

Form 13
Analysis Run Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020A
Start Date	: 09/22/16 08:46	**End Date**	: 09/22/16 10:35

Sample Number	Dilution Factor	Analysis Time	Arsenic, SPLP	Nickel, SPLP
R902788-1 ICV	1	08:46:56	X	X
R902788-2 ICB	1	08:52:01	X	X
R902788-3 ICSA	1	08:58:14	X	X
R902788-4 ICSAB	1	09:01:20	X	X
R902788-5 CCV	1	09:07:21	X	X
R902788-6 CCB	1	09:12:17	X	X
WG934572-1 BLANK	10	09:15:24	X	X
WG934572-2 LCS	10	09:18:26	X	X
R902788-7 CCV	1	09:45:46	X	X
R902788-8 CCB	1	09:50:54	X	X
L1629226-01	10	10:00:08		X
L1629226-05	10	10:03:10		X
L1629226-06	10	10:06:12		X
L1629226-10	10	10:09:14		X
L1629226-11	10	10:12:17	X	
L1629226-12	10	10:15:20	X	
L1629226-17	10	10:18:24		X
L1629226-18	10	10:27:47	X	
R902788-9 CCV	1	10:30:51	X	X
R902788-10 CCB	1	10:35:07	X	X

Digestion Logs
ICPMS

Form 12
Preparation Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Matrix	: SOIL	**Prep Method**	: EPA 3005A

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L1629226-01	09/22/16 06:28	-	50
L1629226-05	09/22/16 06:28	-	50
L1629226-06	09/22/16 06:28	-	50
L1629226-10	09/22/16 06:28	-	50
L1629226-11	09/22/16 06:28	-	50
L1629226-12	09/22/16 06:28	-	50
L1629226-17	09/22/16 06:28	-	50
L1629226-18	09/22/16 06:28	-	50
WG934572-1	09/22/16 06:28	-	50
WG934572-2	09/22/16 06:28	-	50

Wet Chemistry

Total Solids / Percent Moisture Analysis

Results Summary

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: WG932512-1	**Date Collected**	: 09/15/16 08:10
Client ID	: 4479-091516-0810DUP	**Date Received**	: 09/15/16
Sample Location	:	**Date Analyzed**	: 09/16/16 01:21
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932512.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 77
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	% RL	% MDL	Qualifier
NONE	Solids, Total	76.0	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-01	**Date Collected**	: 09/15/16 08:10
Client ID	: 4479-091516-0810	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 01:21
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932512.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 77
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	% RL	% MDL	Qualifier
NONE	Solids, Total	77.2	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629226-02	Date Collected	: 09/15/16 08:30
Client ID	: 4479-091516-0830	Date Received	: 09/15/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/16/16 01:21
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 121,2540G	Analyst	: VB
Lab File ID	: WG932512.csv	Instrument ID	:
Sample Amount	:	%Solids	: 94
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	93.6	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-03	**Date Collected**	: 09/15/16 08:40
Client ID	: 4479-091516-0840	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 01:21
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932512.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 73
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**73.2**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629226-04	Date Collected	: 09/15/16 08:55
Client ID	: 4479-091516-0855	Date Received	: 09/15/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/16/16 01:21
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 121,2540G	Analyst	: VB
Lab File ID	: WG932512.csv	Instrument ID	:
Sample Amount	:	%Solids	: 54
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	54.0	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-05	**Date Collected**	: 09/15/16 09:45
Client ID	: 4479-091516-0945	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 01:21
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932512.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 86
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**85.9**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629226-06	Date Collected	: 09/15/16 10:00
Client ID	: 4479-091516-1000	Date Received	: 09/15/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/16/16 01:21
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 121,2540G	Analyst	: VB
Lab File ID	: WG932512.csv	Instrument ID	:
Sample Amount	:	%Solids	: 60
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	60.0	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-07	**Date Collected**	: 09/15/16 10:20
Client ID	: 4479-091516-1020	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 01:21
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932512.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 67
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	% RL	% MDL	Qualifier
NONE	Solids, Total	66.6	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629226-08	Date Collected	: 09/15/16 10:45
Client ID	: 4479-091516-1045	Date Received	: 09/15/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/16/16 01:21
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 121,2540G	Analyst	: VB
Lab File ID	: WG932512.csv	Instrument ID	:
Sample Amount	:	%Solids	: 77
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	77.0	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-09	**Date Collected**	: 09/15/16 10:55
Client ID	: 4479-091516-1055	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 01:21
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932512.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 73
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**72.7**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-10	**Date Collected**	: 09/15/16 11:10
Client ID	: 4479-091516-1110	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 01:21
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932512.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 72
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	Results (%)	RL (%)	MDL (%)	Qualifier
NONE	Solids, Total	71.8	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-11	**Date Collected**	: 09/15/16 13:05
Client ID	: 4479-091516-1305	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 01:21
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932512.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 93
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	Results (%)	RL (%)	MDL (%)	Qualifier
NONE	Solids, Total	93.3	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-12	**Date Collected**	: 09/15/16 13:00
Client ID	: 4479-091516-1300	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 01:21
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932512.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 94
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	% RL	% MDL	Qualifier
NONE	Solids, Total	93.7	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-13	**Date Collected**	: 09/15/16 13:30
Client ID	: 4479-091516-1330	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 01:21
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932512.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 85
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	84.9	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629226-14	Date Collected	: 09/15/16 13:40
Client ID	: 4479-091516-1340	Date Received	: 09/15/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/16/16 01:21
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 121,2540G	Analyst	: VB
Lab File ID	: WG932512.csv	Instrument ID	:
Sample Amount	:	%Solids	: 91
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	91.1	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629226-15	Date Collected	: 09/15/16 13:45
Client ID	: 4479-091516-1345	Date Received	: 09/15/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/16/16 01:21
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 121,2540G	Analyst	: VB
Lab File ID	: WG932512.csv	Instrument ID	:
Sample Amount	:	%Solids	: 85
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	85.3	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-16	**Date Collected**	: 09/15/16 14:15
Client ID	: 4479-091516-1415	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 01:21
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932512.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 76
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**76.4**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-17	**Date Collected**	: 09/15/16 14:35
Client ID	: 4479-091516-1435	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 01:21
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932512.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 91
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**91.3**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629226-18	**Date Collected**	: 09/15/16 14:40
Client ID	: 4479-091516-1440	**Date Received**	: 09/15/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/16/16 01:21
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932512.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 88
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**87.7**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629226-19	Date Collected	: 09/15/16 15:00
Client ID	: 4479-091516-1500	Date Received	: 09/15/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/16/16 01:21
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 121,2540G	Analyst	: VB
Lab File ID	: WG932512.csv	Instrument ID	:
Sample Amount	:	%Solids	: 92
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	92.2	0.100	NA	

Duplicate Sample Results Summary

Form 6
Lab Duplicates

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Client Sample ID	: 4479-091516-0810	**Matrix**	: SOIL
Lab Sample ID	: L1629226-01	**Analysis Date**	: 09/16/16 01:21
Dup Sample ID	: WG932512-1	**DUP Analysis Date**	: 09/16/16 01:21

Parameter	Sample Concentration (%)	Duplicate Concentration (%)	RPD	RPD Limit
Solids, Total	77.2	76.0	2	20

Organic Carbon Analysis

Results Summary

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: WG934874-1	Date Collected	: NA
Client ID	: WG934874-1BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 09/22/16 09:00
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 13,-	Analyst	: CM
Lab File ID	: WG934874,CM,toc1,csv	Instrument ID	: TOC1
Sample Amount	:	%Solids	: NA
Digestion Method	:	Date Digested	:

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-44-0	Total Organic Carbon (Rep1)	ND	500	500.	U
7440-44-0	Total Organic Carbon (Rep2)	ND	500	500.	U

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: WG934874-2	Date Collected	:
Client ID	: WG934874-2SRM	Date Received	:
Sample Location	:	Date Analyzed	: 09/22/16 09:00
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 13,-	Analyst	: CM
Lab File ID	: WG934874,CM,toc1,csv	Instrument ID	: TOC1
Sample Amount	:	%Solids	: NA
Digestion Method	:	Date Digested	:

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-44-0	Total Organic Carbon (Rep1)	42800	500	500.	
7440-44-0	Total Organic Carbon (Rep2)	38400	500	500.	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629226-19	Date Collected	: 09/15/16 15:00
Client ID	: 4479-091516-1500	Date Received	: 09/15/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/22/16 09:00
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 13,-	Analyst	: CM
Lab File ID	: WG934874,CM,toc1,csv	Instrument ID	: TOC1
Sample Amount	:	%Solids	: 92
Digestion Method	:	Date Digested	:

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-44-0	Total Organic Carbon (Rep1)	2380	500	500.	
7440-44-0	Total Organic Carbon (Rep2)	2260	500	500.	

Calibration Summary

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TOC1	**Units**	:

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R902935-4			R902935-6						
Date Analyzed :	09/22/16 09:00			09/22/16 09:20						
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Total Organic Carbon (Rep1)	1.000	1.000	100	1.000	1.060	106				

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TOC1	**Units**	:

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R902935-8			R902935-16			R902935-15		R902935-17	
Date Analyzed :	09/22/16 09:20			09/22/16 10:28			09/22/16 11:53		09/22/16 13:47	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Total Organic Carbon (Rep1)	1.000	1.000	100	1.000	1.090	109	1.040	104	1.050	105

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TOC1	**Units**	:

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R902935-20			R902935-18		R902935-19	
Date Analyzed :				09/22/16 15:40			09/22/16 16:42		09/22/16 17:58	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Total Organic Carbon (Rep1)				1.000	1.060	106	1.130	113	1.100	110

Blank Results Summary

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TOC1		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R902935-3		R902935-1		R902935-5		R902935-10		WG934874-1	
Date Analyzed :	09/22/16 09:00		09/22/16 09:00		09/22/16 09:20		09/22/16 10:33		09/22/16 09:00	
Parameter	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q
Total Organic Carbon (Rep1)	0.0500	U	0.0500	U	0.0500	U	0.0500	U	500.	U
Total Organic Carbon (Rep2)	500.	U	500.	U	500.	U	500.	U	500.	U

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TOC1		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R902935-7		R902935-14		R902935-13		R902935-9			
Date Analyzed :	09/22/16 09:20		09/22/16 11:58		09/22/16 13:52		09/22/16 15:44			
Parameter		**Q**		**Q**		**Q**		**Q**		**Q**
Total Organic Carbon (Rep1)	0.0500	U	0.0500	U	0.0500	U	0.0500	U		

Form 3
Blanks

Client	:	Haley & Aldrich, Inc.	**Lab Number**	:	L1629226
Project Name	:	EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	:	70613-814
Instrument ID	:	TOC1			

		Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID	:	R902935-21		R902935-12		R902935-11					
Date Analyzed	:	09/22/16 09:25		09/22/16 16:47		09/22/16 18:02					
Parameter			**Q**		**Q**		**Q**		**Q**		**Q**
Total Organic Carbon (Rep1)		0.0500	U	0.0500	U	0.0500	U				

Grainsize Analysis

Results Summary

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: WG936692-1	Date Collected	: 09/15/16 08:10
Client ID	: 4479-091516-0810DUP	Date Received	: 09/15/16
Sample Location	:	Date Analyzed	: 09/28/16 13:04
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 12,D422	Analyst	: AR
Lab File ID	: GS4479-091516-0810,WG9366	Instrument ID	:
Sample Amount	:	%Solids	: 77
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	% Results	% RL	% MDL	Qualifier
NONE	Cobbles	ND	0.100	NA	U
NONE	% Coarse Gravel	7.90	0.100	NA	
NONE	% Fine Gravel	10.2	0.100	NA	
NONE	% Coarse Sand	19.2	0.100	NA	
NONE	% Medium Sand	25.9	0.100	NA	
NONE	% Fine Sand	15.3	0.100	NA	
NONE	% Silt Fine	19.9	0.100	NA	
NONE	% Clay Fine	1.60	0.100	NA	
NONE	% Total Fines	21.5	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629226-01	Date Collected	: 09/15/16 08:10
Client ID	: 4479-091516-0810	Date Received	: 09/15/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/28/16 13:04
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 12,D422	Analyst	: AR
Lab File ID	: GS4479-091516-0810,L16292	Instrument ID	:
Sample Amount	:	%Solids	: 77
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	% Results	% RL	% MDL	Qualifier
NONE	Cobbles	ND	0.100	NA	U
NONE	% Coarse Gravel	ND	0.100	NA	U
NONE	% Fine Gravel	19.7	0.100	NA	
NONE	% Coarse Sand	14.1	0.100	NA	
NONE	% Medium Sand	24.7	0.100	NA	
NONE	% Fine Sand	20.8	0.100	NA	
NONE	% Silt Fine	19.4	0.100	NA	
NONE	% Clay Fine	1.30	0.100	NA	
NONE	% Total Fines	20.7	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629226-10	Date Collected	: 09/15/16 11:10
Client ID	: 4479-091516-1110	Date Received	: 09/15/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/28/16 13:04
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 12,D422	Analyst	: AR
Lab File ID	: GS4479-091516-1110,L16292	Instrument ID	:
Sample Amount	:	%Solids	: 72
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	% Results	% RL	% MDL	Qualifier
NONE	Cobbles	ND	0.100	NA	U
NONE	% Coarse Gravel	ND	0.100	NA	U
NONE	% Fine Gravel	14.1	0.100	NA	
NONE	% Coarse Sand	17.1	0.100	NA	
NONE	% Medium Sand	22.3	0.100	NA	
NONE	% Fine Sand	14.6	0.100	NA	
NONE	% Silt Fine	28.0	0.100	NA	
NONE	% Clay Fine	3.90	0.100	NA	
NONE	% Total Fines	31.9	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629226-19	Date Collected	: 09/15/16 15:00
Client ID	: 4479-091516-1500	Date Received	: 09/15/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/28/16 13:04
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 12,D422	Analyst	: AR
Lab File ID	: GS4479-091516-1500,L16292	Instrument ID	:
Sample Amount	:	%Solids	: 92
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	% Results	% RL	% MDL	Qualifier
NONE	Cobbles	ND	0.100	NA	U
NONE	% Coarse Gravel	13.8	0.100	NA	
NONE	% Fine Gravel	24.7	0.100	NA	
NONE	% Coarse Sand	14.2	0.100	NA	
NONE	% Medium Sand	13.0	0.100	NA	
NONE	% Fine Sand	10.9	0.100	NA	
NONE	% Silt Fine	21.1	0.100	NA	
NONE	% Clay Fine	2.30	0.100	NA	
NONE	% Total Fines	23.4	0.100	NA	

Duplicate Sample Results Summary

Form 6
Lab Duplicates

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629226
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Client Sample ID	: 4479-091516-0810	**Matrix**	: SOIL
Lab Sample ID	: L1629226-01	**Analysis Date**	: 09/28/16 13:04
Dup Sample ID	: WG936692-1	**DUP Analysis Date**	: 09/28/16 13:04

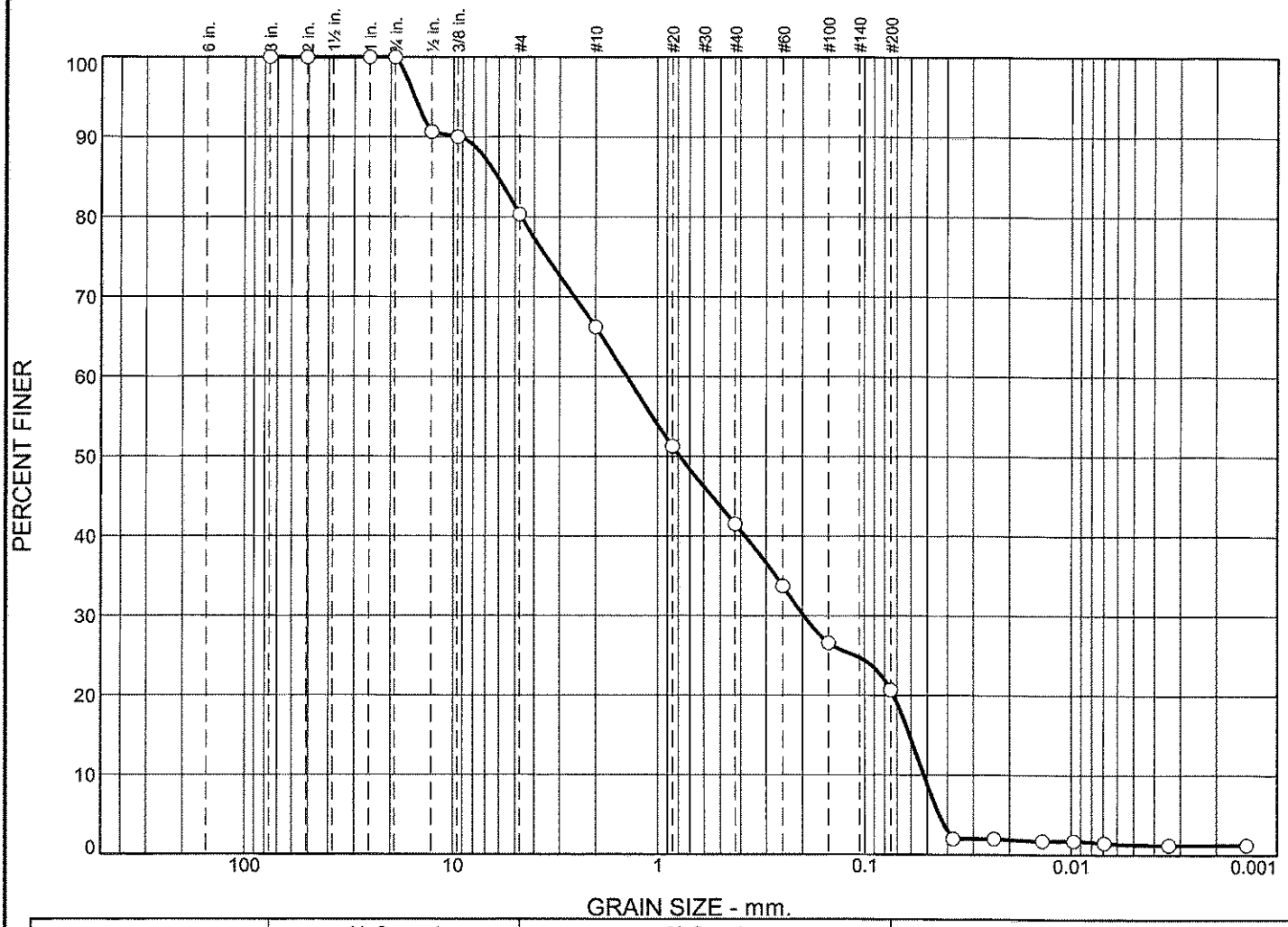
Parameter	Sample Concentration (%)	Duplicate Concentration (%)	RPD	RPD Limit
Cobbles	ND	ND	NC	20
% Coarse Gravel	ND	7.90	NC	20
% Fine Gravel	19.7	10.2	64 Q	20
% Coarse Sand	14.1	19.2	31 Q	20
% Medium Sand	24.7	25.9	5	20
% Fine Sand	20.8	15.3	30 Q	20
% Silt Fine	19.4	19.9	3	20
% Clay Fine	1.30	1.60	21 Q	20
% Total Fines	20.7	21.5	4	20

Sample Raw Data

ASTM D422-63

GRAIN SIZE ANALYSIS

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	19.7	14.1	24.7	20.8	19.4	1.3

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			6.0910	1.4068	0.7832	0.1982	0.0610	0.0522	0.53	26.97

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source of Sample:** 4479-091516-0810 **Sample Number:** L1629226-01

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/28/2016

Location: 4479-091516-0810

Sample Number: L1629226-01

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 67.14
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
67.14	0.00	3"	0.00	0.00	100.0
		2"	0.00	0.00	100.0
		1"	0.00	0.00	100.0
		.75"	0.00	0.00	100.0
		.5"	6.29	0.00	90.6
		.375"	0.41	0.00	90.0
		#4	6.51	0.00	80.3
		#10	9.49	0.00	66.2
		#20	10.02	0.00	51.3
		#40	6.54	0.00	41.5
		#60	5.24	0.00	33.7
		#100	4.80	0.00	26.6
		#200	3.96	0.00	20.7

Hydrometer Test Data

Hydrometer test uses material passing #200
Percent passing #200 based upon complete sample = 20.7
Weight of hydrometer sample =67.14
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.0	1.0040	1.0040	0.0136	4.0	15.2	0.0377	2.0
5.00	20.0	1.0040	1.0040	0.0136	4.0	15.2	0.0238	2.0
15.00	20.0	1.0035	1.0035	0.0136	3.5	15.4	0.0138	1.7
30.00	20.0	1.0035	1.0035	0.0136	3.5	15.4	0.0098	1.7
60.00	20.0	1.0030	1.0030	0.0136	3.0	15.5	0.0069	1.5
250.00	20.0	1.0025	1.0025	0.0136	2.5	15.6	0.0034	1.2
1440.00	20.0	1.0025	1.0025	0.0136	2.5	15.6	0.0014	1.2

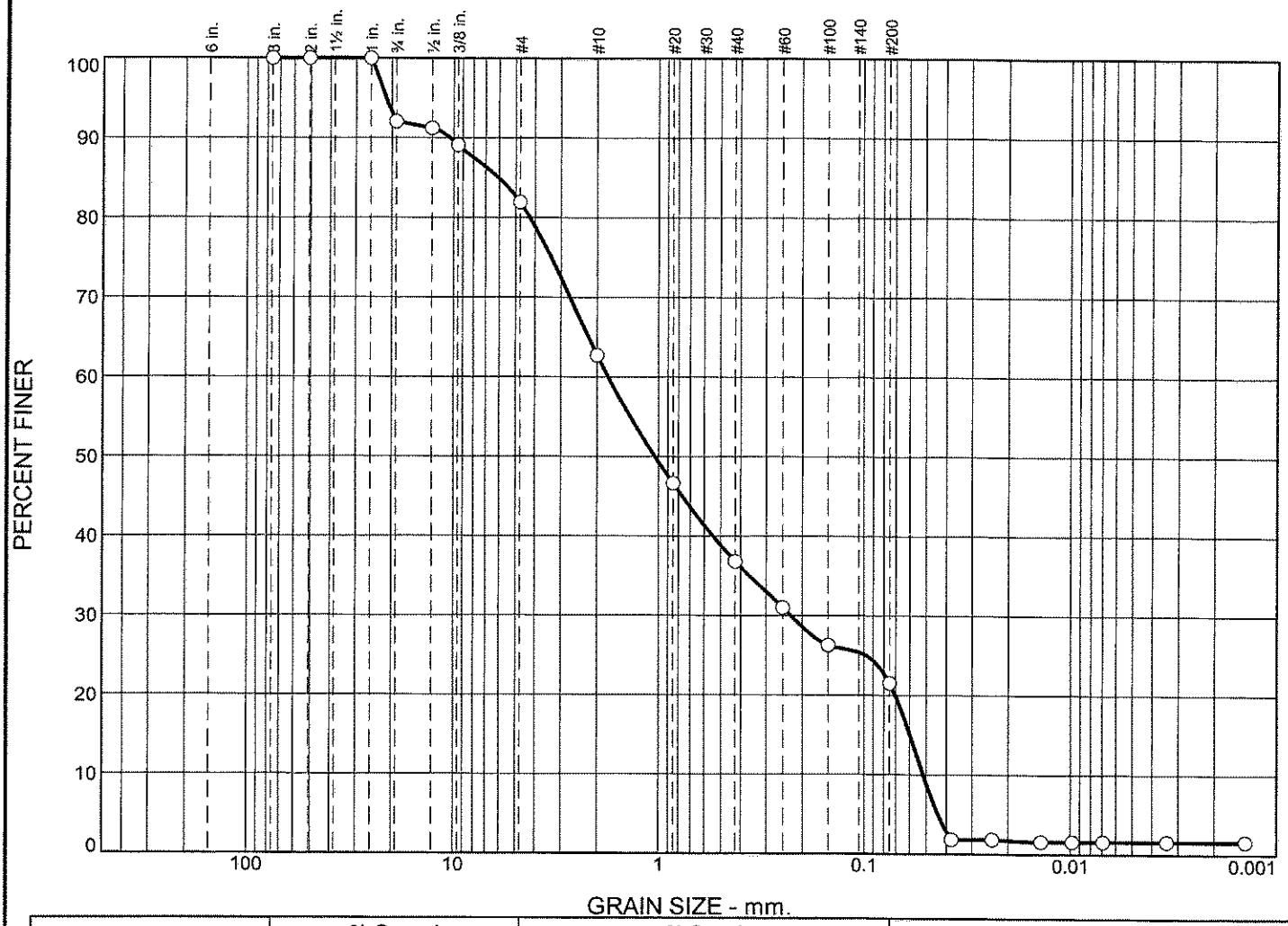
Fractional Components

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	19.7	19.7	14.1	24.7	20.8	59.6	19.4	1.3	20.7

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0522	0.0610	0.0728	0.1982	0.7832	1.4068	4.6670	6.0910	9.3859	15.3737

Fineness Modulus	C_u	C_c
2.95	26.97	0.53

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	7.9	10.2	19.2	25.9	15.3	19.9	1.6

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_C	C_U
○			6.0587	1.7696	1.0438	0.2282	0.0600	0.0518	0.57	34.18

Material Description	USCS	AASHTO
○		

Project No. **Client:**

Project:

○ **Source of Sample:** 4479-091516-0810 **Sample Number:** WG936692-1

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/28/2016

Location: 4479-091516-0810

Sample Number: WG936692-1

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 65.32
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
65.32	0.00	3"	0.00	0.00	100.0
		2"	0.00	0.00	100.0
		1"	0.00	0.00	100.0
		.75"	5.19	0.00	92.1
		.5"	0.55	0.00	91.2
		.375"	1.40	0.00	89.1
		#4	4.67	0.00	81.9
		#10	12.55	0.00	62.7
		#20	10.50	0.00	46.6
		#40	6.41	0.00	36.8
		#60	3.79	0.00	31.0
		#100	3.09	0.00	26.3
		#200	3.13	0.00	21.5

Hydrometer Test Data

Hydrometer test uses material passing #200
Percent passing #200 based upon complete sample = 21.5
Weight of hydrometer sample =65.32
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.0	1.0035	1.0035	0.0136	3.5	15.4	0.0378	1.8
5.00	20.0	1.0035	1.0035	0.0136	3.5	15.4	0.0239	1.8
15.00	20.0	1.0030	1.0030	0.0136	3.0	15.5	0.0139	1.6
30.00	20.0	1.0030	1.0030	0.0136	3.0	15.5	0.0098	1.6
60.00	20.0	1.0030	1.0030	0.0136	3.0	15.5	0.0069	1.6
250.00	20.0	1.0030	1.0030	0.0136	3.0	15.5	0.0034	1.6
1440.00	20.0	1.0030	1.0030	0.0136	3.0	15.5	0.0014	1.6

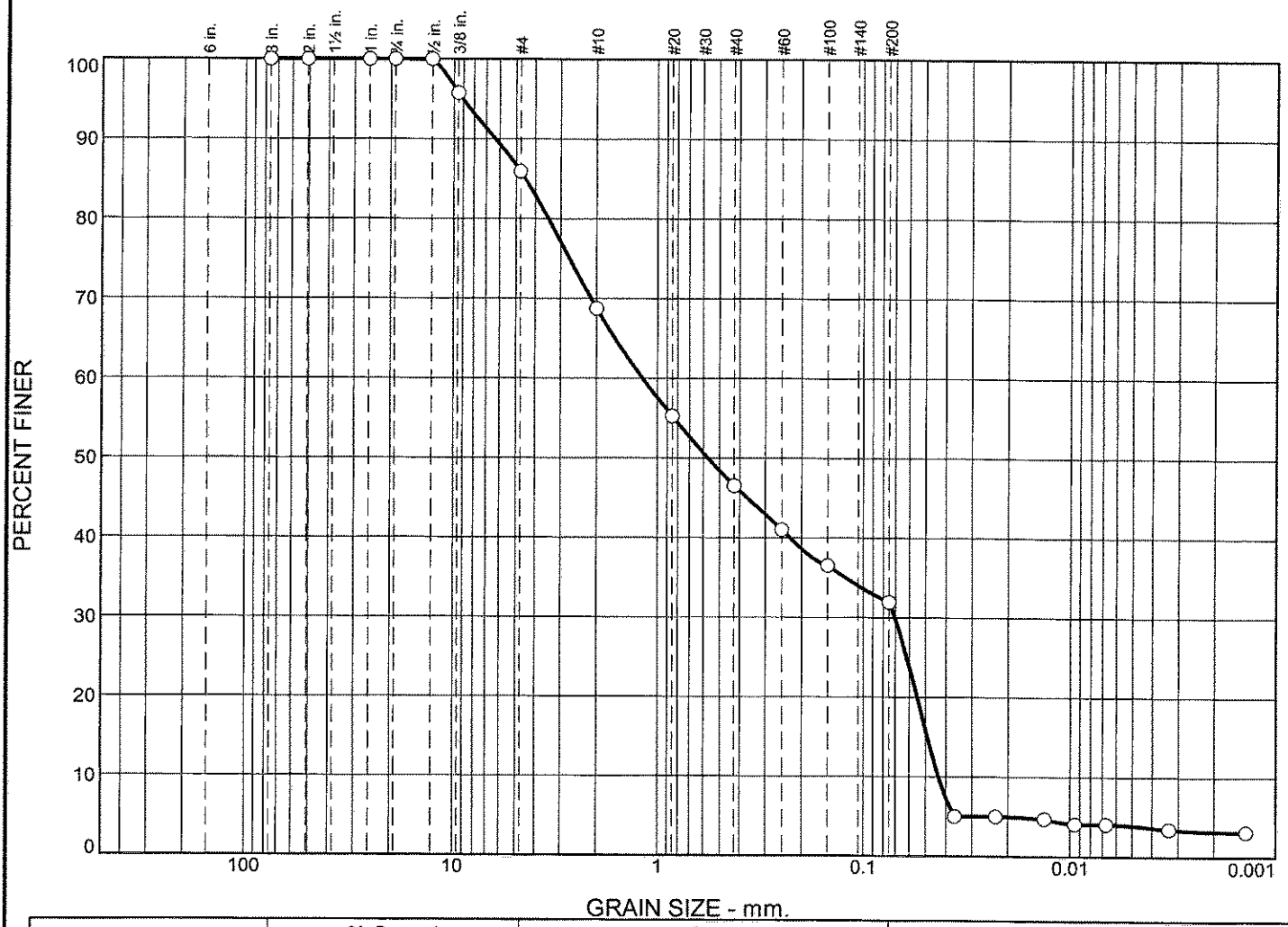
Fractional Components

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	7.9	10.2	18.1	19.2	25.9	15.3	60.4	19.9	1.6	21.5

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0518	0.0600	0.0706	0.2282	1.0438	1.7696	4.2466	6.0587	10.4681	21.3990

Fineness Modulus	C_u	C_c
3.18	34.18	0.57

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	14.1	17.1	22.3	14.6	28.0	3.9

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			4.4984	1.1865	0.5698	0.0704	0.0492	0.0434	0.10	27.34

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source of Sample:** 4479-091516-1110 **Sample Number:** L1629226-10

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/28/2016

Location: 4479-091516-1110

Sample Number: L1629226-10

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 81.39
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
81.39	0.00	3"	0.00	0.00	100.0
		2"	0.00	0.00	100.0
		1"	0.00	0.00	100.0
		.75"	0.00	0.00	100.0
		.5"	0.00	0.00	100.0
		.375"	3.45	0.00	95.8
		#4	8.02	0.00	85.9
		#10	13.96	0.00	68.8
		#20	10.97	0.00	55.3
		#40	7.11	0.00	46.5
		#60	4.50	0.00	41.0
		#100	3.65	0.00	36.5
		#200	3.74	0.00	31.9

Hydrometer Test Data

Hydrometer test uses material passing #200
Percent passing #200 based upon complete sample = 31.9
Weight of hydrometer sample =81.39
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.0	1.0080	1.0080	0.0136	8.0	14.2	0.0363	5.0
5.00	20.0	1.0080	1.0080	0.0136	8.0	14.2	0.0230	5.0
15.00	20.0	1.0075	1.0075	0.0136	7.5	14.3	0.0133	4.7
30.00	20.0	1.0065	1.0065	0.0136	6.5	14.6	0.0095	4.1
60.00	20.0	1.0065	1.0065	0.0136	6.5	14.6	0.0067	4.1
250.00	20.0	1.0055	1.0055	0.0136	5.5	14.8	0.0033	3.4
1440.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0014	3.1

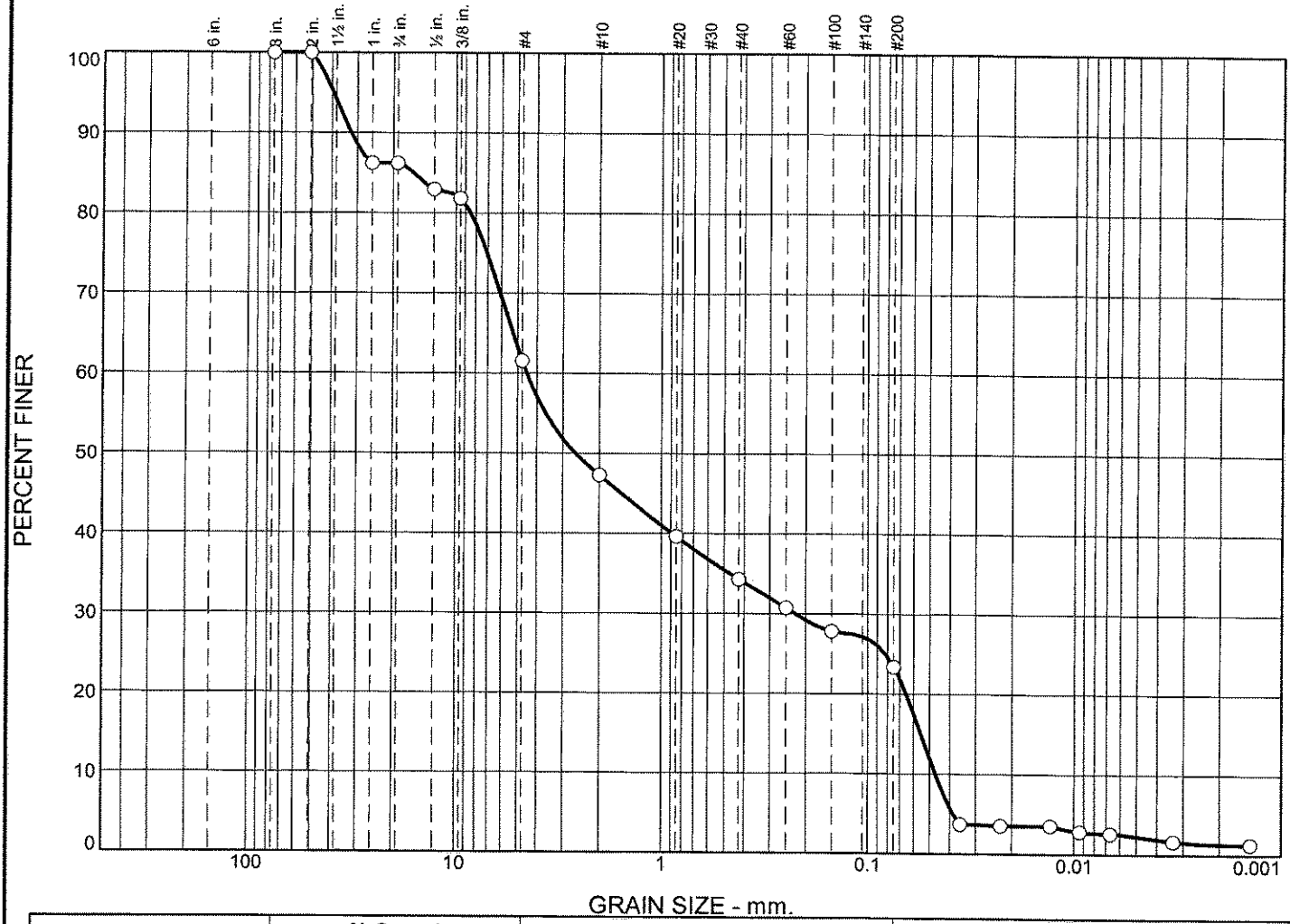
Fractional Components

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	14.1	14.1	17.1	22.3	14.6	54.0	28.0	3.9	31.9

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0434	0.0492	0.0550	0.0704	0.5698	1.1865	3.4530	4.4984	6.3231	9.0834

Fineness Modulus	C_u	C_c
2.56	27.34	0.10

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	13.8	24.7	14.2	13.0	10.9	21.1	2.3

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			15.9996	4.5039	2.6097	0.2246	0.0553	0.0471	0.24	95.61

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source of Sample:** 4479-091516-1500 **Sample Number:** L1629226-19

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/28/2016

Location: 4479-091516-1500

Sample Number: L1629226-19

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 100.54
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
100.54	0.00	3"	0.00	0.00	100.0
		2"	0.00	0.00	100.0
		1"	13.88	0.00	86.2
		.75"	0.00	0.00	86.2
		.5"	3.25	0.00	83.0
		.375"	1.15	0.00	81.8
		#4	20.39	0.00	61.5
		#10	14.33	0.00	47.3
		#20	7.70	0.00	39.6
		#40	5.35	0.00	34.3
		#60	3.58	0.00	30.7
		#100	2.92	0.00	27.8
		#200	4.46	0.00	23.4

Hydrometer Test Data

Hydrometer test uses material passing #200
Percent passing #200 based upon complete sample = 23.4
Weight of hydrometer sample =100.54
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.0	1.0100	1.0100	0.0136	10.0	13.6	0.0356	3.7
5.00	20.0	1.0095	1.0095	0.0136	9.5	13.8	0.0227	3.5
15.00	20.0	1.0095	1.0095	0.0136	9.5	13.8	0.0131	3.5
30.00	20.0	1.0075	1.0075	0.0136	7.5	14.3	0.0094	2.8
60.00	20.0	1.0070	1.0070	0.0136	7.0	14.4	0.0067	2.6
250.00	20.0	1.0045	1.0045	0.0136	4.5	15.1	0.0034	1.7
1440.00	20.0	1.0035	1.0035	0.0136	3.5	15.4	0.0014	1.3

Fractional Components

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	13.8	24.7	38.5	14.2	13.0	10.9	38.1	21.1	2.3	23.4

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0471	0.0553	0.0653	0.2246	2.6097	4.5039	8.5128	15.9996	32.2571	39.4457

Fineness Modulus	C_u	C_c
3.88	95.61	0.24

ALPHA ANALYTICAL

World Class Chemistry

www.alphalab.com

Lab Number: L1629399

Client: Haley & Aldrich, Inc.

ATTN: Dimitri Quafisi

Project Name: EWING TOWNSHIP INDUSTRIAL

Project Number: 70613-814

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

ANALYTICAL DATA PACKAGE FOR THE
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
TRENTON NEW JERSEY 08625

Agency/Division:	**Bureau/Office:**
Project No: 70613-814	**Contract No:**
Laboratory: Alpha Analytical	**Laboratory Location:** Westborough, Ma.
	Laboratory Phone Number: (508) 898-9220
SDG No: L1629399	**NJDEP Certification #:** MA015/MA935
Date of First Sample Receipt: 09/16/2016	**Date of Last Sample Receipt:** 09/16/2016

Agency Sample Number	Laboratory Sample Number	Sample Location	Date/Time of Collection
4479-091616-0850	L1629399-01	EWING TOWNSHIP INDUS	09/16/2016 08:50
4479-091616-0855	L1629399-02	EWING TOWNSHIP INDUS	09/16/2016 08:50
4479-091616-0910	L1629399-03	EWING TOWNSHIP INDUS	09/16/2016 08:55
4479-091616-0925	L1629399-04	EWING TOWNSHIP INDUS	09/16/2016 09:10
4479-091616-0945	L1629399-05	EWING TOWNSHIP INDUS	09/16/2016 09:25
4479-091616-0955	L1629399-06	EWING TOWNSHIP INDUS	09/16/2016 09:45
4479-091616-1000	L1629399-07	EWING TOWNSHIP INDUS	09/16/2016 09:55
4479-091616-1010	L1629399-08	EWING TOWNSHIP INDUS	09/16/2016 10:10
4479-091616-1040	L1629399-09	EWING TOWNSHIP INDUS	09/16/2016 10:40
4479-091616-1045	L1629399-10	EWING TOWNSHIP INDUS	09/16/2016 10:45
4479-091616-1130	L1629399-11	EWING TOWNSHIP INDUS	09/16/2016 11:30
4479-091616-1132	L1629399-12	EWING TOWNSHIP INDUS	09/16/2016 11:32
4479-091616-1135	L1629399-13	EWING TOWNSHIP INDUS	09/16/2016 11:35
4479-091616-1138	L1629399-14	EWING TOWNSHIP INDUS	09/16/2016 11:38
4479-091616-1142	L1629399-15	EWING TOWNSHIP INDUS	09/16/2016 11:42
4479-091616-1145	L1629399-16	EWING TOWNSHIP INDUS	09/16/2016 11:45
4479-091616-1140	L1629399-17	EWING TOWNSHIP INDUS	09/16/2016 11:40
4479-091616-1147	L1629399-18	EWING TOWNSHIP INDUS	09/16/2016 11:47
4479-091616-1200	L1629399-19	EWING TOWNSHIP INDUS	09/16/2016 12:00

ANALYTICAL DATA PACKAGE FOR THE
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
TRENTON NEW JERSEY 08625

Agency/Division:	**Bureau/Office:**
Project No: 70613-814	**Contract No:**
Laboratory: Alpha Analytical	**Laboratory Location:** Westborough, Ma.
	Laboratory Phone Number: (508) 898-9220
SDG No: L1629399	**NJDEP Certification #:** MA015/MA935
Date of First Sample Receipt: 09/16/2016	**Date of Last Sample Receipt:** 09/16/2016

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on disk or electronically has been authorized by the laboratory director or his/her designee, as verified by the following signature.

Technical Director/Representative (Typed)	Kelly Stenstrom	09/28/16
Technical Director/Representative (Signature)	Kelly Stenstrom	

Table of Contents

New Jersey Reduced Data Deliverable Package 1
- Title Page 2
- Table of Contents 4
- Chain of Custody 7
  - External Chain of Custody 8
  - Lims COC (LN01) 10
  - Sample Receipt Tracking Report 14
- Methodology Review 37
  - Method References 38
- Laboratory Chronicle 39
  - Sample Receipt and Container Information 40
- NJ DEP DKQP Summary Questionnaire 46
  - DKQP Summary Questionnaire 47
- Conformance/Non-Conformance (Reliability) Summary 48
  - Conformance/Non-Conformance (Reliability) Report 49
- Glossary 52
  - Glossary Report 53
- SPLP Extraction Data 55
  - SPLP ZHE Extraction Data 56
    - Form 1 - Organics 57
  - SPLP Extraction Data - NonCLP 60
    - Form 1 - Organics 61
- Organics Analysis 67
  - GCMS 8260 Analysis 68
    - Sample Results Summary 69
      - Form 1 - Organics 70
    - Tune Results Summary 85
      - Form 5 - Organics 86
    - Blank Results Summary 92
      - Form 4 - Organics 93
    - Standards Data Summary 96
      - Form 6 - Organics 97
      - Form 7 - Organics 103
    - Surrogate Summary 106
      - Form 2 - Organics 107
    - Batch QC Summary 109
      - Form 3 - Organics 110
    - Internal Standard Summary 113
      - Form 8 - Organics 114
    - Chromatograms 117
      - Sample Raw Data 118
        - 4479-091616-0910 (L1629399-03) Analyzed: 09/17/16 18:28 119
        - 4479-091616-0925 (L1629399-04) Analyzed: 09/17/16 18:55 122
        - 4479-091616-0945 (L1629399-05) Analyzed: 09/17/16 19:22 126
        - 4479-091616-1000 (L1629399-07) Analyzed: 09/17/16 19:49 131
        - 4479-091616-1010 (L1629399-08) Analyzed: 09/17/16 20:15 134
        - 4479-091616-1040 (L1629399-09) Analyzed: 09/17/16 20:42 137
        - 4479-091616-1045 (L1629399-10) Analyzed: 09/17/16 21:09 141
        - 4479-091616-0850 (L1629399-01) Analyzed: 09/17/16 21:35 145
        - 4479-091616-0855 (L1629399-02) Analyzed: 09/17/16 22:02 149

Table of Contents

4479-091616-0955 (L1629399-06) Analyzed: 09/17/16 22:29 153
4479-091616-0855 (L1629399-02) Analyzed: 09/27/16 18:39 157
4479-091616-0850 (L1629399-01) Analyzed: 09/27/16 19:11 161
Method Blank Raw Data 165
Laboratory Method Bl (WG933153-5) Analyzed: 09/17/16 15:48 166
Laboratory Method Bl (WG933154-5) Analyzed: 09/17/16 15:48 169
Laboratory Method Bl (WG936484-5) Analyzed: 09/27/16 16:03 172
Metals Analysis 175
Inorganic Data (ICP Analysis) 176
Sample Results Summary 177
Form 1 - Inorganics 178
Blank Results Summary 192
Form 3 - Inorganics 193
Calibration Summary 196
Form 2A - Inorganics 197
Form 2B - Inorganics 201
ICP Interference Check Sample Results Summary 202
Form 4A - Inorganics 203
Spike Sample Results 204
Form 5A - Inorganics 205
Duplicate Sample Results Summary 206
Form 6 - Inorganics 207
LCS Sample Results Summary 208
Form 7 - Inorganics 209
Sample Run Logs 210
Form 13 - Inorganics 211
ICP Digestion 213
Form 12 - Inorganics 214
Inorganic Data (ICPMS Analysis) 215
Sample Results Summary 216
Form 1 - Inorganics 217
Blank Results Summary 224
Form 3 - Inorganics 225
Calibration Summary 229
Form 2A - Inorganics 230
ICP Interference Check Sample Results Summary 234
Form 4A - Inorganics 235
Spike Sample Results 236
Form 5A - Inorganics 237
Duplicate Sample Results Summary 238
Form 6 - Inorganics 239
LCS Sample Results Summary 240
Form 7 - Inorganics 241
Internal Standard Summary 242
Form 15 - Inorganics 243
Sample Run Logs 245
Form 13 - Inorganics 246
ICPMS Digestion 248
Form 12 - Inorganics 249
Wet Chemistry Analysis 250

Table of Contents

Total Solids Analysis 251
Results Summary 252
Form 1 - Inorganics 253
Duplicate Sample Results Summary 273
Form 6 - Inorganics 274
Organic Carbon Analysis 275
Results Summary 276
Form 1 - Inorganics 277
Calibration Summary 282
Form 2A - Inorganics 283
Blank Results Summary 286
Form 3 - Inorganics 287
Grainsize Analysis 290
Results Summary 291
Form 1 - Inorganics 292
Duplicate Sample Results Summary 296
Form 6 - Inorganics 297
Sample Raw Data 298
Grainsize Raw Data 299

Chain of Custody

CHAIN OF CUSTODY

ALPHA ANALYTICAL — World Class Chemistry

Westborough, MA 01581 — 8 Walkup Dr. — TEL: 508-898-9220 — FAX: 508-898-9193

Mansfield, MA 02048 — 320 Forbes Blvd — TEL: 508-822-9300 — FAX: 508-822-3288

Service Centers
Brewer, ME 04412 — Portsmouth, NH 03801 — Mahwah, NJ 07430
Albany, NY 12205
Tonawanda, NY 14150 — Holmes, PA 19043

Page 2 of 2

Date Rec'd in Lab: 9/16/16

ALPHA Job #: L1629399

Project Information

Project Name: Ewing Township Industrial Land
Project Location: Ewing, NJ
Project # 70613-814
(Use Project name as Project #) ☐
Project Manager: Dan Putz
ALPHAQuote #:

Turn-Around Time

Standard ☐ — Due Date:
Rush (only if pre approved) ☒ — # of Days:

Deliverables

☒ Email ☐ Fax
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other:

Billing Information

☐ Same as Client Info
PO #

Regulatory Requirements (Program/Criteria)

Note: Select State from menu & identify criteria.

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

H&A Information

H&A Client: RACER
H&A Address: 6500 Rockside Rd Cleveland, OH 44131
H&A Phone: 216-706-1314
H&A Fax:
H&A Email: dputz@haleyaldrich.com

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:
Rush Totals
Hold SPLP pending Totals analysis

Please specify Metals or TAL.

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Totals +SPLP Benzene	Totals + SPLP TCE	Totals + SPLP Arsenic	Totals + SPLP Nickel	TOC	Grainsize			Total Bottles
29399-11	4479-091616-1130	9/16/16	1130	Soil	TMD			X						
-12	4479-091616-1132	9/16/16	1132	Soil	TMD			X						
-13	4479-091616-1135	9/16/16	1135	Soil	TMD			X						
-14	4479-091616-1138	9/16/16	1138	Soil	TMD			X						
-15	4479-091616-1142	9/16/16	1142	Soil	TMD			X						
-16	4479-091616-1145	9/16/16	1145	Soil	TMD			X						
-17	4479-091616-1140	9/16/16	1140	Soil	TMD			X						
-18	4479-091616-1147	9/16/16	1147	Soil	TMD					X	X			
-19	4479-091616-1200	9/16/16	1200	Soil	TMD					X	X			
										X	X			
												TMD		

Sample Filtration

☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

Sample Specific Comments

Container Type	E	E	A	A	A	P		
Preservative	A	A	A	A	A	A		

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	9/16/16 1615		9/16/16 16:11
	9/16/16 1850	Tom Tobin	9-16-16 18:50
Tom Tobin	9-16-16 2315		9/16/16 2315

Document ID: 20455 Rev 1 (1/28/2016)

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. Alpha Analytical's services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement# 2015-18-Alpha Analytical by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Alpha Analytical.

CHAIN OF CUSTODY

ALPHA ANALYTICAL — World Class Chemistry

Westborough, MA 01581 — 8 Walkup Dr. — TEL: 508-898-9220 — FAX: 508-898-9193

Mansfield, MA 02048 — 320 Forbes Blvd — TEL: 508-822-9300 — FAX: 508-822-3288

Service Centers
Brewer, ME 04412 — Portsmouth, NH 03801 — Mahwah, NJ 07430
Albany, NY 12205
Tonawanda, NY 14150 — Holmes, PA 19043

Page 1 of 2

Date Rec'd in Lab: 9/16/16

ALPHA Job #: L1629395

Project Information
- Project Name: Ewing Township Industrial Land
- Project Location:
- Project # 70613-814
- (Use Project name as Project #) ☐
- Project Manager: Dan Putz
- ALPHAQuote #:

Turn-Around Time
- Standard ☐ — Due Date:
- Rush (only if pre approved) ☒ — # of Days:

Deliverables
- ☒ Email ☐ Fax
- ☐ EQuIS (1 File) ☐ EQuIS (4 File)
- ☐ Other:

Billing Information
- ☐ Same as Client Info
- PO #

Regulatory Requirements (Program/Criteria)
Note: Select State from menu & identify criteria.

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
- ☐ NJ ☐ NY
- ☐ Other:

H&A Information
- H&A Client: RACER
- H&A Address: 6500 Rockside Rd, Cleveland, OH 44131
- H&A Phone: 216-706-1314
- H&A Fax:
- H&A Email: dputz@haleyaldrich.com

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:
Rush Totals
Hold SPLP Samples ~~at~~ pending Totals analysis

Please specify Metals or TAL.

Sample Filtration
- ☐ Done
- ☐ Lab to do

Preservation
- ☐ Lab to do

(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: Totals + SPLP Benzene	Totals + SPLP TCE	Totals + SPLP Arsenic	Totals + SPLP Nickel	Speciate	TOC			Total Bottles	Sample Specific Comments
29395 -01	4479-091616-0850	9/16/16	0850	Soil	TMD	X									
-02	4479-091616-0855	9/16/16	0855	Soil	TMD	X		X							
-03	4479-091616-0910	9/16/16	0910	Soil	TMD	X	X								
-04	4479-091616-0925	9/16/16	0925	Soil	TMD	X	X	X	X						
-05	4479-091616-0945	9/16/16	0945	Soil	TMD	X	X								
-06	4479-091616-0955	9/16/16	0955	Soil	TMD		X								
-07	4479-091616-1000	9/16/16	1000	Soil	TMD	X		X	X						
-08	4479-091616-1010	9/16/16	1010	Soil	TMD	X									
-09	4479-091616-1040	9/16/16	1040	Soil	TMD	X	X		X						
-10	4479-091616-1045	9/16/16	1045	Soil	TMD	X	X		X	X	X				
	Container Type					E	E	A	A	P	A				
	Preservative					A	A	A	A	A	A				

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
Tara Dunn	9/16/16 1615	FedEx	9/16/16 16:11
VS	9/16/16 1850	Tom Tobin	9-16-16 1850
Tom Tobin	9-16-16 2315	Allen Mac	9/16/16 2315

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. Alpha Analytical's services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement# 2015-18-Alpha Analytical by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Alpha Analytical.

Document ID: 20455 Rev 1 (1/28/2016)

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Sep 29 2016, 01:47 pm

Login Number: L1629399
Account: HALEY-OH2 Haley & Aldrich, Inc.Project: 70613-814
Received: 16SEP16 Due Date: 28SEP16

Sample #	Client ID	Mat	PR	Collected	Container
L1629399-01	4479-091616-0850	3	S0	16SEP16 08:50	2-EVial-A,2-Encore-25,3-Encore-5,1-Plastic-A-TS,1-SVial-F,4-SVial-W

Prelim 9/26 TOC & Grain Size; 9/28 SPLP-VO, SPLP-Metals & Final 8260 total/SPLP: Benzene only NJ-RED Package Due Date: 09/19/16

ENCORE,NJ-8260HLW,NJ-RED,NJ-SPLP-8260,NJ-SPLP-VOA,NJ-SPLPZHEEXT-DATA,SPLP-EXT-ZHE,NJDEP,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1629399-02	4479-091616-0855	3	S0	16SEP16 08:50	2-EVial-A,2-Encore-25,3-Encore-5,1-Glass-A.25,1-Plastic-A-TS,1-SVial-F,4-SVial-W

Prelim 9/26 TOC & Grain Size; 9/28 SPLP-VO, SPLP-Metals & Final 8260 total/SPLP: Benzene only Package Due Date: 09/19/16

AS-TI,ENCORE,HOLD-CONTINGENCY,NJ-8260HLW,NJ-SPLP-8260,NJ-SPLP-VOA,NJ-SPLPZHEEXT-DATA,SPLP-EXT-ZHE, PREPT,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1629399-03	4479-091616-0910	3	S0	16SEP16 08:55	2-Encore-25,3-Encore-5,1-Plastic-A-TS,1-SVial-F,4-SVial-W

Prelim 9/26 TOC & Grain Size; 9/28 SPLP-VO, SPLP-Metals & Final 8260: TCE and Benzene only Package Due Date: 09/19/16

ENCORE,HOLD-CONTINGENCY,NJ-8260HLW,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1629399-04	4479-091616-0925	3	S0	16SEP16 09:10	2-Encore-25,3-Encore-5,1-Glass-A.25,1-Plastic-A-TS,1-SVial-F,4-SVial-W

Prelim 9/26 TOC & Grain Size; 9/28 SPLP-VO, SPLP-Metals & Final 8260: Benzene only Package Due Date: 09/19/16

AS-TI,ENCORE,HOLD-8260HLW,HOLD-CONTINGENCY,NI-TI,NJ-8260HLW,PREPT,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1629399-05	4479-091616-0945	3	S0	16SEP16 09:25	2-Encore-25,3-Encore-5,1-Plastic-A-TS,1-SVial-F,4-SVial-W

Prelim 9/26 TOC & Grain Size; 9/28 SPLP-VO, SPLP-Metals & Final 8260: TCE and Benzene only Package Due Date: 09/19/16

ENCORE,HOLD-CONTINGENCY,NJ-8260HLW,TS

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Sep 29 2016, 01:47 pm

Login Number: L1629399
Account: HALEY-OH2 Haley & Aldrich, Inc.Project: 70613-814
Received: 16SEP16 Due Date: 28SEP16

Sample #	Client ID	Mat	PR	Collected	Container
L1629399-06	4479-091616-0955	3	S0	16SEP16 09:45	2-Encore-25,3-Encore-5,1-Plastic-A-TS,1-SVial-F,4-SVial-W

Prelim 9/26 TOC & Grain Size; 9/28 SPLP-VO, SPLP-Metals & Final 8260: TCE only Package Due Date: 09/19/16

ENCORE,HOLD-CONTINGENCY,NJ-8260HLW,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1629399-07	4479-091616-1000	3	S0	16SEP16 09:55	1-EPlastic-C.120,2-Encore-25,3-Encore-5,1-Glass-A.25,1-Plastic-A-TS,1-SVial-F,4-

PREPP: Metals only Prelim 9/26 TOC & Grain Size; 9/28 SPLP-VO, SPLP-Metals & Final 8260: Benzene only Package Due Date: 09/19/16

AS-TI,ENCORE,HOLD-8260HLW,HOLD-CONTINGENCY,NI-TI,NJ-8260HLW,NJ-SPLPEXT-DATA,PREPP,PREPT,SPLP-NI-6020T-PPB,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1629399-08	4479-091616-1010	3	S0	16SEP16 10:10	2-Encore-25,3-Encore-5,1-Plastic-A-TS,1-SVial-F,4-SVial-W

Prelim 9/26 TOC & Grain Size; 9/28 SPLP-VO, SPLP-Metals & Final 8260: Benzene only Package Due Date: 09/19/16

ENCORE,HOLD-CONTINGENCY,NJ-8260HLW,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1629399-09	4479-091616-1040	3	S0	16SEP16 10:40	2-Encore-25,3-Encore-5,1-Glass-A.25,1-Plastic-A-TS,1-SVial-F,4-SVial-W

Prelim 9/26 TOC & Grain Size; 9/28 SPLP-VO, SPLP-Metals & Final 8260: TCE and Benzene only Package Due Date: 09/19/16

ENCORE,HOLD-8260HLW,HOLD-CONTINGENCY,NI-TI,NJ-8260HLW,PREPT,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1629399-10	4479-091616-1045	3	S0	16SEP16 10:45	2-Encore-25,3-Encore-5,1-Glass-A.25,1-Glass-AM.06,1-Plastic-A-GS,1-Plastic-A-TS,

Prelim 9/26 TOC & Grain Size; 9/28 SPLP-VO, SPLP-Metals & Final 8260: TCE and Benzene only Package Due Date: 09/19/16

A2-SIEVE-HYDRO-NJ,A2-HYDRO-CFINE,A2-HYDRO-CGRAVEL,A2-HYDRO-COBBLES,A2-HYDRO-CSAND,A2-HYDRO-FGRAVEL,A2-HYDRO-FSAND,A2-HYDRO-MSAND,A2-HYDRO-SFINE,A2-HYDRO-TFINE,A2-TOC-LK-2REPS-PPM,ENCORE,HOLD-8260HLW,NI-TI,NJ-8260HLW,PREPT,TS

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Sep 29 2016, 01:47 pm

Login Number: L1629399
Account: HALEY-OH2 Haley & Aldrich, Inc.Project: 70613-814
Received: 16SEP16 Due Date: 28SEP16

Sample #	Client ID	Mat	PR	Collected	Container
L1629399-11	4479-091616-1130	3	S0	16SEP16 11:30	1-EPlastic-C.120,2-Glass-A.25,1-SGlass-A.06,1-Tumble Vessel

PREPP: Metals only Prelim 9/26 TOC & Grain Size; 9/28 SPLP-VO, SPLP-Metals & Final Package Due Date: 09/19/16

AS-TI,NJ-SPLPEXT-DATA,PREPP,PREPT,SPLP-AS-6020T-PPB,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1629399-12	4479-091616-1132	3	S0	16SEP16 11:32	1-Glass-A.25,1-SGlass-A.06

Prelim 9/26 TOC & Grain Size; 9/28 SPLP-VO, SPLP-Metals & Final Package Due Date: 09/19/16

AS-TI,PREPT,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1629399-13	4479-091616-1135	3	S0	16SEP16 11:35	1-EPlastic-C.120,2-Glass-A.25,1-SGlass-A.06,1-Tumble Vessel

PREPP: Metals only Prelim 9/26 TOC & Grain Size; 9/28 SPLP-VO, SPLP-Metals & Final Package Due Date: 09/19/16

AS-TI,NJ-SPLPEXT-DATA,PREPP,PREPT,SPLP-AS-6020T-PPB,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1629399-14	4479-091616-1138	3	S0	16SEP16 11:38	1-Glass-A.25,1-SGlass-A.06

Prelim 9/26 TOC & Grain Size; 9/28 SPLP-VO, SPLP-Metals & Final Package Due Date: 09/19/16

AS-TI,PREPT,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1629399-15	4479-091616-1142	3	S0	16SEP16 11:42	1-EPlastic-C.120,2-Glass-A.25,1-SGlass-A.06,1-Tumble Vessel

PREPP: Metals only Prelim 9/26 TOC & Grain Size; 9/28 SPLP-VO, SPLP-Metals & Final Package Due Date: 09/19/16

AS-TI,NJ-SPLPEXT-DATA,PREPP,PREPT,SPLP-AS-6020T-PPB,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1629399-16	4479-091616-1145	3	S0	16SEP16 11:45	1-Glass-A.25,1-SGlass-A.06

Prelim 9/26 TOC & Grain Size; 9/28 SPLP-VO, SPLP-Metals & Final Package Due Date: 09/19/16

AS-TI,PREPT,TS

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Sep 29 2016, 01:47 pm

Login Number: L1629399
Account: HALEY-OH2 Haley & Aldrich, Inc.Project: 70613-814
Received: 16SEP16 Due Date: 28SEP16

Sample #	Client ID	Mat	PR	Collected	Container
L1629399-17	4479-091616-1140	3	S0	16SEP16 11:40	1-EPlastic-C.120,2-Glass-A.25,1-SGlass-A.06,1-Tumble Vessel

PREPP: Metals only Prelim 9/26 TOC & Grain Size; 9/28 SPLP-VO, SPLP-Metals & Final Package Due Date: 09/19/16

AS-TI,NJ-SPLPEXT-DATA,PREPP,PREPT,SPLP-AS-6020T-PPB,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1629399-18	4479-091616-1147	3	S0	16SEP16 11:47	1-Glass-A.06,1-Plastic-A-GS,1-SGlass-A.06

Prelim 9/26 TOC & Grain Size; 9/28 SPLP-VO, SPLP-Metals & Final Package Due Date: 09/19/16

A2-SIEVE-HYDRO-NJ,A2-HYDRO-CFINE,A2-HYDRO-CGRAVEL,A2-HYDRO-COBBLES,A2-HYDRO-CSAND,A2-HYDRO-FGRAVEL,
A2-HYDRO-FSAND,A2-HYDRO-MSAND,A2-HYDRO-SFINE,A2-HYDRO-TFINE,A2-TOC-LK-2REPS-PPM,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1629399-19	4479-091616-1200	3	S0	16SEP16 12:00	1-Glass-A.06,1-Plastic-A-GS,1-SGlass-A.06

Prelim 9/26 TOC & Grain Size; 9/28 SPLP-VO, SPLP-Metals & Final Package Due Date: 09/19/16

A2-SIEVE-HYDRO-NJ,A2-HYDRO-CFINE,A2-HYDRO-CGRAVEL,A2-HYDRO-COBBLES,A2-HYDRO-CSAND,A2-HYDRO-FGRAVEL,
A2-HYDRO-FSAND,A2-HYDRO-MSAND,A2-HYDRO-SFINE,A2-HYDRO-TFINE,A2-TOC-LK-2REPS-PPM,TS

Logged By: Kelly Stenstrom

ALPHA ANALYTICAL LABORATORIES
Container Tracking Report

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1629399-01A	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-01A	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-01A	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-01B	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-01B	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-01B	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-01C	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-01C	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-01C	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-01D	Plastic-A-TS	INTACT	20-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Fred Ababio
L1629399-01D	Plastic-A-TS	INTACT	17-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629399-01D	Plastic-A-TS	INTACT	17-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629399-01D	Plastic-A-TS	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-01E	Encore-25	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-01E	Encore-25	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-01E	Encore-25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-01F	Encore-25	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-01F	Encore-25	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-01F	Encore-25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-01S	EVial-A	INTACT	28-SEP-16	GC/MS	GC/MS	Mike May	CUSTODY	VOA DEAD FRIDGE	CUSTODY Mike May
L1629399-01S	EVial-A	INTACT	28-SEP-16	CUSTODY	CUSTODY	Mike May	GC/MS	GC/MS	Mike May
L1629399-01S	EVial-A	INTACT	22-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-01T	EVial-A	INTACT	28-SEP-16	GC/MS	GC/MS	Mike May	CUSTODY	VOA DEAD FRIDGE	CUSTODY Mike May
L1629399-01T	EVial-A	INTACT	28-SEP-16	CUSTODY	CUSTODY	Mike May	GC/MS	GC/MS	Mike May
L1629399-01T	EVial-A	INTACT	22-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629399-01U	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-01U	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-01U	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-01V	SVial-W	EMPTY	28-SEP-16	GC/MS	F-VOA CUSTODY	Matilda Owusuaa	CUSTODY	VOA CUSTODY	Matilda Owusuaa
L1629399-01V	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-01V	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-01V	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-01X	SVial-F	INTACT	17-SEP-16	GC/MS	GC/MS	Mike Vickery	CUSTODY	VOA CUSTODY	Mike Vickery
L1629399-01X	SVial-F	INTACT	17-SEP-16	GC/MS	VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1629399-01X	SVial-F	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-01X	SVial-F	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-01X	SVial-F	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-01Y	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-01Y	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-01Y	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-01Z	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-01Z	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-01Z	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-02A	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-02A	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-02A	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-02B	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-02B	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-02B	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-02C	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629399-02C	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-02C	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-02D	Encore-25	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-02D	Encore-25	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-02D	Encore-25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-02E	Encore-25	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-02E	Encore-25	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-02E	Encore-25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-02F	Plastic-A-TS	INTACT	17-SEP-16	CUSTODY	A2-CUSTODY-MET3-S6	Fatima Cofie	A2-CUSTODY-MET3-S4	A2-CUSTODY-MET3-S4	Fatima Cofie
L1629399-02F	Plastic-A-TS	INTACT	17-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	William McClendon	A2-CUSTODY-MET3-S6	A2-CUSTODY-MET3-S6	William McClendon
L1629399-02F	Plastic-A-TS	INTACT	17-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	William McClendon	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	
L1629399-02F	Plastic-A-TS	INTACT	17-SEP-16		CUSTODY	William McClendon	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	William McCle
L1629399-02F	Plastic-A-TS	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-02G	Glass-A.25	INTACT	19-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	W4-S3-B CUSTODY	W4-S3-B CUSTODY	Emily Keith
L1629399-02G	Glass-A.25	INTACT	17-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629399-02G	Glass-A.25	INTACT	17-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629399-02G	Glass-A.25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-02S	EVial-A	INTACT	28-SEP-16	GC/MS	GC/MS	Mike May	CUSTODY	VOA DEAD FRIDGE	CUSTODY Mike May
L1629399-02S	EVial-A	INTACT	28-SEP-16	CUSTODY	CUSTODY	Mike May	GC/MS	GC/MS	Mike May
L1629399-02S	EVial-A	INTACT	22-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-02T	EVial-A	INTACT	28-SEP-16	GC/MS	GC/MS	Mike May	CUSTODY	VOA DEAD FRIDGE	CUSTODY Mike May
L1629399-02T	EVial-A	INTACT	28-SEP-16	CUSTODY	CUSTODY	Mike May	GC/MS	GC/MS	Mike May
L1629399-02T	EVial-A	INTACT	22-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-02U	SVial-W	EMPTY	28-SEP-16	GC/MS	F-VOA CUSTODY	Matilda Owusuaa	CUSTODY	VOA CUSTODY	Matilda Owusuaa
L1629399-02U	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629399-02U	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-02U	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-02V	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-02V	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-02V	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-02X	SVial-F	INTACT	17-SEP-16	GC/MS	GC/MS	Mike Vickery	CUSTODY	VOA CUSTODY	Mike Vickery
L1629399-02X	SVial-F	INTACT	17-SEP-16	GC/MS	VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1629399-02X	SVial-F	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-02X	SVial-F	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-02X	SVial-F	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-02Y	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-02Y	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-02Y	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-02Z	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-02Z	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-02Z	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-03A	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-03A	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-03A	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-03B	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-03B	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-03B	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-03C	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-03C	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-03C	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629399-03D	Plastic-A-TS	INTACT	20-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Fred Ababio
L1629399-03D	Plastic-A-TS	INTACT	17-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629399-03D	Plastic-A-TS	INTACT	17-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629399-03D	Plastic-A-TS	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-03E	Encore-25	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-03E	Encore-25	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-03E	Encore-25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-03F	Encore-25	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-03F	Encore-25	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-03F	Encore-25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-03U	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-03U	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-03U	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-03V	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-03V	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-03V	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-03X	SVial-F	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-03X	SVial-F	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-03X	SVial-F	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-03Y	SVial-W	INTACT	18-SEP-16	GC/MS	GC/MS	Brian Noll	CUSTODY	VOA DEAD FRIDGE	CUSTODY Brian Noll
L1629399-03Y	SVial-W	INTACT	17-SEP-16	GC/MS	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1629399-03Y	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-03Y	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-03Y	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-03Z	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629399-03Z	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-03Z	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-04A	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-04A	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-04A	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-04B	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-04B	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-04B	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-04C	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-04C	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-04C	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-04D	Encore-25	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-04D	Encore-25	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-04D	Encore-25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-04E	Encore-25	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-04E	Encore-25	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-04E	Encore-25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-04F	Plastic-A-TS	INTACT	17-SEP-16	CUSTODY	A2-CUSTODY-MET3-S6	Fatima Cofie	A2-CUSTODY-MET3-S4	A2-CUSTODY-MET3-S4	Fatima Cofie
L1629399-04F	Plastic-A-TS	INTACT	17-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	William McClendon	A2-CUSTODY-MET3-S6	A2-CUSTODY-MET3-S6	William McClendon
L1629399-04F	Plastic-A-TS	INTACT	17-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	William McClendon	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	
L1629399-04F	Plastic-A-TS	INTACT	17-SEP-16		CUSTODY	William McClendon	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	William McCle
L1629399-04F	Plastic-A-TS	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-04G	Glass-A.25	INTACT	19-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	W4-S3-B CUSTODY	W4-S3-B CUSTODY	Emily Keith
L1629399-04G	Glass-A.25	INTACT	17-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629399-04G	Glass-A.25	INTACT	17-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629399-04G	Glass-A.25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-04U	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-04U	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-04U	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-04V	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-04V	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-04V	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-04X	SVial-F	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-04X	SVial-F	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-04X	SVial-F	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-04Y	SVial-W	INTACT	18-SEP-16	GC/MS	GC/MS	Brian Noll	CUSTODY	VOA DEAD FRIDGE	CUSTODY Brian Noll
L1629399-04Y	SVial-W	INTACT	17-SEP-16	GC/MS	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1629399-04Y	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-04Y	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-04Y	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-04Z	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-04Z	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-04Z	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-05A	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-05A	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-05A	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-05B	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-05B	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-05B	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-05C	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629399-05C	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-05C	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-05D	Plastic-A-TS	INTACT	20-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Fred Ababio
L1629399-05D	Plastic-A-TS	INTACT	17-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629399-05D	Plastic-A-TS	INTACT	17-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629399-05D	Plastic-A-TS	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-05E	Encore-25	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-05E	Encore-25	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-05E	Encore-25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-05F	Encore-25	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-05F	Encore-25	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-05F	Encore-25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-05U	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-05U	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-05U	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-05V	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-05V	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-05V	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-05X	SVial-F	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-05X	SVial-F	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-05X	SVial-F	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-05Y	SVial-W	INTACT	18-SEP-16	GC/MS	GC/MS	Brian Noll	CUSTODY	VOA DEAD FRIDGE	CUSTODY Brian Noll
L1629399-05Y	SVial-W	INTACT	17-SEP-16	GC/MS	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1629399-05Y	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-05Y	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629399-05Y	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-05Z	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-05Z	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-05Z	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-06A	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-06A	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-06A	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-06B	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-06B	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-06B	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-06C	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-06C	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-06C	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-06D	Plastic-A-TS	INTACT	20-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Fred Ababio
L1629399-06D	Plastic-A-TS	INTACT	17-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629399-06D	Plastic-A-TS	INTACT	17-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629399-06D	Plastic-A-TS	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-06E	Encore-25	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-06E	Encore-25	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-06E	Encore-25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-06F	Encore-25	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-06F	Encore-25	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-06F	Encore-25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-06U	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-06U	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629399-06U	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-06V	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-06V	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-06V	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-06X	SVial-F	INTACT	17-SEP-16	GC/MS	GC/MS	Mike Vickery	CUSTODY	VOA CUSTODY	Mike Vickery
L1629399-06X	SVial-F	INTACT	17-SEP-16	GC/MS	VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1629399-06X	SVial-F	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-06X	SVial-F	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-06X	SVial-F	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-06Y	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-06Y	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-06Y	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-06Z	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-06Z	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-06Z	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-07A	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-07A	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-07A	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-07B	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-07B	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-07B	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-07C	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-07C	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-07C	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-07D	Encore-25	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629399-07D	Encore-25	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-07D	Encore-25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-07E	Encore-25	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-07E	Encore-25	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-07E	Encore-25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-07F	Plastic-A-TS	INTACT	17-SEP-16	CUSTODY	A2-CUSTODY-MET3-S6	Fatima Cofie	A2-CUSTODY-MET3-S4	A2-CUSTODY-MET3-S4	Fatima Cofie
L1629399-07F	Plastic-A-TS	INTACT	17-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	William McClendon	A2-CUSTODY-MET3-S6	A2-CUSTODY-MET3-S6	William McClendon
L1629399-07F	Plastic-A-TS	INTACT	17-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	William McClendon	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	
L1629399-07F	Plastic-A-TS	INTACT	17-SEP-16		CUSTODY	William McClendon	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	William McCle
L1629399-07F	Plastic-A-TS	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-07G	Glass-A.25	INTACT	26-SEP-16	W5-S2-C CUSTODY	W2-S3-D CUSTODY	Sam Bardsley	W2-S2-C CUSTODY	W2-S2-C CUSTODY	Sam Bardsley
L1629399-07G	Glass-A.25	INTACT	23-SEP-16		RETURN WALK-IN CUSTODY	Sam Bardsley	W2-S3-D CUSTODY	W2-S3-D CUSTODY	Sam Bardsley
L1629399-07G	Glass-A.25	INTACT	23-SEP-16	ORGPREP	W4-S3-B CUSTODY	Lily Boateng	CUSTODY	RETURN WALK-IN CUSTODY	Lily Boateng
L1629399-07G	Glass-A.25	INTACT	19-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	W4-S3-B CUSTODY	W4-S3-B CUSTODY	Emily Keith
L1629399-07G	Glass-A.25	INTACT	17-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629399-07G	Glass-A.25	INTACT	17-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629399-07G	Glass-A.25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-07U	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-07U	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-07U	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-07V	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-07V	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-07V	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-07W	EPlastic-C.120	INTACT	27-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Alp Demiroz	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Alp Demiroz
L1629399-07W	EPlastic-C.120	INTACT	23-SEP-16	CUSTODY	A2-CUSTODY	Sam Bardsley	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Sam Bardsley

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629399-07W	EPlastic-C.120	INTACT	23-SEP-16	TRANSIT COURIER	COOLER25-TRANSFER_TO_MANSFIELD	Lily Boateng	A2-CUSTODY	A2-CUSTODY	Sam Bardsley
L1629399-07W	EPlastic-C.120	INTACT	23-SEP-16	COOLER25-TRANSFER_TO_MANSFIELD	COOLER25-TRANSFER_TO_MANSFIELD	Lily Boateng	TRANSIT COURIER	COOLER25-TRANSFER_TO_MANSF	
L1629399-07W	EPlastic-C.120	INTACT	23-SEP-16		CUSTODY	Lily Boateng	COOLER25-TRANSFER_TO_MANSFIELD	COOLER25-TRANSFER_TO_MANSFIELD	Lily Boater
L1629399-07W	EPlastic-C.120	INTACT	22-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-07X	SVial-F	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-07X	SVial-F	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-07X	SVial-F	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-07Y	SVial-W	INTACT	18-SEP-16	GC/MS	GC/MS	Brian Noll	CUSTODY	VOA DEAD FRIDGE	CUSTODY Brian Noll
L1629399-07Y	SVial-W	INTACT	17-SEP-16	GC/MS	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1629399-07Y	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-07Y	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-07Y	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-07Z	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-07Z	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-07Z	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-08A	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-08A	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-08A	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-08B	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-08B	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-08B	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-08C	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-08C	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-08C	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-08D	Plastic-A-TS	INTACT	20-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Fred Ababio

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629399-08D	Plastic-A-TS	INTACT	17-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629399-08D	Plastic-A-TS	INTACT	17-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629399-08D	Plastic-A-TS	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-08E	Encore-25	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-08E	Encore-25	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-08E	Encore-25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-08F	Encore-25	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-08F	Encore-25	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-08F	Encore-25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-08U	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-08U	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-08U	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-08V	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-08V	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-08V	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-08X	SVial-F	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-08X	SVial-F	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-08X	SVial-F	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-08Y	SVial-W	INTACT	18-SEP-16	GC/MS	GC/MS	Brian Noll	CUSTODY	VOA DEAD FRIDGE	CUSTODY Brian Noll
L1629399-08Y	SVial-W	INTACT	17-SEP-16	GC/MS	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1629399-08Y	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-08Y	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-08Y	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-08Z	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-08Z	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629399-08Z	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-09A	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-09A	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-09A	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-09B	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-09B	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-09B	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-09C	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-09C	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-09C	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-09D	Encore-25	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-09D	Encore-25	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-09D	Encore-25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-09E	Encore-25	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-09E	Encore-25	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-09E	Encore-25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-09F	Plastic-A-TS	INTACT	17-SEP-16	CUSTODY	A2-CUSTODY-MET3-S6	Fatima Cofie	A2-CUSTODY-MET3-S4	A2-CUSTODY-MET3-S4	Fatima Cofie
L1629399-09F	Plastic-A-TS	INTACT	17-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	William McClendon	A2-CUSTODY-MET3-S6	A2-CUSTODY-MET3-S6	William McClendon
L1629399-09F	Plastic-A-TS	INTACT	17-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	William McClendon	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	
L1629399-09F	Plastic-A-TS	INTACT	17-SEP-16		CUSTODY	William McClendon	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	William McCle
L1629399-09F	Plastic-A-TS	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-09G	Glass-A.25	INTACT	19-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	W4-S3-B CUSTODY	W4-S3-B CUSTODY	Emily Keith
L1629399-09G	Glass-A.25	INTACT	17-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629399-09G	Glass-A.25	INTACT	17-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629399-09G	Glass-A.25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629399-09U	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-09U	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-09U	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-09V	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-09V	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-09V	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-09X	SVial-F	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-09X	SVial-F	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-09X	SVial-F	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-09Y	SVial-W	INTACT	18-SEP-16	GC/MS	GC/MS	Brian Noll	CUSTODY	VOA DEAD FRIDGE	CUSTODY Brian Noll
L1629399-09Y	SVial-W	INTACT	17-SEP-16	GC/MS	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1629399-09Y	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-09Y	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-09Y	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-09Z	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-09Z	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-09Z	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-10A	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-10A	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-10A	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-10B	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-10B	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-10B	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-10C	Encore-5	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-10C	Encore-5	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629399-10C	Encore-5	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-10D	Plastic-A-TS	INTACT	20-SEP-16		RETURN WALK-IN CUSTODY	Fred Ababio	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Fred Ababio
L1629399-10D	Plastic-A-TS	INTACT	17-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629399-10D	Plastic-A-TS	INTACT	17-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629399-10D	Plastic-A-TS	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-10E	Glass-AM.06	INTACT	17-SEP-16	CUSTODY	A2-CUSTODY-MET3-S6	Fatima Cofie	A2-CUSTODY-MET3-S4	A2-CUSTODY-MET3-S4	Fatima Cofie
L1629399-10E	Glass-AM.06	INTACT	17-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	William McClendon	A2-CUSTODY-MET3-S6	A2-CUSTODY-MET3-S6	William McClendon
L1629399-10E	Glass-AM.06	INTACT	17-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	William McClendon	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	
L1629399-10E	Glass-AM.06	INTACT	17-SEP-16		CUSTODY	William McClendon	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	William McCle
L1629399-10E	Glass-AM.06	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-10F	Glass-A.25	INTACT	19-SEP-16	CUSTODY	A2-WET CHEMISTRY	Sonal Patel	A2-CUSTODY-FRZ1-Z1	A2-CUSTODY-FRZ1-Z1	Sonal Patel
L1629399-10F	Glass-A.25	INTACT	19-SEP-16	CUSTODY	A2-CUSTODY-FRZ1-Z1	Ashley Roulx	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Ashley Roulx
L1629399-10F	Glass-A.25	INTACT	18-SEP-16	CUSTODY	A2-CUSTODY	Bethany Bedard	A2-CUSTODY-FRZ1-Z1	A2-CUSTODY-FRZ1-Z1	Bethany Bedard
L1629399-10F	Glass-A.25	INTACT	17-SEP-16	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	William McClendon	A2-CUSTODY	A2-CUSTODY	William McClendon
L1629399-10F	Glass-A.25	INTACT	17-SEP-16	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	William McClendon	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	
L1629399-10F	Glass-A.25	INTACT	17-SEP-16		CUSTODY	William McClendon	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	William McCle
L1629399-10F	Glass-A.25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-10G	Plastic-A-GS	INTACT	22-SEP-16	CUSTODY	A2-WET CHEMISTRY	Sonal Patel	A2-CUSTODY-GRAINSIZE1	A2-CUSTODY-GRAINSIZE1	Sonal Patel
L1629399-10G	Plastic-A-GS	INTACT	22-SEP-16	CUSTODY	A2-CUSTODY-GRAINSIZE1	Ashley Roulx	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Ashley Roulx
L1629399-10G	Plastic-A-GS	INTACT	18-SEP-16	CUSTODY	A2-CUSTODY	Bethany Bedard	A2-CUSTODY-GRAINSIZE1	A2-CUSTODY-GRAINSIZE1	Bethany Bedard
L1629399-10G	Plastic-A-GS	INTACT	17-SEP-16	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	William McClendon	A2-CUSTODY	A2-CUSTODY	William McClendon
L1629399-10G	Plastic-A-GS	INTACT	17-SEP-16	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	William McClendon	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	
L1629399-10G	Plastic-A-GS	INTACT	17-SEP-16		CUSTODY	William McClendon	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	William McCle
L1629399-10G	Plastic-A-GS	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-10H	Encore-25	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629399-10H	Encore-25	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-10H	Encore-25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-10I	Encore-25	EMPTY	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-10I	Encore-25	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-10I	Encore-25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-10U	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-10U	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-10U	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-10V	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-10V	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-10V	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-10X	SVial-F	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1629399-10X	SVial-F	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-10X	SVial-F	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-10Y	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-10Y	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-10Y	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-10Z	SVial-W	INTACT	18-SEP-16	GC/MS	GC/MS	Brian Noll	CUSTODY	VOA DEAD FRIDGE	CUSTODY Brian Noll
L1629399-10Z	SVial-W	INTACT	17-SEP-16	GC/MS	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1629399-10Z	SVial-W	INTACT	17-SEP-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1629399-10Z	SVial-W	INTACT	17-SEP-16		CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1629399-10Z	SVial-W	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-11A	SGlass-A.06	INTACT	17-SEP-16	CUSTODY	A2-CUSTODY-MET3-S6	Fatima Cofie	A2-CUSTODY-MET3-S4	A2-CUSTODY-MET3-S4	Fatima Cofie
L1629399-11A	SGlass-A.06	INTACT	17-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	William McClendon	A2-CUSTODY-MET3-S6	A2-CUSTODY-MET3-S6	William McClendon
L1629399-11A	SGlass-A.06	INTACT	17-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	William McClendon	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629399-11A	SGlass-A.06	INTACT	17-SEP-16		CUSTODY	William McClendon	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	William McCle
L1629399-11A	SGlass-A.06	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-11B	Glass-A.25	INTACT	26-SEP-16	W5-S2-C CUSTODY	W2-S3-D CUSTODY	Sam Bardsley	W2-S2-C CUSTODY	W2-S2-C CUSTODY	Sam Bardsley
L1629399-11B	Glass-A.25	INTACT	23-SEP-16		RETURN WALK-IN CUSTODY	Sam Bardsley	W2-S3-D CUSTODY	W2-S3-D CUSTODY	Sam Bardsley
L1629399-11B	Glass-A.25	INTACT	23-SEP-16	ORGPREP	W4-S3-B CUSTODY	Lily Boateng	CUSTODY	RETURN WALK-IN CUSTODY	Lily Boateng
L1629399-11B	Glass-A.25	INTACT	19-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	W4-S3-B CUSTODY	W4-S3-B CUSTODY	Emily Keith
L1629399-11B	Glass-A.25	INTACT	17-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629399-11B	Glass-A.25	INTACT	17-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629399-11B	Glass-A.25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-11W	EPlastic-C.120	INTACT	27-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Alp Demiroz	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Alp Demiroz
L1629399-11W	EPlastic-C.120	INTACT	23-SEP-16	CUSTODY	A2-CUSTODY	Sam Bardsley	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Sam Bardsley
L1629399-11W	EPlastic-C.120	INTACT	23-SEP-16	TRANSIT COURIER	COOLER25-TRANSFER_TO_MANSFIELD	Lily Boateng	A2-CUSTODY	A2-CUSTODY	Sam Bardsley
L1629399-11W	EPlastic-C.120	INTACT	23-SEP-16	COOLER25-TRANSFER_TO_MANSFIELD	COOLER25-TRANSFER_TO_MANSFIELD	Lily Boateng	TRANSIT COURIER	COOLER25-TRANSFER_TO_MANSF	
L1629399-11W	EPlastic-C.120	INTACT	23-SEP-16		CUSTODY	Lily Boateng	COOLER25-TRANSFER_TO_MANSFIELD	COOLER25-TRANSFER_TO_MANSFIELD	Lily Boate
L1629399-11W	EPlastic-C.120	INTACT	22-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-12A	SGlass-A.06	INTACT	17-SEP-16	CUSTODY	A2-CUSTODY-MET3-S6	Fatima Cofie	A2-CUSTODY-MET3-S4	A2-CUSTODY-MET3-S4	Fatima Cofie
L1629399-12A	SGlass-A.06	INTACT	17-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	William McClendon	A2-CUSTODY-MET3-S6	A2-CUSTODY-MET3-S6	William McClendon
L1629399-12A	SGlass-A.06	INTACT	17-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	William McClendon	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	
L1629399-12A	SGlass-A.06	INTACT	17-SEP-16		CUSTODY	William McClendon	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	William McCle
L1629399-12A	SGlass-A.06	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-12B	Glass-A.25	INTACT	19-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	W4-S3-B CUSTODY	W4-S3-B CUSTODY	Emily Keith
L1629399-12B	Glass-A.25	INTACT	17-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629399-12B	Glass-A.25	INTACT	17-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629399-12B	Glass-A.25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-13A	SGlass-A.06	INTACT	17-SEP-16	CUSTODY	A2-CUSTODY-MET3-S6	Fatima Cofie	A2-CUSTODY-MET3-S4	A2-CUSTODY-MET3-S4	Fatima Cofie

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1629399-13A	SGlass-A.06	INTACT	17-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	William McClendon	A2-CUSTODY-MET3-S6	A2-CUSTODY-MET3-S6	William McClendon
L1629399-13A	SGlass-A.06	INTACT	17-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	William McClendon	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	
L1629399-13A	SGlass-A.06	INTACT	17-SEP-16		CUSTODY	William McClendon	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	William McCle
L1629399-13A	SGlass-A.06	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-13B	Glass-A.25	INTACT	26-SEP-16	W5-S2-C CUSTODY	W2-S3-D CUSTODY	Sam Bardsley	W2-S2-C CUSTODY	W2-S2-C CUSTODY	Sam Bardsley
L1629399-13B	Glass-A.25	INTACT	23-SEP-16		RETURN WALK-IN CUSTODY	Sam Bardsley	W2-S3-D CUSTODY	W2-S3-D CUSTODY	Sam Bardsley
L1629399-13B	Glass-A.25	INTACT	23-SEP-16	ORGPREP	W4-S3-B CUSTODY	Lily Boateng	CUSTODY	RETURN WALK-IN CUSTODY	Lily Boateng
L1629399-13B	Glass-A.25	INTACT	19-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	W4-S3-B CUSTODY	W4-S3-B CUSTODY	Emily Keith
L1629399-13B	Glass-A.25	INTACT	17-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629399-13B	Glass-A.25	INTACT	17-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629399-13B	Glass-A.25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-13W	EPlastic-C.120	INTACT	27-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Alp Demiroz	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Alp Demiroz
L1629399-13W	EPlastic-C.120	INTACT	23-SEP-16	CUSTODY	A2-CUSTODY	Sam Bardsley	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Sam Bardsley
L1629399-13W	EPlastic-C.120	INTACT	23-SEP-16	TRANSIT COURIER	COOLER25-TRANSFER_TO_MANSFIELD	Lily Boateng	A2-CUSTODY	A2-CUSTODY	Sam Bardsley
L1629399-13W	EPlastic-C.120	INTACT	23-SEP-16	COOLER25-TRANSFER_TO_MANSFIELD	COOLER25-TRANSFER_TO_MANSFIELD	Lily Boateng	TRANSIT COURIER	COOLER25-TRANSFER_TO_MANSF	
L1629399-13W	EPlastic-C.120	INTACT	23-SEP-16		CUSTODY	Lily Boateng	COOLER25-TRANSFER_TO_MANSFIELD	COOLER25-TRANSFER_TO_MANSFIELD	Lily Boate
L1629399-13W	EPlastic-C.120	INTACT	22-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-14A	SGlass-A.06	INTACT	17-SEP-16	CUSTODY	A2-CUSTODY-MET3-S6	Fatima Cofie	A2-CUSTODY-MET3-S4	A2-CUSTODY-MET3-S4	Fatima Cofie
L1629399-14A	SGlass-A.06	INTACT	17-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	William McClendon	A2-CUSTODY-MET3-S6	A2-CUSTODY-MET3-S6	William McClendon
L1629399-14A	SGlass-A.06	INTACT	17-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	William McClendon	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	
L1629399-14A	SGlass-A.06	INTACT	17-SEP-16		CUSTODY	William McClendon	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	William McCle
L1629399-14A	SGlass-A.06	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-14B	Glass-A.25	INTACT	19-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	W4-S3-B CUSTODY	W4-S3-B CUSTODY	Emily Keith
L1629399-14B	Glass-A.25	INTACT	17-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629399-14B	Glass-A.25	INTACT	17-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1629399-14B	Glass-A.25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-15A	SGlass-A.06	INTACT	17-SEP-16	CUSTODY	A2-CUSTODY-MET3-S6	Fatima Cofie	A2-CUSTODY-MET3-S4	A2-CUSTODY-MET3-S4	Fatima Cofie
L1629399-15A	SGlass-A.06	INTACT	17-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	William McClendon	A2-CUSTODY-MET3-S6	A2-CUSTODY-MET3-S6	William McClendon
L1629399-15A	SGlass-A.06	INTACT	17-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	William McClendon	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	
L1629399-15A	SGlass-A.06	INTACT	17-SEP-16		CUSTODY	William McClendon	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	William McCle
L1629399-15A	SGlass-A.06	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-15B	Glass-A.25	INTACT	26-SEP-16	W5-S2-C CUSTODY	W2-S3-D CUSTODY	Sam Bardsley	W2-S2-C CUSTODY	W2-S2-C CUSTODY	Sam Bardsley
L1629399-15B	Glass-A.25	INTACT	23-SEP-16		RETURN WALK-IN CUSTODY	Sam Bardsley	W2-S3-D CUSTODY	W2-S3-D CUSTODY	Sam Bardsley
L1629399-15B	Glass-A.25	INTACT	23-SEP-16	ORGPREP	W4-S3-B CUSTODY	Lily Boateng	CUSTODY	RETURN WALK-IN CUSTODY	Lily Boateng
L1629399-15B	Glass-A.25	INTACT	19-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	W4-S3-B CUSTODY	W4-S3-B CUSTODY	Emily Keith
L1629399-15B	Glass-A.25	INTACT	17-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629399-15B	Glass-A.25	INTACT	17-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629399-15B	Glass-A.25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-15W	EPlastic-C.120	INTACT	27-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Alp Demiroz	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Alp Demiroz
L1629399-15W	EPlastic-C.120	INTACT	23-SEP-16	CUSTODY	A2-CUSTODY	Sam Bardsley	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Sam Bardsley
L1629399-15W	EPlastic-C.120	INTACT	23-SEP-16	TRANSIT COURIER	COOLER25-TRANSFER_TO_MANSFIELD	Lily Boateng	A2-CUSTODY	A2-CUSTODY	Sam Bardsley
L1629399-15W	EPlastic-C.120	INTACT	23-SEP-16	COOLER25-TRANSFER_TO_MANSFIELD	COOLER25-TRANSFER_TO_MANSFIELD	Lily Boateng	TRANSIT COURIER	COOLER25-TRANSFER_TO_MANSF	
L1629399-15W	EPlastic-C.120	INTACT	23-SEP-16		CUSTODY	Lily Boateng	COOLER25-TRANSFER_TO_MANSFIELD	COOLER25-TRANSFER_TO_MANSFIELD	Lily Boate
L1629399-15W	EPlastic-C.120	INTACT	22-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-16A	SGlass-A.06	INTACT	17-SEP-16	CUSTODY	A2-CUSTODY-MET3-S6	Fatima Cofie	A2-CUSTODY-MET3-S4	A2-CUSTODY-MET3-S4	Fatima Cofie
L1629399-16A	SGlass-A.06	INTACT	17-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	William McClendon	A2-CUSTODY-MET3-S6	A2-CUSTODY-MET3-S6	William McClendon
L1629399-16A	SGlass-A.06	INTACT	17-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	William McClendon	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	
L1629399-16A	SGlass-A.06	INTACT	17-SEP-16		CUSTODY	William McClendon	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	William McCle
L1629399-16A	SGlass-A.06	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-16B	Glass-A.25	INTACT	19-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	W4-S3-B CUSTODY	W4-S3-B CUSTODY	Emily Keith

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629399-16B	Glass-A.25	INTACT	17-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629399-16B	Glass-A.25	INTACT	17-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629399-16B	Glass-A.25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-17A	SGlass-A.06	INTACT	17-SEP-16	CUSTODY	A2-CUSTODY-MET3-S6	Fatima Cofie	A2-CUSTODY-MET3-S4	A2-CUSTODY-MET3-S4	Fatima Cofie
L1629399-17A	SGlass-A.06	INTACT	17-SEP-16	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	William McClendon	A2-CUSTODY-MET3-S6	A2-CUSTODY-MET3-S6	William McClendon
L1629399-17A	SGlass-A.06	INTACT	17-SEP-16	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	William McClendon	TRANSIT COURIER	COOLER2-TRANSFER_TO_MANSFIELD	
L1629399-17A	SGlass-A.06	INTACT	17-SEP-16		CUSTODY	William McClendon	COOLER2-TRANSFER_TO_MANSFIELD	COOLER2-TRANSFER_TO_MANSFIELD	William McCle
L1629399-17A	SGlass-A.06	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-17B	Glass-A.25	INTACT	26-SEP-16	W5-S2-C CUSTODY	W2-S3-D CUSTODY	Sam Bardsley	W2-S2-C CUSTODY	W2-S2-C CUSTODY	Sam Bardsley
L1629399-17B	Glass-A.25	INTACT	23-SEP-16		RETURN WALK-IN CUSTODY	Sam Bardsley	W2-S3-D CUSTODY	W2-S3-D CUSTODY	Sam Bardsley
L1629399-17B	Glass-A.25	INTACT	23-SEP-16	ORGPREP	W4-S3-B CUSTODY	Lily Boateng	CUSTODY	RETURN WALK-IN CUSTODY	Lily Boateng
L1629399-17B	Glass-A.25	INTACT	19-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	W4-S3-B CUSTODY	W4-S3-B CUSTODY	Emily Keith
L1629399-17B	Glass-A.25	INTACT	17-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629399-17B	Glass-A.25	INTACT	17-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629399-17B	Glass-A.25	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-17W	EPlastic-C.120	INTACT	27-SEP-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Alp Demiroz	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Alp Demiroz
L1629399-17W	EPlastic-C.120	INTACT	23-SEP-16	CUSTODY	A2-CUSTODY	Sam Bardsley	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Sam Bardsley
L1629399-17W	EPlastic-C.120	INTACT	23-SEP-16	TRANSIT COURIER	COOLER25-TRANSFER_TO_MANSFIELD	Lily Boateng	A2-CUSTODY	A2-CUSTODY	Sam Bardsley
L1629399-17W	EPlastic-C.120	INTACT	23-SEP-16	COOLER25-TRANSFER_TO_MANSFIELD	COOLER25-TRANSFER_TO_MANSFIELD	Lily Boateng	TRANSIT COURIER	COOLER25-TRANSFER_TO_MANSF	
L1629399-17W	EPlastic-C.120	INTACT	23-SEP-16		CUSTODY	Lily Boateng	COOLER25-TRANSFER_TO_MANSFIELD	COOLER25-TRANSFER_TO_MANSFIELD	Lily Boate
L1629399-17W	EPlastic-C.120	INTACT	22-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-18A	Plastic-A-GS	INTACT	22-SEP-16	CUSTODY	A2-WET CHEMISTRY	Sonal Patel	A2-CUSTODY-GRAINSIZE1	A2-CUSTODY-GRAINSIZE1	Sonal Patel
L1629399-18A	Plastic-A-GS	INTACT	22-SEP-16	CUSTODY	A2-CUSTODY-GRAINSIZE1	Ashley Roulx	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Ashley Roulx
L1629399-18A	Plastic-A-GS	INTACT	18-SEP-16	CUSTODY	A2-CUSTODY	Bethany Bedard	A2-CUSTODY-GRAINSIZE1	A2-CUSTODY-GRAINSIZE1	Bethany Bedard
L1629399-18A	Plastic-A-GS	INTACT	17-SEP-16	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	William McClendon	A2-CUSTODY	A2-CUSTODY	William McClendon

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629399-18A	Plastic-A-GS	INTACT	17-SEP-16	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	William McClendon	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	
L1629399-18A	Plastic-A-GS	INTACT	17-SEP-16		CUSTODY	William McClendon	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	William McCle
L1629399-18A	Plastic-A-GS	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-18B	Glass-A.06	INTACT	19-SEP-16	CUSTODY	A2-WET CHEMISTRY	Sonal Patel	A2-CUSTODY-FRZ1-Z1	A2-CUSTODY-FRZ1-Z1	Sonal Patel
L1629399-18B	Glass-A.06	INTACT	19-SEP-16	CUSTODY	A2-CUSTODY-FRZ1-Z1	Ashley Roulx	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Ashley Roulx
L1629399-18B	Glass-A.06	INTACT	18-SEP-16	CUSTODY	A2-CUSTODY	Bethany Bedard	A2-CUSTODY-FRZ1-Z1	A2-CUSTODY-FRZ1-Z1	Bethany Bedard
L1629399-18B	Glass-A.06	INTACT	17-SEP-16	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	William McClendon	A2-CUSTODY	A2-CUSTODY	William McClendon
L1629399-18B	Glass-A.06	INTACT	17-SEP-16	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	William McClendon	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	
L1629399-18B	Glass-A.06	INTACT	17-SEP-16		CUSTODY	William McClendon	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	William McCle
L1629399-18B	Glass-A.06	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-18C	SGlass-A.06	INTACT	28-SEP-16		W4-S3-B CUSTODY	Sam Bardsley	W4-S2-B CUSTODY	W4-S2-B CUSTODY	Sam Bardsley
L1629399-18C	SGlass-A.06	INTACT	19-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	W4-S3-B CUSTODY	W4-S3-B CUSTODY	Emily Keith
L1629399-18C	SGlass-A.06	INTACT	17-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629399-18C	SGlass-A.06	INTACT	17-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629399-18C	SGlass-A.06	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-19A	Plastic-A-GS	INTACT	22-SEP-16	CUSTODY	A2-WET CHEMISTRY	Sonal Patel	A2-CUSTODY-GRAINSIZE1	A2-CUSTODY-GRAINSIZE1	Sonal Patel
L1629399-19A	Plastic-A-GS	INTACT	22-SEP-16	CUSTODY	A2-CUSTODY-GRAINSIZE1	Ashley Roulx	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Ashley Roulx
L1629399-19A	Plastic-A-GS	INTACT	18-SEP-16	CUSTODY	A2-CUSTODY	Bethany Bedard	A2-CUSTODY-GRAINSIZE1	A2-CUSTODY-GRAINSIZE1	Bethany Bedard
L1629399-19A	Plastic-A-GS	INTACT	17-SEP-16	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	William McClendon	A2-CUSTODY	A2-CUSTODY	William McClendon
L1629399-19A	Plastic-A-GS	INTACT	17-SEP-16	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	William McClendon	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	
L1629399-19A	Plastic-A-GS	INTACT	17-SEP-16		CUSTODY	William McClendon	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	William McCle
L1629399-19A	Plastic-A-GS	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-19B	Glass-A.06	INTACT	19-SEP-16	CUSTODY	A2-WET CHEMISTRY	Sonal Patel	A2-CUSTODY-FRZ1-Z1	A2-CUSTODY-FRZ1-Z1	Sonal Patel
L1629399-19B	Glass-A.06	INTACT	19-SEP-16	CUSTODY	A2-CUSTODY-FRZ1-Z1	Ashley Roulx	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Ashley Roulx
L1629399-19B	Glass-A.06	INTACT	18-SEP-16	CUSTODY	A2-CUSTODY	Bethany Bedard	A2-CUSTODY-FRZ1-Z1	A2-CUSTODY-FRZ1-Z1	Bethany Bedard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1629399-19B	Glass-A.06	INTACT	17-SEP-16	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	William McClendon	A2-CUSTODY	A2-CUSTODY	William McClendon
L1629399-19B	Glass-A.06	INTACT	17-SEP-16	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	William McClendon	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	
L1629399-19B	Glass-A.06	INTACT	17-SEP-16		CUSTODY	William McClendon	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	William McCle
L1629399-19B	Glass-A.06	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1629399-19C	SGlass-A.06	INTACT	28-SEP-16		W4-S3-B CUSTODY	Sam Bardsley	W4-S2-B CUSTODY	W4-S2-B CUSTODY	Sam Bardsley
L1629399-19C	SGlass-A.06	INTACT	19-SEP-16		RETURN WALK-IN CUSTODY	Emily Keith	W4-S3-B CUSTODY	W4-S3-B CUSTODY	Emily Keith
L1629399-19C	SGlass-A.06	INTACT	17-SEP-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1629399-19C	SGlass-A.06	INTACT	17-SEP-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1629399-19C	SGlass-A.06	INTACT	17-SEP-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis

Methodology Review

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

12 Annual Book of ASTM Standards. (American Society for Testing and Materials) ASTM International.

13 Determination of Total Organic Carbon in Sediment. U.S. EPA, Region II. July 27, 1988.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Laboratory Chronicle

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: 17-SEP-16 03:00

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1629399-01A	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-01B	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-01C	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-01D	Plastic 2oz unpreserved for TS	A	N/A	2.2	Y	Absent	TS(7)
L1629399-01E	25 gram Encore Sampler	A	N/A	2.2	Y	Absent	SPLP-EXT-ZHE(14)
L1629399-01F	25 gram Encore Sampler	A	N/A	2.2	Y	Absent	SPLP-EXT-ZHE(14)
L1629399-01S	Vial unpreserved Extracts	A	N/A	2.2	Y	Absent	NJ-SPLP-VOA(14)
L1629399-01T	Vial unpreserved Extracts	A	N/A	2.2	Y	Absent	NJ-SPLP-VOA(14)
L1629399-01U	Vial Water preserved split	A	N/A	2.2	Y	Absent	SPLP-EXT-ZHE(14)
L1629399-01V	Vial Water preserved split	A	N/A	2.2	Y	Absent	SPLP-EXT-ZHE(14)
L1629399-01X	Vial MeOH preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-01Y	Vial Water preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-01Z	Vial Water preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-02A	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-02B	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-02C	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-02D	25 gram Encore Sampler	A	N/A	2.2	Y	Absent	SPLP-EXT-ZHE(14)
L1629399-02E	25 gram Encore Sampler	A	N/A	2.2	Y	Absent	SPLP-EXT-ZHE(14)
L1629399-02F	Plastic 2oz unpreserved for TS	A	N/A	2.2	Y	Absent	AS-TI(180)
L1629399-02G	Glass 250ml/8oz unpreserved	A	N/A	2.2	Y	Absent	HOLD-CONTINGENCY(14),TS(7)
L1629399-02S	Vial unpreserved Extracts	A	N/A	2.2	Y	Absent	NJ-SPLP-VOA(14)
L1629399-02T	Vial unpreserved Extracts	A	N/A	2.2	Y	Absent	NJ-SPLP-VOA(14)
L1629399-02U	Vial Water preserved split	A	N/A	2.2	Y	Absent	SPLP-EXT-ZHE(14)
L1629399-02V	Vial Water preserved split	A	N/A	2.2	Y	Absent	SPLP-EXT-ZHE(14)
L1629399-02X	Vial MeOH preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-02Y	Vial Water preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1629399-02Z	Vial Water preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-03A	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-03B	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-03C	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-03D	Plastic 2oz unpreserved for TS	A	N/A	2.2	Y	Absent	TS(7)
L1629399-03E	25 gram Encore Sampler	A	N/A	2.2	Y	Absent	HOLD-CONTINGENCY(14)
L1629399-03F	25 gram Encore Sampler	A	N/A	2.2	Y	Absent	HOLD-CONTINGENCY(14)
L1629399-03U	Vial Water preserved split	A	N/A	2.2	Y	Absent	HOLD-CONTINGENCY(14)
L1629399-03V	Vial Water preserved split	A	N/A	2.2	Y	Absent	HOLD-CONTINGENCY(14)
L1629399-03X	Vial MeOH preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-03Y	Vial Water preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-03Z	Vial Water preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-04A	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-04B	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-04C	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-04D	25 gram Encore Sampler	A	N/A	2.2	Y	Absent	HOLD-8260HLW(2)
L1629399-04E	25 gram Encore Sampler	A	N/A	2.2	Y	Absent	HOLD-8260HLW(2)
L1629399-04F	Plastic 2oz unpreserved for TS	A	N/A	2.2	Y	Absent	AS-TI(180),NI-TI(180)
L1629399-04G	Glass 250ml/8oz unpreserved	A	N/A	2.2	Y	Absent	HOLD-CONTINGENCY(14),TS(7)
L1629399-04U	Vial Water preserved split	A	N/A	2.2	Y	Absent	HOLD-8260HLW(14)
L1629399-04V	Vial Water preserved split	A	N/A	2.2	Y	Absent	HOLD-8260HLW(14)
L1629399-04X	Vial MeOH preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-04Y	Vial Water preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-04Z	Vial Water preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-05A	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-05B	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-05C	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-05D	Plastic 2oz unpreserved for TS	A	N/A	2.2	Y	Absent	TS(7)
L1629399-05E	25 gram Encore Sampler	A	N/A	2.2	Y	Absent	HOLD-CONTINGENCY(14)
L1629399-05F	25 gram Encore Sampler	A	N/A	2.2	Y	Absent	HOLD-CONTINGENCY(14)
L1629399-05U	Vial Water preserved split	A	N/A	2.2	Y	Absent	HOLD-CONTINGENCY(14)
L1629399-05V	Vial Water preserved split	A	N/A	2.2	Y	Absent	HOLD-CONTINGENCY(14)
L1629399-05X	Vial MeOH preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-05Y	Vial Water preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-05Z	Vial Water preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1629399-06A	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-06B	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-06C	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-06D	Plastic 2oz unpreserved for TS	A	N/A	2.2	Y	Absent	TS(7)
L1629399-06E	25 gram Encore Sampler	A	N/A	2.2	Y	Absent	HOLD-CONTINGENCY(14)
L1629399-06F	25 gram Encore Sampler	A	N/A	2.2	Y	Absent	HOLD-CONTINGENCY(14)
L1629399-06U	Vial Water preserved split	A	N/A	2.2	Y	Absent	HOLD-CONTINGENCY(14)
L1629399-06V	Vial Water preserved split	A	N/A	2.2	Y	Absent	HOLD-CONTINGENCY(14)
L1629399-06X	Vial MeOH preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-06Y	Vial Water preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-06Z	Vial Water preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-07A	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-07B	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-07C	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-07D	25 gram Encore Sampler	A	N/A	2.2	Y	Absent	HOLD-8260HLW(2)
L1629399-07E	25 gram Encore Sampler	A	N/A	2.2	Y	Absent	HOLD-8260HLW(2)
L1629399-07F	Plastic 2oz unpreserved for TS	A	N/A	2.2	Y	Absent	AS-TI(180),NI-TI(180)
L1629399-07G	Glass 250ml/8oz unpreserved	A	N/A	2.2	Y	Absent	HOLD-CONTINGENCY(14),TS(7)
L1629399-07U	Vial Water preserved split	A	N/A	2.2	Y	Absent	HOLD-8260HLW(14)
L1629399-07V	Vial Water preserved split	A	N/A	2.2	Y	Absent	HOLD-8260HLW(14)
L1629399-07W	Plastic 120ml HNO3 preserved Ext	A	<2	2.2	Y	Absent	SPLP-NI-6020T-PPB(180)
L1629399-07W9	Tumble Vessel	A	N/A	2.2	Y	Absent	-
L1629399-07X	Vial MeOH preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-07Y	Vial Water preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-07Z	Vial Water preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-08A	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-08B	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-08C	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-08D	Plastic 2oz unpreserved for TS	A	N/A	2.2	Y	Absent	TS(7)
L1629399-08E	25 gram Encore Sampler	A	N/A	2.2	Y	Absent	HOLD-CONTINGENCY(14)
L1629399-08F	25 gram Encore Sampler	A	N/A	2.2	Y	Absent	HOLD-CONTINGENCY(14)
L1629399-08U	Vial Water preserved split	A	N/A	2.2	Y	Absent	HOLD-CONTINGENCY(14)
L1629399-08V	Vial Water preserved split	A	N/A	2.2	Y	Absent	HOLD-CONTINGENCY(14)
L1629399-08X	Vial MeOH preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-08Y	Vial Water preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1629399-08Z	Vial Water preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-09A	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-09B	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-09C	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-09D	25 gram Encore Sampler	A	N/A	2.2	Y	Absent	HOLD-8260HLW(2)
L1629399-09E	25 gram Encore Sampler	A	N/A	2.2	Y	Absent	HOLD-8260HLW(2)
L1629399-09F	Plastic 2oz unpreserved for TS	A	N/A	2.2	Y	Absent	NI-TI(180)
L1629399-09G	Glass 250ml/8oz unpreserved	A	N/A	2.2	Y	Absent	HOLD-CONTINGENCY(14),TS(7)
L1629399-09U	Vial Water preserved split	A	N/A	2.2	Y	Absent	HOLD-8260HLW(14)
L1629399-09V	Vial Water preserved split	A	N/A	2.2	Y	Absent	HOLD-8260HLW(14)
L1629399-09X	Vial MeOH preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-09Y	Vial Water preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-09Z	Vial Water preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-10A	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-10B	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-10C	5 gram Encore Sampler	A	N/A	2.2	Y	Absent	NJ-8260HLW(2)
L1629399-10D	Plastic 2oz unpreserved for TS	A	N/A	2.2	Y	Absent	TS(7)
L1629399-10E	Metals Only - Glass 60mL/2oz unp	A	N/A	2.2	Y	Absent	NI-TI(180)
L1629399-10F	Glass 250ml/8oz unpreserved	A	N/A	2.2	Y	Absent	A2-TOC-LK-2REPS-PPM(14)
L1629399-10G	Plastic 8oz unpreserved for Grai	A	N/A	2.2	Y	Absent	A2-HYDRO-TFINE(),A2-HYDRO-CFINE(),A2-HYDRO-CGRAVEL(),A2-HYDRO-FSAND(),A2-HYDRO-MSAND(),A2-HYDRO-CSAND(),A2-HYDRO-SFINE(),A2-HYDRO-COBBLES(),A2-HYDRO-FGRAVEL()
L1629399-10H	25 gram Encore Sampler	A	N/A	2.2	Y	Absent	HOLD-8260HLW(2)
L1629399-10I	25 gram Encore Sampler	A	N/A	2.2	Y	Absent	HOLD-8260HLW(2)
L1629399-10U	Vial Water preserved split	A	N/A	2.2	Y	Absent	HOLD-8260HLW(14)
L1629399-10V	Vial Water preserved split	A	N/A	2.2	Y	Absent	HOLD-8260HLW(14)
L1629399-10X	Vial MeOH preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-10Y	Vial Water preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-10Z	Vial Water preserved split	A	N/A	2.2	Y	Absent	NJ-8260HLW(14)
L1629399-11A	Glass 60ml unpreserved split	A	N/A	2.2	Y	Absent	AS-TI(180)
L1629399-11B	Glass 250ml/8oz unpreserved	A	N/A	2.2	Y	Absent	TS(7)
L1629399-11G	Glass 250ml/8oz unpreserved	A	N/A	2.2	Y	Absent	-
L1629399-11W	Plastic 120ml HNO3 preserved Ext	A	<2	2.2	Y	Absent	SPLP-AS-6020T-PPB(180)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1629399-11W9	Tumble Vessel	A	N/A	2.2	Y	Absent	-
L1629399-12A	Glass 60ml unpreserved split	A	N/A	2.2	Y	Absent	AS-TI(180)
L1629399-12B	Glass 250ml/8oz unpreserved	A	N/A	2.2	Y	Absent	TS(7)
L1629399-13A	Glass 60ml unpreserved split	A	N/A	2.2	Y	Absent	AS-TI(180)
L1629399-13B	Glass 250ml/8oz unpreserved	A	N/A	2.2	Y	Absent	TS(7)
L1629399-13G	Glass 250ml/8oz unpreserved	A	N/A	2.2	Y	Absent	-
L1629399-13W	Plastic 120ml HNO3 preserved Ext	A	<2	2.2	Y	Absent	SPLP-AS-6020T-PPB(180)
L1629399-13W9	Tumble Vessel	A	N/A	2.2	Y	Absent	-
L1629399-14A	Glass 60ml unpreserved split	A	N/A	2.2	Y	Absent	AS-TI(180)
L1629399-14B	Glass 250ml/8oz unpreserved	A	N/A	2.2	Y	Absent	TS(7)
L1629399-15A	Glass 60ml unpreserved split	A	N/A	2.2	Y	Absent	AS-TI(180)
L1629399-15B	Glass 250ml/8oz unpreserved	A	N/A	2.2	Y	Absent	TS(7)
L1629399-15G	Glass 250ml/8oz unpreserved	A	N/A	2.2	Y	Absent	-
L1629399-15W	Plastic 120ml HNO3 preserved Ext	A	<2	2.2	Y	Absent	SPLP-AS-6020T-PPB(180)
L1629399-15W9	Tumble Vessel	A	N/A	2.2	Y	Absent	-
L1629399-16A	Glass 60ml unpreserved split	A	N/A	2.2	Y	Absent	AS-TI(180)
L1629399-16B	Glass 250ml/8oz unpreserved	A	N/A	2.2	Y	Absent	TS(7)
L1629399-17A	Glass 60ml unpreserved split	A	N/A	2.2	Y	Absent	AS-TI(180)
L1629399-17B	Glass 250ml/8oz unpreserved	A	N/A	2.2	Y	Absent	TS(7)
L1629399-17G	Glass 250ml/8oz unpreserved	A	N/A	2.2	Y	Absent	-
L1629399-17W	Plastic 120ml HNO3 preserved Ext	A	<2	2.2	Y	Absent	SPLP-AS-6020T-PPB(180)
L1629399-17W9	Tumble Vessel	A	N/A	2.2	Y	Absent	-
L1629399-18A	Plastic 8oz unpreserved for Grai	A	N/A	2.2	Y	Absent	A2-HYDRO-TFINE(),A2-HYDRO-CFINE(),A2-HYDRO-CGRAVEL(),A2-HYDRO-FSAND(),A2-HYDRO-MSAND(),A2-HYDRO-CSAND(),A2-HYDRO-SFINE(),A2-HYDRO-COBBLES(),A2-HYDRO-FGRAVEL()
L1629399-18B	Glass 60mL/2oz unpreserved	A	N/A	2.2	Y	Absent	A2-TOC-LK-2REPS-PPM(14)
L1629399-18C	Glass 60ml unpreserved split	A	N/A	2.2	Y	Absent	TS(7)
L1629399-19A	Plastic 8oz unpreserved for Grai	A	N/A	2.2	Y	Absent	A2-HYDRO-TFINE(),A2-HYDRO-CFINE(),A2-HYDRO-CGRAVEL(),A2-HYDRO-FSAND(),A2-HYDRO-MSAND(),A2-HYDRO-CSAND(),A2-HYDRO-SFINE(),A2-HYDRO-COBBLES(),A2-HYDRO-FGRAVEL()
L1629399-19B	Glass 60mL/2oz unpreserved	A	N/A	2.2	Y	Absent	A2-TOC-LK-2REPS-PPM(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1629399-19C	Glass 60ml unpreserved split	A	N/A	2.2	Y	Absent	TS(7)

*Values in parentheses indicate holding time in days

NJ DEP
Data of Known Quality Protocols
Conformance/Non-Conformance
Summary Questionnaire

NJ DEP Data of Known Quality Protocols
Conformance/Non-Conformance
Summary Questionnaire

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	YES
1a	Were the method specified handling, preservation, and holding time requirements met?	YES
1b	EPH Method: Was the EPH Method conducted without significant modifications (see Section 11.3 of respective DKQ methods)?	N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	YES
3	Were all samples received at an appropriate temperature (4 ± 2° C)?	YES
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	NO
5a	Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	YES
5b	Were these reporting limits met?	YES
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	NO
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	YES

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1a or #1b is "No", the data package does not meet the requirements for "Data of Known Quality".

Conformance/Non-Conformance Summary

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Case Narrative (continued)

Report Submission
This final report replaces the partial reports issued September 26, 2016, and includes the results of all requested analyses.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

DKQP Related Narratives
SPLP Volatiles
In reference to question 6:
At the client's request, all submitted samples were not analyzed for the full DKQP list of constituents identified in the method specific analyte list presented in the DKQP documents.

Volatile Organics
L1629399-01 and -02: The sample has an elevated detection limit due to the dilution required by the elevated concentrations of non-target compounds in the sample.
L1629399-06: The analysis of Volatile Organics by EPA Method 5035/8260 Low Level could not be performed due to the elevated concentrations of non-target compounds in the sample.
In reference to question 4:
L1629399-07: The surrogate recovery for toluene-d8 (133%) is outside the acceptance criteria; however, since the sample was non-detect for all target analytes associated with this surrogate, re-analysis was not required.
In reference to question 6:
At the client's request, all submitted samples were not analyzed for the full DKQP list of constituents identified in the method specific analyte list presented in the DKQP documents.

Total Metals
In reference to question 6:
At the client's request, all submitted samples were not analyzed for the full DKQP list of constituents identified

Case Narrative (continued)

in the method specific analyte list presented in the DKQP documents.

SPLP Metals

In reference to question 6:

At the client's request, all submitted samples were not analyzed for the full DKQP list of constituents identified in the method specific analyte list presented in the DKQP documents.

Non-DKQP Related Narratives

Total Organic Carbon

WG934874: A Matrix Spike and Laboratory Duplicate were prepared with the sample batch, however, the native sample required a different reporting method; therefore, the matrix spike and laboratory duplicate results could not be reported.

Grain Size Analysis

The WG935908-1 Laboratory Duplicate RPDs, performed on L1629399-10, are outside the acceptance criteria for % fine gravel (150%) and % coarse sand (30%). The elevated RPDs have been attributed to the non-homogeneous nature of the native sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Kelly Stenstrom Report Date: 09/28/16

Title: Technical Director/Representative

Glossary

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the

Data Qualifiers

reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

SPLP Extraction Data

SPLP Extraction Data
Volatile Organics

Form 1
Volatile Organics

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-01	**Date Collected**	: 09/16/16 08:50
Client ID	: 4479-091616-0850	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/28/16 09:43
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: PK
Lab File ID	:	**Instrument ID**	:
Sample Amount	: 0.0	**GC Column**	:
Level	: LOW	**%Solids**	: 76
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Sample Weight	0.020	-	NA	
NONE	Leachate Volume	0.400	-	NA	
NONE	pH, Extraction Post-Filtration	6.40	-	NA	

Form 1
Volatile Organics

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-02	**Date Collected**	: 09/16/16 08:50
Client ID	: 4479-091616-0855	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/28/16 09:43
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: PK
Lab File ID	:	**Instrument ID**	:
Sample Amount	: 0.0	**GC Column**	:
Level	: LOW	**%Solids**	: 62
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

			kg		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Sample Weight	0.020	-	NA	
NONE	Leachate Volume	0.400	-	NA	
NONE	pH, Extraction Post-Filtration	7.30	-	NA	

Form 1
Volatile Organics

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: WG936669-1	Date Collected	: NA
Client ID	: WG936669-1BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 09/28/16 09:43
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,1312	Analyst	: PK
Lab File ID	:	Instrument ID	:
Sample Amount	: 0.0	GC Column	:
Level	: LOW	%Solids	: NA
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		SU			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Sample Weight	0.020	-	NA	
NONE	Leachate Volume	0.400	-	NA	
NONE	pH, Extraction Post-Filtration	7.98	-	NA	

SPLP Extraction Data
Non- Volatiles

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-07	**Date Collected**	: 09/16/16 09:55
Client ID	: 4479-091616-1000	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/23/16 16:37
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: MC
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 82

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	3.68	-	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-11	**Date Collected**	: 09/16/16 11:30
Client ID	: 4479-091616-1130	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/23/16 16:37
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: MC
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 90

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	3.16	-	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-13	**Date Collected**	: 09/16/16 11:35
Client ID	: 4479-091616-1135	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/23/16 16:37
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: MC
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 91

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	9.69	-	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-15	**Date Collected**	: 09/16/16 11:42
Client ID	: 4479-091616-1142	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/23/16 16:37
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: MC
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 90

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	9.67	-	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-17	**Date Collected**	: 09/16/16 11:40
Client ID	: 4479-091616-1140	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/23/16 16:37
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: MC
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0.1kg	**%Solids**	: 89

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	0.100	-	NA	
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	9.72	-	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: WG935768-1	**Date Collected**	: NA
Client ID	: WG935768-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/23/16 16:37
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,1312	**Analyst**	: MC
Lab File ID	: --	**Instrument ID**	:
Sample Amount	: 0kg	**%Solids**	: NA

CAS NO.	Parameter	Results	kg RL	MDL	Qualifier
NONE	Sample Weight	ND	-	NA	U
NONE	Leachate Volume	2.00	-	NA	
NONE	pH, Extraction Post-Filtration	3.28	-	NA	

Organics

GC/MS 8260
Analysis

Sample Results Summary

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-01	**Date Collected**	: 09/16/16 08:50
Client ID	: 4479-091616-0850	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/27/16 19:11
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MM
Lab File ID	: VQ160927A15	**Instrument ID**	: QUIMBY
Sample Amount	: 10.0 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: 76
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-43-2	Benzene	2.7	0.50	0.16	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-01D	**Date Collected**	: 09/16/16 08:50
Client ID	: 4479-091616-0850	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 21:35
Sample Matrix	: SOIL	**Dilution Factor**	: 2
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: VC160917B19	**Instrument ID**	: CHARLIE
Sample Amount	:	**GC Column**	: RTX-VMS
Level	: HIGH	**%Solids**	: 76
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.05 ml

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-43-2	Benzene	0.10	0.23	0.027	J

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-02	**Date Collected**	: 09/16/16 08:50
Client ID	: 4479-091616-0855	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/27/16 18:39
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MM
Lab File ID	: VQ160927A14	**Instrument ID**	: QUIMBY
Sample Amount	: 10.0 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: 62
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-43-2	Benzene	3.0	0.50	0.16	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-02D	**Date Collected**	: 09/16/16 08:50
Client ID	: 4479-091616-0855	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 22:02
Sample Matrix	: SOIL	**Dilution Factor**	: 4
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: VC160917B20	**Instrument ID**	: CHARLIE
Sample Amount	:	**GC Column**	: RTX-VMS
Level	: HIGH	**%Solids**	: 62
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.025 ml

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-43-2	Benzene	0.20	0.54	0.064	J

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-03	**Date Collected**	: 09/16/16 08:55
Client ID	: 4479-091616-0910	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 18:28
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: VC160917B12	**Instrument ID**	: CHARLIE
Sample Amount	: 5.1 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 90
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-43-2	Benzene	ND	0.0011	0.00013	U
79-01-6	Trichloroethene	ND	0.0011	0.00014	U

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-04	**Date Collected**	: 09/16/16 09:10
Client ID	: 4479-091616-0925	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 18:55
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: VC160917B13	**Instrument ID**	: CHARLIE
Sample Amount	: 5.7 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 81
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-43-2	Benzene	0.00018	0.0011	0.00013	J

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-05	**Date Collected**	: 09/16/16 09:25
Client ID	: 4479-091616-0945	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 19:22
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: VC160917B14	**Instrument ID**	: CHARLIE
Sample Amount	: 6.3 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 85
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-43-2	Benzene	0.00016	0.00093	0.00011	J
79-01-6	Trichloroethene	0.0025	0.00093	0.00012	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-06	**Date Collected**	: 09/16/16 09:45
Client ID	: 4479-091616-0955	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 22:29
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: VC160917B21	**Instrument ID**	: CHARLIE
Sample Amount	:	**GC Column**	: RTX-VMS
Level	: HIGH	**%Solids**	: 83
Extract Volume (MeOH)	: NA	**Injection Volume**	: 0.1 ml

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
79-01-6	Trichloroethene	0.011	0.072	0.0090	J

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-07	**Date Collected**	: 09/16/16 09:55
Client ID	: 4479-091616-1000	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 19:49
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: VC160917B15	**Instrument ID**	: CHARLIE
Sample Amount	: 3.5 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 82
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-43-2	Benzene	ND	0.0017	0.00021	U

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-08	**Date Collected**	: 09/16/16 10:10
Client ID	: 4479-091616-1010	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 20:15
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: VC160917B16	**Instrument ID**	: CHARLIE
Sample Amount	: 5.2 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 76
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-43-2	Benzene	ND	0.0013	0.00015	U

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-09	**Date Collected**	: 09/16/16 10:40
Client ID	: 4479-091616-1040	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 20:42
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: VC160917B17	**Instrument ID**	: CHARLIE
Sample Amount	: 5.9 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 83
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-43-2	Benzene	ND	0.0010	0.00012	U
79-01-6	Trichloroethene	0.0017	0.0010	0.00013	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-10	**Date Collected**	: 09/16/16 10:45
Client ID	: 4479-091616-1045	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 21:09
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: VC160917B18	**Instrument ID**	: CHARLIE
Sample Amount	: 4.8 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 87
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-43-2	Benzene	ND	0.0012	0.00014	U
79-01-6	Trichloroethene	0.0012	0.0012	0.00015	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: WG933153-5	**Date Collected**	: NA
Client ID	: WG933153-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/17/16 15:48
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MS
Lab File ID	: VC160917B06	**Instrument ID**	: CHARLIE
Sample Amount	: 5.0 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: NA
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-43-2	Benzene	ND	0.0010	0.00012	U
79-01-6	Trichloroethene	ND	0.0010	0.00012	U

Form 1
VOA

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: WG933154-5	Date Collected	: NA
Client ID	: WG933154-5BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 09/17/16 15:48
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MS
Lab File ID	: VC160917B06	Instrument ID	: CHARLIE
Sample Amount	:	GC Column	: RTX-VMS
Level	: HIGH	%Solids	: NA
Extract Volume (MeOH)	: NA	Injection Volume	: 0.1 ml

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
71-43-2	Benzene	ND	0.050	0.0059	U
79-01-6	Trichloroethene	ND	0.050	0.0062	U

Form 1
VOA

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: WG936484-5	Date Collected	: NA
Client ID	: WG936484-5BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 09/27/16 16:03
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MM
Lab File ID	: VQ160927A09	Instrument ID	: QUIMBY
Sample Amount	: 10.0 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: NA
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
71-43-2	Benzene	ND	0.50	0.16	U

Tuning Results Summary

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: CHARLIE	**Analysis Date**	: 09/17/16 13:09
Tune Standard	: WG933153-1	**Tune File ID**	: VC160917BF2_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	23.5
75	30.0 - 60.0% of mass 95	46.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7
173	Less than 2.0% of mass 174	0.7 (1)1
174	Greater than 50.0 of mass 95	74.9
175	5.0 - 9.0% of mass 174	5.5 (7.3)1
176	95.0 - 101% of mass 174	74.2 (99)1
177	5.0 - 9.0% of mass 176	4.5 (6)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG933153-2CCAL	WG933153-2	VC160917B03	09/17/16 14:28
WG933153-3LCS	WG933153-3	VC160917B03	09/17/16 14:28
WG933153-4LCSD	WG933153-4	VC160917B04	09/17/16 14:55
WG933153-5BLANK	WG933153-5	VC160917B06	09/17/16 15:48
4479-091616-0910	L1629399-03	VC160917B12	09/17/16 18:28
4479-091616-0925	L1629399-04	VC160917B13	09/17/16 18:55
4479-091616-0945	L1629399-05	VC160917B14	09/17/16 19:22
4479-091616-1000	L1629399-07	VC160917B15	09/17/16 19:49
4479-091616-1010	L1629399-08	VC160917B16	09/17/16 20:15
4479-091616-1040	L1629399-09	VC160917B17	09/17/16 20:42
4479-091616-1045	L1629399-10	VC160917B18	09/17/16 21:09

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: QUIMBY	**Analysis Date**	: 08/29/16 07:23
Tune Standard	: WG927217-1	**Tune File ID**	: VQ160829BF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	22.7
75	30.0 - 60.0% of mass 95	52.8
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0 (0)1
174	Greater than 50.0 of mass 95	66.4
175	5.0 - 9.0% of mass 174	4.6 (6.9)1
176	95.0 - 101% of mass 174	64 (96.3)1
177	5.0 - 9.0% of mass 176	4.1 (6.5)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STDL11	R895934-1	VQ160829A03	08/29/16 09:05
STDL1	R895934-2	VQ160829A04	08/29/16 09:37
STDL2	R895934-3	VQ160829A05	08/29/16 10:08
STDL3	R895934-4	VQ160829A06	08/29/16 10:40
STDL6	R895934-5	VQ160829A08	08/29/16 11:43
STDL8	R895934-7	VQ160829A09	08/29/16 12:14
STDL10	R895934-8	VQ160829A10	08/29/16 12:46
ICV Quant Report	R895934-6	VQ160829A16	08/29/16 15:54

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: QUIMBY	**Analysis Date**	: 09/27/16 11:32
Tune Standard	: WG936484-1	**Tune File ID**	: VQ160927BF2_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	26.3
75	30.0 - 60.0% of mass 95	57.2
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.1 (.2)1
174	Greater than 50.0 of mass 95	60.3
175	5.0 - 9.0% of mass 174	4.8 (7.9)1
176	95.0 - 101% of mass 174	58 (96.2)1
177	5.0 - 9.0% of mass 176	3.7 (6.4)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG936484-2CCAL	WG936484-2	VQ160927A02	09/27/16 12:24
WG936484-3LCS	WG936484-3	VQ160927A02	09/27/16 12:24
WG936484-4LCSD	WG936484-4	VQ160927A03	09/27/16 12:56
WG936484-5BLANK	WG936484-5	VQ160927A09	09/27/16 16:03
4479-091616-0855	L1629399-02	VQ160927A14	09/27/16 18:39
4479-091616-0850	L1629399-01	VQ160927A15	09/27/16 19:11

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: CHARLIE	**Analysis Date**	: 09/15/16 21:28
Tune Standard	: WG932754-1	**Tune File ID**	: VC160915BFN1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	24.1
75	30.0 - 60.0% of mass 95	47.5
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.7 (.9)1
174	Greater than 50.0 of mass 95	75.8
175	5.0 - 9.0% of mass 174	5.5 (7.3)1
176	95.0 - 101% of mass 174	73.6 (97.2)1
177	5.0 - 9.0% of mass 176	4.9 (6.6)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STDL1	R901021-1	VC160915Q03	09/15/16 22:46
STDL2	R901021-3	VC160915Q04	09/15/16 23:12
STDL3	R901021-2	VC160915Q05	09/15/16 23:39
STDL4	R901021-4	VC160915Q06	09/16/16 00:05
STDL5	R901021-6	VC160915Q07	09/16/16 00:32
STDL6	R901021-5	VC160915Q08	09/16/16 00:59
STDL7	R901021-7	VC160915Q09	09/16/16 01:26
STDL8	R901021-8	VC160915Q10	09/16/16 01:52

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: CHARLIE	**Analysis Date**	: 09/16/16 11:46
Tune Standard	: WG932754-2	**Tune File ID**	: VC160916BF3_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	24
75	30.0 - 60.0% of mass 95	47.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7
173	Less than 2.0% of mass 174	0.6 (.8)1
174	Greater than 50.0 of mass 95	77.4
175	5.0 - 9.0% of mass 174	5.8 (7.5)1
176	95.0 - 101% of mass 174	75.2 (97.2)1
177	5.0 - 9.0% of mass 176	4.9 (6.5)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
ICV Quant Report	R901021-9	VC160916B01	09/16/16 12:15

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: CHARLIE	**Analysis Date**	: 09/17/16 13:09
Tune Standard	: WG933154-1	**Tune File ID**	: VC160917BF2_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	23.5
75	30.0 - 60.0% of mass 95	46.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7
173	Less than 2.0% of mass 174	0.7 (1)1
174	Greater than 50.0 of mass 95	74.9
175	5.0 - 9.0% of mass 174	5.5 (7.3)1
176	95.0 - 101% of mass 174	74.2 (99)1
177	5.0 - 9.0% of mass 176	4.5 (6)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG933154-2CCAL	WG933154-2	VC160917B03	09/17/16 14:28
WG933154-3LCS	WG933154-3	VC160917B03	09/17/16 14:28
WG933154-4LCSD	WG933154-4	VC160917B04	09/17/16 14:55
WG933154-5BLANK	WG933154-5	VC160917B06	09/17/16 15:48
4479-091616-0850	L1629399-01D	VC160917B19	09/17/16 21:35
4479-091616-0855	L1629399-02D	VC160917B20	09/17/16 22:02
4479-091616-0955	L1629399-06	VC160917B21	09/17/16 22:29

Blank Results Summary

Method Blank Summary
Form 4

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab Sample ID	: WG933154-5	**Lab File ID**	: VC160917B06
Instrument ID	: CHARLIE		
Matrix	: SOIL	**Analysis Date**	: 09/17/16 15:48

Client Sample No.	Lab Sample ID	Analysis Date
WG933154-3LCS	WG933154-3	09/17/16 14:28
WG933154-4LCSD	WG933154-4	09/17/16 14:55
4479-091616-0850	L1629399-01D	09/17/16 21:35
4479-091616-0855	L1629399-02D	09/17/16 22:02
4479-091616-0955	L1629399-06	09/17/16 22:29

Method Blank Summary
Form 4

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab Sample ID	: WG933153-5	**Lab File ID**	: VC160917B06
Instrument ID	: CHARLIE		
Matrix	: SOIL	**Analysis Date**	: 09/17/16 15:48

Client Sample No.	Lab Sample ID	Analysis Date
WG933153-3LCS	WG933153-3	09/17/16 14:28
WG933153-4LCSD	WG933153-4	09/17/16 14:55
4479-091616-0910	L1629399-03	09/17/16 18:28
4479-091616-0925	L1629399-04	09/17/16 18:55
4479-091616-0945	L1629399-05	09/17/16 19:22
4479-091616-1000	L1629399-07	09/17/16 19:49
4479-091616-1010	L1629399-08	09/17/16 20:15
4479-091616-1040	L1629399-09	09/17/16 20:42
4479-091616-1045	L1629399-10	09/17/16 21:09

Method Blank Summary
Form 4

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab Sample ID	: WG936484-5	**Lab File ID**	: VQ160927A09
Instrument ID	: QUIMBY		
Matrix	: SOIL	**Analysis Date**	: 09/27/16 16:03

Client Sample No.	Lab Sample ID	Analysis Date
WG936484-3LCS	WG936484-3	09/27/16 12:24
WG936484-4LCSD	WG936484-4	09/27/16 12:56
4479-091616-0855	L1629399-02	09/27/16 18:39
4479-091616-0850	L1629399-01	09/27/16 19:11

Standards Data Summary

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1629399**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: QUIMBY**	**Ical Ref**	**: ICAL12824**
Calibration dates	**: 08/29/16 09:05 08/29/16 12:46**		

Calibration Files
L11 =VQ160829A03.D L1 =VQ160829A04.D L2 =VQ160829A05.D L3 =VQ160829A06.D L6 =VQ160829A08.D
L8 =VQ160829A09.D L10 =VQ160829A10.D

		Compound	L11	L1	L2	L3	L6	L8	L10	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------								
2)	TP	Dichlorodifluo		0.317	0.328	0.350	0.349	0.354	0.337	0.339	4.31
3)	TP	Chloromethane		0.578	0.530	0.541	0.516	0.527	0.519	0.535	4.25
4)	TP	Vinyl chloride	0.514	0.401	0.452	0.456	0.457	0.465	0.456	0.457	7.18
5)	TP	Bromomethane		0.197	0.219	0.229	0.261	0.274	0.283	0.244	13.93
6)	TP	Chloroethane		0.282	0.280	0.293	0.294	0.295	0.295	0.290	2.42
7)	TP	Trichlorofluor		0.477	0.482	0.504	0.495	0.520	0.510	0.498	3.30
8)	TP	Ethyl ether		0.152	0.149	0.148	0.156	0.146	0.144	0.149	2.85
10)	TP	1,1-Dichloroet		0.303	0.291	0.319	0.317	0.308	0.313	0.309	3.38
11)	TP	Carbon disulfide		1.113	0.955	0.983	0.995	1.006	1.002	1.009	5.38
12)	TP	Freon-113		0.252	0.267	0.283	0.287	0.291	0.285	0.277	5.40
13)	TP	Iodomethane		0.304	0.362	0.416	0.489	0.511	0.526	*L	0.9985
14)	TP	Acrolein		0.002	0.001	0.000	0.001	0.002	0.003	0.001#	67.15#
15)	TP	Methylene chlo		0.486	0.396	0.374	0.377	0.375	0.376	0.397	11.16
17)	TP	Acetone			0.089	0.056	0.047	0.042	0.043	*L	0.9980
18)	TP	trans-1,2-Dich		0.357	0.343	0.349	0.353	0.353	0.352	0.351	1.40
19)	TP	Methyl acetate		0.150	0.116	0.102	0.107	0.102	0.100	*L	0.9994
20)	TP	Methyl tert butyl ether		0.701	0.670	0.681	0.720	0.682	0.666	0.686	2.94
21)	TP	tert-Butyl alc		0.016	0.012	0.013	0.014	0.013	0.012	0.013#	10.90
22)	TP	Diisopropyl ether		1.152	1.188	1.187	1.236	1.179	1.158	1.183	2.53
23)	TP	1,1-Dichloroet		0.715	0.687	0.693	0.694	0.691	0.685	0.694	1.53
24)	TP	Halothane		0.212	0.222	0.230	0.237	0.238	0.239	0.230	4.64
25)	TP	Acrylonitrile			0.074	0.070	0.076	0.071	0.073	0.073	3.25
26)	TP	Ethyl tert-but		1.011	1.018	1.014	1.089	1.034	1.024	1.032	2.82
27)	TP	Vinyl acetate		0.458	0.439	0.449	0.442	0.434	0.433	0.442	2.15
28)	TP	cis-1,2-Dichlo		0.389	0.371	0.372	0.383	0.378	0.380	0.379	1.76
29)	TP	2,2-Dichloropr		0.583	0.581	0.603	0.607	0.614	0.610	0.600	2.38
30)	TP	Bromochloromet		0.134	0.141	0.139	0.146	0.142	0.143	0.141	2.85
31)	TP	Cyclohexane		0.696	0.658	0.702	0.701	0.702	0.688	0.691	2.49
32)	TP	Chloroform		0.618	0.622	0.632	0.633	0.623	0.623	0.625	0.97
33)	TP	Ethyl acetate		0.262	0.200	0.163	0.179	0.166	0.165	*L	0.9988
34)	TP	Carbon tetrach		0.450	0.443	0.482	0.504	0.511	0.511	0.484	6.30
35)	TP	Tetrahydrofuran		0.053	0.055	0.047	0.052	0.048	0.047	*LF	0.9981
36)	S	Dibromofluoromethane	0.188	0.188	0.189	0.195	0.191	0.193	0.190	0.191	1.44
37)	TP	1,1,1-Trichlor		0.575	0.556	0.582	0.603	0.602	0.603	0.587	3.34
39)	TP	2-Butanone			0.080	0.074	0.077	0.071	0.070	0.075#	5.67
40)	TP	1,1-Dichloropr		0.489	0.492	0.510	0.515	0.517	0.521	0.507	2.71
41)	TP	Benzene		1.610	1.557	1.598	1.576	1.549	1.536	1.571	1.85
42)	TP	Tertiary-Amyl Methyl Ether		0.779	0.806	0.789	0.858	0.810	0.804	0.808	3.40
43)	S	1,2-Dichloroethane-d4	0.220	0.221	0.222	0.225	0.223	0.219	0.214	0.221	1.63

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1629399**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: QUIMBY**	**Ical Ref**	**: ICAL12824**
Calibration dates	**: 08/29/16 09:05 08/29/16 12:46**		

Calibration Files
L11 =VQ160829A03.D L1 =VQ160829A04.D L2 =VQ160829A05.D L3 =VQ160829A06.D L6 =VQ160829A08.D
L8 =VQ160829A09.D L10 =VQ160829A10.D

		Compound	L11	L1	L2	L3	L6	L8	L10	Avg	%RSD
44)	TP	1,2-Dichloroet		0.410	0.437	0.429	0.450	0.436	0.435	0.433	3.06
47)	TP	Methyl cyclohe		0.596	0.589	0.640	0.664	0.657	0.658	0.634	5.22
48)	TP	Trichloroethene		0.418	0.401	0.409	0.410	0.410	0.417	0.411	1.50
50)	TP	Dibromomethane		0.164	0.158	0.162	0.170	0.165	0.166	0.164	2.56
51)	TP	1,2-Dichloropr		0.392	0.399	0.394	0.404	0.400	0.407	0.399	1.40
53)	TP	2-Chloroethyl		0.147	0.168	0.164	0.181	0.174	0.178	0.168	7.29
54)	TP	Bromodichlorom		0.437	0.440	0.451	0.484	0.481	0.490	0.464	5.14
57)	TP	1,4-Dioxane		0.002	0.002	0.002	0.002	0.002	0.001	0.002#	7.35
58)	TP	cis-1,3-Dichlo		0.540	0.556	0.554	0.593	0.588	0.604	0.573	4.53
59)	I	Chlorobenzene-d5	----------ISTD----------								
60)	S	Toluene-d8	1.417	1.407	1.416	1.394	1.355	1.343	1.328	1.380	2.70
61)	TP	Toluene		1.542	1.497	1.488	1.463	1.443	1.430	1.477	2.76
62)	TP	4-Methyl-2-pen		0.109	0.090	0.097	0.104	0.097	0.097	0.099#	6.65
63)	TP	Tetrachloroethene		0.523	0.514	0.527	0.516	0.514	0.519	0.519	1.01
65)	TP	trans-1,3-Dich		0.593	0.572	0.571	0.603	0.600	0.613	0.592	2.91
67)	TP	Ethyl methacry		0.413	0.451	0.442	0.484	0.453	0.453	0.449	5.09
68)	TP	1,1,2-Trichlor		0.276	0.264	0.259	0.264	0.257	0.262	0.264	2.52
69)	TP	Chlorodibromom		0.318	0.324	0.333	0.372	0.370	0.383	0.350	8.03
70)	TP	1,3-Dichloropr		0.576	0.574	0.561	0.563	0.550	0.563	0.565	1.66
71)	TP	1,2-Dibromoethane		0.307	0.309	0.292	0.310	0.305	0.313	0.306	2.33
72)	TP	2-Hexanone		0.221	0.187	0.176	0.180	0.168	0.165	0.183	11.21
73)	T	Chlorobenzene		1.541	1.556	1.519	1.519	1.502	1.489	1.521	1.62
74)	TP	Ethylbenzene		2.529	2.576	2.660	2.711	2.744	2.641	2.643	3.06
75)	T	1,1,1,2-Tetrac		0.450	0.441	0.441	0.472	0.474	0.483	0.460	3.99
76)	TP	p/m Xylene		0.799	0.798	0.839	0.849	0.894	0.868	0.841	4.53
77)	TP	o Xylene		0.734	0.772	0.798	0.806	0.848	0.830	0.798	5.11
78)	TP	Styrene		1.218	1.253	1.320	1.389	1.445	1.372	1.333	6.45
79)	I	1,4-Dichlorobenzene-d4	----------ISTD----------								
80)	TP	Bromoform		0.490	0.499	0.474	0.635	0.587	0.626	0.552	13.19
82)	TP	Isopropylbenzene		6.948	6.894	6.788	7.302	7.044	7.182	7.026	2.71
83)	S	4-Bromofluorobenzene	1.374	1.394	1.359	1.290	1.405	1.327	1.390	1.363	3.03
84)	TP	Bromobenzene		1.635	1.622	1.499	1.638	1.519	1.587	1.583	3.83
85)	TP	n-Propylbenzene		7.092	7.062	7.060	7.315	7.214	7.215	7.160	1.45
86)	TP	1,4-Dichlorobu		2.457	2.379	2.065	2.262	2.002	2.041	*L	0.9978
87)	TP	1,1,2,2-Tetrac		1.229	1.175	1.056	1.165	1.007	1.029	*L	0.9969
88)	TP	4-Ethyltoluene		5.633	5.600	5.689	5.758	5.746	5.741	5.695	1.15
89)	TP	2-Chlorotoluene		5.387	5.175	4.954	5.098	5.025	5.152	5.132	2.91
90)	TP	1,3,5-Trimethy		4.327	4.454	4.332	4.182	4.181	4.073	4.258	3.22
91)	TP	1,2,3-Trichlor		1.066	0.923	0.828	0.903	0.787	0.801	*L	0.9972
92)	TP	trans-1,4-Dich		0.427	0.436	0.395	0.478	0.418	0.421	*L	0.9969

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1629399**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: QUIMBY**	**Ical Ref**	**: ICAL12824**
Calibration dates	**: 08/29/16 09:05 08/29/16 12:46**		

Calibration Files
L11 =VQ160829A03.D L1 =VQ160829A04.D L2 =VQ160829A05.D L3 =VQ160829A06.D L6 =VQ160829A08.D
L8 =VQ160829A09.D L10 =VQ160829A10.D

	Compound	L11	L1	L2	L3	L6	L8	L10	Avg	%RSD
93) TP	4-Chlorotoluene		4.512	4.470	4.278	4.488	4.432	4.520	4.450	2.03
94) TP	tert-Butylbenzene		3.939	3.933	4.021	4.276	4.262	4.358	4.132	4.56
97) TP	1,2,4-Trimethy		3.976	4.388	4.081	4.070	4.040	3.895	4.075	4.13
98) TP	sec-Butylbenzene		5.432	5.552	5.781	6.180	6.143	6.136	5.871	5.61
99) TP	p-Isopropyltol		4.122	4.333	4.557	4.742	4.725	4.597	4.513	5.35
100) TP	1,3-Dichlorobe		2.629	2.554	2.505	2.598	2.539	2.573	2.566	1.71
101) TP	1,4-Dichlorobe		2.426	2.431	2.310	2.434	2.379	2.391	2.395	2.00
102) TP	p-Diethylbenzene		2.299	2.597	2.718	2.792	2.776	2.644	2.638	6.90
103) TP	n-Butylbenzene		3.984	4.371	4.588	4.804	4.819	4.658	4.537	6.98
104) TP	1,2-Dichlorobe		2.183	2.252	2.159	2.231	2.150	2.159	2.189	1.95
105) TP	1,2,4,5-Tetram		4.075	4.587	4.042	3.206	2.863	2.742	*L	0.9924
106) TP	1,2-Dibromo-3-		0.039	0.118	0.125	0.147	0.126	0.128	*L	0.9961
107) TP	1,3,5-Trichlor		1.165	1.295	1.259	1.266	1.225	1.171	1.230	4.33
108) TP	Hexachlorobuta		0.461	0.485	0.501	0.556	0.549	0.558	0.518	8.01
109) TP	1,2,4-Trichlor		0.776	0.964	0.926	0.970	0.914	0.862	0.902	8.10
110) TP	Naphthalene		1.828	1.871	1.714	1.658	1.514	1.346	1.655	11.94
111) TP	1,2,3-Trichlor		0.673	0.808	0.764	0.788	0.725	0.669	0.738	7.97

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1629399**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: CHARLIE**	**Ical Ref**	**: ICAL12884**
Calibration dates	**: 09/15/16 22:46 09/16/16 01:52**		

Calibration Files

L1 =VC160915Q03.D L2 =VC160915Q04.D L3 =VC160915Q05.D L4 =VC160915Q06.D L5 =VC160915Q07.D

L6 =VC160915Q08.D L7 =VC160915Q09.D L8 =VC160915Q10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------									
2)	T	Dichlorodifluoromethane	0.320	0.305	0.252	0.272	0.289	0.284	0.285	0.288	0.287	7.09
3)	T	Chloromethane	0.795	0.725	0.620	0.635	0.649	0.654	0.651	0.663	0.674	8.61
4)	T	Vinyl chloride	0.511	0.492	0.426	0.450	0.471	0.476	0.494	0.508	0.479	6.13
5)	T	Bromomethane	0.270	0.260	0.216	0.222	0.222	0.225	0.221	0.228	0.233	8.66
6)	T	Chloroethane	0.395	0.306	0.253	0.244	0.250	0.237	0.209		*L	0.9944
7)	T	Trichlorofluoromethane	0.543	0.538	0.470	0.501	0.530	0.517	0.510	0.506	0.514	4.57
8)	T	Ethyl ether	0.203	0.222	0.205	0.206	0.205	0.204	0.199	0.196	0.205	3.68
10)	T	1,1-Dichloroethene	0.312	0.305	0.270	0.280	0.295	0.291	0.288	0.288	0.291	4.57
11)	T	Carbon disulfide	2.655	1.896	1.135	1.129	1.094	1.064	1.033	1.034	*L	0.9989
12)	T	Freon-113	0.276	0.281	0.251	0.267	0.282	0.276	0.275	0.275	0.273	3.66
14)	T	Acrolein	0.163	0.152	0.092	0.090	0.090	0.091	0.080	0.093	*L	0.9943
15)	T	Methylene chloride	0.614	0.505	0.438	0.441	0.439	0.441	0.431	0.435	0.468	13.60
17)	T	Acetone	0.547	0.271	0.161	0.150	0.149	0.147	0.142	0.147	*L	0.9994
18)	T	trans-1,2-Dichloroethene	0.443	0.449	0.406	0.411	0.422	0.422	0.415	0.418	0.423	3.60
19)	T	Methyl acetate	0.476	0.450	0.426	0.423	0.430	0.437	0.434	0.442	0.440	3.89
20)	T	Methyl tert-butyl ether	1.214	1.295	1.235	1.248	1.261	1.289	1.279	1.295	1.265	2.38
21)	T	tert-Butyl alcohol	0.069	0.062	0.058	0.060	0.065	0.065	0.068	0.070	0.065	6.59
22)	T	Diisopropyl ether	2.249	2.325	2.233	2.283	2.288	2.329	2.306	2.294	2.288	1.48
23)	T	1,1-Dichloroethane	0.969	0.985	0.895	0.921	0.932	0.938	0.927	0.938	0.938	2.98
24)	T	Halothane	0.270	0.279	0.247	0.262	0.273	0.272	0.272	0.273	0.268	3.61
25)	T	Acrylonitrile	0.208	0.226	0.228	0.223	0.229	0.233	0.232	0.233	0.227	3.62
26)	T	Ethyl tert-butyl ether	1.745	1.882	1.822	1.845	1.858	1.893	1.871	1.875	1.849	2.56
27)	T	Vinyl acetate	1.200	1.339	1.371	1.405	1.425	1.477	1.460	1.460	1.392	6.53
28)	T	cis-1,2-Dichloroethene	0.506	0.499	0.459	0.468	0.470	0.473	0.467	0.467	0.476	3.56
29)	T	2,2-Dichloropropane	0.621	0.623	0.573	0.601	0.626	0.630	0.634	0.648	0.620	3.70
30)	T	Bromochloromethane	0.229	0.234	0.224	0.226	0.224	0.225	0.218	0.212	0.224	2.97
31)	T	Cyclohexane	0.973	0.980	0.859	0.932	0.975	0.962	0.950	0.956	0.948	4.15
32)	T	Chloroform	0.784	0.797	0.746	0.754	0.763	0.767	0.763	0.772	0.768	2.12
33)	T	Ethyl acetate	0.668	0.691	0.634	0.641	0.646	0.668	0.666	0.672	0.661	2.89
34)	T	Carbon tetrachloride	0.456	0.496	0.482	0.522	0.555	0.572	0.578	0.591	0.532	9.39
35)	T	Tetrahydrofuran	0.224	0.221	0.202	0.199	0.204	0.208	0.203	0.207	0.209	4.36
36)	S	Dibromofluoromethane	0.292	0.298	0.298	0.298	0.305	0.300	0.303	0.305	0.300	1.47
37)	T	1,1,1-Trichloroethane	0.648	0.674	0.608	0.634	0.664	0.665	0.666	0.681	0.655	3.64
39)	T	2-Butanone	0.552	0.324	0.290	0.290	0.294	0.297	0.296	0.300	*L	0.9996
40)	T	1,1-Dichloropropene	0.541	0.545	0.493	0.519	0.542	0.540	0.538	0.546	0.533	3.40
41)	T	Benzene	2.022	1.785	1.590	1.618	1.638	1.644	1.620	1.627	1.693	8.59
42)	T	tert-Amyl methyl ether	1.164	1.259	1.221	1.241	1.256	1.282	1.279	1.296	1.250	3.36
43)	S	1,2-Dichloroethane-d4	0.334	0.334	0.328	0.334	0.339	0.337	0.343	0.351	0.338	2.06
44)	T	1,2-Dichloroethane	0.675	0.714	0.667	0.675	0.671	0.682	0.679	0.687	0.681	2.13

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1629399**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: CHARLIE**	**Ical Ref**	**: ICAL12884**
Calibration dates	**: 09/15/16 22:46 09/16/16 01:52**		

Calibration Files

L1 =VC160915Q03.D L2 =VC160915Q04.D L3 =VC160915Q05.D L4 =VC160915Q06.D L5 =VC160915Q07.D

L6 =VC160915Q08.D L7 =VC160915Q09.D L8 =VC160915Q10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
47)	T	Methyl cyclohexane	0.600	0.622	0.567	0.607	0.642	0.633	0.620	0.624	0.614	3.78
48)	T	Trichloroethene	0.461	0.460	0.426	0.427	0.440	0.437	0.429	0.429	0.438	3.26
50)	T	Dibromomethane	0.240	0.267	0.262	0.265	0.266	0.272	0.271	0.274	0.265	4.06
51)	T	1,2-Dichloropropane	0.526	0.559	0.519	0.537	0.537	0.544	0.540	0.543	0.538	2.21
53)	T	2-Chloroethyl vinyl ether	0.239	0.275	0.301	0.305	0.313	0.321	0.319	0.321	0.299	9.65
54)	T	Bromodichloromethane	0.513	0.555	0.553	0.574	0.588	0.610	0.609	0.619	0.577	6.26
57)	T	1,4-Dioxane	0.004	0.005	0.004	0.004	0.005	0.004	0.005	0.005	0.005	6.00
58)	T	cis-1,3-Dichloropropene	0.561	0.667	0.670	0.698	0.708	0.726	0.723	0.730	0.685	8.15
59)	I	Chlorobenzene-d5	----------ISTD----------									
60)	S	Toluene-d8	1.007	1.012	1.015	1.024	1.022	1.022	1.035	1.053	1.024	1.42
61)	T	Toluene	1.007	0.936	0.799	0.816	0.806	0.816	0.813	0.829	0.853	8.94
62)	T	4-Methyl-2-pentanone	0.152	0.175	0.181	0.184	0.185	0.193	0.190	0.195	0.182	7.54
63)	T	Tetrachloroethene	0.350	0.348	0.317	0.327	0.331	0.331	0.329	0.334	0.334	3.26
65)	T	trans-1,3-Dichloropropene	0.375	0.452	0.473	0.497	0.496	0.517	0.524	0.538	0.484	10.76
67)	T	Ethyl methacrylate	0.339	0.409	0.444	0.458	0.459	0.476	0.472	0.478	0.442	10.70
68)	T	1,1,2-Trichloroethane	0.224	0.254	0.244	0.245	0.241	0.246	0.241	0.243	0.242	3.42
69)	T	Chlorodibromomethane	0.289	0.321	0.337	0.350	0.354	0.369	0.376	0.385	0.348	9.12
70)	T	1,3-Dichloropropane	0.480	0.519	0.505	0.514	0.504	0.518	0.516	0.526	0.510	2.81
71)	T	1,2-Dibromoethane	0.260	0.288	0.288	0.290	0.291	0.299	0.301	0.307	0.290	4.85
72)	T	2-Hexanone	0.336	0.340	0.344	0.358	0.362	0.377	0.378	0.386	0.360	5.26
73)	T	Chlorobenzene	0.963	0.977	0.901	0.913	0.899	0.908	0.896	0.900	0.920	3.44
74)	T	Ethylbenzene	1.668	1.656	1.518	1.552	1.542	1.559	1.550	1.557	1.575	3.50
75)	T	1,1,1,2-Tetrachloroethane	0.306	0.327	0.326	0.336	0.336	0.348	0.347	0.353	0.335	4.54
76)	T	p/m Xylene	0.585	0.605	0.563	0.571	0.566	0.566	0.553	0.548	0.570	3.19
77)	T	o Xylene	0.549	0.585	0.552	0.561	0.546	0.554	0.532	0.528	0.551	3.23
78)	T	Styrene	0.846	0.974	0.955	0.961	0.942	0.952	0.925	0.908	0.933	4.37
79)	I	1,4-Dichlorobenzene-d4	----------ISTD----------									
80)	T	Bromoform	0.288	0.336	0.365	0.385	0.390	0.411	0.416	0.422	0.376	12.21
82)	T	Isopropylbenzene	2.615	2.649	2.530	2.604	2.611	2.625	2.620	2.629	2.610	1.35
83)	S	4-Bromofluorobenzene	0.989	0.994	0.999	1.011	1.006	1.009	1.021	1.027	1.007	1.28
84)	T	Bromobenzene	0.698	0.726	0.696	0.700	0.682	0.695	0.686	0.684	0.696	2.00
85)	T	n-Propylbenzene	3.254	3.337	3.143	3.205	3.208	3.208	3.179	3.151	3.211	1.93
86)	T	1,4-Dichlorobutane	1.381	1.403	1.373	1.383	1.354	1.385	1.365	1.367	1.376	1.10
87)	T	1,1,2,2-Tetrachloroethane	0.625	0.699	0.689	0.683	0.683	0.703	0.686	0.693	0.683	3.58
88)	T	4-Ethyltoluene	2.683	2.753	2.619	2.690	2.663	2.696	2.700	2.689	2.687	1.39
89)	T	2-Chlorotoluene	1.984	2.299	1.953	1.986	1.684	1.986	1.983	1.982	1.982	8.31
90)	T	1,3,5-Trimethylbenzene	2.242	2.333	2.164	2.209	2.185	2.217	2.200	2.201	2.219	2.32
91)	T	1,2,3-Trichloropropane	0.518	0.563	0.539	0.538	0.530	0.538	0.533	0.529	0.536	2.41
92)	T	trans-1,4-Dichloro-2-b...	0.230	0.284	0.289	0.292	0.295	0.306	0.308	0.315	0.290	9.08
93)	T	4-Chlorotoluene	2.009	2.101	1.950	2.013	1.986	2.035	1.994	2.036	2.015	2.19

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1629399**
Project Name	**: EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	**: 70613-814**
Instrument ID	**: CHARLIE**	**Ical Ref**	**: ICAL12884**
Calibration dates	**: 09/15/16 22:46 09/16/16 01:52**		

Calibration Files

L1 =VC160915Q03.D L2 =VC160915Q04.D L3 =VC160915Q05.D L4 =VC160915Q06.D L5 =VC160915Q07.D

L6 =VC160915Q08.D L7 =VC160915Q09.D L8 =VC160915Q10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
94)	T	tert-Butylbenzene	1.866	1.951	1.833	1.885	1.873	1.900	1.899	1.905	1.889	1.83
97)	T	1,2,4-Trimethylbenzene	2.197	2.324	2.208	2.241	2.223	2.269	2.271	2.260	2.249	1.83
98)	T	sec-Butylbenzene	2.796	2.882	2.684	2.763	2.771	2.788	2.800	2.787	2.784	1.96
99)	T	p-Isopropyltoluene	2.356	2.480	2.338	2.398	2.396	2.434	2.423	2.403	2.404	1.85
100)	T	1,3-Dichlorobenzene	1.346	1.364	1.291	1.305	1.276	1.304	1.295	1.271	1.307	2.51
101)	T	1,4-Dichlorobenzene	1.408	1.406	1.284	1.303	1.271	1.300	1.288	1.265	1.316	4.40
102)	T	p-Diethylbenzene	1.401	1.469	1.433	1.481	1.481	1.500	1.493	1.457	1.464	2.26
103)	T	n-Butylbenzene	2.337	2.330	2.184	2.250	2.243	2.272	2.258	2.206	2.260	2.37
104)	T	1,2-Dichlorobenzene	1.275	1.267	1.214	1.227	1.207	1.238	1.211	1.191	1.229	2.40
105)	T	1,2,4,5-Tetramethylben...	2.102	2.307	2.360	2.427	2.409	2.444	2.386	2.352	2.348	4.63
106)	T	1,2-Dibromo-3-chloropr...	0.086	0.106	0.107	0.109	0.116	0.119	0.122	0.124	0.111	11.08
107)	T	1,3,5-Trichlorobenzene	1.001	1.017	0.971	0.983	0.963	0.971	0.944	0.920	0.971	3.16
108)	T	Hexachlorobutadiene	0.424	0.391	0.380	0.391	0.391	0.398	0.387	0.390	0.394	3.36
109)	T	1,2,4-Trichlorobenzene	0.859	0.861	0.853	0.869	0.849	0.875	0.854	0.829	0.856	1.61
110)	T	Naphthalene	1.871	1.995	2.036	2.049	2.051	2.123	2.070	2.083	2.035	3.73
111)	T	1,2,3-Trichlorobenzene	0.766	0.804	0.785	0.787	0.778	0.799	0.777	0.770	0.783	1.72

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814	
Instrument ID	: CHARLIE	**Calibration Date**	: 09/17/16 14:28	
Lab File ID	: VC160917B03	**Init. Calib. Date(s)**	: 09/15/16	09/16/16
Sample No	: WG933153-2	**Init. Calib. Times**	: 22:46	01:52
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	137	0
Dibromofluoromethane	0.3	0.252	-	16	20	116	0
Benzene	1.693	1.417	-	16.3	20	122	0
1,2-Dichloroethane-d4	0.338	0.302	-	10.7	20	126	0
Trichloroethene	0.438	0.395	-	9.8	20	127	0
Chlorobenzene-d5	1	1	-	0	20	84	0
Toluene-d8	1.024	1.256	-	-22.7*	20	104	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	77	0
4-Bromofluorobenzene	1.007	0.989	-	1.8	20	76	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814	
Instrument ID	: CHARLIE	**Calibration Date**	: 09/17/16 14:28	
Lab File ID	: VC160917B03	**Init. Calib. Date(s)**	: 09/15/16	09/16/16
Sample No	: WG933154-2	**Init. Calib. Times**	: 22:46	01:52
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	137	0
Dibromofluoromethane	0.3	0.252	-	16	20	116	0
Benzene	1.693	1.417	-	16.3	20	122	0
1,2-Dichloroethane-d4	0.338	0.302	-	10.7	20	126	0
Trichloroethene	0.438	0.395	-	9.8	20	127	0
Chlorobenzene-d5	1	1	-	0	20	84	0
Toluene-d8	1.024	1.256	-	-22.7*	20	104	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	77	0
4-Bromofluorobenzene	1.007	0.989	-	1.8	20	76	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629399	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814	
Instrument ID	: QUIMBY	Calibration Date	: 09/27/16 12:24	
Lab File ID	: VQ160927A02	Init. Calib. Date(s)	: 08/29/16	08/29/16
Sample No	: WG936484-2	Init. Calib. Times	: 09:05	12:46
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	70	-.01
Dibromofluoromethane	0.191	0.196	-	-2.6	20	70	0
Benzene	1.571	1.377	-	12.3	20	60	0
1,2-Dichloroethane-d4	0.221	0.246	-	-11.3	20	76	0
Chlorobenzene-d5	1	1	-	0	20	67	0
Toluene-d8	1.38	1.377	-	0.2	20	66	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	73	0
4-Bromofluorobenzene	1.363	1.124	-	17.5	20	64	0

* Value outside of QC limits.

Surrogate Summary

Form 2
Surrogate Recovery
VOLATILES

Client: Haley & Aldrich, Inc.
Project Name: EWING TOWNSHIP INDUSTRIAL LAND

Lab Number: L1629399
Project Number: 70613-814
Matrix:

CLIENT ID (LAB SAMPLE NO.)	SMC1 TOL	SMC2 BFB	SMC3 DCA	SMC4 DBFM	TOT OUT
4479-091616-0850 (L1629399-01)	98	89	111	103	0
4479-091616-0855 (L1629399-02)	96	86	112	102	0
WG936484-4LCSD	101	85	108	102	0
WG936484-3LCS	100	83	112	103	0
WG936484-5BLANK	104	80	109	105	0

	QC LIMITS
TOL = TOLUENE-D8	(70-130)
BFB = 4-BROMOFLUOROBENZENE	(70-130)
DCA = 1,2-DICHLOROETHANE-D4	(70-130)
DBFM = DIBROMOFLUOROMETHANE)	(70-130)

* Values outside of QC limits

Form 2
Surrogate Recovery
VOLATILES

Client: Haley & Aldrich, Inc.
Project Name: EWING TOWNSHIP INDUSTRIAL LAND

Lab Number: L1629399
Project Number: 70613-814
Matrix:

CLIENT ID (LAB SAMPLE NO.)	SMC1 TOL	SMC2 BFB	SMC3 DCA	SMC4 DBFM	TOT OUT
4479-091616-0910 (L1629399-03)	121	99	94	85	0
4479-091616-0925 (L1629399-04)	120	102	93	82	0
4479-091616-0945 (L1629399-05)	120	99	94	84	0
4479-091616-1000 (L1629399-07)	133*	115	96	88	1
4479-091616-1010 (L1629399-08)	120	98	94	84	0
4479-091616-1040 (L1629399-09)	119	96	95	83	0
4479-091616-1045 (L1629399-10)	121	97	93	85	0
WG933153-4LCSD	122	100	90	85	0
WG933153-3LCS	123	98	90	84	0
WG933153-5BLANK	122	96	90	78	0
4479-091616-0850 (L1629399-01D)	122	110	90	79	0
4479-091616-0855 (L1629399-02D)	122	107	89	79	0
4479-091616-0955 (L1629399-06)	122	114	88	76	0
WG933154-4LCSD	122	100	90	85	0
WG933154-3LCS	123	98	90	84	0
WG933154-5BLANK	122	96	90	78	0

	QC LIMITS
TOL = TOLUENE-D8	(70-130)
BFB = 4-BROMOFLUOROBENZENE	(70-130)
DCA = 1,2-DICHLOROETHANE-D4	(70-130)
DBFM = DIBROMOFLUOROMETHANE)	(70-130)

* Values outside of QC limits

FORM II

Batch QC Summary

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1629399	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG933153-3	**Analysis Date :** 09/17/16 14:28	**File ID**	: VC160917B03	
LCSD Sample ID	: WG933153-4	**Analysis Date :** 09/17/16 14:55	**File ID**	: VC160917B04	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
Benzene	0.02	0.017	84	0.02	0.017	84	0	70-130	30
Trichloroethene	0.02	0.018	90	0.02	0.018	91	1	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1629399	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG933154-3	**Analysis Date :** 09/17/16 14:28	**File ID**	: VC160917B03	
LCSD Sample ID	: WG933154-4	**Analysis Date :** 09/17/16 14:55	**File ID**	: VC160917B04	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
Benzene	1	0.84	84	1	0.84	84	0	70-130	30
Trichloroethene	1	0.90	90	1	0.91	91	1	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1629399	
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG936484-3	**Analysis Date :** 09/27/16 12:24	**File ID**	: VQ160927A02	
LCSD Sample ID	: WG936484-4	**Analysis Date :** 09/27/16 12:56	**File ID**	: VQ160927A03	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	**True (ug/l)**	**Found (ug/l)**	**%R**	**True (ug/l)**	**Found (ug/l)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Benzene	10	8.8	88	10	9.0	90	2	70-130	20

Internal Standard Summary

Internal Standard Area and RT Summary
Form 8

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: CHARLIE	**Analysis Date**	: 09/17/16 14:28
Sample No	: WG933153-2	**Lab File ID**	: VC160917B03

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG933153-2	498298	6.34	390046	9.90	198080	12.52
Upper Limit	996596	6.84	780092	10.40	396160	13.02
Lower Limit	249149	5.84	195023	9.40	99040	12.02
Sample ID						
WG933153-3 LCS	498298	6.34	390046	9.90	198080	12.52
WG933153-4 LCSD	478653	6.35	374714	9.91	189382	12.52
WG933153-5 BLANK	477807	6.34	376124	9.91	198936	12.53
4479-091616-0910	461692	6.34	362607	9.91	182926	12.52
4479-091616-0925	482700	6.34	385087	9.91	193634	12.52
4479-091616-0945	469824	6.34	375057	9.91	190009	12.52
4479-091616-1000	396808	6.35	261725	9.91	99341	12.52
4479-091616-1010	453495	6.34	359696	9.91	184217	12.52
4479-091616-1040	471982	6.34	375207	9.90	191816	12.52
4479-091616-1045	453532	6.35	358398	9.91	183568	12.52

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: CHARLIE	**Analysis Date**	: 09/17/16 14:28
Sample No	: WG933154-2	**Lab File ID**	: VC160917B03

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG933154-2	498298	6.34	390046	9.90	198080	12.52
Upper Limit	996596	6.84	780092	10.40	396160	13.02
Lower Limit	249149	5.84	195023	9.40	99040	12.02
Sample ID						
WG933154-3 LCS	498298	6.34	390046	9.90	198080	12.52
WG933154-4 LCSD	478653	6.35	374714	9.91	189382	12.52
WG933154-5 BLANK	477807	6.34	376124	9.91	198936	12.53
4479-091616-0850	481919	6.34	385032	9.91	194547	12.52
4479-091616-0855	495207	6.34	392187	9.91	193217	12.52
4479-091616-0955	488994	6.34	383894	9.91	185478	12.52

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: QUIMBY	**Analysis Date**	: 09/27/16 12:24
Sample No	: WG936484-2	**Lab File ID**	: VQ160927A02

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG936484-2	192732	9.62	145043	14.71	54523	19.00
Upper Limit	385464	10.12	290086	15.21	109046	19.50
Lower Limit	96366	9.12	72522	14.21	27262	18.50
Sample ID						
WG936484-3 LCS	192732	9.62	145043	14.71	54523	19.00
WG936484-4 LCSD	196705	9.63	148691	14.71	53435	19.01
WG936484-5 BLANK	175661	9.63	127369	14.71	45685	19.01
4479-091616-0855	170383	9.63	141006	14.71	58814	19.01
4479-091616-0850	193063	9.63	153398	14.72	57496	19.01

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Chromatograms

Sample Raw Data

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Charlie\2016\160917A\
Data File : VC160917B12.D
Acq On : 17 Sep 2016 18:28
Operator : CHARLIE:MS
Sample : l1629399-03,31,5.1,5,,y
Misc : WG933153,ICAL12884
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 18 13:36:59 2016
Quant Method : I:\VOLATILES\Charlie\2016\160917A\C_160916_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Sep 16 09:29:10 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Charlie\2016\160917A\VC160917B03.D
Sub List : 8260-TCE+Benz - TCE and Benzene

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.343	96	461692	20.000 ug/L	0.00
Standard Area 1 = 498298			Recovery = 92.65%		
59) Chlorobenzene-d5	9.908	117	362607	20.000 ug/L	0.00
Standard Area 1 = 390046			Recovery = 92.97%		
79) 1,4-Dichlorobenzene-d4	12.524	152	182926	20.000 ug/L	0.00
Standard Area 1 = 198080			Recovery = 92.35%		
System Monitoring Compounds					
36) Dibromofluoromethane	5.525	113	117306	16.952 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 84.76%		
43) 1,2-Dichloroethane-d4	6.059	65	146792	18.835 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 94.18%		
60) Toluene-d8	8.052	98	449807	24.238 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 121.19%		
83) 4-Bromofluorobenzene	11.344	95	182751	19.840 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 99.20%		
Target Compounds					Qvalue
41) Benzene	5.923	78	236	N.D.	
48) Trichloroethene	0.000		0	N.D.	

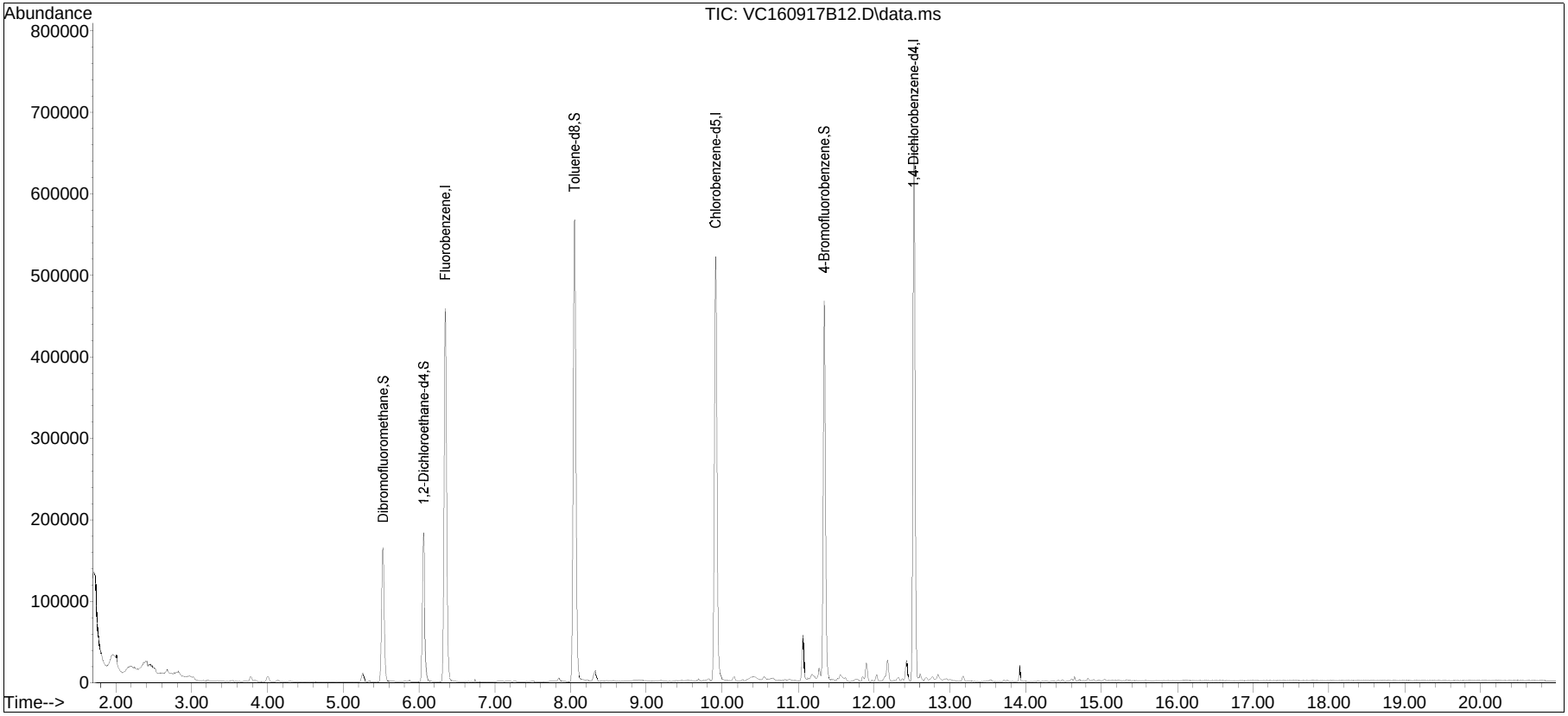
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Charlie\2016\160917A\
Data File : VC160917B12.D
Acq On : 17 Sep 2016 18:28
Operator : CHARLIE:MS
Sample : l1629399-03,31,5.1,5,,y
Misc : WG933153,ICAL12884
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 18 13:36:59 2016
Quant Method : I:\VOLATILES\Charlie\2016\160917A\C_160916_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Sep 16 09:29:10 2016
Response via : Initial Calibration

Sub List : 8260-TCE+Benz - TCE and Benzene60917A\VC160917B03.D•



Manual Integration Report

Data Path	: I:\VOLATILES\Charlie\2016\	QMethod	: C_160916_8260.m
Data File	: VC160917B12.D	Operator	: CHARLIE:MS
Date Inj'd	: 9/17/2016 18:28	Instrument	: Charlie
Sample	: l1629399-03,31,5.1,5,,y	Quant Date	: 9/18/2016 1:36 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Charlie\2016\160917A\
Data File : VC160917B13.D
Acq On : 17 Sep 2016 18:55
Operator : CHARLIE:MS
Sample : l1629399-04,31,5.7,5,,y
Misc : WG933153,ICAL12884
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 18 13:37:03 2016
Quant Method : I:\VOLATILES\Charlie\2016\160917A\C_160916_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Sep 16 09:29:10 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Charlie\2016\160917A\VC160917B03.D
Sub List : 8260-TCE+Benz - TCE and Benzene

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.343	96	482700	20.000	ug/L	0.00
Standard Area 1 = 498298			Recovery = 96.87%			
59) Chlorobenzene-d5	9.908	117	385087	20.000	ug/L	0.00
Standard Area 1 = 390046			Recovery = 98.73%			
79) 1,4-Dichlorobenzene-d4	12.524	152	193634	20.000	ug/L	0.00
Standard Area 1 = 198080			Recovery = 97.76%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.519	113	118246	16.344	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 81.72%			
43) 1,2-Dichloroethane-d4	6.060	65	151158	18.551	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 92.75%			
60) Toluene-d8	8.052	98	472071	23.952	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 119.76%			
83) 4-Bromofluorobenzene	11.345	95	198462	20.354	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 101.77%			
Target Compounds						Qvalue
41) Benzene	5.913	78	6765	0.166	ug/L	# 82

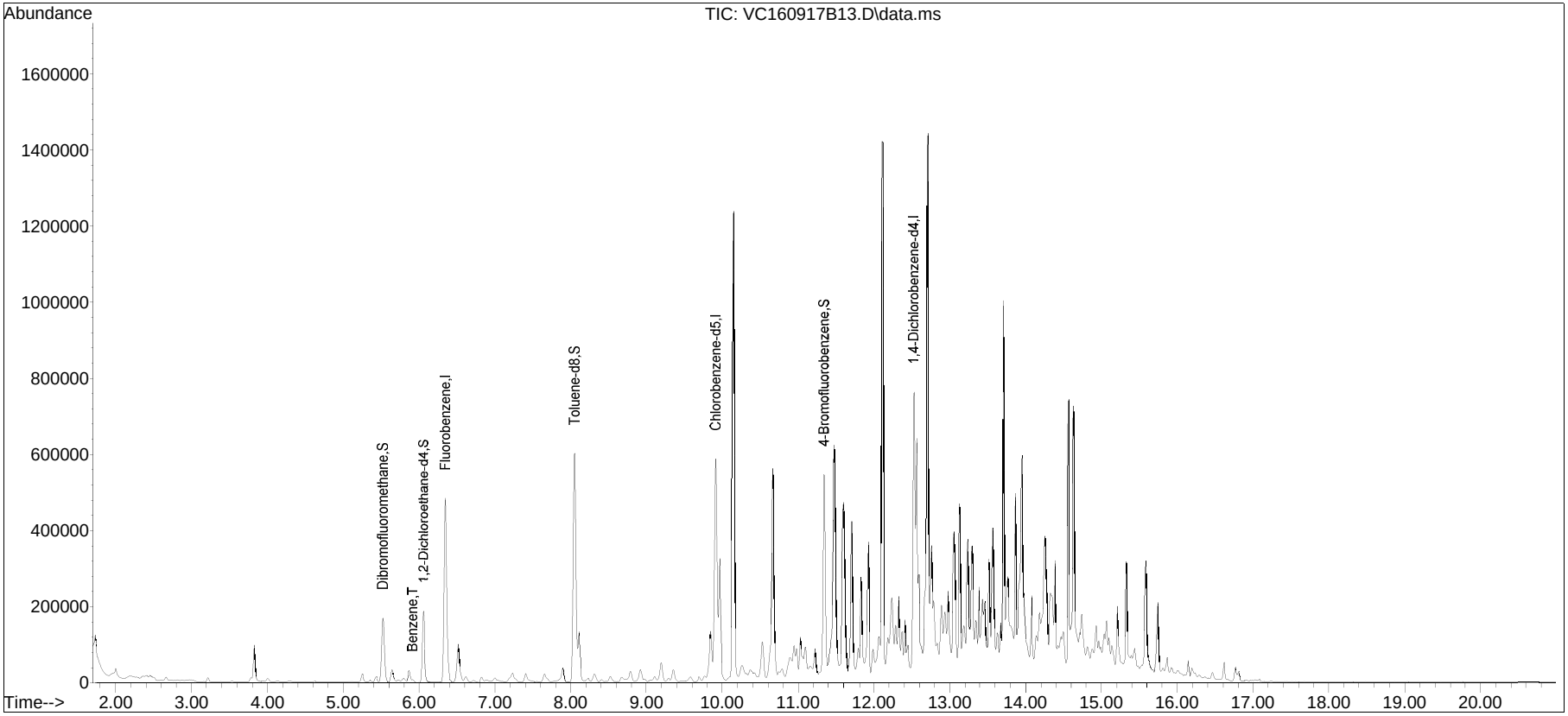
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

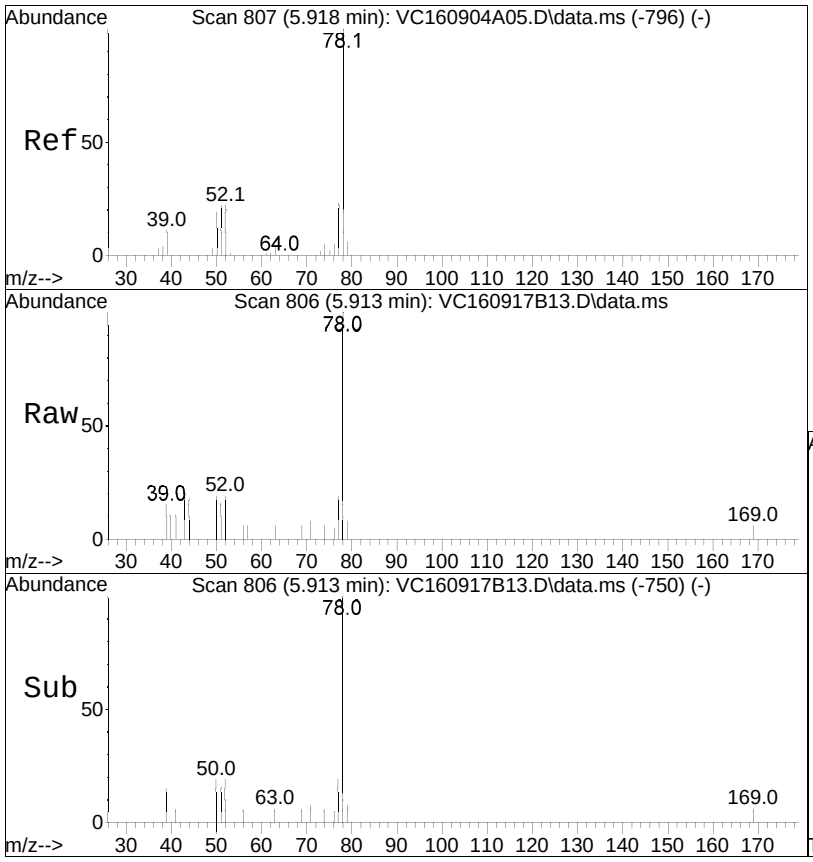
Data Path : I:\VOLATILES\Charlie\2016\160917A\
Data File : VC160917B13.D
Acq On : 17 Sep 2016 18:55
Operator : CHARLIE:MS
Sample : l1629399-04,31,5.7,5,,y
Misc : WG933153,ICAL12884
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 18 13:37:03 2016
Quant Method : I:\VOLATILES\Charlie\2016\160917A\C_160916_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Sep 16 09:29:10 2016
Response via : Initial Calibration

Sub List : 8260-TCE+Benz - TCE and Benzene60917A\VC160917B03.D•



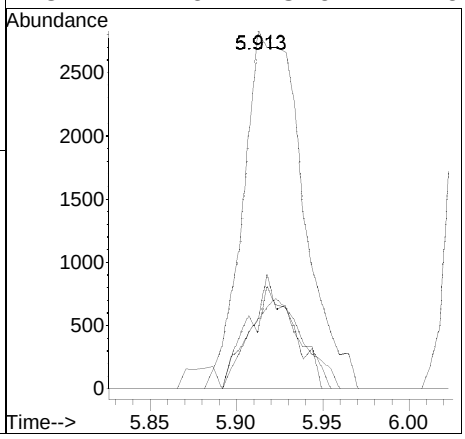
C_160916_8260.m Sun Sep 18 15:41:34 2016 SVOA-INSTRUMENT Page 2 : 2



#41
Benzene
Concen: 0.17 ug/L
RT: 5.913 min Scan# 806
Delta R.T. -0.005 min
Lab File: VC160917B13.D
Acq: 17 Sep 2016 18:55

Tgt Ion: 78 Resp: 6765

Ion	Ratio	Lower	Upper
78	100		
77	23.3	14.5	30.1
51	0.0	13.9	28.9#
52	22.6	13.0	27.0



Manual Integration Report

Data Path	: I:\VOLATILES\Charlie\2016\	QMethod	: C_160916_8260.m
Data File	: VC160917B13.D	Operator	: CHARLIE:MS
Date Inj'd	: 9/17/2016 18:55	Instrument	: Charlie
Sample	: l1629399-04,31,5.7,5,,y	Quant Date	: 9/18/2016 1:37 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Charlie\2016\160917A\
Data File : VC160917B14.D
Acq On : 17 Sep 2016 19:22
Operator : CHARLIE:MS
Sample : l1629399-05,31,6.3,5,,y
Misc : WG933153,ICAL12884
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 18 13:37:09 2016
Quant Method : I:\VOLATILES\Charlie\2016\160917A\C_160916_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Sep 16 09:29:10 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Charlie\2016\160917A\VC160917B03.D
Sub List : 8260-TCE+Benz - TCE and Benzene

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.343	96	469824	20.000	ug/L	0.00
Standard Area 1 = 498298			Recovery =	94.29%		
59) Chlorobenzene-d5	9.908	117	375057	20.000	ug/L	0.00
Standard Area 1 = 390046			Recovery =	96.16%		
79) 1,4-Dichlorobenzene-d4	12.524	152	190009	20.000	ug/L	0.00
Standard Area 1 = 198080			Recovery =	95.93%		
System Monitoring Compounds						
36) Dibromofluoromethane	5.525	113	118269	16.795	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery =	83.98%		
43) 1,2-Dichloroethane-d4	6.059	65	149295	18.825	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery =	94.12%		
60) Toluene-d8	8.047	98	460908	24.011	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery =	120.06%		
83) 4-Bromofluorobenzene	11.344	95	189133	19.767	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery =	98.83%		
Target Compounds						Qvalue
41) Benzene	5.923	78	6891	0.173	ug/L #	76
48) Trichloroethene	6.526	95	28238	2.742	ug/L #	83

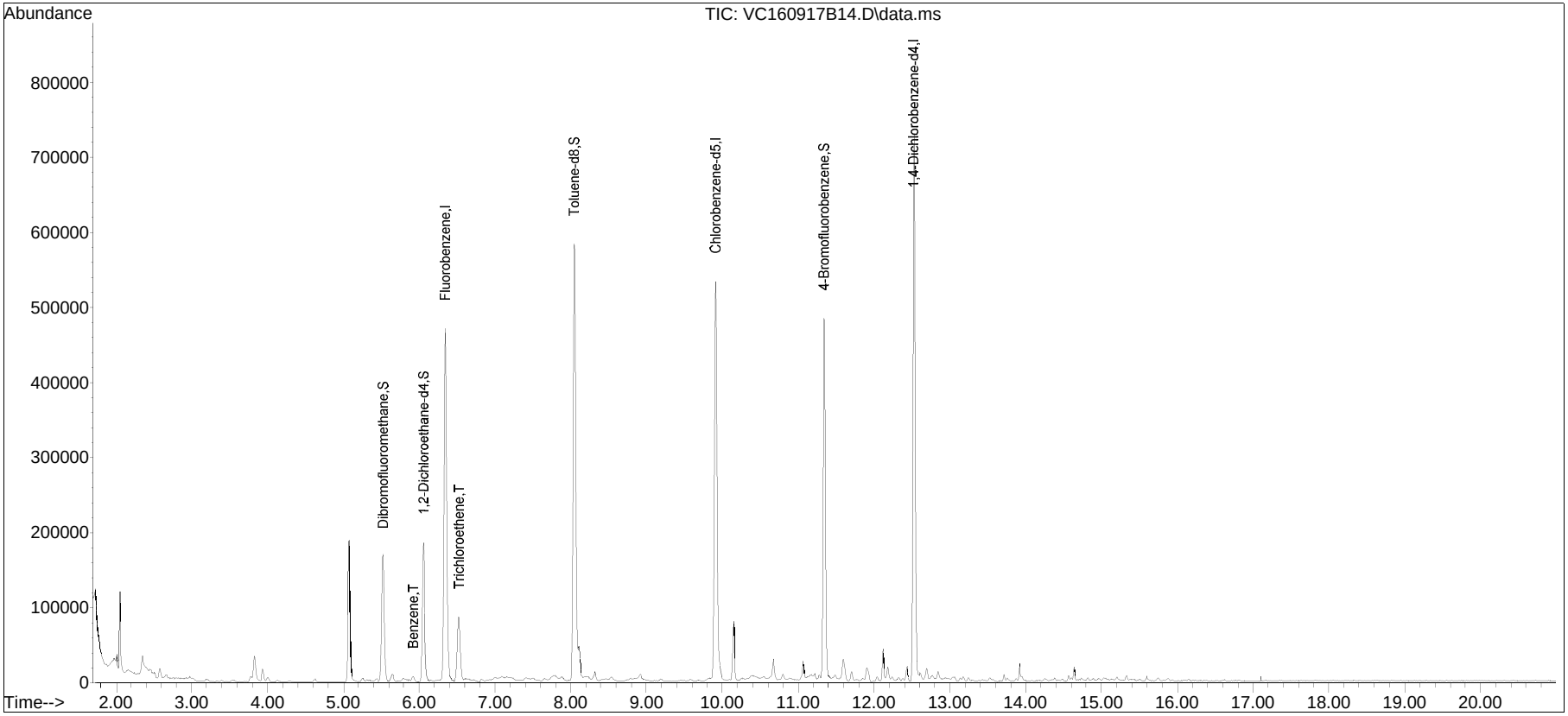
(#) = qualifier out of range (m) = manual integration (+) = signals summed

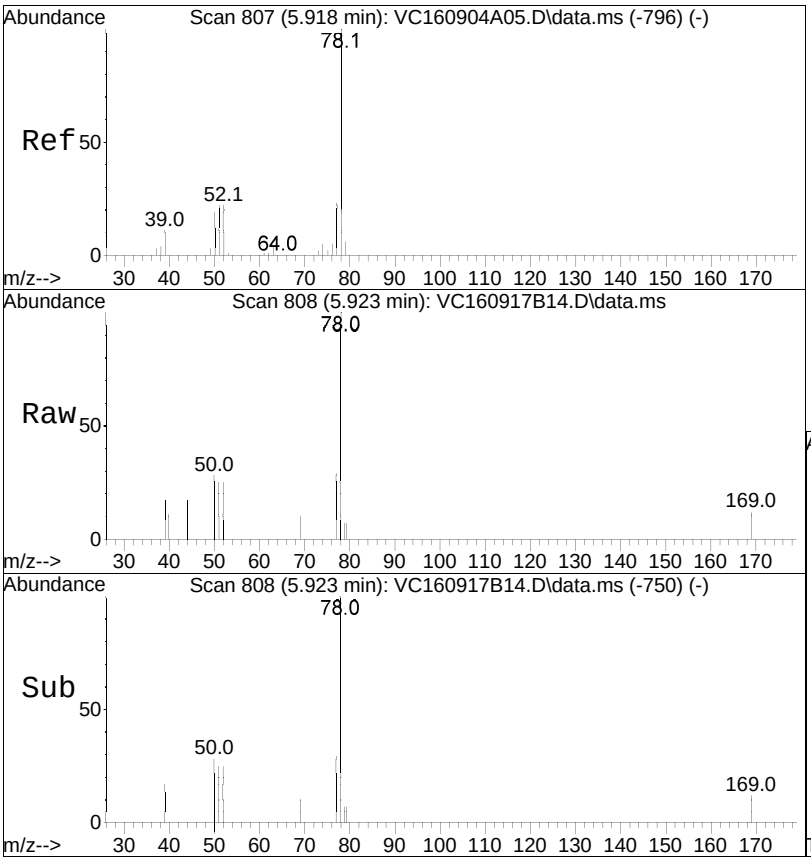
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Charlie\2016\160917A\
Data File : VC160917B14.D
Acq On : 17 Sep 2016 19:22
Operator : CHARLIE:MS
Sample : l1629399-05,31,6.3,5,,y
Misc : WG933153,ICAL12884
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 18 13:37:09 2016
Quant Method : I:\VOLATILES\Charlie\2016\160917A\C_160916_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Sep 16 09:29:10 2016
Response via : Initial Calibration

Sub List : 8260-TCE+Benz - TCE and Benzene60917A\VC160917B03.D•

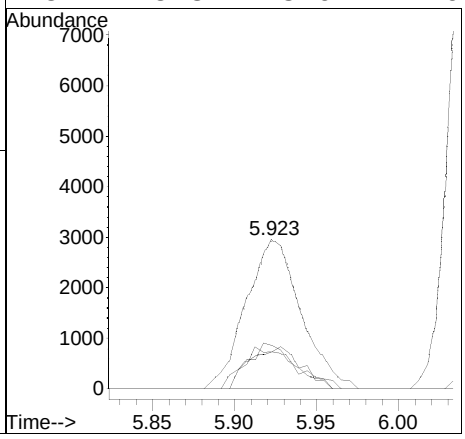


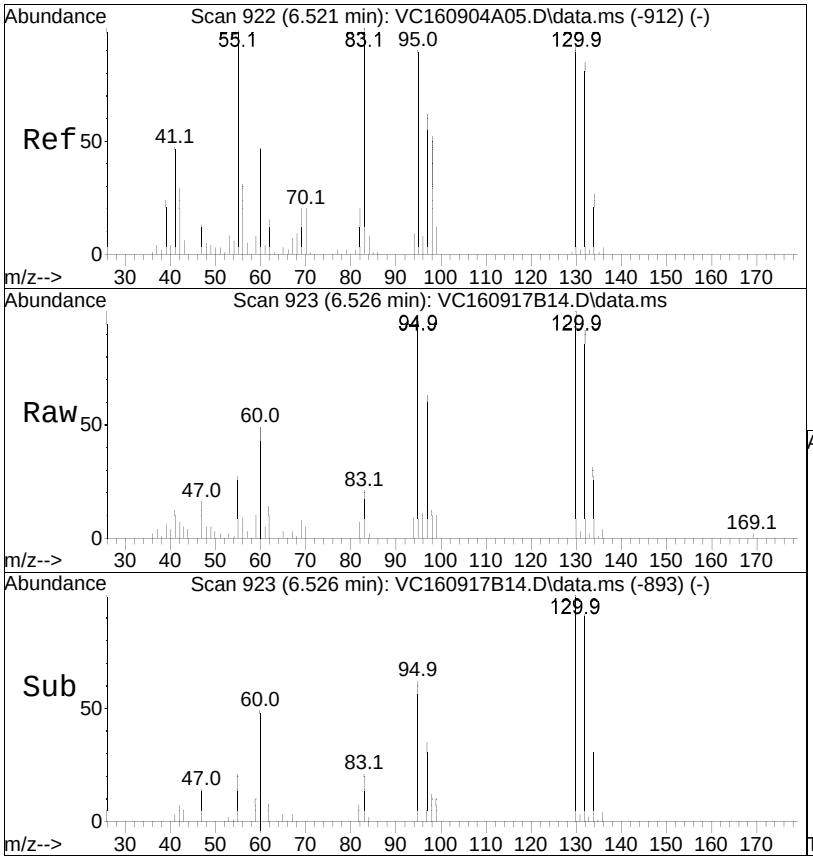


#41
Benzene
Concen: 0.17 ug/L
RT: 5.923 min Scan# 808
Delta R.T. 0.005 min
Lab File: VC160917B14.D
Acq: 17 Sep 2016 19:22

Tgt Ion: 78 Resp: 6891

Ion	Ratio	Lower	Upper
78	100		
77	28.3	14.5	30.1
51	0.0	13.9	28.9#
52	25.8	13.0	27.0

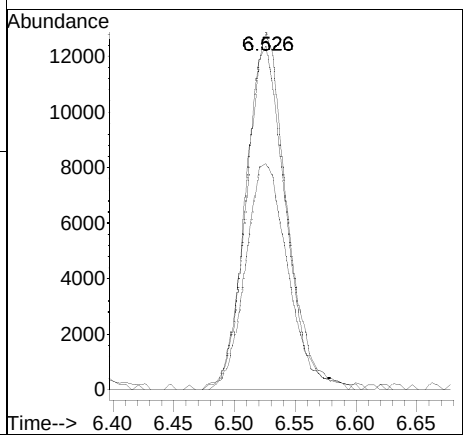




#48
Trichloroethene
Concen: 2.74 ug/L
RT: 6.526 min Scan# 923
Delta R.T. 0.005 min
Lab File: VC160917B14.D
Acq: 17 Sep 2016 19:22

Tgt Ion: 95 Resp: 28238

Ion	Ratio	Lower	Upper
95	100		
97	70.3	52.3	78.5
130	104.0	64.4	96.6#



Manual Integration Report

Data Path	: I:\VOLATILES\Charlie\2016\	QMethod	: C_160916_8260.m
Data File	: VC160917B14.D	Operator	: CHARLIE:MS
Date Inj'd	: 9/17/2016 19:22	Instrument	: Charlie
Sample	: l1629399-05,31,6.3,5,,y	Quant Date	: 9/18/2016 1:37 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Charlie\2016\160917A\
Data File : VC160917B15.D
Acq On : 17 Sep 2016 19:49
Operator : CHARLIE:MS
Sample : l1629399-07,31,3.5,5,,y
Misc : WG933153,ICAL12884
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 18 13:37:14 2016
Quant Method : I:\VOLATILES\Charlie\2016\160917A\C_160916_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Sep 16 09:29:10 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Charlie\2016\160917A\VC160917B03.D
Sub List : 8260-TCE+Benz - TCE and Benzene

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.348	96	396808	20.000 ug/L	0.00
Standard Area 1 = 498298			Recovery = 79.63%		
59) Chlorobenzene-d5	9.908	117	261725	20.000 ug/L	0.00
Standard Area 1 = 390046			Recovery = 67.10%		
79) 1,4-Dichlorobenzene-d4	12.524	152	99341	20.000 ug/L	0.00
Standard Area 1 = 198080			Recovery = 50.15%		
System Monitoring Compounds					
36) Dibromofluoromethane	5.525	113	104868	17.632 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 88.16%		
43) 1,2-Dichloroethane-d4	6.060	65	128200	19.139 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 95.69%		
60) Toluene-d8	8.052	98	357230	26.669 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 133.35%#		
83) 4-Bromofluorobenzene	11.345	95	114999	22.989 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 114.95%		
Target Compounds					Qvalue
41) Benzene	5.928	78	2275	N.D.	

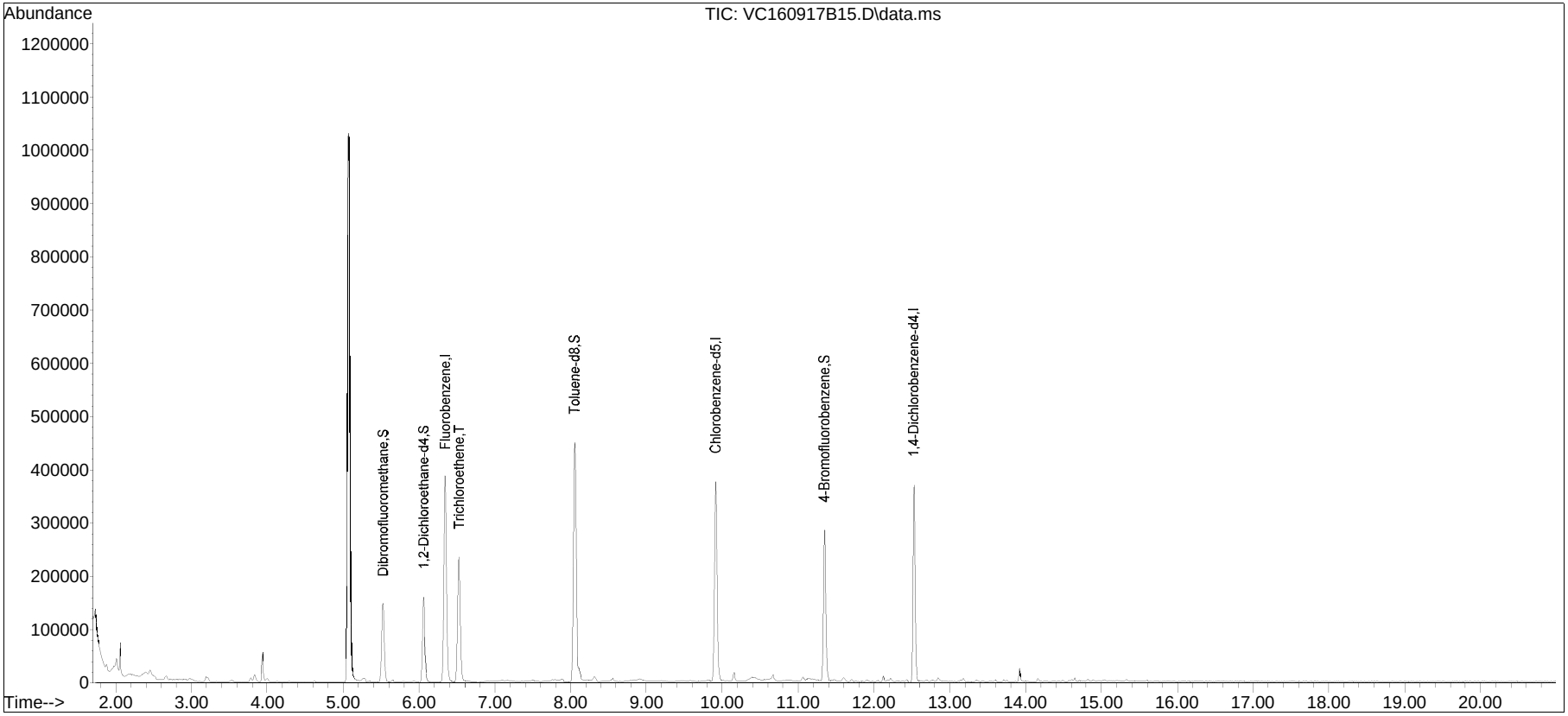
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Charlie\2016\160917A\
Data File : VC160917B15.D
Acq On : 17 Sep 2016 19:49
Operator : CHARLIE:MS
Sample : l1629399-07,31,3.5,5,,y
Misc : WG933153,ICAL12884
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 18 13:37:14 2016
Quant Method : I:\VOLATILES\Charlie\2016\160917A\C_160916_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Sep 16 09:29:10 2016
Response via : Initial Calibration

Sub List : 8260-TCE+Benz - TCE and Benzene60917A\VC160917B03.D•



Manual Integration Report

Data Path	: I:\VOLATILES\Charlie\2016\	QMethod	: C_160916_8260.m
Data File	: VC160917B15.D	Operator	: CHARLIE:MS
Date Inj'd	: 9/17/2016 19:49	Instrument	: Charlie
Sample	: l1629399-07,31,3.5,5,,y	Quant Date	: 9/18/2016 1:37 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Charlie\2016\160917A\
Data File : VC160917B16.D
Acq On : 17 Sep 2016 20:15
Operator : CHARLIE:MS
Sample : l1629399-08,31,5.2,5,,y
Misc : WG933153,ICAL12884
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 18 13:53:17 2016
Quant Method : I:\VOLATILES\Charlie\2016\160917A\C_160916_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Sep 16 09:29:10 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Charlie\2016\160917A\VC160917B03.D
Sub List : 8260-TCE+Benz - TCE and Benzene

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.343	96	453495	20.000	ug/L	0.00
Standard Area 1 = 498298			Recovery = 91.01%			
59) Chlorobenzene-d5	9.908	117	359696	20.000	ug/L	0.00
Standard Area 1 = 390046			Recovery = 92.22%			
79) 1,4-Dichlorobenzene-d4	12.524	152	184217	20.000	ug/L	0.00
Standard Area 1 = 198080			Recovery = 93.00%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.525	113	114374	16.827	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 84.14%			
43) 1,2-Dichloroethane-d4	6.059	65	143255	18.714	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 93.57%			
60) Toluene-d8	8.052	98	441054	23.958	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 119.79%			
83) 4-Bromofluorobenzene	11.350	95	181289	19.543	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 97.72%			
Target Compounds						Qvalue
41) Benzene	5.928	78	619	N.D.		

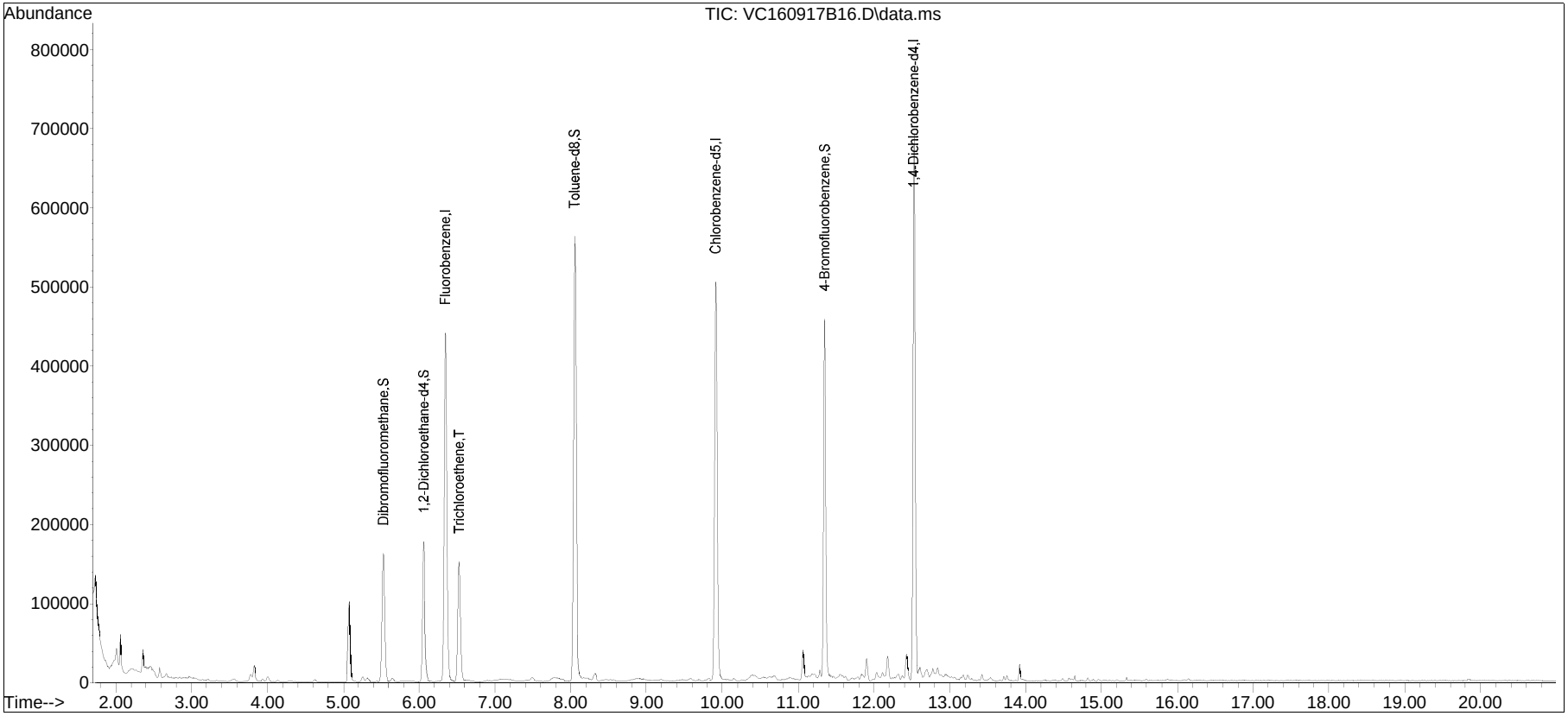
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Charlie\2016\160917A\
Data File : VC160917B16.D
Acq On : 17 Sep 2016 20:15
Operator : CHARLIE:MS
Sample : l1629399-08,31,5.2,5,,y
Misc : WG933153,ICAL12884
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 18 13:53:17 2016
Quant Method : I:\VOLATILES\Charlie\2016\160917A\C_160916_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Sep 16 09:29:10 2016
Response via : Initial Calibration

Sub List : 8260-TCE+Benz - TCE and Benzene60917A\VC160917B03.D•



Manual Integration Report

Data Path	: I:\VOLATILES\Charlie\2016\	QMethod	: C_160916_8260.m
Data File	: VC160917B16.D	Operator	: CHARLIE:MS
Date Inj'd	: 9/17/2016 20:15	Instrument	: Charlie
Sample	: l1629399-08,31,5.2,5,,y	Quant Date	: 9/18/2016 1:37 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Charlie\2016\160917A\
Data File : VC160917B17.D
Acq On : 17 Sep 2016 20:42
Operator : CHARLIE:MS
Sample : l1629399-09,31,5.9,5,,y
Misc : WG933153,ICAL12884
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 18 13:37:24 2016
Quant Method : I:\VOLATILES\Charlie\2016\160917A\C_160916_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Sep 16 09:29:10 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Charlie\2016\160917A\VC160917B03.D
Sub List : 8260-TCE+Benz - TCE and Benzene

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.337	96	471982	20.000 ug/L	0.00
Standard Area 1 = 498298			Recovery =	94.72%	
59) Chlorobenzene-d5	9.903	117	375207	20.000 ug/L	0.00
Standard Area 1 = 390046			Recovery =	96.20%	
79) 1,4-Dichlorobenzene-d4	12.519	152	191816	20.000 ug/L	0.00
Standard Area 1 = 198080			Recovery =	96.84%	
System Monitoring Compounds					
36) Dibromofluoromethane	5.520	113	117752	16.645 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery =	83.22%	
43) 1,2-Dichloroethane-d4	6.054	65	150663	18.910 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery =	94.55%	
60) Toluene-d8	8.041	98	456648	23.780 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery =	118.90%	
83) 4-Bromofluorobenzene	11.339	95	186353	19.293 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery =	96.47%	
Target Compounds					Qvalue
41) Benzene	5.913	78	503	N.D.	
48) Trichloroethene	6.521	95	17697	1.710 ug/L #	85

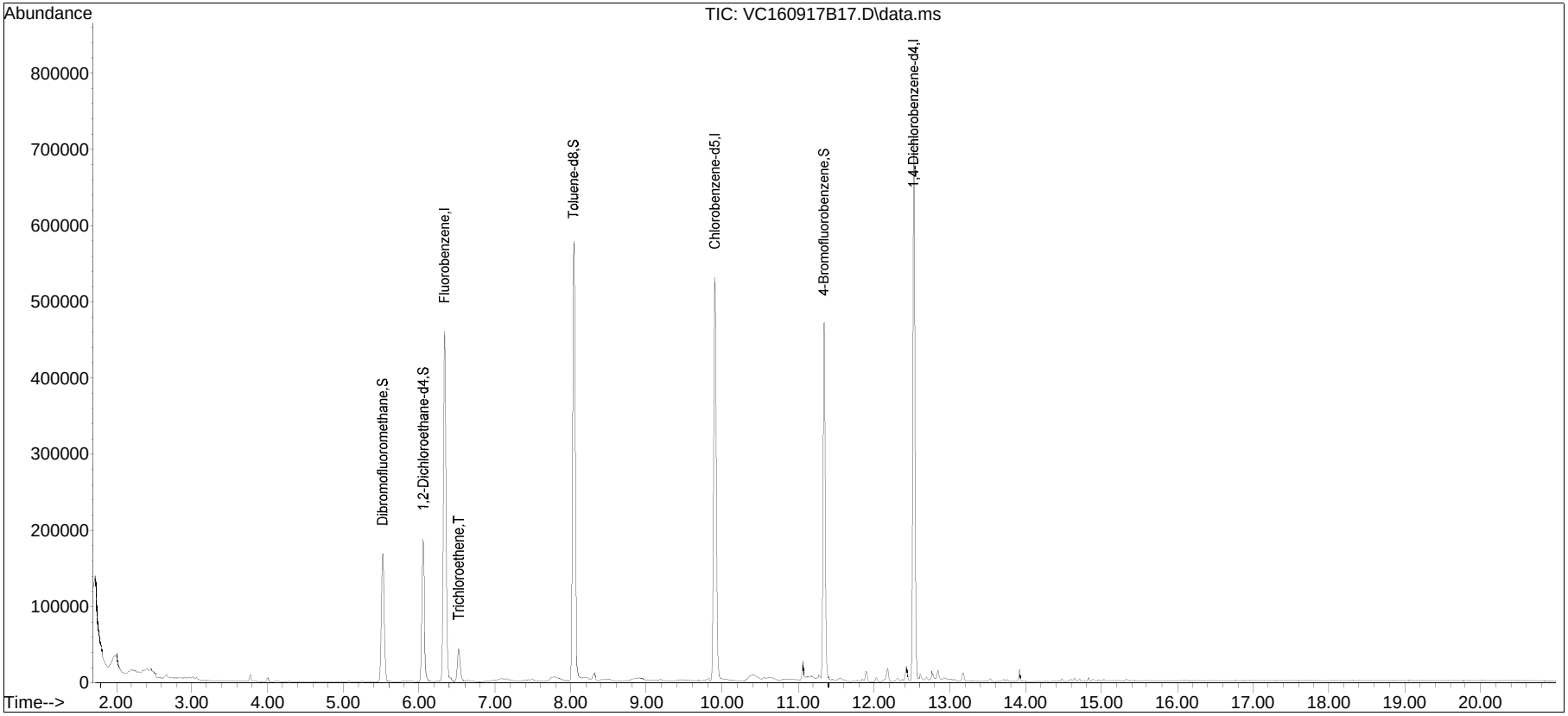
(#) = qualifier out of range (m) = manual integration (+) = signals summed

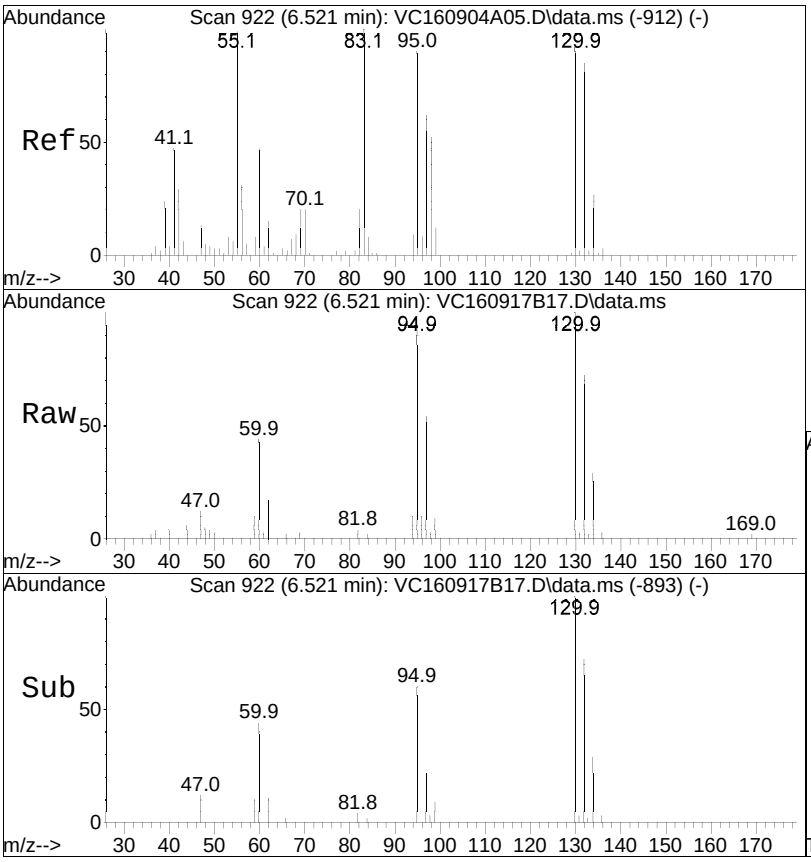
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Charlie\2016\160917A\
Data File : VC160917B17.D
Acq On : 17 Sep 2016 20:42
Operator : CHARLIE:MS
Sample : l1629399-09,31,5.9,5,,y
Misc : WG933153,ICAL12884
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 18 13:37:24 2016
Quant Method : I:\VOLATILES\Charlie\2016\160917A\C_160916_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Sep 16 09:29:10 2016
Response via : Initial Calibration

Sub List : 8260-TCE+Benz - TCE and Benzene60917A\VC160917B03.D•

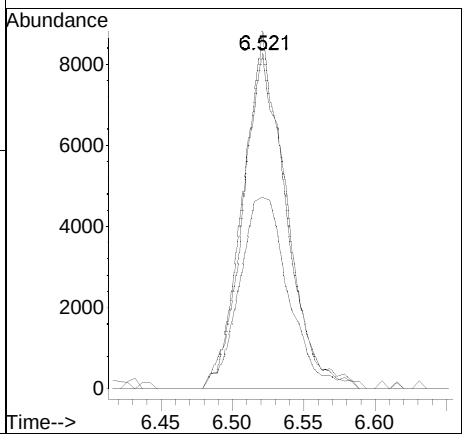




#48
Trichloroethene
Concen: 1.71 ug/L
RT: 6.521 min Scan# 922
Delta R.T. -0.000 min
Lab File: VC160917B17.D
Acq: 17 Sep 2016 20:42

Tgt Ion: 95 Resp: 17697

Ion	Ratio	Lower	Upper
95	100		
97	64.1	52.3	78.5
130	102.6	64.4	96.6#



Manual Integration Report

Data Path	: I:\VOLATILES\Charlie\2016\	QMethod	: C_160916_8260.m
Data File	: VC160917B17.D	Operator	: CHARLIE:MS
Date Inj'd	: 9/17/2016 20:42	Instrument	: Charlie
Sample	: l1629399-09,31,5.9,5,,y	Quant Date	: 9/18/2016 1:37 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Charlie\2016\160917A\
Data File : VC160917B18.D
Acq On : 17 Sep 2016 21:09
Operator : CHARLIE:MS
Sample : l1629399-10,31,4.8,5,,y
Misc : WG933153,ICAL12884
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 18 13:53:48 2016
Quant Method : I:\VOLATILES\Charlie\2016\160917A\C_160916_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Sep 16 09:29:10 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Charlie\2016\160917A\VC160917B03.D
Sub List : 8260-TCE+Benz - TCE and Benzene

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.348	96	453532	20.000 ug/L	0.00
Standard Area 1 = 498298			Recovery =	91.02%	
59) Chlorobenzene-d5	9.913	117	358398	20.000 ug/L	0.01
Standard Area 1 = 390046			Recovery =	91.89%	
79) 1,4-Dichlorobenzene-d4	12.524	152	183568	20.000 ug/L	0.00
Standard Area 1 = 198080			Recovery =	92.67%	
System Monitoring Compounds					
36) Dibromofluoromethane	5.519	113	115319	16.964 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery =	84.82%	
43) 1,2-Dichloroethane-d4	6.059	65	143108	18.693 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery =	93.47%	
60) Toluene-d8	8.052	98	444934	24.257 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery =	121.29%	
83) 4-Bromofluorobenzene	11.350	95	179686	19.439 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery =	97.19%	
Target Compounds					Qvalue
41) Benzene	5.928	78	262	N.D.	
48) Trichloroethene	6.526	95	9725	0.978 ug/L #	88

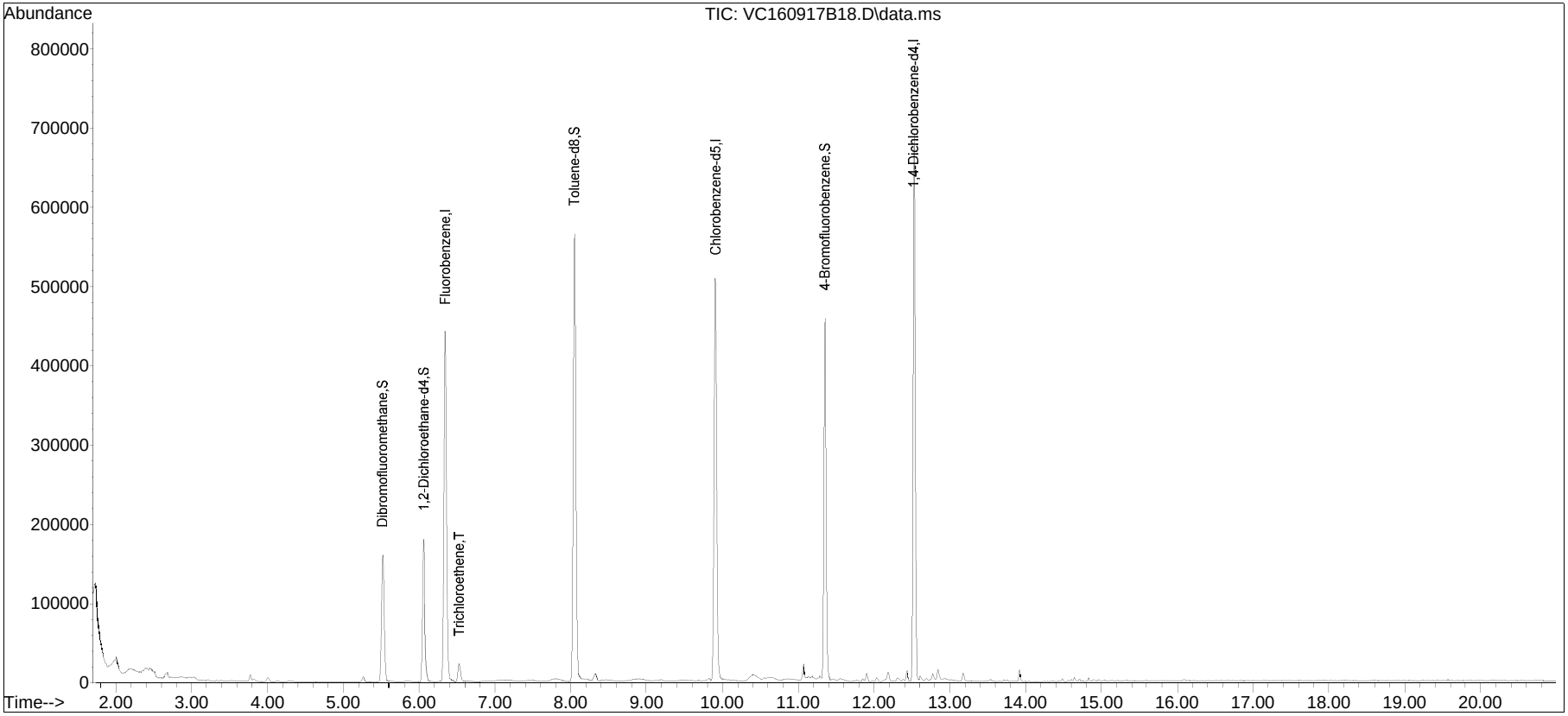
(#) = qualifier out of range (m) = manual integration (+) = signals summed

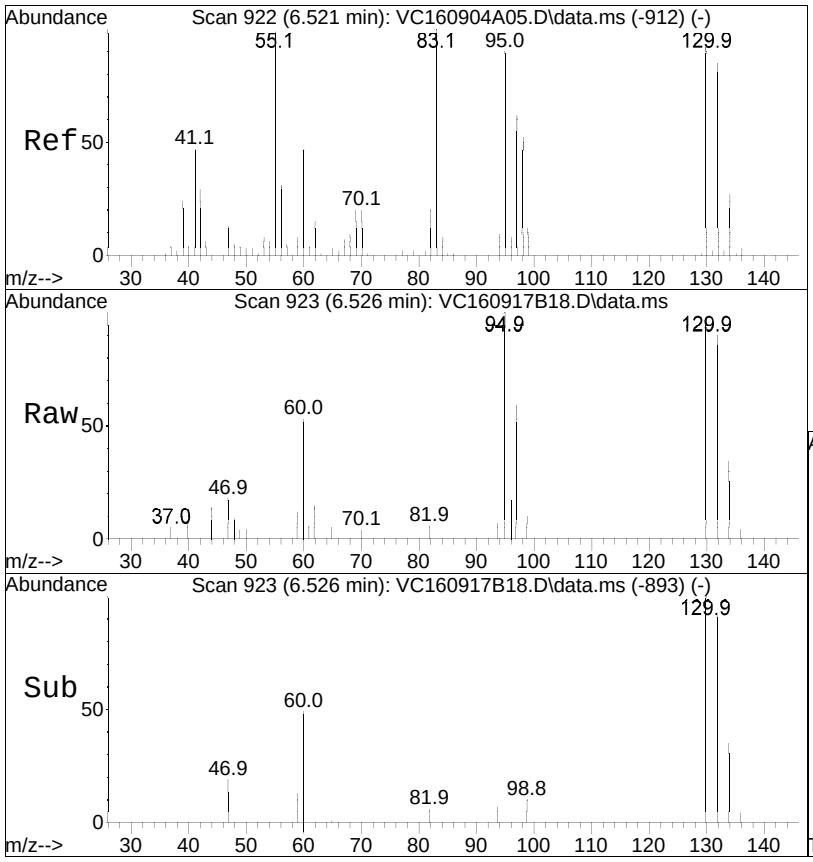
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Charlie\2016\160917A\
Data File : VC160917B18.D
Acq On : 17 Sep 2016 21:09
Operator : CHARLIE:MS
Sample : l1629399-10,31,4.8,5,,y
Misc : WG933153,ICAL12884
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 18 13:53:48 2016
Quant Method : I:\VOLATILES\Charlie\2016\160917A\C_160916_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Sep 16 09:29:10 2016
Response via : Initial Calibration

Sub List : 8260-TCE+Benz - TCE and Benzene60917A\VC160917B03.D•

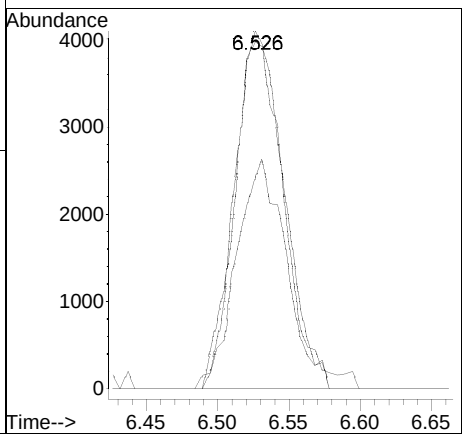




#48
Trichloroethene
Concen: 0.98 ug/L
RT: 6.526 min Scan# 923
Delta R.T. 0.005 min
Lab File: VC160917B18.D
Acq: 17 Sep 2016 21:09

Tgt Ion: 95 Resp: 9725

Ion	Ratio	Lower	Upper
95	100		
97	65.0	52.3	78.5
130	99.6	64.4	96.6#



Manual Integration Report

Data Path	: I:\VOLATILES\Charlie\2016\	QMethod	: C_160916_8260.m
Data File	: VC160917B18.D	Operator	: CHARLIE:MS
Date Inj'd	: 9/17/2016 21:09	Instrument	: Charlie
Sample	: l1629399-10,31,4.8,5,,y	Quant Date	: 9/18/2016 1:37 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Charlie\2016\160917A\
Data File : VC160917B19.D
Acq On : 17 Sep 2016 21:35
Operator : CHARLIE:MS
Sample : l1629399-01D,31H,3.4,5,0.050,,x
Misc : WG933154,ICAL12884
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 18 13:54:00 2016
Quant Method : I:\VOLATILES\Charlie\2016\160917A\C_160916_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Sep 16 09:29:10 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Charlie\2016\160917A\VC160917B03.D
Sub List : 8260-TCE+Benz - TCE and Benzene

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.343	96	481919	20.000	ug/L	0.00
Standard Area 1 = 498298			Recovery = 96.71%			
59) Chlorobenzene-d5	9.908	117	385032	20.000	ug/L	0.00
Standard Area 1 = 390046			Recovery = 98.71%			
79) 1,4-Dichlorobenzene-d4	12.524	152	194547	20.000	ug/L	0.00
Standard Area 1 = 198080			Recovery = 98.22%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.519	113	113530	15.718	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 78.59%			
43) 1,2-Dichloroethane-d4	6.054	65	145847	17.928	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 89.64%			
60) Toluene-d8	8.052	98	481340	24.426	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 122.13%			
83) 4-Bromofluorobenzene	11.344	95	215004	21.947	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 109.74%			
Target Compounds						Qvalue
41) Benzene	5.918	78	18206	0.446	ug/L	91

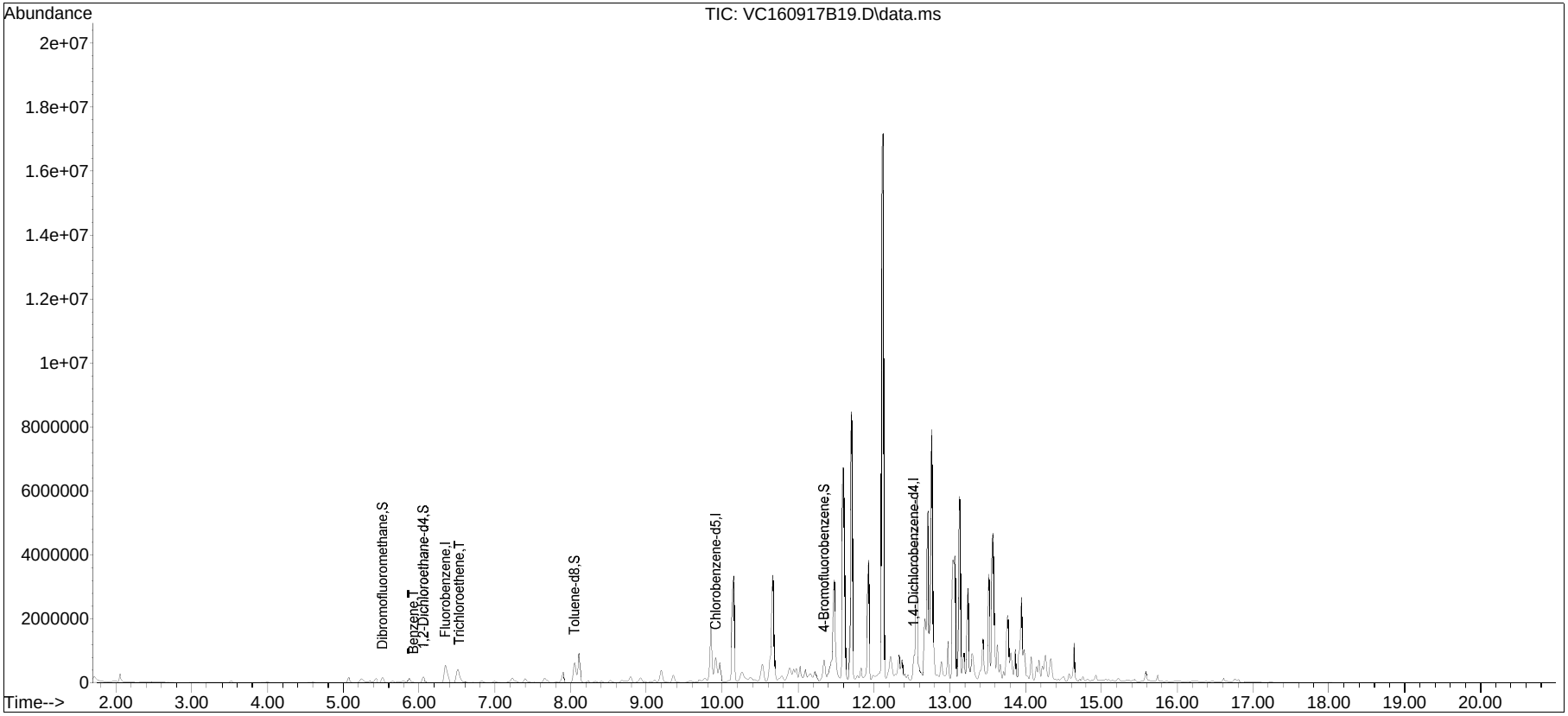
(#) = qualifier out of range (m) = manual integration (+) = signals summed

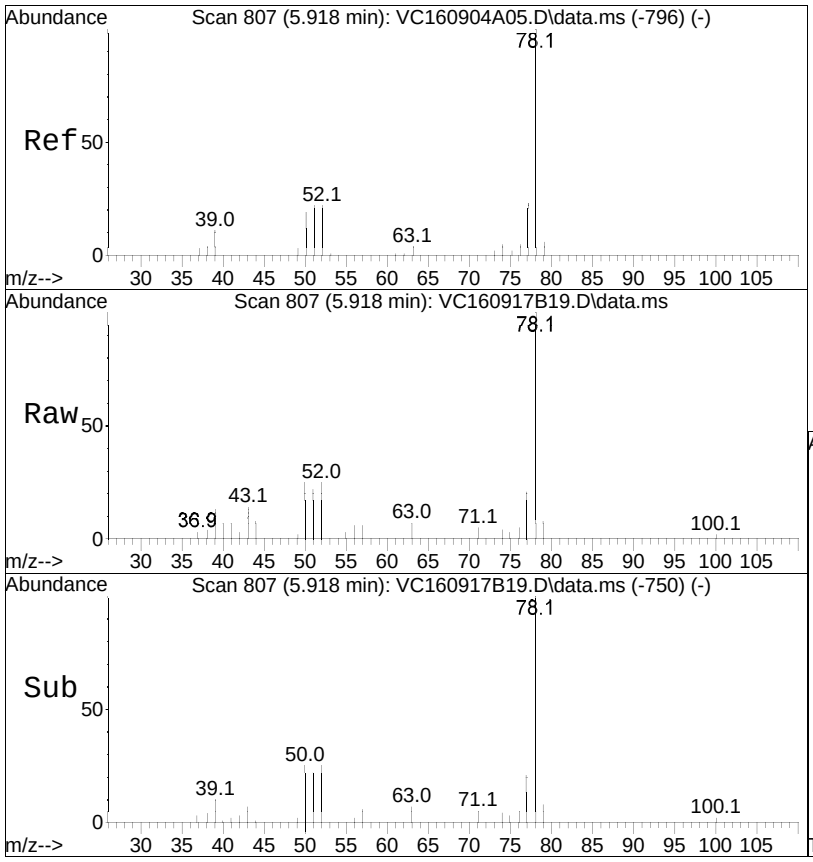
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Charlie\2016\160917A\
Data File : VC160917B19.D
Acq On : 17 Sep 2016 21:35
Operator : CHARLIE:MS
Sample : l1629399-01D,31H,3.4,5,0.050,,x
Misc : WG933154,ICAL12884
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 18 13:54:00 2016
Quant Method : I:\VOLATILES\Charlie\2016\160917A\C_160916_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Sep 16 09:29:10 2016
Response via : Initial Calibration

Sub List : 8260-TCE+Benz - TCE and Benzene60917A\VC160917B03.D•

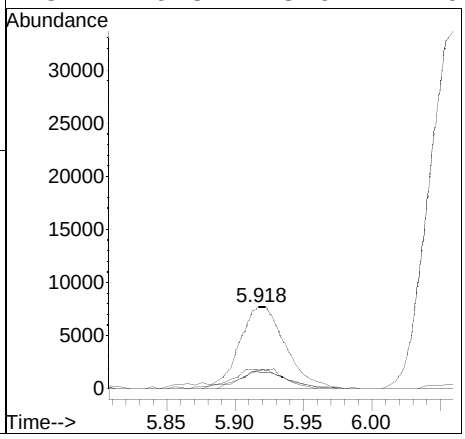




#41
Benzene
Concen: 0.45 ug/L
RT: 5.918 min Scan# 807
Delta R.T. -0.000 min
Lab File: VC160917B19.D
Acq: 17 Sep 2016 21:35

Tgt Ion: 78 Resp: 18206

Ion	Ratio	Lower	Upper
78	100		
77	21.1	14.5	30.1
51	27.3	13.9	28.9
52	26.3	13.0	27.0



Manual Integration Report

Data Path	: I:\VOLATILES\Charlie\2016\	QMethod	: C_160916_8260.m
Data File	: VC160917B19.D	Operator	: CHARLIE:MS
Date Inj'd	: 9/17/2016 21:35	Instrument	: Charlie
Sample	: l1629399-01D,31H,3.4,5,0.0	Quant Date	: 9/18/2016 1:37 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Charlie\2016\160917A\
Data File : VC160917B20.D
Acq On : 17 Sep 2016 22:02
Operator : CHARLIE:MS
Sample : l1629399-02D,31H,3.8,5,0.025,,x
Misc : WG933154,ICAL12884
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 18 13:54:26 2016
Quant Method : I:\VOLATILES\Charlie\2016\160917A\C_160916_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Sep 16 09:29:10 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Charlie\2016\160917A\VC160917B03.D
Sub List : 8260-TCE+Benz - TCE and Benzene

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.343	96	495207	20.000	ug/L	0.00
Standard Area 1 = 498298			Recovery = 99.38%			
59) Chlorobenzene-d5	9.908	117	392187	20.000	ug/L	0.00
Standard Area 1 = 390046			Recovery = 100.55%			
79) 1,4-Dichlorobenzene-d4	12.524	152	193217	20.000	ug/L	0.00
Standard Area 1 = 198080			Recovery = 97.54%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.519	113	117838	15.876	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 79.38%			
43) 1,2-Dichloroethane-d4	6.059	65	147999	17.705	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 88.52%			
60) Toluene-d8	8.052	98	488683	24.346	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 121.73%			
83) 4-Bromofluorobenzene	11.344	95	207136	21.289	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 106.45%			
Target Compounds						Qvalue
41) Benzene	5.923	78	15819	0.377	ug/L	92

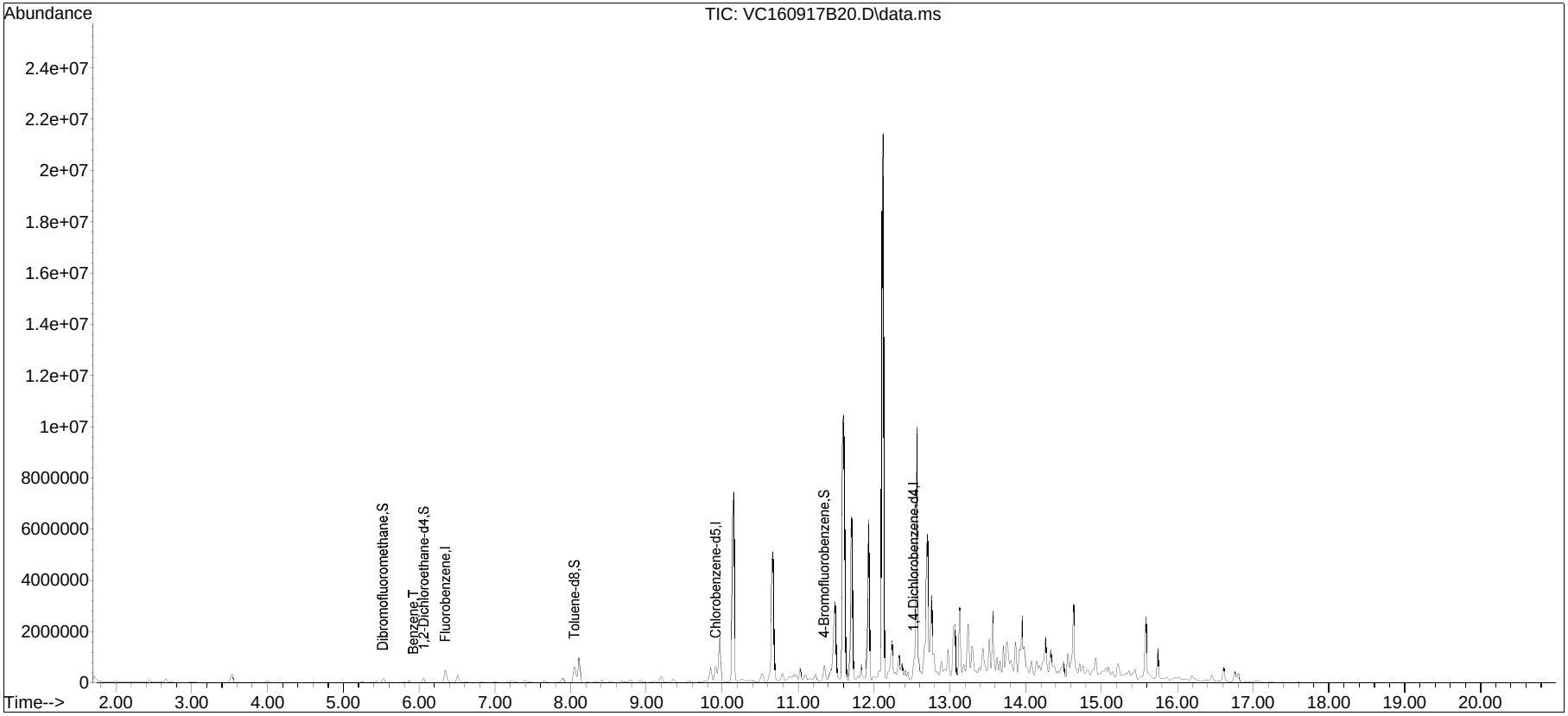
(#) = qualifier out of range (m) = manual integration (+) = signals summed

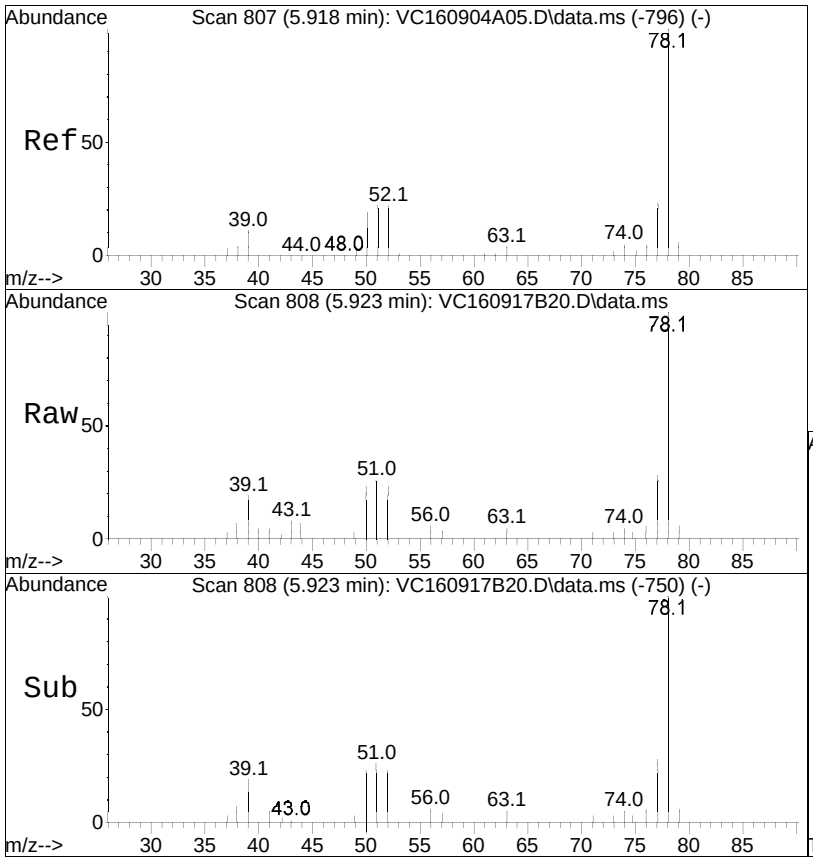
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Charlie\2016\160917A\
Data File : VC160917B20.D
Acq On : 17 Sep 2016 22:02
Operator : CHARLIE:MS
Sample : l1629399-02D,31H,3.8,5,0.025,,x
Misc : WG933154,ICAL12884
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 18 13:54:26 2016
Quant Method : I:\VOLATILES\Charlie\2016\160917A\C_160916_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Sep 16 09:29:10 2016
Response via : Initial Calibration

Sub List : 8260-TCE+Benz - TCE and Benzene60917A\VC160917B03.D•

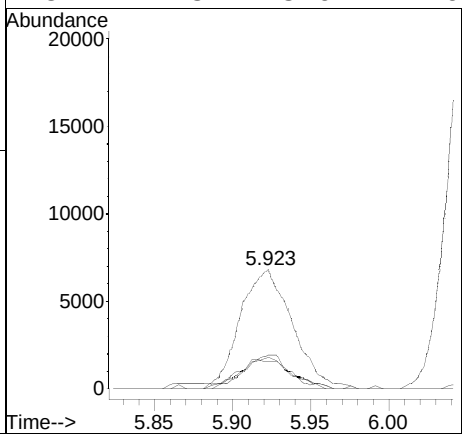




#41
Benzene
Concen: 0.38 ug/L
RT: 5.923 min Scan# 808
Delta R.T. 0.005 min
Lab File: VC160917B20.D
Acq: 17 Sep 2016 22:02

Tgt Ion: 78 Resp: 15819

Ion	Ratio	Lower	Upper
78	100		
77	24.6	14.5	30.1
51	25.8	13.9	28.9
52	24.3	13.0	27.0



Manual Integration Report

Data Path	: I:\VOLATILES\Charlie\2016\	QMethod	: C_160916_8260.m
Data File	: VC160917B20.D	Operator	: CHARLIE:MS
Date Inj'd	: 9/17/2016 22:02	Instrument	: Charlie
Sample	: l1629399-02D,31H,3.8,5,0.0	Quant Date	: 9/18/2016 1:37 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Charlie\2016\160917A\
Data File : VC160917B21.D
Acq On : 17 Sep 2016 22:29
Operator : CHARLIE:MS
Sample : l1629399-06,31H,5,5.1,0.100,,x
Misc : WG933154,ICAL12884
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 18 13:54:50 2016
Quant Method : I:\VOLATILES\Charlie\2016\160917A\C_160916_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Sep 16 09:29:10 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Charlie\2016\160917A\VC160917B03.D
Sub List : 8260-TCE+Benz - TCE and Benzene

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.343	96	488994	20.000 ug/L	0.00
Standard Area 1 = 498298			Recovery = 98.13%		
59) Chlorobenzene-d5	9.908	117	383894	20.000 ug/L	0.00
Standard Area 1 = 390046			Recovery = 98.42%		
79) 1,4-Dichlorobenzene-d4	12.524	152	185478	20.000 ug/L	0.00
Standard Area 1 = 198080			Recovery = 93.64%		
System Monitoring Compounds					
36) Dibromofluoromethane	5.514	113	111111	15.160 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 75.80%		
43) 1,2-Dichloroethane-d4	6.054	65	144646	17.524 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 87.62%		
60) Toluene-d8	8.047	98	481291	24.496 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 122.48%		
83) 4-Bromofluorobenzene	11.345	95	213496	22.859 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 114.30%		
Target Compounds					Qvalue
48) Trichloroethene	6.526	95	1676	0.156 ug/L #	1

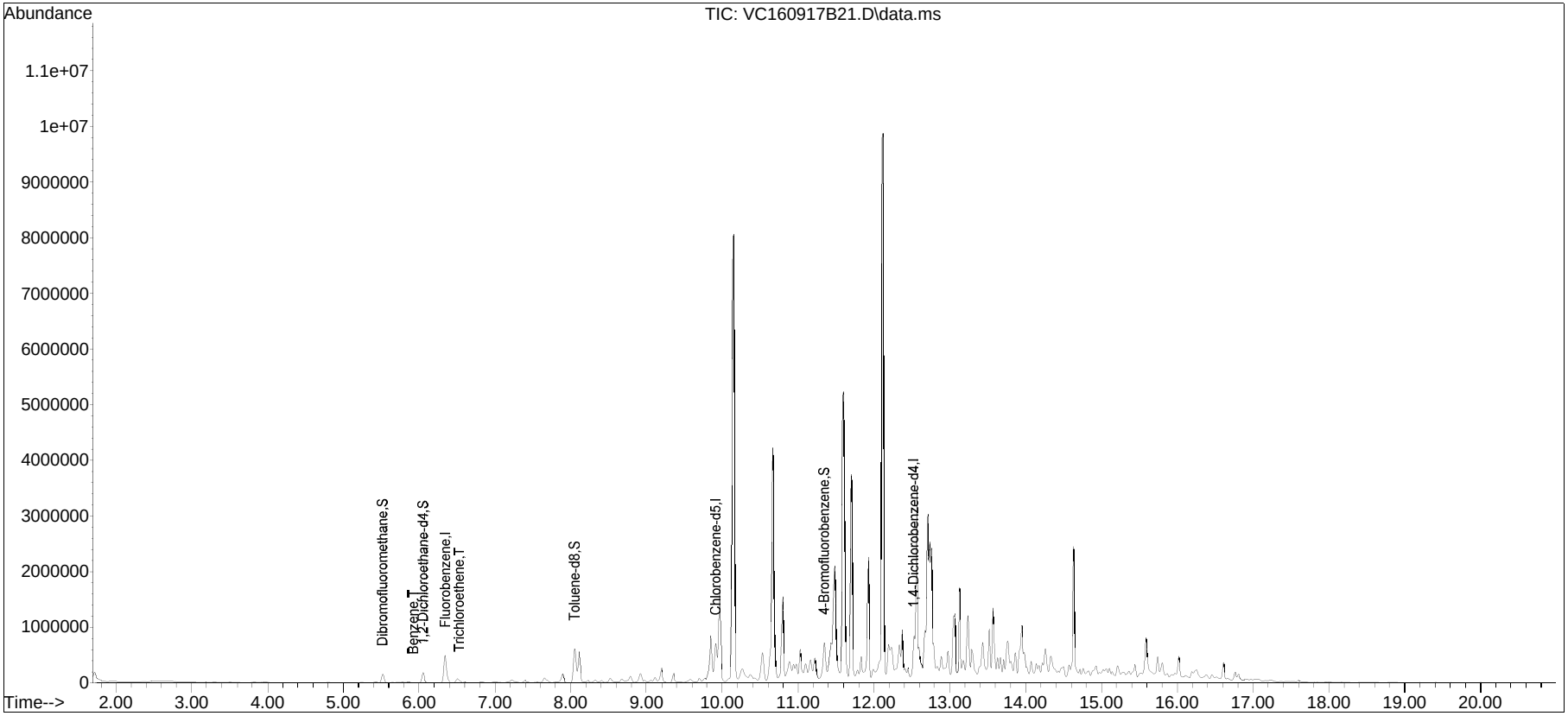
(#) = qualifier out of range (m) = manual integration (+) = signals summed

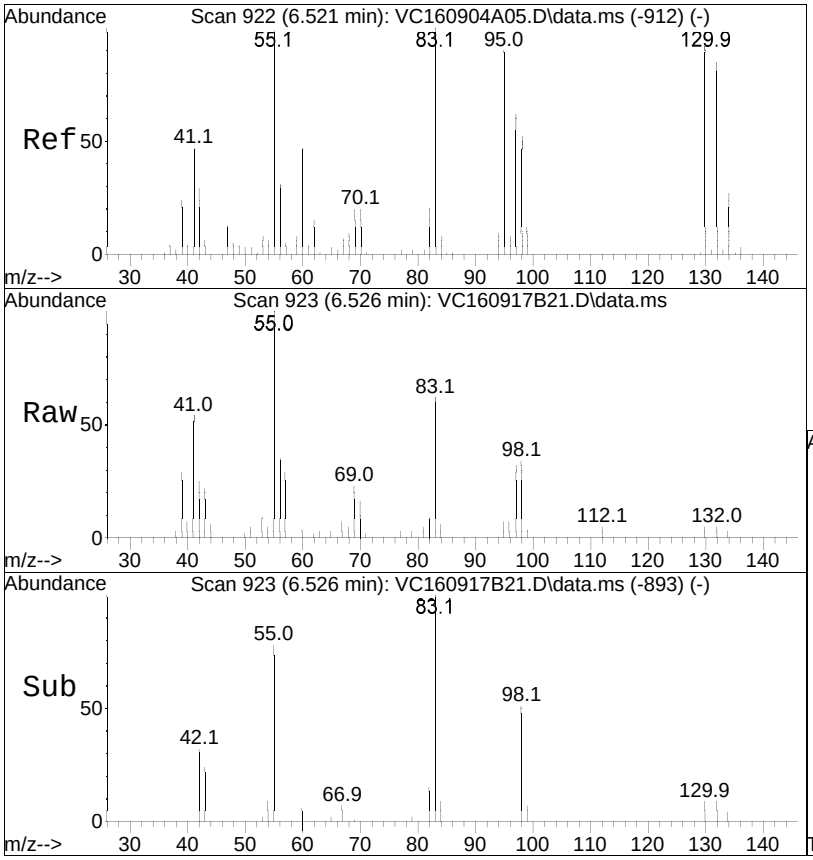
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Charlie\2016\160917A\
Data File : VC160917B21.D
Acq On : 17 Sep 2016 22:29
Operator : CHARLIE:MS
Sample : l1629399-06,31H,5,5.1,0.100,,x
Misc : WG933154,ICAL12884
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 18 13:54:50 2016
Quant Method : I:\VOLATILES\Charlie\2016\160917A\C_160916_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Sep 16 09:29:10 2016
Response via : Initial Calibration

Sub List : 8260-TCE+Benz - TCE and Benzene60917A\VC160917B03.D•

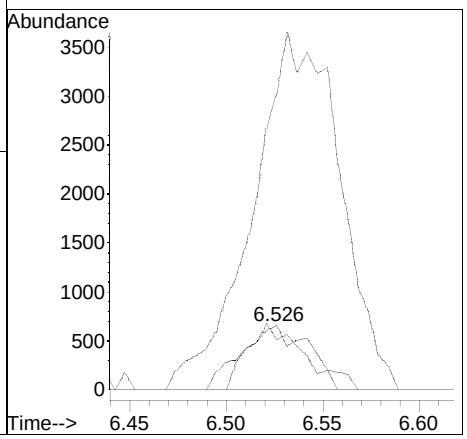




#48
Trichloroethene
Concen: 0.16 ug/L
RT: 6.526 min Scan# 923
Delta R.T. 0.005 min
Lab File: VC160917B21.D
Acq: 17 Sep 2016 22:29

Tgt Ion: 95 Resp: 1676

Ion	Ratio	Lower	Upper
95	100		
97	683.2	52.3	78.5#
130	76.6	64.4	96.6



Manual Integration Report

Data Path	: I:\VOLATILES\Charlie\2016\	QMethod	: C_160916_8260.m
Data File	: VC160917B21.D	Operator	: CHARLIE:MS
Date Inj'd	: 9/17/2016 22:29	Instrument	: Charlie
Sample	: l1629399-06,31H,5,5.1,0.10	Quant Date	: 9/18/2016 1:37 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160927\
Data File : VQ160927A14.D
Acq On : 27 Sep 2016 6:39 pm
Operator : QUIMBY:MM
Sample : L1629399-02,31,10,10,,S
Misc : WG936484,ICAL12824
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 27 19:57:51 2016
Quant Method : I:\VOLATILES\Quimby\2016\160927\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Quimby\2016\160927\VQ160927A02.D
Sub List : 8260-Benzene - benzene only

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.626	96	170383	10.000	ug/L	0.00
Standard Area 1 = 192732			Recovery = 88.40%			
59) Chlorobenzene-d5	14.712	117	141006	10.000	ug/L	0.00
Standard Area 1 = 145043			Recovery = 97.22%			
79) 1,4-Dichlorobenzene-d4	19.008	152	58814	10.000	ug/L	# 0.00
Standard Area 1 = 54523			Recovery = 107.87%			
System Monitoring Compounds						
36) Dibromofluoromethane	8.383	113	33087	10.191	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.91%			
43) 1,2-Dichloroethane-d4	9.140	65	42117	11.208	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 112.08%			
60) Toluene-d8	12.160	98	186388	9.578	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 95.78%			
83) 4-Bromofluorobenzene	16.854	95	69205	8.634	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 86.34%			
Target Compounds						Qvalue
41) Benzene	9.305	78	80567	3.010	ug/L	98

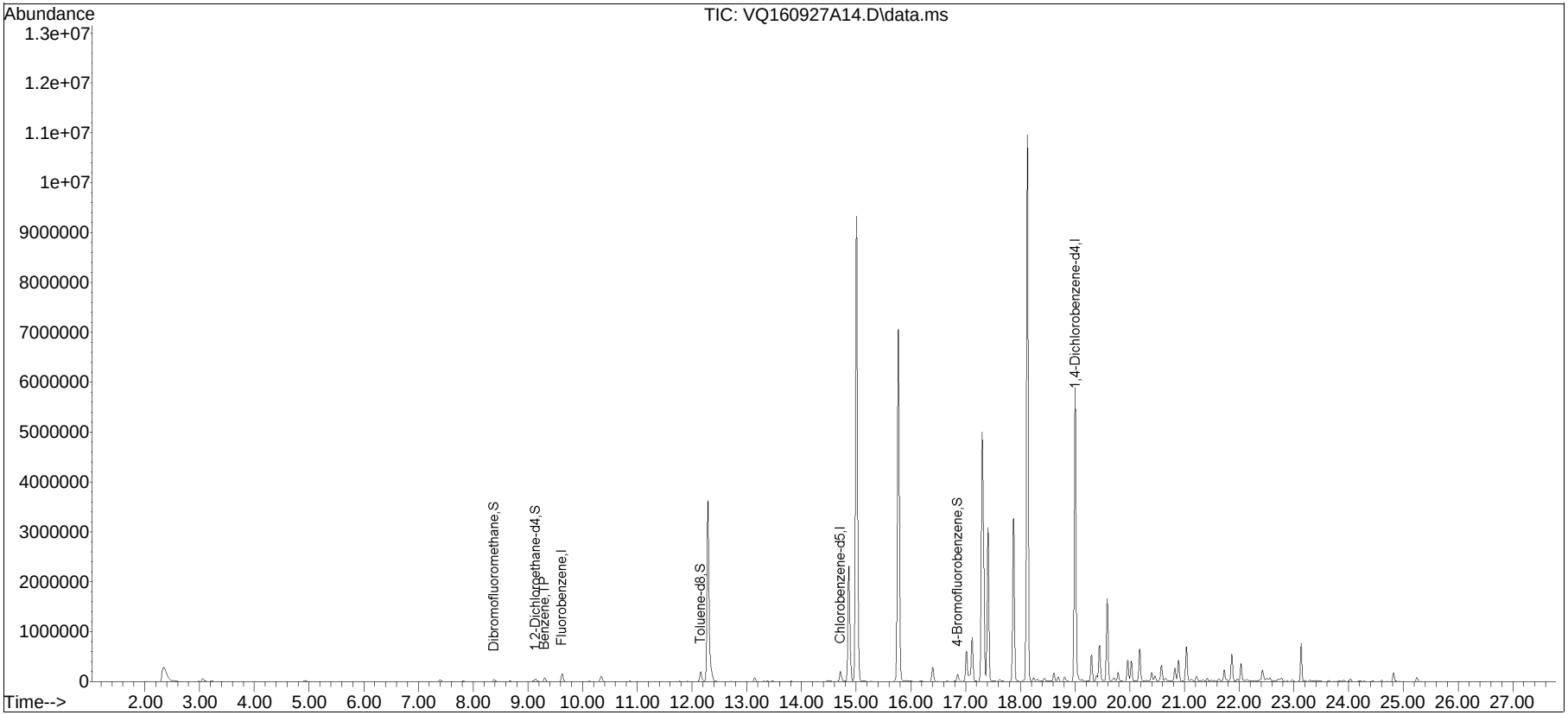
(#) = qualifier out of range (m) = manual integration (+) = signals summed

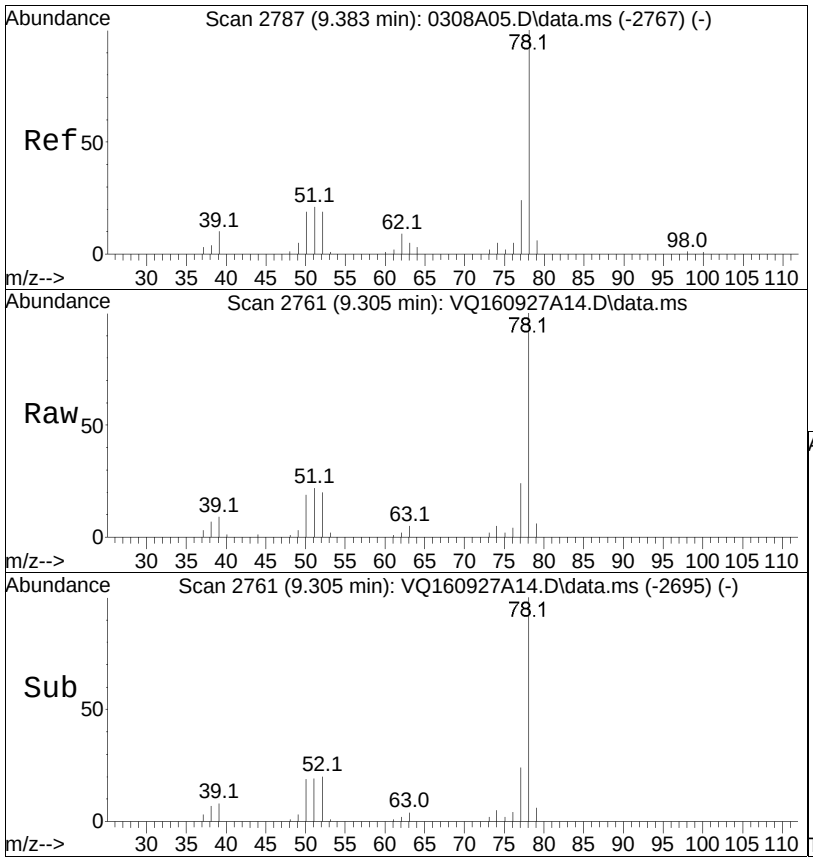
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160927\
Data File : VQ160927A14.D
Acq On : 27 Sep 2016 6:39 pm
Operator : QUIMBY:MM
Sample : L1629399-02,31,10,10,,S
Misc : WG936484,ICAL12824
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 27 19:57:51 2016
Quant Method : I:\VOLATILES\Quimby\2016\160927\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

Sub List : 8260-Benzene - benzene only6\160927\VQ160927A02.D•

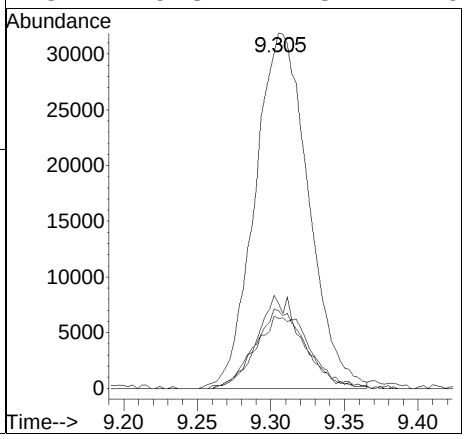




#41
Benzene
Concen: 3.01 ug/L
RT: 9.305 min Scan# 2761
Delta R.T. -0.003 min
Lab File: VQ160927A14.D
Acq: 27 Sep 2016 6:39 pm

Tgt Ion: 78 Resp: 80567

Ion	Ratio	Lower	Upper
78	100		
77	23.9	15.3	31.9
51	21.1	14.1	29.3
52	19.8	11.8	24.6



Manual Integration Report

Data Path	: I:\VOLATILES\Quimby\2016\1	QMethod	: VQ_160829_8260.m
Data File	: VQ160927A14.D	Operator	: QUIMBY:MM
Date Inj'd	: 9/27/2016 6:39 pm	Instrument	: Quimby
Sample	: L1629399-02,31,10,10,,S	Quant Date	: 9/27/2016 7:57 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160927\
Data File : VQ160927A15.D
Acq On : 27 Sep 2016 7:11 pm
Operator : QUIMBY:MM
Sample : L1629399-01,31,10,10,,T
Misc : WG936484,ICAL12824
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 27 19:57:57 2016
Quant Method : I:\VOLATILES\Quimby\2016\160927\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Quimby\2016\160927\VQ160927A02.D
Sub List : 8260-Benzene - benzene only

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	9.626	96	193063	10.000 ug/L	0.00
Standard Area 1 = 192732			Recovery = 100.17%		
59) Chlorobenzene-d5	14.715	117	153398	10.000 ug/L	0.00
Standard Area 1 = 145043			Recovery = 105.76%		
79) 1,4-Dichlorobenzene-d4	19.005	152	57496	10.000 ug/L	# 0.00
Standard Area 1 = 54523			Recovery = 105.45%		
System Monitoring Compounds					
36) Dibromofluoromethane	8.379	113	37819	10.280 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.80%		
43) 1,2-Dichloroethane-d4	9.140	65	47064	11.053 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 110.53%		
60) Toluene-d8	12.157	98	208135	9.832 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.32%		
83) 4-Bromofluorobenzene	16.854	95	69982	8.932 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 89.32%		
Target Compounds					Qvalue
41) Benzene	9.308	78	81894	2.700 ug/L	99

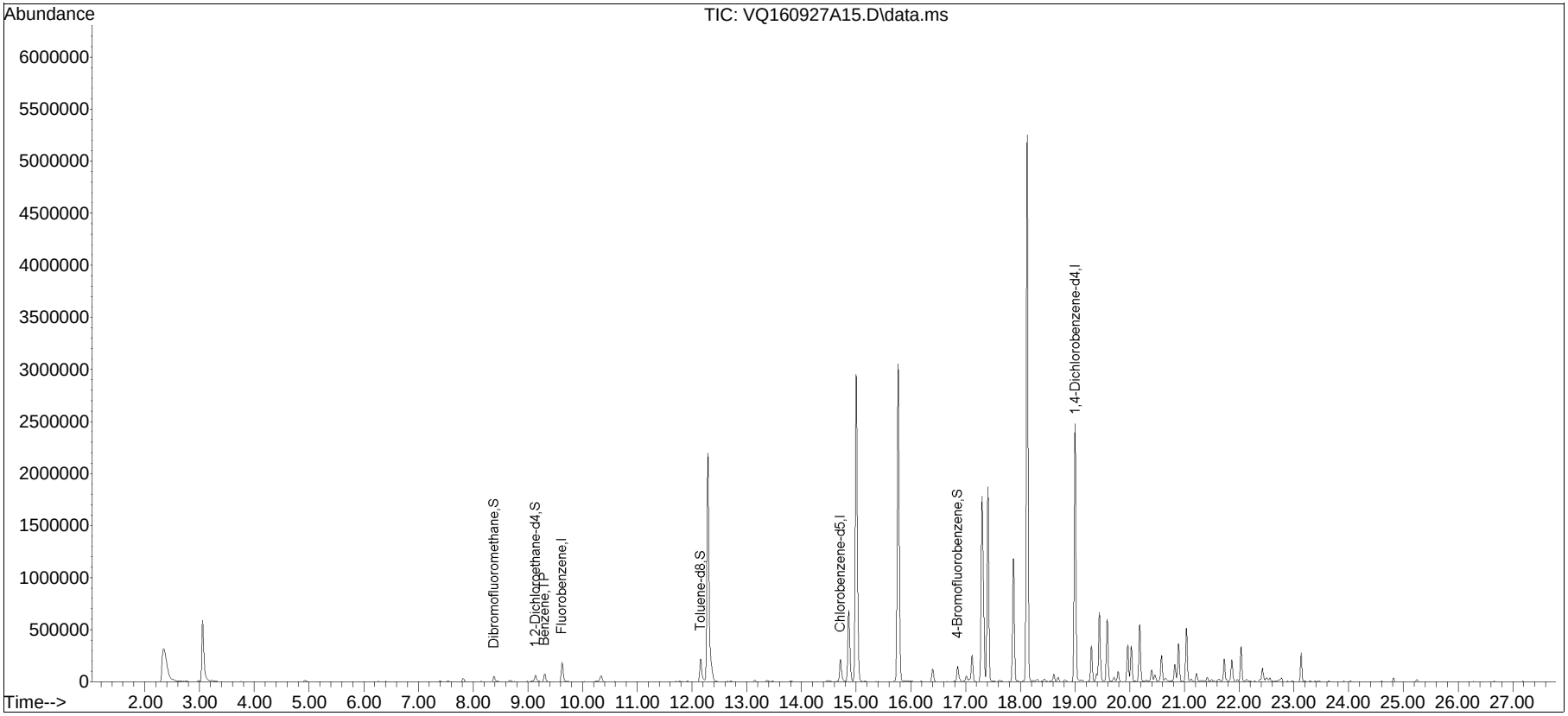
(#) = qualifier out of range (m) = manual integration (+) = signals summed

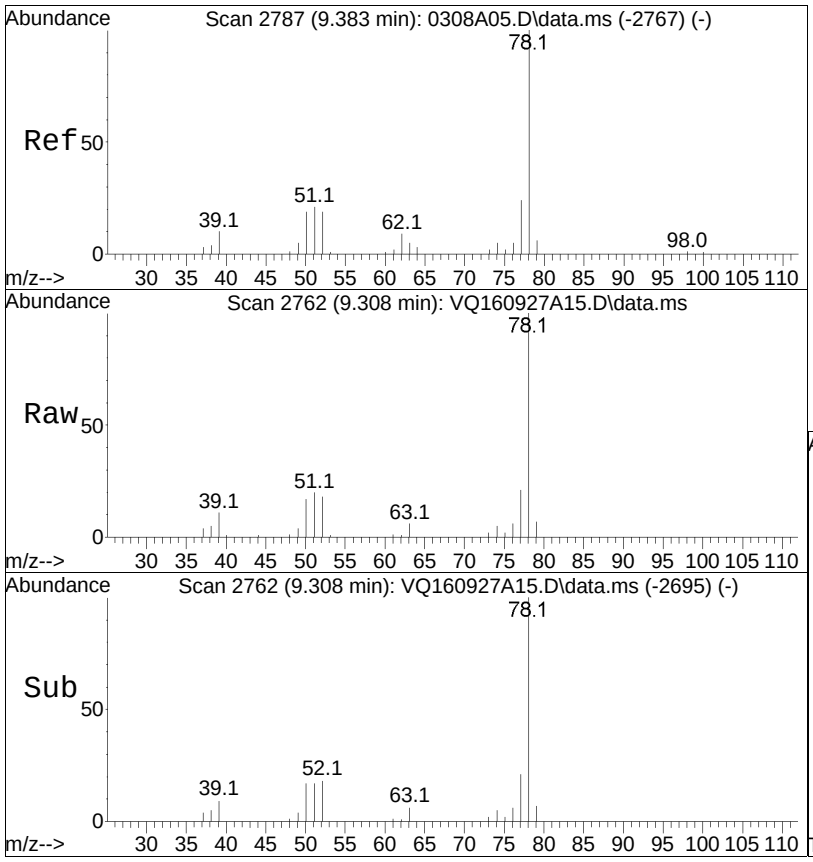
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160927\
Data File : VQ160927A15.D
Acq On : 27 Sep 2016 7:11 pm
Operator : QUIMBY:MM
Sample : L1629399-01,31,10,10,,T
Misc : WG936484,ICAL12824
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 27 19:57:57 2016
Quant Method : I:\VOLATILES\Quimby\2016\160927\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

Sub List : 8260-Benzene - benzene only6\160927\VQ160927A02.D•

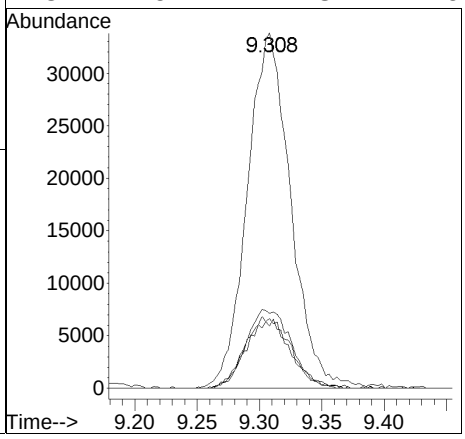




#41
Benzene
Concen: 2.70 ug/L
RT: 9.308 min Scan# 2762
Delta R.T. 0.000 min
Lab File: VQ160927A15.D
Acq: 27 Sep 2016 7:11 pm

Tgt Ion: 78 Resp: 81894

Ion	Ratio	Lower	Upper
78	100		
77	23.6	15.3	31.9
51	21.1	14.1	29.3
52	19.7	11.8	24.6



Manual Integration Report

Data Path	: I:\VOLATILES\Quimby\2016\1	QMethod	: VQ_160829_8260.m
Data File	: VQ160927A15.D	Operator	: QUIMBY:MM
Date Inj'd	: 9/27/2016 7:11 pm	Instrument	: Quimby
Sample	: L1629399-01,31,10,10,,T	Quant Date	: 9/27/2016 7:57 pm

There are no manual integrations or false positives in this file.

Method Blank
Raw Data

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Charlie\2016\160917A\
Data File : VC160917B06.D
Acq On : 17 Sep 2016 15:48
Operator : CHARLIE:MS
Sample : WG933153-5,31,5,5
Misc : WG933153,ICAL12884
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 18 13:36:29 2016
Quant Method : I:\VOLATILES\Charlie\2016\160917A\C_160916_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Sep 16 09:29:10 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Charlie\2016\160917A\VC160917B03.D
Sub List : 8260-TCE+Benz - TCE and Benzene

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.343	96	477807	20.000	ug/L	0.00
Standard Area 1 = 498298			Recovery = 95.89%			
59) Chlorobenzene-d5	9.913	117	376124	20.000	ug/L	0.01
Standard Area 1 = 390046			Recovery = 96.43%			
79) 1,4-Dichlorobenzene-d4	12.529	152	198936	20.000	ug/L	0.00
Standard Area 1 = 198080			Recovery = 100.43%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.519	113	111125	15.517	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 77.58%			
43) 1,2-Dichloroethane-d4	6.054	65	145209	18.004	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 90.02%			
60) Toluene-d8	8.052	98	470296	24.431	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 122.16%			
83) 4-Bromofluorobenzene	11.350	95	192833	19.250	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 96.25%			
Target Compounds						Qvalue
41) Benzene	5.913	78	1792	N.D.		
48) Trichloroethene	6.516	95	118	N.D.		

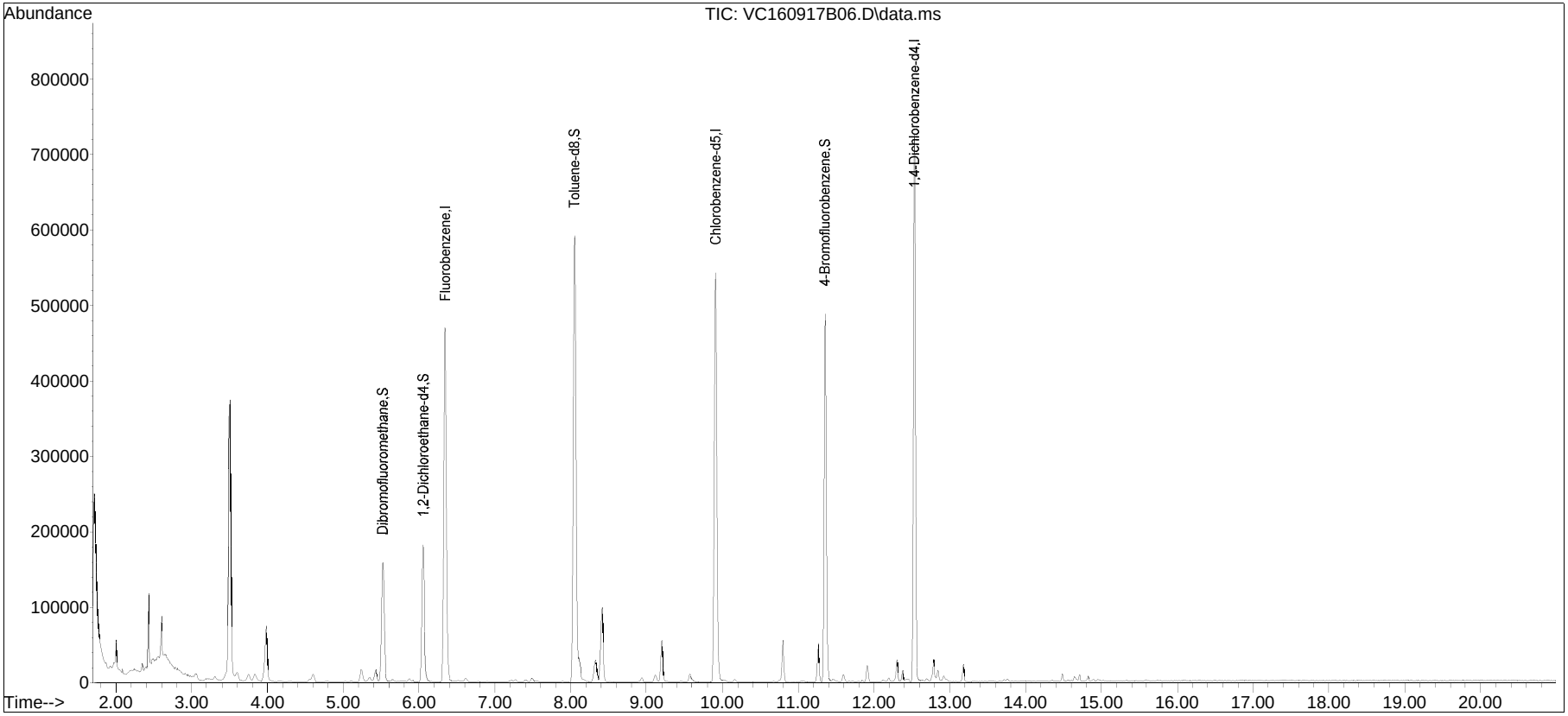
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Charlie\2016\160917A\
Data File : VC160917B06.D
Acq On : 17 Sep 2016 15:48
Operator : CHARLIE:MS
Sample : WG933153-5,31,5,5
Misc : WG933153,ICAL12884
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 18 13:36:29 2016
Quant Method : I:\VOLATILES\Charlie\2016\160917A\C_160916_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Sep 16 09:29:10 2016
Response via : Initial Calibration

Sub List : 8260-TCE+Benz - TCE and Benzene60917A\VC160917B03.D•



Manual Integration Report

Data Path	: I:\VOLATILES\Charlie\2016\	QMethod	: C_160916_8260.m
Data File	: VC160917B06.D	Operator	: CHARLIE:MS
Date Inj'd	: 9/17/2016 15:48	Instrument	: Charlie
Sample	: WG933153-5,31,5,5	Quant Date	: 9/18/2016 1:36 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Charlie\2016\160917A\
Data File : VC160917B06.D
Acq On : 17 Sep 2016 15:48
Operator : CHARLIE:MS
Sample : WG933154-5,31H,5,5,0.1
Misc : WG933154,ICAL12884
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 18 13:36:29 2016
Quant Method : I:\VOLATILES\Charlie\2016\160917A\C_160916_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Sep 16 09:29:10 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Charlie\2016\160917A\VC160917B03.D
Sub List : 8260-TCE+Benz - TCE and Benzene

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.343	96	477807	20.000 ug/L	0.00
Standard Area 1 = 498298			Recovery = 95.89%		
59) Chlorobenzene-d5	9.913	117	376124	20.000 ug/L	0.01
Standard Area 1 = 390046			Recovery = 96.43%		
79) 1,4-Dichlorobenzene-d4	12.529	152	198936	20.000 ug/L	0.00
Standard Area 1 = 198080			Recovery = 100.43%		
System Monitoring Compounds					
36) Dibromofluoromethane	5.519	113	111125	15.517 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 77.58%		
43) 1,2-Dichloroethane-d4	6.054	65	145209	18.004 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 90.02%		
60) Toluene-d8	8.052	98	470296	24.431 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 122.16%		
83) 4-Bromofluorobenzene	11.350	95	192833	19.250 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 96.25%		
Target Compounds					Qvalue
41) Benzene	5.913	78	1792	N.D.	
48) Trichloroethene	6.516	95	118	N.D.	

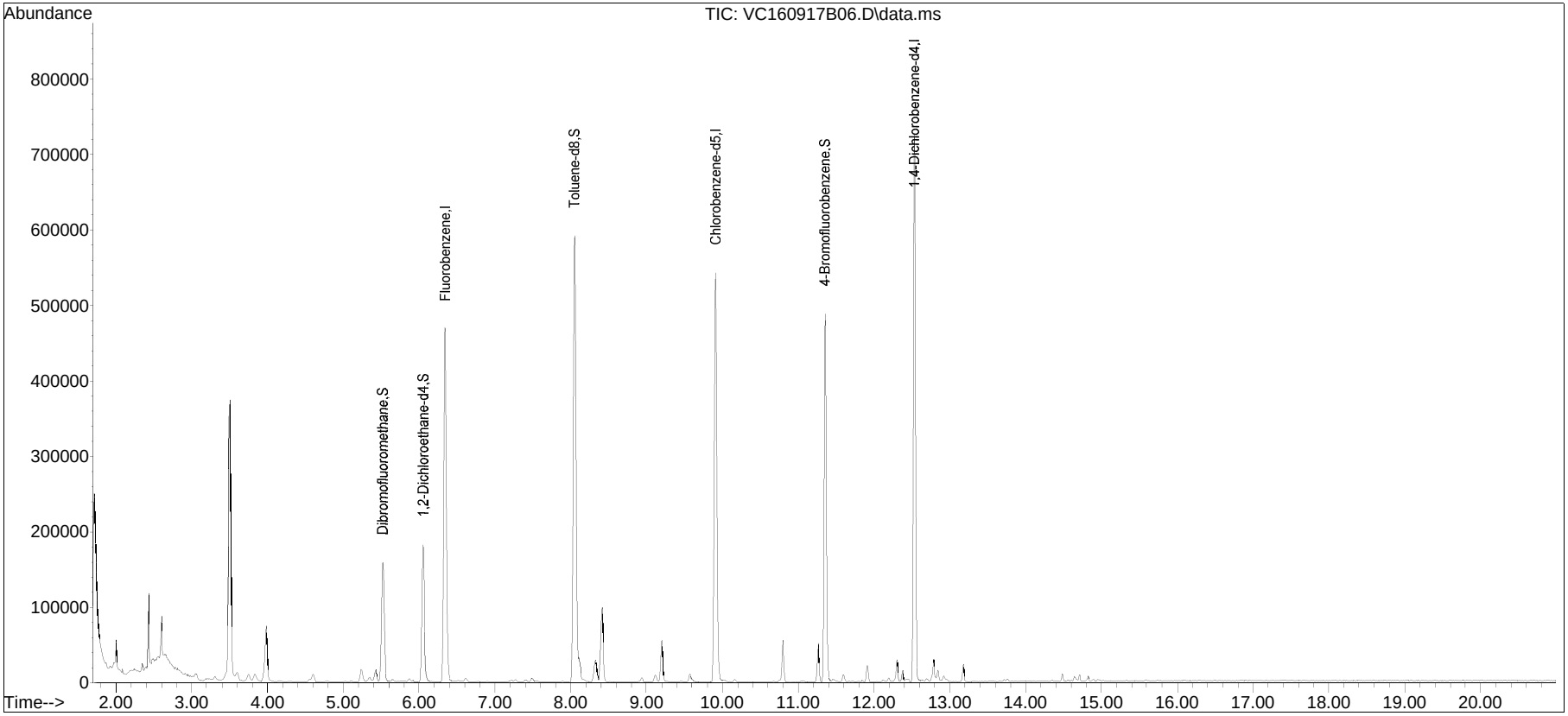
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Charlie\2016\160917A\
Data File : VC160917B06.D
Acq On : 17 Sep 2016 15:48
Operator : CHARLIE:MS
Sample : WG933154-5,31H,5,5,0.1
Misc : WG933154,ICAL12884
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 18 13:36:29 2016
Quant Method : I:\VOLATILES\Charlie\2016\160917A\C_160916_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Sep 16 09:29:10 2016
Response via : Initial Calibration

Sub List : 8260-TCE+Benz - TCE and Benzene60917A\VC160917B03.D•



Manual Integration Report

Data Path	: I:\VOLATILES\Charlie\2016\	QMethod	: C_160916_8260.m
Data File	: VC160917B06.D	Operator	: CHARLIE:MS
Date Inj'd	: 9/17/2016 15:48	Instrument	: Charlie
Sample	: WG933154-5,31H,5,5,0.1	Quant Date	: 9/18/2016 1:36 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160927\
Data File : VQ160927A09.D
Acq On : 27 Sep 2016 4:03 pm
Operator : QUIMBY:MM
Sample : WG936484-5,31,10,10
Misc : WG936484,ICAL12824
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 27 19:57:24 2016
Quant Method : I:\VOLATILES\Quimby\2016\160927\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\Quimby\2016\160927\VQ160927A02.D
Sub List : 8260-Benzene - benzene only

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.626	96	175661	10.000	ug/L	0.00
Standard Area 1 = 192732			Recovery = 91.14%			
59) Chlorobenzene-d5	14.712	117	127369	10.000	ug/L	0.00
Standard Area 1 = 145043			Recovery = 87.81%			
79) 1,4-Dichlorobenzene-d4	19.005	152	45685	10.000	ug/L	0.00
Standard Area 1 = 54523			Recovery = 83.79%			
System Monitoring Compounds						
36) Dibromofluoromethane	8.383	113	35043	10.470	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 104.70%			
43) 1,2-Dichloroethane-d4	9.140	65	42162	10.883	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 108.83%			
60) Toluene-d8	12.157	98	181946	10.351	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.51%			
83) 4-Bromofluorobenzene	16.851	95	50060	8.041	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 80.41%			
Target Compounds						Qvalue
41) Benzene	9.302	78	207	N.D.		

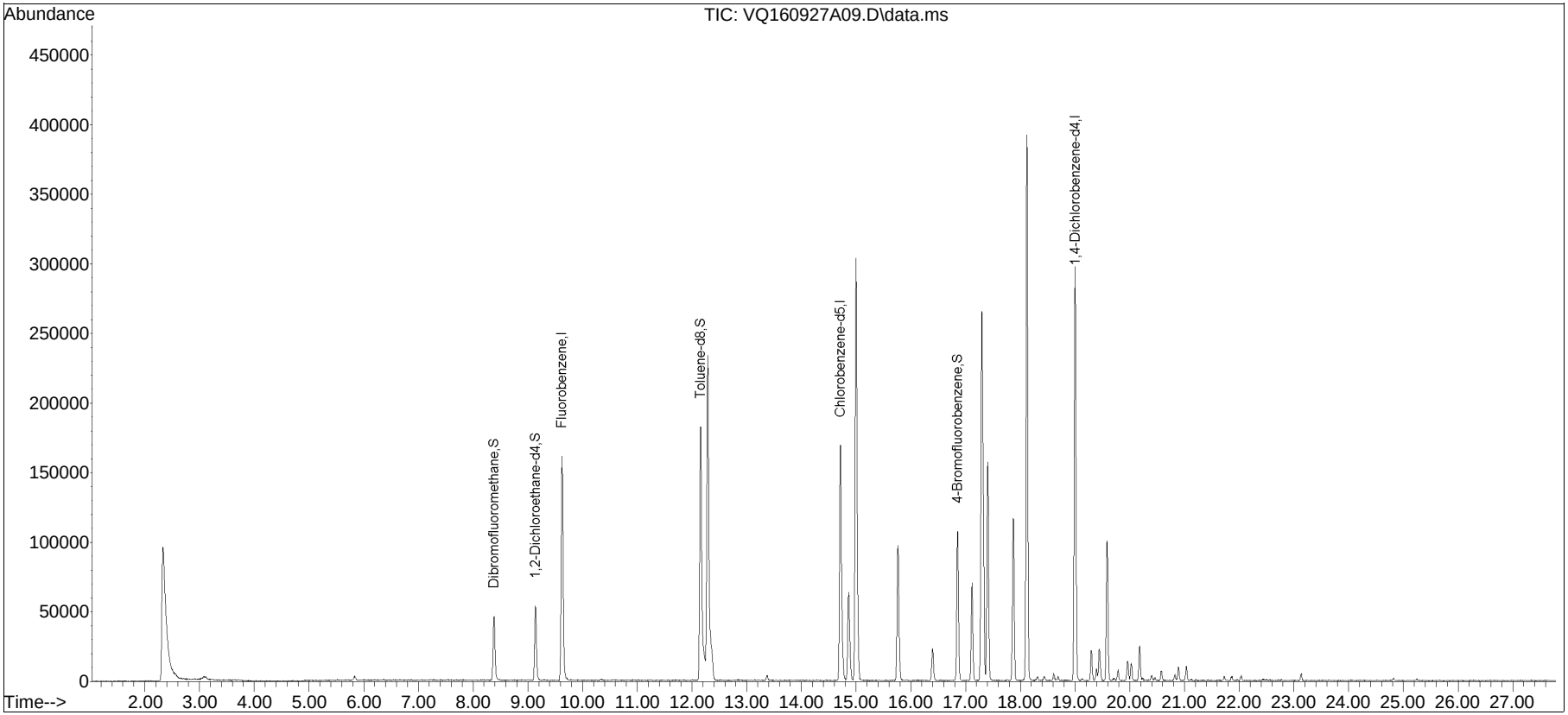
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\Quimby\2016\160927\
Data File : VQ160927A09.D
Acq On : 27 Sep 2016 4:03 pm
Operator : QUIMBY:MM
Sample : WG936484-5,31,10,10
Misc : WG936484,ICAL12824
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 27 19:57:24 2016
Quant Method : I:\VOLATILES\Quimby\2016\160927\VQ_160829_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Aug 30 08:40:50 2016
Response via : Initial Calibration

Sub List : 8260-Benzene - benzene only6\160927\VQ160927A02.D•



Manual Integration Report

Data Path	: I:\VOLATILES\Quimby\2016\1Q	Method	: VQ_160829_8260.m
Data File	: VQ160927A09.D	Operator	: QUIMBY:MM
Date Inj'd	: 9/27/2016 4:03 pm	Instrument	: Quimby
Sample	: WG936484-5,31,10,10	Quant Date	: 9/27/2016 7:57 pm

There are no manual integrations or false positives in this file.

Metals

Inorganic Data
(ICP Analysis)

Sample Results Summary

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-02	**Date Collected**	: 09/16/16 08:50
Client ID	: 4479-091616-0855	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/19/16 13:13
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG933346.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 1.3g	**%Solids**	: 62
Digestion Method	: EPA 3050B	**Date Digested**	: 09/17/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	2.5	0.62	0.20	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-04	**Date Collected**	: 09/16/16 09:10
Client ID	: 4479-091616-0925	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/19/16 13:32
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG933346.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 1.251g	**%Solids**	: 81
Digestion Method	: EPA 3050B	**Date Digested**	: 09/17/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	5.5	0.49	0.16	
7440-02-0	Nickel, Total	19	1.2	0.20	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-07	**Date Collected**	: 09/16/16 09:55
Client ID	: 4479-091616-1000	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/19/16 13:36
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG933346.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 1.311g	**%Solids**	: 82
Digestion Method	: EPA 3050B	**Date Digested**	: 09/17/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	14	0.47	0.15	
7440-02-0	Nickel, Total	360	1.2	0.19	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-09	**Date Collected**	: 09/16/16 10:40
Client ID	: 4479-091616-1040	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/19/16 13:41
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG933346.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 1.27g	**%Solids**	: 83
Digestion Method	: EPA 3050B	**Date Digested**	: 09/17/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, Total	5.4	1.2	0.19	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629399-10	Date Collected	: 09/16/16 10:45
Client ID	: 4479-091616-1045	Date Received	: 09/16/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/19/16 13:45
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,6010C	Analyst	: JH
Lab File ID	: WG933346.pdf	Instrument ID	: TRACE5
Sample Amount	: 1.265g	%Solids	: 87
Digestion Method	: EPA 3050B	Date Digested	: 09/17/16

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-02-0	Nickel, Total	7.2	1.1	0.18	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-11	**Date Collected**	: 09/16/16 11:30
Client ID	: 4479-091616-1130	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/19/16 13:49
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG933346.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 1.271g	**%Solids**	: 90
Digestion Method	: EPA 3050B	**Date Digested**	: 09/17/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	47	0.44	0.14	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-12	**Date Collected**	: 09/16/16 11:32
Client ID	: 4479-091616-1132	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/19/16 14:13
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG933346.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 1.311g	**%Solids**	: 92
Digestion Method	: EPA 3050B	**Date Digested**	: 09/17/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	7.5	0.42	0.14	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-13	**Date Collected**	: 09/16/16 11:35
Client ID	: 4479-091616-1135	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/19/16 14:17
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG933346.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 1.312g	**%Solids**	: 91
Digestion Method	: EPA 3050B	**Date Digested**	: 09/17/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	68	0.42	0.14	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-14	**Date Collected**	: 09/16/16 11:38
Client ID	: 4479-091616-1138	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/19/16 14:21
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG933346.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 1.255g	**%Solids**	: 91
Digestion Method	: EPA 3050B	**Date Digested**	: 09/17/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	7.0	0.44	0.14	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-15	**Date Collected**	: 09/16/16 11:42
Client ID	: 4479-091616-1142	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/19/16 14:26
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG933346.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 1.269g	**%Solids**	: 90
Digestion Method	: EPA 3050B	**Date Digested**	: 09/17/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	24	0.44	0.14	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-16	**Date Collected**	: 09/16/16 11:45
Client ID	: 4479-091616-1145	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/19/16 14:30
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG933346.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 1.282g	**%Solids**	: 93
Digestion Method	: EPA 3050B	**Date Digested**	: 09/17/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	6.5	0.42	0.14	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-17	**Date Collected**	: 09/16/16 11:40
Client ID	: 4479-091616-1140	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/19/16 14:34
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG933346.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 1.266g	**%Solids**	: 89
Digestion Method	: EPA 3050B	**Date Digested**	: 09/17/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	34	0.44	0.15	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: WG932977-1	Date Collected	: NA
Client ID	: WG932977-1BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 09/19/16 14:08
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,6010C	Analyst	: JH
Lab File ID	: WG933346.pdf	Instrument ID	: TRACE5
Sample Amount	: 1.25g	%Solids	: NA
Digestion Method	: EPA 3050B	Date Digested	: 09/17/16

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-38-2	Arsenic, Total	ND	0.40	0.13	U
7440-02-0	Nickel, Total	ND	1.0	0.16	U

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: WG932977-3	**Date Collected**	: 09/16/16 08:50
Client ID	: 4479-091616-0855DUP	**Date Received**	: 09/16/16
Sample Location	:	**Date Analyzed**	: 09/19/16 13:18
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG933346.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 1.295g	**%Solids**	: 62
Digestion Method	: EPA 3050B	**Date Digested**	: 09/17/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	2.6	0.62	0.20	

Blank Results Summary

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TRACE5		

		Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID	:	R901602-5		R901602-12		R901602-14		R901602-2		WG932977-1	
Date Analyzed	:	09/19/16 10:52		09/19/16 11:39		09/19/16 11:48		09/19/16 12:06		09/19/16 14:08	
Parameter		mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q	mg/kg	Q
Arsenic		0.00330	U	0.00330	U	0.00330	U	0.00330	U	0.13	U
Nickel		0.00400	U	0.00400	U	0.00400	U	0.00400	U	0.16	U

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TRACE5		

		Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID	:	R901602-7		R901602-15		R901602-17		R901602-19			
Date Analyzed	:	09/19/16 11:01		09/19/16 12:57		09/19/16 13:09		09/19/16 14:02			
Parameter		mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Arsenic		0.00330	U	0.00330	U	0.00330	U	0.00330	U		
Nickel		0.00400	U	0.00400	U	0.00400	U	0.00400	U		

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TRACE5		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R901602-21							
Date Analyzed :			09/19/16 14:43							
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Arsenic			0.00330	U						
Nickel			0.00400	U						

Calibration Summary

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TRACE5	**Units**	: mg/l

		Initial Calibration			Continuing Calibration(s)						
Lab ID	:	R901602-4									
Date Analyzed	:	09/19/16 10:48									
Parameter		**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic		0.5000	0.5210	104.							
Nickel		0.5000	0.5030	101.							

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TRACE5	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R901602-6			R901602-11			R901602-13		R901602-1	
Date Analyzed :	09/19/16 10:57			09/19/16 11:35			09/19/16 11:44		09/19/16 12:02	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic	0.5000	0.5340	107.	0.5000	0.4980	100	0.5250	105.	0.5110	102.
Nickel	0.5000	0.5090	102.	0.5000	0.4760	95.	0.4990	100	0.4860	97.

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TRACE5	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R901602-3			R901602-16		R901602-18	
Date Analyzed :				09/19/16 12:52			09/19/16 13:05		09/19/16 13:58	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic				0.5000	0.4970	99.	0.5020	100.	0.5200	104.
Nickel				0.5000	0.4680	94.	0.4700	94.	0.4900	98.

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TRACE5	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R901602-20						
Date Analyzed :				09/19/16 14:39						
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic				0.5000	0.4870	97.				
Nickel				0.5000	0.4600	92.				

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2B
CRI Check Standard

Client	:	**Haley & Aldrich, Inc.**	**Lab Number**	:	**L1629399**
Project Name	:	**EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	:	**70613-814**
Instrument ID	:	**TRACE5**	**Units**	:	**mg/L**

		Initial	Final
Lab ID	:	**R901602-10**	
Date Analyzed	:	**09/19/16 11:31**	

Parameter	True	Found	%R	Found	%R
Arsenic	0.020	0.023	114		
Nickel	0.080	0.083	103		

Acceptance Criteria: Methods 200.7, 6010

CRI: 70-130%

ICP Interference Check Sample Results Summary

Form 4a
Interference Check Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TRACE5	**Concentration Units**	: mg/L

	True		Initial Found				Final Found			
Lab ID :			R901602-8		R901602-9					
Analysis Date :			09/19/16 11:22		09/19/16 11:27					
Analyte	**Sol. A**	**Sol. AB**	**Sol. A**	**%R**	**Sol. AB**	**%R**	**Sol. A**	**%R**	**Sol. AB**	**%R**
Arsenic		**1**	**0.00270**		**1.02**	**102**				
Nickel		**0.3**	**-0.00210**		**0.294**	**98**				

Acceptance Criteria: **Methods 200.7, 200.8, 6010, 6020**

ICSA: **80-120%**

ICSAB: **80-120%**

Spike Sample Results

Form 5a
Matrix Spike

Client	: Haley & Aldrich, Inc.		**Lab Number**	:	L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND		**Project Number**	:	70613-814
Client Sample ID	: 4479-091616-0855		**Matrix**	:	SOIL
Lab Sample ID	: L1629399-02				
Matrix Spike	: WG932977-4		**MS Analysis Date**	:	09/19/16 13:22
Matrix Spike Dup	:		**MSD Analysis Date**	:	

		Matrix Spike Sample				Matrix Spike Duplicate					
Parameter	**Sample Conc. (mg/kg)**	**Spike Added (mg/kg)**	**Spike Conc. (mg/kg)**	**%R**		**Spike Added (mg/kg)**	**Spike Conc. (mg/kg)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Arsenic, Total	2.5	15.2	16.	88						75-125	20
Nickel, Total	890	63.5	620	0	Q					75-125	20

Duplicate Sample Results Summary

Form 6
Lab Duplicates

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Client Sample ID	: 4479-091616-0855	**Matrix**	: SOIL
Lab Sample ID	: L1629399-02	**Analysis Date**	: 09/19/16 13:13
Dup Sample ID	: WG932977-3	**DUP Analysis Date**	: 09/19/16 13:18

Parameter	Sample Concentration (mg/kg)	Duplicate Concentration (mg/kg)	RPD	RPD Limit
Arsenic, Total	2.5	2.6	4	20

LCS Sample Results Summary

Form 7
Laboratory Control Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Client Sample ID	: NA	**Matrix**	: SOIL
Lab Sample ID	: WG932977-2	**LCS Analysis Date**	: 09/19/16 12:48
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
Arsenic, Total	145.	140.	96.					80-121	20
Nickel, Total	129.	110.	85.					83-117	20

Run Logs

Form 13
Analysis Run Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TRACE5	**Analysis Method**	: 1,6010C
Start Date	: 09/19/16 10:48	**End Date**	: 09/19/16 14:43

Sample Number	Dilution Factor	Analysis Time	Arsenic, Total	Nickel, Total
R901602-4 ICV	1	10:48:00	X	X
R901602-5 ICB	1	10:52:00	X	X
R901602-6 ICV	1	10:57:00	X	X
R901602-7 ICB	1	11:01:00	X	X
R901602-8 ICSA	1	11:22:00	X	X
R901602-9 ICSAB	1	11:27:00	X	X
R901602-10 CRI	1	11:31:00	X	X
R901602-11 CCV	1	11:35:00	X	X
R901602-12 CCB	1	11:39:00	X	X
R901602-13 CCV	1	11:44:00	X	X
R901602-14 CCB	1	11:48:00	X	X
R901602-1 CCV	1	12:02:00	X	X
R901602-2 CCB	1	12:06:00	X	X
WG932977-2 LCS	8	12:48:00	X	X
R901602-3 CCV	1	12:52:00	X	X
R901602-15 CCB	1	12:57:00	X	X
R901602-16 CCV	1	13:05:00	X	X
R901602-17 CCB	1	13:09:00	X	X
L1629399-02	1	13:13:00	X	
WG932977-3 DUP	1	13:18:00	X	X
WG932977-4 MS	1	13:22:00	X	X
L1629399-04	1	13:32:00	X	X
L1629399-07	1	13:36:00	X	X
L1629399-09	1	13:41:00		X
L1629399-10	1	13:45:00		X
L1629399-11	1	13:49:00	X	
R901602-18 CCV	1	13:58:00	X	X

Form 13
Analysis Run Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TRACE5	**Analysis Method**	: 1,6010C
Start Date	: 09/19/16 10:48	**End Date**	: 09/19/16 14:43

Sample Number	Dilution Factor	Analysis Time	Arsenic, Total	Nickel, Total
R901602-19 CCB	1	14:02:00	X	X
WG932977-1 BLANK	1	14:08:00	X	X
L1629399-12	1	14:13:00	X	
L1629399-13	1	14:17:00	X	
L1629399-14	1	14:21:00	X	
L1629399-15	1	14:26:00	X	
L1629399-16	1	14:30:00	X	
L1629399-17	1	14:34:00	X	
R901602-20 CCV	1	14:39:00	X	X
R901602-21 CCB	1	14:43:00	X	X

Digestion Logs
ICP

Form 12
Preparation Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Matrix	: SOIL	**Prep Method**	: EPA 3050B

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L1629399-02	09/17/16 07:24	1.30	-
L1629399-04	09/17/16 07:24	1.25	-
L1629399-07	09/17/16 07:24	1.31	-
L1629399-09	09/17/16 07:24	1.27	-
L1629399-10	09/17/16 07:24	1.26	-
L1629399-11	09/17/16 07:24	1.27	-
L1629399-12	09/17/16 07:24	1.31	-
L1629399-13	09/17/16 07:24	1.31	-
L1629399-14	09/17/16 07:24	1.26	-
L1629399-15	09/17/16 07:24	1.27	-
L1629399-16	09/17/16 07:24	1.28	-
L1629399-17	09/17/16 07:24	1.27	-
WG932977-1	09/17/16 07:24	1.25	-
WG932977-2	09/17/16 07:24	0.39	-
WG932977-3	09/17/16 07:24	1.30	-
WG932977-4	09/17/16 07:24	1.26	-

Inorganic Data
(ICPMS Analysis)

Sample Results Summary

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629399-07	Date Collected	: 09/16/16 09:55
Client ID	: 4479-091616-1000	Date Received	: 09/16/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/24/16 14:00
Sample Matrix	: SOIL	Dilution Factor	: 10
Analytical Method	: 1,6020A	Analyst	: BV
Lab File ID	: wg935406.pdf	Instrument ID	: ICPMSQ2
Sample Amount	: 50ml	%Solids	: 82
Digestion Method	: EPA 3005A	Date Digested	: 09/24/16

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-02-0	Nickel, SPLP	204.	20.0	5.56	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-11	**Date Collected**	: 09/16/16 11:30
Client ID	: 4479-091616-1130	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/24/16 14:15
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,6020A	**Analyst**	: BV
Lab File ID	: wg935406.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: 90
Digestion Method	: EPA 3005A	**Date Digested**	: 09/24/16

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, SPLP	16.4	10.0	1.65	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-13	**Date Collected**	: 09/16/16 11:35
Client ID	: 4479-091616-1135	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/24/16 14:18
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,6020A	**Analyst**	: BV
Lab File ID	: wg935406.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: 91
Digestion Method	: EPA 3005A	**Date Digested**	: 09/24/16

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, SPLP	54.6	10.0	1.65	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-15	**Date Collected**	: 09/16/16 11:42
Client ID	: 4479-091616-1142	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/24/16 14:31
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,6020A	**Analyst**	: BV
Lab File ID	: wg935406.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: 90
Digestion Method	: EPA 3005A	**Date Digested**	: 09/24/16

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, SPLP	13.6	10.0	1.65	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629399-17	Date Collected	: 09/16/16 11:40
Client ID	: 4479-091616-1140	Date Received	: 09/16/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/24/16 14:34
Sample Matrix	: SOIL	Dilution Factor	: 10
Analytical Method	: 1,6020A	Analyst	: BV
Lab File ID	: wg935406.pdf	Instrument ID	: ICPMSQ2
Sample Amount	: 50ml	%Solids	: 89
Digestion Method	: EPA 3005A	Date Digested	: 09/24/16

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-38-2	Arsenic, SPLP	10.1	10.0	1.65	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: WG935430-1	Date Collected	: NA
Client ID	: WG935430-1BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 09/24/16 13:55
Sample Matrix	: SOIL	Dilution Factor	: 10
Analytical Method	: 1,6020A	Analyst	: BV
Lab File ID	: wg935406.pdf	Instrument ID	: ICPMSQ2
Sample Amount	: 50ml	%Solids	: NA
Digestion Method	: EPA 3005A	Date Digested	: 09/24/16

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-38-2	Arsenic, SPLP	ND	10.0	1.65	U
7440-02-0	Nickel, SPLP	ND	20.0	5.56	U

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: WG935430-3	**Date Collected**	: 09/16/16 09:55
Client ID	: 4479-091616-1000DUP	**Date Received**	: 09/16/16
Sample Location	:	**Date Analyzed**	: 09/24/16 14:03
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 1,6020A	**Analyst**	: BV
Lab File ID	: wg935406.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: 82
Digestion Method	: EPA 3005A	**Date Digested**	: 09/24/16

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-02-0	Nickel, SPLP	198.	20.0	5.56	

Blank Results Summary

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R903758-2		R903758-6		R903758-8		R903758-10		WG935430-1	
Date Analyzed :	09/24/16 09:15		09/24/16 09:37		09/24/16 10:12		09/24/16 10:51		09/24/16 13:55	
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q
Arsenic	0.165	U	0.165	U	0.165	U	0.165	U	1.65	U
Nickel	0.556	U	0.556	U	0.556	U	0.556	U	5.56	U

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R903758-12		R903758-14		R903758-16			
Date Analyzed :			09/24/16 11:26		09/24/16 12:00		09/24/16 12:37			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Arsenic			0.165	U	0.165	U	0.165	U		
Nickel			0.556	U	0.556	U	0.556	U		

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R903758-18		R903758-20		R903758-22			
Date Analyzed :			09/24/16 13:13		09/24/16 13:48		09/24/16 14:23			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Arsenic			0.165	U	0.165	U	0.165	U		
Nickel			0.556	U	0.556	U	0.556	U		

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R903758-24							
Date Analyzed :			09/24/16 14:45							
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Arsenic			0.165	U						
Nickel			0.556	U						

Calibration Summary

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R903758-1			R903758-5			R903758-7		R903758-9	
Date Analyzed :	09/24/16 09:12			09/24/16 09:34			09/24/16 10:09		09/24/16 10:48	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic	100.0000	94.2000	94	100.0000	102.0000	102	97.5000	98	93.2000	93
Nickel	100.0000	101.0000	101	100.0000	107.0000	107	96.8000	97	97.9000	98

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R903758-11			R903758-13		R903758-15	
Date Analyzed :				09/24/16 11:23			09/24/16 11:57		09/24/16 12:34	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic				100.0000	97.9000	98	100.0000	100	97.4000	97
Nickel				100.0000	99.6000	100	106.0000	106	102.0000	102

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R903758-17			R903758-19		R903758-21	
Date Analyzed :				09/24/16 13:10			09/24/16 13:45		09/24/16 14:21	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic				100.0000	94.0000	94	95.8000	96	92.0000	92
Nickel				100.0000	97.5000	98	99.9000	100	93.8000	94

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R903758-23						
Date Analyzed :				09/24/16 14:38						
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic				100.0000	92.1000	92				
Nickel				100.0000	98.4000	98				

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

ICP Interference Check Sample Results Summary

Form 4a
Interference Check Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: ICPMSQ2	**Concentration Units**	: ug/l

	True		Initial Found				Final Found			
Lab ID :			R903758-3		R903758-4					
Analysis Date :			09/24/16 09:26		09/24/16 09:29					
Analyte	**Sol. A**	**Sol. AB**	**Sol. A**	**%R**	**Sol. AB**	**%R**	**Sol. A**	**%R**	**Sol. AB**	**%R**
Arsenic		20	0.0259		19.0	95				
Nickel		40	0.503		40.6	102				

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

Spike Sample Results

Form 5a
Matrix Spike

Client	:	Haley & Aldrich, Inc.	**Lab Number**	:	L1629399
Project Name	:	EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	:	70613-814
Client Sample ID	:	4479-091616-1000	**Matrix**	:	SOIL
Lab Sample ID	:	L1629399-07			
Matrix Spike	:	WG935430-4	**MS Analysis Date**	:	09/24/16 14:06
Matrix Spike Dup	:		**MSD Analysis Date**	:	

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Arsenic, SPLP	ND	120	134.	112					80-120	20
Nickel, SPLP	204.	500	732.	106					80-120	20

Duplicate Sample Results Summary

Form 6
Lab Duplicates

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Client Sample ID	: 4479-091616-1000	**Matrix**	: SOIL
Lab Sample ID	: L1629399-07	**Analysis Date**	: 09/24/16 14:00
Dup Sample ID	: WG935430-3	**DUP Analysis Date**	: 09/24/16 14:03

Parameter	Sample Concentration (ug/l)	Duplicate Concentration (ug/l)	RPD	RPD Limit
Nickel, SPLP	204.	198.	3	20

LCS Sample Results Summary

Form 7
Laboratory Control Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Client Sample ID	: NA	**Matrix**	: SOIL
Lab Sample ID	: WG935430-2	**LCS Analysis Date**	: 09/24/16 13:58
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Arsenic, SPLP	120.	119.	99.					80-120	20
Nickel, SPLP	500.	486.	97.					80-120	20

Internal Standard Summary

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: ICPMSQ2	**Analysis Method**	: 1,6020A
Start Date	: 09/24/16	**End Date**	: 09/24/16

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R903758-1 ICV	09:12:28	99	107	105	106	104
R903758-2 ICB	09:15:23	92	96	96	96	99
R903758-3 ICSA	09:26:11	89	98	99	100	102
R903758-4 ICSAB	09:29:06	89	94	98	98	97
R903758-5 CCV	09:34:52	95	105	102	103	99
R903758-6 CCB	09:37:48	94	103	101	100	102
R903758-7 CCV	10:09:27	98	115	112	110	107
R903758-8 CCB	10:12:23	102	118	113	114	112
R903758-9 CCV	10:48:48	103	122	119	115	110
R903758-10 CCB	10:51:43	103	124	112	116	114
R903758-11 CCV	11:23:20	105	121	112	114	109
R903758-12 CCB	11:26:15	101	116	116	112	110
R903758-13 CCV	11:57:49	98	110	109	107	103
R903758-14 CCB	12:00:44	104	115	111	111	111
R903758-15 CCV	12:34:34	103	113	108	110	104
R903758-16 CCB	12:37:30	103	116	113	112	111
R903758-17 CCV	13:10:44	103	119	117	114	110
R903758-18 CCB	13:13:40	98	118	110	114	114
R903758-19 CCV	13:45:18	104	125	118	113	105
R903758-20 CCB	13:48:14	103	115	112	110	107
WG935430-1 BLANK	13:55:08	98	112	112	109	109
WG935430-2 LCS	13:58:01	101	114	116	109	111
L1629399-07	14:00:55	102	112	111	110	111
WG935430-3 DUP	14:03:48	100	108	108	108	108
WG935430-4 MS	14:06:40	101	114	108	107	107
L1629399-11	14:15:17	98	110	110	108	111
L1629399-13	14:18:09	94	104	102	102	105

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: ICPMSQ2	**Analysis Method**	: 1,6020A
Start Date	: 09/24/16	**End Date**	: 09/24/16

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R903758-21 CCV	14:21:01	99	117	116	114	110
R903758-22 CCB	14:23:57	100	112	114	111	108
L1629399-15	14:31:16	95	107	104	105	108
L1629399-17	14:34:08	94	103	106	103	105
R903758-23 CCV	14:38:56	101	114	113	110	106
R903758-24 CCB	14:45:27	104	118	109	112	112

Run Logs

Form 13
Analysis Run Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: ICPMSQ2	**Analysis Method**	: 1,6020A
Start Date	: 09/24/16 09:12	**End Date**	: 09/24/16 14:45

Sample Number	Dilution Factor	Analysis Time	Arsenic, SPLP	Nickel, SPLP
R903758-1 ICV	1	09:12:28	X	X
R903758-2 ICB	1	09:15:23	X	X
R903758-3 ICSA	1	09:26:11	X	X
R903758-4 ICSAB	1	09:29:06	X	X
R903758-5 CCV	1	09:34:52	X	X
R903758-6 CCB	1	09:37:48	X	X
R903758-7 CCV	1	10:09:27	X	X
R903758-8 CCB	1	10:12:23	X	X
R903758-9 CCV	1	10:48:48	X	X
R903758-10 CCB	1	10:51:43	X	X
R903758-11 CCV	1	11:23:20	X	X
R903758-12 CCB	1	11:26:15	X	X
R903758-13 CCV	1	11:57:49	X	X
R903758-14 CCB	1	12:00:44	X	X
R903758-15 CCV	1	12:34:34	X	X
R903758-16 CCB	1	12:37:30	X	X
R903758-17 CCV	1	13:10:44	X	X
R903758-18 CCB	1	13:13:40	X	X
R903758-19 CCV	1	13:45:18	X	X
R903758-20 CCB	1	13:48:14	X	X
WG935430-1 BLANK	10	13:55:08	X	X
WG935430-2 LCS	10	13:58:01	X	X
L1629399-07	10	14:00:55		X
WG935430-3 DUP	10	14:03:48	X	X
WG935430-4 MS	10	14:06:40	X	X
L1629399-11	10	14:15:17	X	
L1629399-13	10	14:18:09	X	

Form 13
Analysis Run Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: ICPMSQ2	**Analysis Method**	: 1,6020A
Start Date	: 09/24/16 09:12	**End Date**	: 09/24/16 14:45

Sample Number	Dilution Factor	Analysis Time	Arsenic, SPLP	Nickel, SPLP
R903758-21 CCV	1	14:21:01	X	X
R903758-22 CCB	1	14:23:57	X	X
L1629399-15	10	14:31:16	X	
L1629399-17	10	14:34:08	X	
R903758-23 CCV	1	14:38:56	X	X
R903758-24 CCB	1	14:45:27	X	X

Digestion Logs
ICPMS

Form 12
Preparation Log

Client	:	**Haley & Aldrich, Inc.**	**Lab Number**	:	**L1629399**
Project Name	:	**EWING TOWNSHIP INDUSTRIAL LAND**	**Project Number**	:	**70613-814**
Matrix	:	**SOIL**	**Prep Method**	:	**EPA 3005A**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L1629399-07	09/24/16 11:18	-	50
L1629399-11	09/24/16 11:18	-	50
L1629399-13	09/24/16 11:18	-	50
L1629399-15	09/24/16 11:18	-	50
L1629399-17	09/24/16 11:18	-	50
WG935430-1	09/24/16 11:18	-	50
WG935430-2	09/24/16 11:18	-	50
WG935430-3	09/24/16 11:18	-	50
WG935430-4	09/24/16 11:18	-	50

Wet Chemistry

Total Solids / Percent Moisture Analysis

Results Summary

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: WG932954-1	Date Collected	: 09/16/16 08:50
Client ID	: 4479-091616-0850DUP	Date Received	: 09/16/16
Sample Location	:	Date Analyzed	: 09/17/16 02:02
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 121,2540G	Analyst	: VB
Lab File ID	: WG932954.csv	Instrument ID	:
Sample Amount	:	%Solids	: 76
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	% Results	% RL	% MDL	Qualifier
NONE	Solids, Total	73.4	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-01	**Date Collected**	: 09/16/16 08:50
Client ID	: 4479-091616-0850	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 02:02
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932954.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 76
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**75.7**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-02	**Date Collected**	: 09/16/16 08:50
Client ID	: 4479-091616-0855	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 02:02
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932954.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 62
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	% RL	% MDL	Qualifier
NONE	Solids, Total	62.2	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-03	**Date Collected**	: 09/16/16 08:55
Client ID	: 4479-091616-0910	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 02:02
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932954.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 90
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**89.8**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-04	**Date Collected**	: 09/16/16 09:10
Client ID	: 4479-091616-0925	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 02:02
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932954.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 81
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**81.4**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-05	**Date Collected**	: 09/16/16 09:25
Client ID	: 4479-091616-0945	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 02:02
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932954.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 85
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	85.4	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-06	**Date Collected**	: 09/16/16 09:45
Client ID	: 4479-091616-0955	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 02:02
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932954.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 83
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	83.0	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-07	**Date Collected**	: 09/16/16 09:55
Client ID	: 4479-091616-1000	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 02:02
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932954.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 82
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**81.8**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-08	**Date Collected**	: 09/16/16 10:10
Client ID	: 4479-091616-1010	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 02:02
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932954.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 76
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**75.6**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-09	**Date Collected**	: 09/16/16 10:40
Client ID	: 4479-091616-1040	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 02:02
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932954.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 83
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	83.2	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-10	**Date Collected**	: 09/16/16 10:45
Client ID	: 4479-091616-1045	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 02:02
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932954.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 87
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**87.0**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-11	**Date Collected**	: 09/16/16 11:30
Client ID	: 4479-091616-1130	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 02:02
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932954.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 90
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**89.7**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-12	**Date Collected**	: 09/16/16 11:32
Client ID	: 4479-091616-1132	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 02:02
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932954.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 92
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	91.7	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-13	**Date Collected**	: 09/16/16 11:35
Client ID	: 4479-091616-1135	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 02:02
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932954.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 91
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**91.3**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-14	**Date Collected**	: 09/16/16 11:38
Client ID	: 4479-091616-1138	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 02:02
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932954.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 91
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**90.5**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-15	**Date Collected**	: 09/16/16 11:42
Client ID	: 4479-091616-1142	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 02:02
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932954.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 90
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**90.2**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-16	**Date Collected**	: 09/16/16 11:45
Client ID	: 4479-091616-1145	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 02:02
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932954.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 93
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**92.9**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-17	**Date Collected**	: 09/16/16 11:40
Client ID	: 4479-091616-1140	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 02:02
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932954.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 89
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**88.9**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-18	**Date Collected**	: 09/16/16 11:47
Client ID	: 4479-091616-1147	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 02:02
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932954.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 92
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	% RL	% MDL	Qualifier
NONE	Solids, Total	92.4	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-19	**Date Collected**	: 09/16/16 12:00
Client ID	: 4479-091616-1200	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/17/16 02:02
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG932954.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 85
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	% RL	% MDL	Qualifier
NONE	Solids, Total	84.7	0.100	NA	

Duplicate Sample Results Summary

Form 6
Lab Duplicates

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Client Sample ID	: 4479-091616-0850	**Matrix**	: SOIL
Lab Sample ID	: L1629399-01	**Analysis Date**	: 09/17/16 02:02
Dup Sample ID	: WG932954-1	**DUP Analysis Date**	: 09/17/16 02:02

Parameter	Sample Concentration (%)	Duplicate Concentration (%)	RPD	RPD Limit
Solids, Total	75.7	73.4	3	20

Organic Carbon Analysis

Results Summary

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: WG934874-1	Date Collected	: NA
Client ID	: WG934874-1BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 09/22/16 09:00
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 13,-	Analyst	: CM
Lab File ID	: WG934874,CM,toc1,csv	Instrument ID	: TOC1
Sample Amount	:	%Solids	: NA
Digestion Method	:	Date Digested	:

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-44-0	Total Organic Carbon (Rep1)	ND	500	500.	U
7440-44-0	Total Organic Carbon (Rep2)	ND	500	500.	U

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: WG934874-2	Date Collected	:
Client ID	: WG934874-2SRM	Date Received	:
Sample Location	:	Date Analyzed	: 09/22/16 09:00
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 13,-	Analyst	: CM
Lab File ID	: WG934874,CM,toc1,csv	Instrument ID	: TOC1
Sample Amount	:	%Solids	: NA
Digestion Method	:	Date Digested	:

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-44-0	Total Organic Carbon (Rep1)	42800	500	500.	
7440-44-0	Total Organic Carbon (Rep2)	38400	500	500.	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629399-10	Date Collected	: 09/16/16 10:45
Client ID	: 4479-091616-1045	Date Received	: 09/16/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/22/16 09:20
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 13,-	Analyst	: CM
Lab File ID	: WG934874,CM,toc1,csv	Instrument ID	: TOC1
Sample Amount	:	%Solids	: 87
Digestion Method	:	Date Digested	:

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-44-0	Total Organic Carbon (Rep1)	1230	500	500.	
7440-44-0	Total Organic Carbon (Rep2)	1450	500	500.	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Lab ID	: L1629399-18	**Date Collected**	: 09/16/16 11:47
Client ID	: 4479-091616-1147	**Date Received**	: 09/16/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 09/22/16 09:20
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 13,-	**Analyst**	: CM
Lab File ID	: WG934874,CM,toc1,csv	**Instrument ID**	: TOC1
Sample Amount	:	**%Solids**	: 92
Digestion Method	:	**Date Digested**	:

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-44-0	Total Organic Carbon (Rep1)	1380	500	500.	
7440-44-0	Total Organic Carbon (Rep2)	1480	500	500.	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629399-19	Date Collected	: 09/16/16 12:00
Client ID	: 4479-091616-1200	Date Received	: 09/16/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/22/16 09:20
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 13,-	Analyst	: CM
Lab File ID	: WG934874,CM,toc1,csv	Instrument ID	: TOC1
Sample Amount	:	%Solids	: 85
Digestion Method	:	Date Digested	:

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7440-44-0	Total Organic Carbon (Rep1)	103000	500	500.	
7440-44-0	Total Organic Carbon (Rep2)	75500	500	500.	

Calibration Summary

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TOC1	**Units**	:

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R902935-4			R902935-6						
Date Analyzed :	09/22/16 09:00			09/22/16 09:20						
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Total Organic Carbon (Rep1)	1.000	1.000	100	1.000	1.060	106				

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TOC1	**Units**	:

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R902935-8			R902935-16			R902935-15		R902935-17	
Date Analyzed :	09/22/16 09:20			09/22/16 10:28			09/22/16 11:53		09/22/16 13:47	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Total Organic Carbon (Rep1)	1.000	1.000	100	1.000	1.090	109	1.040	104	1.050	105

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TOC1	**Units**	:

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R902935-20			R902935-18		R902935-19	
Date Analyzed :				09/22/16 15:40			09/22/16 16:42		09/22/16 17:58	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Total Organic Carbon (Rep1)				1.000	1.060	106	1.130	113	1.100	110

Blank Results Summary

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Instrument ID	: TOC1		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R902935-3		R902935-1		R902935-5		R902935-10		WG934874-1	
Date Analyzed :	09/22/16 09:00		09/22/16 09:00		09/22/16 09:20		09/22/16 10:33		09/22/16 09:00	
Parameter	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q
Total Organic Carbon (Rep1)	0.0500	U	0.0500	U	0.0500	U	0.0500	U	500.	U
Total Organic Carbon (Rep2)	500.	U	500.	U	500.	U	500.	U	500.	U

Form 3
Blanks

Client	:	Haley & Aldrich, Inc.	**Lab Number**	:	L1629399
Project Name	:	EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	:	70613-814
Instrument ID	:	TOC1			

		Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID	:	R902935-7		R902935-14		R902935-13		R902935-9			
Date Analyzed	:	09/22/16 09:20		09/22/16 11:58		09/22/16 13:52		09/22/16 15:44			
Parameter			Q		Q		Q		Q		Q
Total Organic Carbon (Rep1)		0.0500	U	0.0500	U	0.0500	U	0.0500	U		

Form 3
Blanks

Client	:	Haley & Aldrich, Inc.	**Lab Number**	:	L1629399
Project Name	:	EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	:	70613-814
Instrument ID	:	TOC1			

		Initial Calibration Blank		Continuing Calibration Blank(s)				Preparation Blank	
Lab ID	:	R902935-21		R902935-12		R902935-11			
Date Analyzed	:	09/22/16 09:25		09/22/16 16:47		09/22/16 18:02			
Parameter			**Q**		**Q**		**Q**	**Q**	**Q**
Total Organic Carbon (Rep1)		0.0500	U	0.0500	U	0.0500	U		

Grainsize Analysis

Results Summary

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: WG935908-1	Date Collected	: 09/16/16 10:45
Client ID	: 4479-091616-1045DUP	Date Received	: 09/16/16
Sample Location	:	Date Analyzed	: 09/26/16 15:47
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 12,D422	Analyst	: SP
Lab File ID	: GS4479-091616-1045,WG9359	Instrument ID	:
Sample Amount	:	%Solids	: 87
Digestion Method	:	Date Digested	:

		%			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Cobbles	ND	0.100	NA	U
NONE	% Coarse Gravel	ND	0.100	NA	U
NONE	% Fine Gravel	0.400	0.100	NA	
NONE	% Coarse Sand	1.90	0.100	NA	
NONE	% Medium Sand	16.5	0.100	NA	
NONE	% Fine Sand	17.2	0.100	NA	
NONE	% Silt Fine	51.6	0.100	NA	
NONE	% Clay Fine	12.4	0.100	NA	
NONE	% Total Fines	64.0	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629399-10	Date Collected	: 09/16/16 10:45
Client ID	: 4479-091616-1045	Date Received	: 09/16/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/26/16 15:47
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 12,D422	Analyst	: SP
Lab File ID	: GS4479-091916-1045,L16293	Instrument ID	:
Sample Amount	:	%Solids	: 87
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	% Results	% RL	% MDL	Qualifier
NONE	Cobbles	ND	0.100	NA	U
NONE	% Coarse Gravel	ND	0.100	NA	U
NONE	% Fine Gravel	2.80	0.100	NA	
NONE	% Coarse Sand	1.40	0.100	NA	
NONE	% Medium Sand	18.0	0.100	NA	
NONE	% Fine Sand	19.4	0.100	NA	
NONE	% Silt Fine	46.5	0.100	NA	
NONE	% Clay Fine	11.9	0.100	NA	
NONE	% Total Fines	58.4	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629399-18	Date Collected	: 09/16/16 11:47
Client ID	: 4479-091616-1147	Date Received	: 09/16/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/26/16 15:47
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 12,D422	Analyst	: SP
Lab File ID	: GS4479-091616-1147,L16293	Instrument ID	:
Sample Amount	:	%Solids	: 92
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Cobbles	ND	0.100	NA	U
NONE	% Coarse Gravel	ND	0.100	NA	U
NONE	% Fine Gravel	ND	0.100	NA	U
NONE	% Coarse Sand	ND	0.100	NA	U
NONE	% Medium Sand	0.600	0.100	NA	
NONE	% Fine Sand	3.60	0.100	NA	
NONE	% Silt Fine	71.5	0.100	NA	
NONE	% Clay Fine	24.3	0.100	NA	
NONE	% Total Fines	95.8	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	Lab Number	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	Project Number	: 70613-814
Lab ID	: L1629399-19	Date Collected	: 09/16/16 12:00
Client ID	: 4479-091616-1200	Date Received	: 09/16/16
Sample Location	: EWING, NJ	Date Analyzed	: 09/26/16 15:47
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 12,D422	Analyst	: SP
Lab File ID	: GS4479-091616-1200,L16293	Instrument ID	:
Sample Amount	:	%Solids	: 85
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Cobbles	ND	0.100	NA	U
NONE	% Coarse Gravel	ND	0.100	NA	U
NONE	% Fine Gravel	10.0	0.100	NA	
NONE	% Coarse Sand	17.6	0.100	NA	
NONE	% Medium Sand	23.1	0.100	NA	
NONE	% Fine Sand	19.6	0.100	NA	
NONE	% Silt Fine	26.7	0.100	NA	
NONE	% Clay Fine	3.00	0.100	NA	
NONE	% Total Fines	29.7	0.100	NA	

Duplicate Sample Results Summary

Form 6
Lab Duplicates

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1629399
Project Name	: EWING TOWNSHIP INDUSTRIAL LAND	**Project Number**	: 70613-814
Client Sample ID	: 4479-091616-1045	**Matrix**	: SOIL
Lab Sample ID	: L1629399-10	**Analysis Date**	: 09/26/16 15:47
Dup Sample ID	: WG935908-1	**DUP Analysis Date**	: 09/26/16 15:47

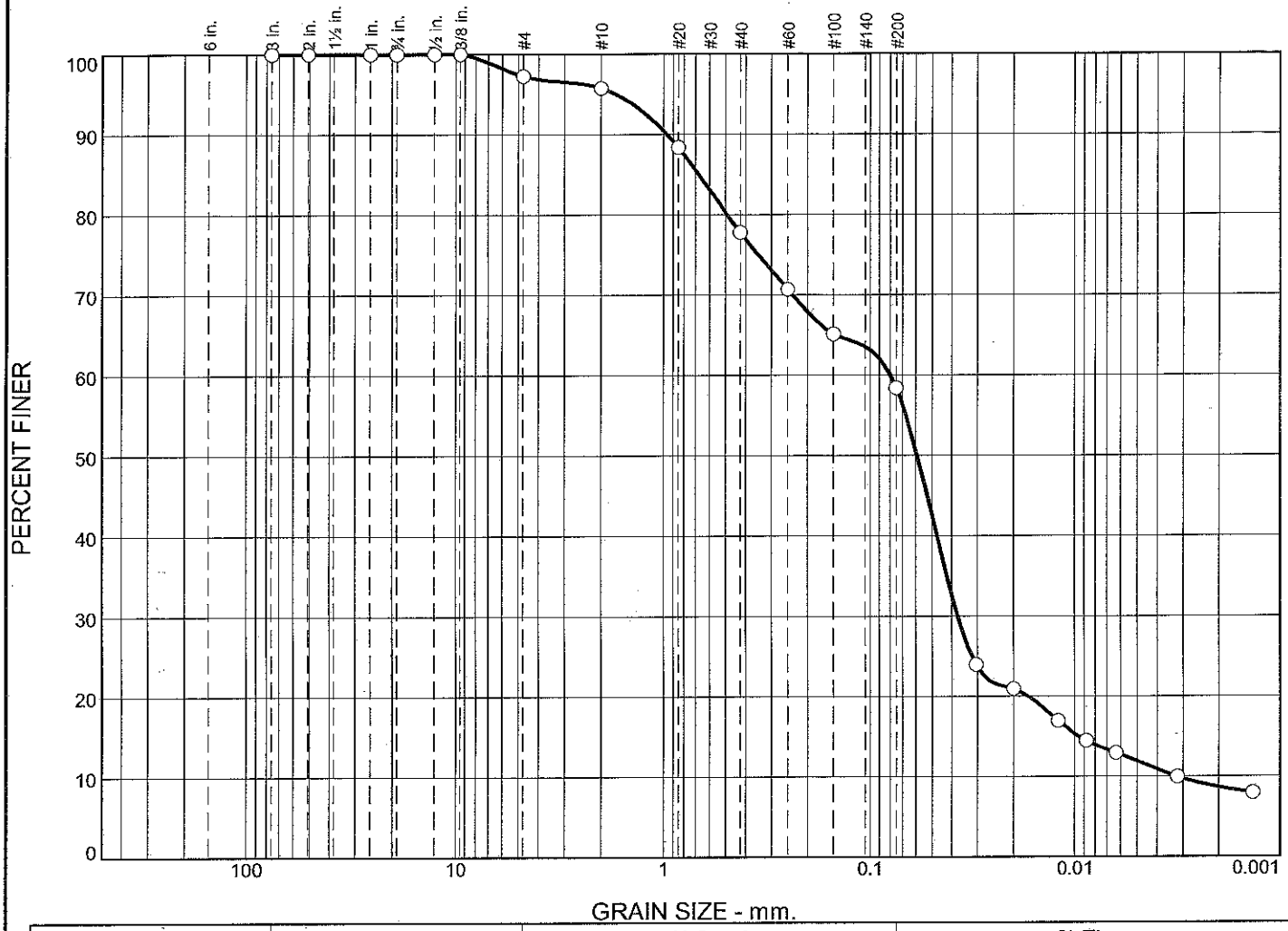
Parameter	Sample Concentration (%)	Duplicate Concentration (%)	RPD	RPD Limit
Cobbles	ND	ND	NC	20
% Coarse Gravel	ND	ND	NC	20
% Fine Gravel	2.80	0.400	150 Q	20
% Coarse Sand	1.40	1.90	30 Q	20
% Medium Sand	18.0	16.5	9	20
% Fine Sand	19.4	17.2	12	20
% Silt Fine	46.5	51.6	10	20
% Clay Fine	11.9	12.4	4	20
% Total Fines	58.4	64.0	9	20

Sample Raw Data

ASTM D422-63

GRAIN SIZE ANALYSIS

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	2.8	1.4	18.0	19.4	46.5	11.9

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.6761	0.0801	0.0592	0.0374	0.0096	0.0032	5.43	24.88

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source of Sample:** 4479-091916-1045 **Sample Number:** L1629399-10

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/26/2016

Location: 4479-091916-1045

Sample Number: L1629399-10

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 93.89
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
93.89	0.00	3	0.00	0.00	100.0
		2	0.00	0.00	100.0
		1	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		.5	0.00	0.00	100.0
		.375	0.00	0.00	100.0
		#4	2.60	0.00	97.2
		#10	1.37	0.00	95.8
		#20	6.97	0.00	88.3
		#40	9.91	0.00	77.8
		#60	6.67	0.00	70.7
		#100	5.23	0.00	65.1
		#200	6.30	0.00	58.4

Hydrometer Test Data

Hydrometer test uses material passing #200
Percent passing #200 based upon complete sample = 58.4
Weight of hydrometer sample =93.89
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.0	1.0240	1.0240	0.0136	24.0	9.9	0.0304	24.0
5.00	20.0	1.0210	1.0210	0.0136	21.0	10.7	0.0200	21.0
15.00	20.0	1.0170	1.0170	0.0136	17.0	11.8	0.0121	17.0
30.00	20.0	1.0145	1.0145	0.0136	14.5	12.5	0.0088	14.5
60.00	20.0	1.0130	1.0130	0.0136	13.0	12.9	0.0063	13.0
250.00	20.0	1.0100	1.0100	0.0136	10.0	13.6	0.0032	10.0
1440.00	20.0	1.0080	1.0080	0.0136	8.0	14.2	0.0014	8.0

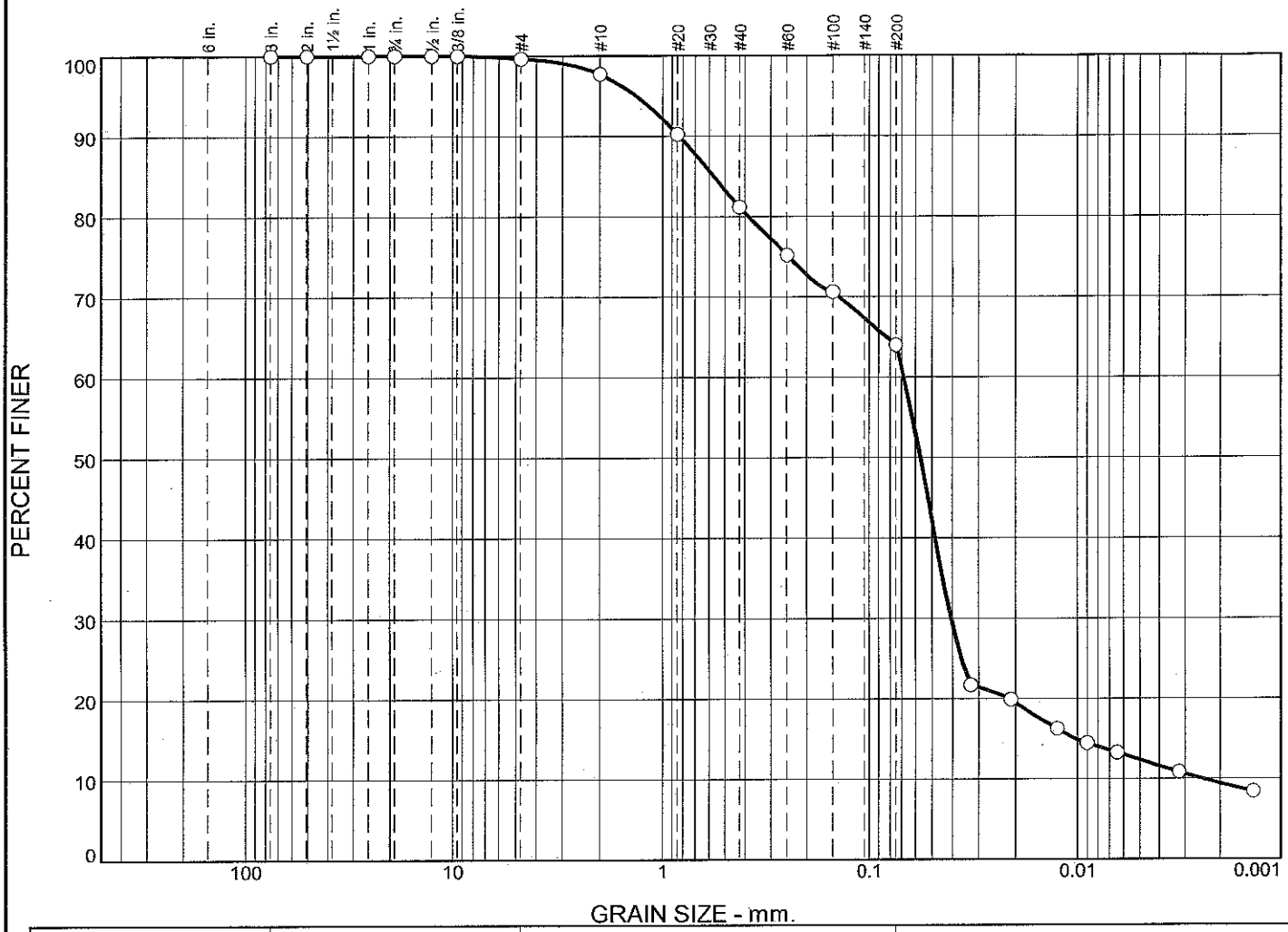
Fractional Components

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	2.8	2.8	1.4	18.0	19.4	38.8	46.5	11.9	58.4

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0032	0.0096	0.0169	0.0374	0.0592	0.0801	0.4917	0.6761	0.9663	1.6913

Fineness Modulus	C_u	C_c
0.93	24.88	5.43

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	0.4	1.9	16.5	17.2	51.6	12.4

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.5694	0.0682	0.0569	0.0405	0.0102	0.0024	9.86	28.01

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source of Sample:** 4479-091616-1045 **Sample Number:** WG935908-1

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/26/2016

Location: 4479-091616-1045

Sample Number: WG935908-1

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare** = 84.98
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
84.98	0.00	3	0.00	0.00	100.0
		2	0.00	0.00	100.0
		1	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		.5	0.00	0.00	100.0
		.375	0.00	0.00	100.0
		#4	0.31	0.00	99.6
		#10	1.64	0.00	97.7
		#20	6.33	0.00	90.3
		#40	7.70	0.00	81.2
		#60	5.10	0.00	75.2
		#100	3.90	0.00	70.6
		#200	5.63	0.00	64.0

Hydrometer Test Data

Hydrometer test uses material passing #200
Percent passing #200 based upon complete sample = 64.0
Weight of hydrometer sample =84.98
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

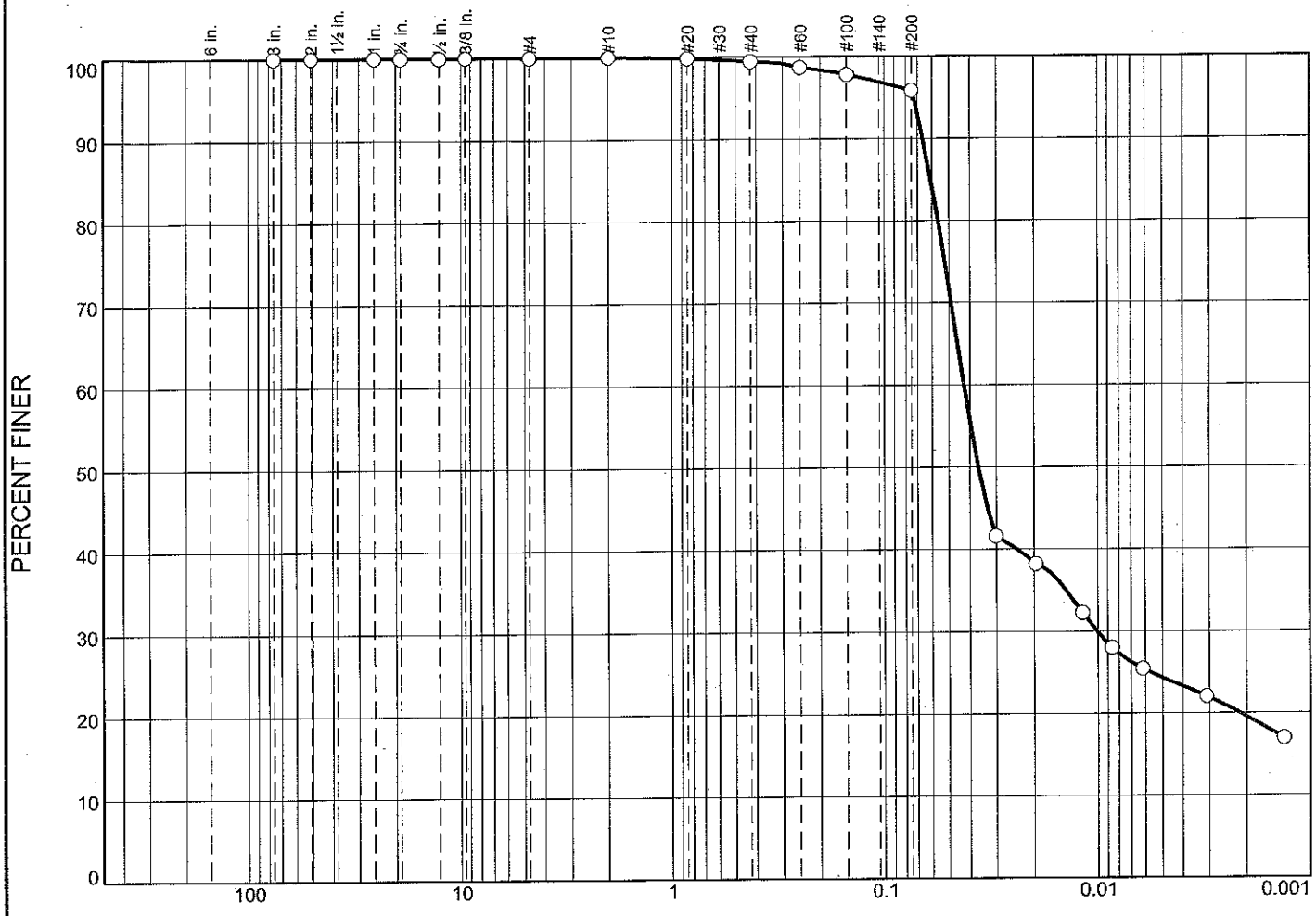
Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.0	1.0180	1.0180	0.0136	18.0	11.5	0.0328	21.7
5.00	20.0	1.0165	1.0165	0.0136	16.5	11.9	0.0211	19.9
15.00	20.0	1.0135	1.0135	0.0136	13.5	12.7	0.0126	16.3
30.00	20.0	1.0120	1.0120	0.0136	12.0	13.1	0.0090	14.5
60.00	20.0	1.0110	1.0110	0.0136	11.0	13.4	0.0064	13.3
250.00	20.0	1.0090	1.0090	0.0136	9.0	13.9	0.0032	10.9
1440.00	20.0	1.0070	1.0070	0.0136	7.0	14.4	0.0014	8.4

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.4	0.4	1.9	16.5	17.2	35.6	51.6	12.4	64.0

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0024	0.0102	0.0214	0.0405	0.0569	0.0682	0.3843	0.5694	0.8324	1.3416

Fineness Modulus	C_u	C_c
0.75	28.01	9.86

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	0.0	0.0	0.6	3.6	71.5	24.3

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.0607	0.0426	0.0364	0.0101				

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source of Sample:** 4479-091616-1147 **Sample Number:** L1629399-18

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/26/2016

Location: 4479-091616-1147

Sample Number: L1629399-18

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 90.51
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
90.51	0.00	3	0.00	0.00	100.0
		2	0.00	0.00	100.0
		1	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		.5	0.00	0.00	100.0
		.375	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#10	0.02	0.00	100.0
		#20	0.14	0.00	99.8
		#40	0.34	0.00	99.4
		#60	0.70	0.00	98.7
		#100	0.80	0.00	97.8
		#200	1.78	0.00	95.8

Hydrometer Test Data

Hydrometer test uses material passing #200
Percent passing #200 based upon complete sample = 95.8
Weight of hydrometer sample =90.51
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.0	1.0245	1.0245	0.0136	24.5	9.8	0.0302	41.6
5.00	20.0	1.0225	1.0225	0.0136	22.5	10.3	0.0196	38.2
15.00	20.0	1.0190	1.0190	0.0136	19.0	11.3	0.0118	32.3
30.00	20.0	1.0165	1.0165	0.0136	16.5	11.9	0.0086	28.0
60.00	20.0	1.0150	1.0150	0.0136	15.0	12.3	0.0062	25.5
250.00	20.0	1.0130	1.0130	0.0136	13.0	12.9	0.0031	22.1
1440.00	20.0	1.0100	1.0100	0.0136	10.0	13.6	0.0013	17.0

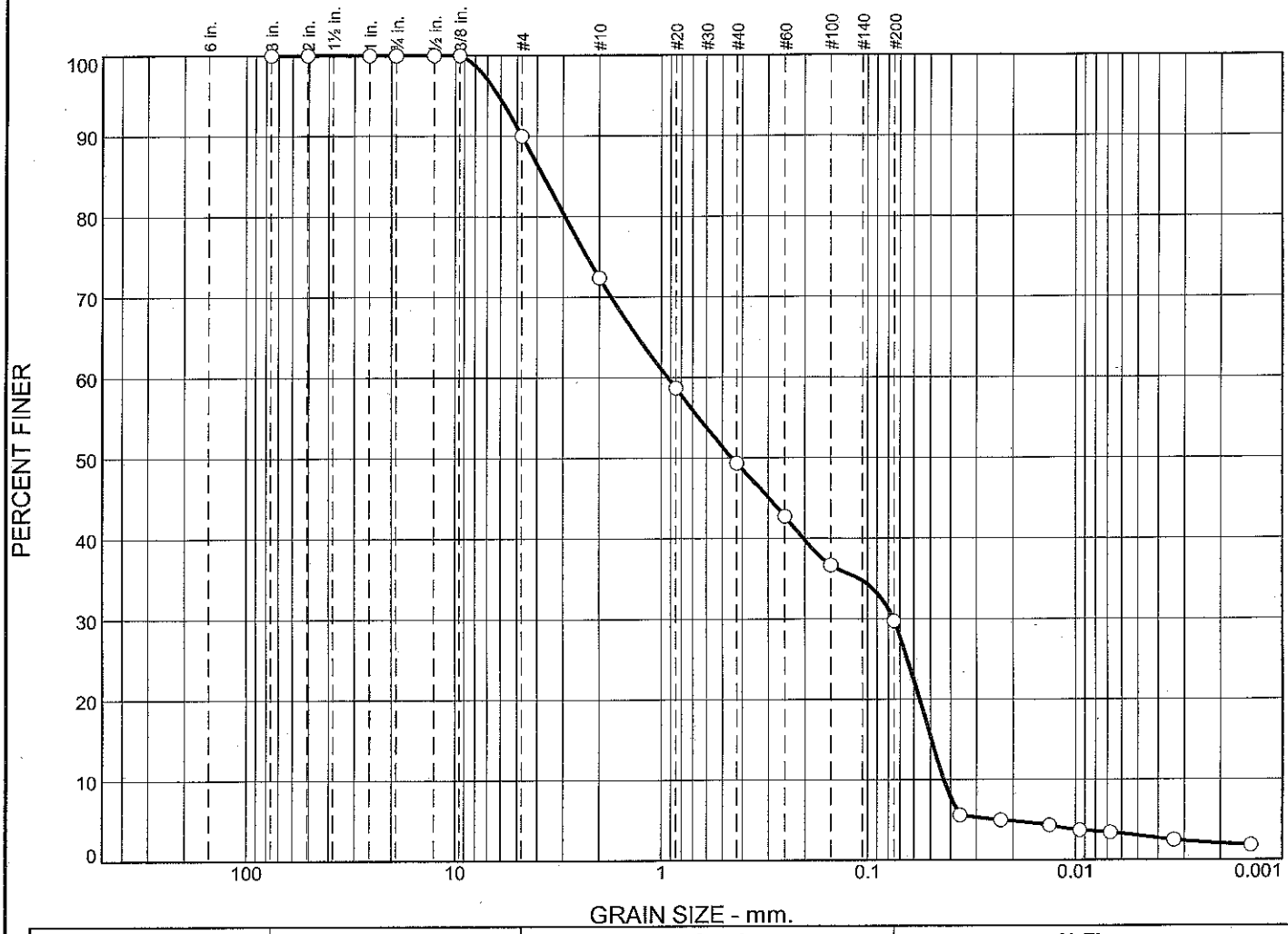
Fractional Components

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.0	0.6	3.6	4.2	71.5	24.3	95.8

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
		0.0021	0.0101	0.0364	0.0426	0.0563	0.0607	0.0661	0.0734

Fineness Modulus
0.04

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	10.0	17.6	23.1	19.6	26.7	3.0

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			3.7346	0.9316	0.4486	0.0757	0.0496	0.0431	0.14	21.63

Material Description	USCS	AASHTO
○		

Project No. **Client:**

Project:

○ **Source of Sample:** 4479-091616-1200 **Sample Number:** L1629399-19

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/26/2016

Location: 4479-091616-1200

Sample Number: L1629399-19

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 76.74
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
76.74	0.00	3	0.00	0.00	100.0
		2	0.00	0.00	100.0
		1	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		.5	0.00	0.00	100.0
		.375	0.00	0.00	100.0
		#4	7.68	0.00	90.0
		#10	13.53	0.00	72.4
		#20	10.50	0.00	58.7
		#40	7.18	0.00	49.3
		#60	5.06	0.00	42.7
		#100	4.65	0.00	36.7
		#200	5.31	0.00	29.7

Hydrometer Test Data

Hydrometer test uses material passing #200
Percent passing #200 based upon complete sample = 29.7
Weight of hydrometer sample =76.74
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.0	1.0090	1.0090	0.0136	9.0	13.9	0.0360	5.6
5.00	20.0	1.0080	1.0080	0.0136	8.0	14.2	0.0230	5.0
15.00	20.0	1.0070	1.0070	0.0136	7.0	14.4	0.0134	4.3
30.00	20.0	1.0060	1.0060	0.0136	6.0	14.7	0.0096	3.7
60.00	20.0	1.0055	1.0055	0.0136	5.5	14.8	0.0068	3.4
250.00	20.0	1.0040	1.0040	0.0136	4.0	15.2	0.0034	2.5
1440.00	20.0	1.0030	1.0030	0.0136	3.0	15.5	0.0014	1.9

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	10.0	10.0	17.6	23.1	19.6	60.3	26.7	3.0	29.7

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0431	0.0496	0.0564	0.0757	0.4486	0.9316	2.9402	3.7346	4.7518	6.1623

Fineness Modulus	C_u	C_c
2.35	21.63	0.14

ALPHA ANALYTICAL

World Class Chemistry

www.alphalab.com

Lab Number: L1634605

Client: Haley & Aldrich, Inc.

ATTN: Dimitri Quafisi

Project Name: RACER PROPERTIES

Project Number: 70613-816

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

ANALYTICAL DATA PACKAGE FOR THE
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
TRENTON NEW JERSEY 08625

Agency/Division:	**Bureau/Office:**
Project No: 70613-816	**Contract No:**
Laboratory: Alpha Analytical	**Laboratory Location:** Westborough, Ma.
	Laboratory Phone Number: (508) 898-9220
SDG No: L1634605	**NJDEP Certification #:** MA015/MA935
Date of First Sample Receipt: 10/26/2016	**Date of Last Sample Receipt:** 10/26/2016

Agency Sample Number	Laboratory Sample Number	Sample Location	Date/Time of Collection
SB-9-SO-8-A-EX1F-	L1634605-01	RACER PROPERTIES	10/26/2016 14:47
SB-AOC09-2013-104	L1634605-02	RACER PROPERTIES	10/26/2016 09:53
SB-9-SO-8-A-EX1I-	L1634605-03	RACER PROPERTIES	10/26/2016 16:00
SB-AOC09-2013-104	L1634605-04	RACER PROPERTIES	10/26/2016 12:01
SB-AOC09-2013-104	L1634605-05	RACER PROPERTIES	10/26/2016 10:22
SB-AOC09-2013-104	L1634605-06	RACER PROPERTIES	10/26/2016 10:27
SB-AOC09-2013-104	L1634605-07	RACER PROPERTIES	10/26/2016 11:46
SB-AOC09-2013-104	L1634605-08	RACER PROPERTIES	10/26/2016 11:50
SB-9-SO-8-A-EX1H-	L1634605-09	RACER PROPERTIES	10/26/2016 14:19
SB-AOC09-2013-104	L1634605-10	RACER PROPERTIES	10/26/2016 09:56
SB-9-SO-8-A-EX1K-	L1634605-11	RACER PROPERTIES	10/26/2016 14:55
SB-9-SO-8-A-EX1F-	L1634605-12	RACER PROPERTIES	10/26/2016 14:34
SB-9-SO-8-A-EX1A-	L1634605-13	RACER PROPERTIES	10/26/2016 16:57
SB-9-SO-8-A-EX1A-	L1634605-14	RACER PROPERTIES	10/26/2016 17:00
SB-AOC09-2013-104	L1634605-15	RACER PROPERTIES	10/26/2016 12:05
SB-9-SO-8-A-EX1C-	L1634605-16	RACER PROPERTIES	10/26/2016 17:10
SB-9-SO-8-A-EX1C-	L1634605-17	RACER PROPERTIES	10/26/2016 17:25
SB-9-SO-8-A-EX1K-	L1634605-18	RACER PROPERTIES	10/26/2016 15:03
SB-9-SO-8-A-EX1H-	L1634605-19	RACER PROPERTIES	10/26/2016 14:47
SB-AOC09-2013-104	L1634605-20	RACER PROPERTIES	10/26/2016 11:11
SB-9-SO-8-A-EX1I-	L1634605-21	RACER PROPERTIES	10/26/2016 15:55

ANALYTICAL DATA PACKAGE FOR THE
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
TRENTON NEW JERSEY 08625

Agency/Division:	**Bureau/Office:**
Project No: 70613-816	**Contract No:**
Laboratory: Alpha Analytical	**Laboratory Location:** Westborough, Ma.
	Laboratory Phone Number: (508) 898-9220
SDG No: L1634605	**NJDEP Certification #:** MA015/MA935
Date of First Sample Receipt: 10/26/2016	**Date of Last Sample Receipt:** 10/26/2016

SB-9-SO-8-A-EX1G	L1634605-22	RACER PROPERTIES	10/26/2016 15:45
SB-AOC09-2013-104	L1634605-23	RACER PROPERTIES	10/26/2016 11:21
SB-9-SO-8-A-EX1E-	L1634605-24	RACER PROPERTIES	10/26/2016 16:05
SB-9-SO-8-A-EX1J-	L1634605-25	RACER PROPERTIES	10/26/2016 15:32
SB-AOC09-2013-104	L1634605-26	RACER PROPERTIES	10/26/2016 11:30
SB-9-SO-8-A-EX1J-	L1634605-27	RACER PROPERTIES	10/26/2016 15:21
SB-9-SO-8-A-EX1B-	L1634605-28	RACER PROPERTIES	10/26/2016 16:46
SB-AOC09-2013-EX1	L1634605-29	RACER PROPERTIES	10/26/2016 11:09
SB-9-SO-8-A-EX1B-	L1634605-30	RACER PROPERTIES	10/26/2016 16:30

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on disk or electronically has been authorized by the laboratory director or his/her designee, as verified by the following signature.

Technical Director/Representative (Typed)	Kelly Stenstrom	11/18/16
Technical Director/Representative (Signature)	Kelly Stenstrom	

Table of Contents

New Jersey Reduced Data Deliverable Package 1
- Title Page 2
- Table of Contents 4
- Chain of Custody 5
  - External Chain of Custody 6
  - Lims COC (LN01) 9
  - Sample Receipt Tracking Report 14
- Methodology Review 22
  - Method References 23
- Laboratory Chronicle 24
  - Sample Receipt and Container Information 25
- NJ DEP DKQP Summary Questionnaire 27
  - DKQP Summary Questionnaire 28
- Conformance/Non-Conformance (Reliability) Summary 29
  - Conformance/Non-Conformance (Reliability) Report 30
- Glossary 32
  - Glossary Report 33
- Metals Analysis 35
  - Inorganic Data (ICP Analysis) 36
    - Sample Results Summary 37
      - Form 1 - Inorganics 38
    - Blank Results Summary 59
      - Form 3 - Inorganics 60
    - Calibration Summary 67
      - Form 2A - Inorganics 68
      - Form 2B - Inorganics 75
    - ICP Interference Check Sample Results Summary 77
      - Form 4A - Inorganics 78
    - Spike Sample Results 80
      - Form 5A - Inorganics 81
    - Duplicate Sample Results Summary 82
      - Form 6 - Inorganics 83
    - LCS Sample Results Summary 84
      - Form 7 - Inorganics 85
    - Sample Run Logs 87
      - Form 13 - Inorganics 88
    - ICP Digestion 92
      - Form 12 - Inorganics 93
- Wet Chemistry Analysis 95
  - Total Solids Analysis 96
    - Results Summary 97
      - Form 1 - Inorganics 98
    - Duplicate Sample Results Summary 117
      - Form 6 - Inorganics 118

Chain of Custody

CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581 — 8 Walkup Dr. — TEL: 508-898-9220 — FAX: 508-898-9193

Mansfield, MA 02048 — 320 Forbes Blvd — TEL: 508-822-9300 — FAX: 508-822-3288

Service Centers
Brewer, ME 04412 — Portsmouth, NH 03801 — Mahwah, NJ 07430
Albany, NY 12205
Tonawanda, NY 14150 — Holmes, PA 19043

Page of

Date Rec'd in Lab: 10/27/16

ALPHA Job #: L1634605

Project Information
Project Name: Racer Properties
Project Location: Ewing NJ
Project #: 70613 G 816
(Use Project name as Project #) ☐
Project Manager: Don Putz
ALPHAQuote #:

Turn-Around Time
Standard ☐ — Due Date:
Rush (only if pre approved) ☑ — # of Days:

Deliverables
☑ Email ☐ Fax
☐ EQuIS (1 File) ☑ EQuIS (4 File)
☐ Other:

Billing Information
☐ Same as Client Info
PO #

Regulatory Requirements (Program/Criteria)
Note: Select State from menu & identify criteria.

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

H&A Information
H&A Client:
H&A Address:
H&A Phone: 937-470-2292
H&A Fax:
H&A Email: dguafisi@haleyaldrich.com

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

See specific comments for Rush Instructions

Please specify Metals or TAL.

ANALYSIS

AS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	AS	Total Bottles	Sample Specific Comments
346 01	SB-9-50-S-A-EX1F-1026-1447	10/26	1447	Soil	DG	X		Hold
02	SB-AOC09-2013-104-EX1A-1026-0953		0953					Rush
03	SB-9-50-S-A-EX2I-1026-1600		1600					Hold
04	SB-AOC09-2013-104-EX1C-1026-1201		1201					Rush
05	SB-AOC09-2013-104-EX1B-1026-1622		1622					Rush
06	SB-AOC09-2013-104-EX1B-1026-1027		1027					Rush
07	SB-AOC09-2013-104-EX1F-1026-1146		1146					Hold
08	SB-AOC09-2013-104-EX1F-1026-1150		1150					Hold
09	SB-9-50-S-A-EX1H-1026-1412		1412					Hold
10	SB-AOC09-2013-104-EX1A-1026-0956		0956					Rush

Container Type
Preservative

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	10/26 @1745		
	2130		10-26-16 2130
	10-27-16 0130		10/27/16 01:30

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. Alpha Analytical's services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement# 2015-18-Alpha Analytical by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Alpha Analytical.

Document ID: 20455 Rev 1 (1/28/2016)

CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Brewer, ME 04412 Portsmouth, NH 03801 Mahwah, NJ 07430
Albany, NY 12205
Tonawanda, NY 14150 Holmes, PA 19043

Page of

Date Rec'd in Lab: 10/27/16

ALPHA Job #: L1634605

H&A Information
- H&A Client:
- H&A Address: 299 Cherry Hill Rd 303 Parsippany NJ
- H&A Phone: (937) 558 470 2292
- H&A Fax:
- H&A Email: dguafisi@haleyaldrich.com

Project Information
- Project Name: Racer Properties
- Project Location: Ewing NJ
- Project #: 70613-816
- (Use Project name as Project #) ☐
- Project Manager: Dan Putz
- ALPHAQuote #:

Turn-Around Time
- Standard ☐ Due Date:
- Rush (only if pre approved) ☑ # of Days:

Deliverables
- ☑ Email ☐ Fax
- ☐ EQuIS (1 File) ☑ EQuIS (4 File)
- ☐ Other:

Billing Information
- ☐ Same as Client Info
- PO #

Regulatory Requirements (Program/Criteria)
NJDEP

Note: Select State from menu & identify criteria.

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

See specific comments for Rush/Hold !

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
- ☐ Done
- ☐ Lab to do

Preservation
- ☐ Lab to do

(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Arsenic	Sample Specific Comments	Total Bottles
34605 11	SB-9-50-8-A-EX1K-1026-1455	10/26	1455	SOIL	DG		HOLD	
12	SB-9-50-8-A-EX1F-1026-1434		1434				HOLD	
13	SB-9-50-8-A-EX1A-1026-1657						Rush (24 hr)	
14	SB-9-50-8-A-EX1A-1026-1700						Rush (24 hr)	
15	SB-AOC09-2013-104-EX1C-1026-1205						Rush	
16	SB-9-50-8-A-EX1C-1026-1710						Rush	
17	SB-9-50-8-A-EX1C-1026-1726						Rush	
18	SB-9-50-8-A-EX1K-1026-1503						Hold	
19	SB-9-50-8-A-EX1H-1026-1447						Hold	
20	SB-AOC09-2013-104-EX1D-1026-1111						Hold	

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type
Preservative

Relinquished By:	Date/Time	Received By:	Date/Time
	10/26 1745		
	10-26-16 2130		10-26-16 17:45
	10-27-16 0130		10-27-16 2130
			10/27/16 0130

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. Alpha Analytical's services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement# 2015-18-Alpha Analytical by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Alpha Analytical.

Document ID: 20455 Rev 1 (1/28/2016)

CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Brewer, ME 04412 Portsmouth, NH 03801 Mahwah, NJ 07430
Albany, NY 12205
Tonawanda, NY 14150 Holmes, PA 19043

Page of

Date Rec'd in Lab: 10/27/16

ALPHA Job #: L1634605

Project Information
- Project Name: Racer Properties
- Project Location: Ewing, NJ
- Project #: 70613-816
- (Use Project name as Project #) ☐
- Project Manager: ~~Angie~~ Dan Putt
- ALPHAQuote #:

Turn-Around Time
- Standard ☐ Due Date:
- Rush (only if pre approved) ☐ 24-Hr # of Days:

Deliverables
- ☒ Email ☐ Fax
- ☒ EQuIS (1 File) ☒ EQuIS (4 File)
- ☐ Other:

Billing Information
- ☐ Same as Client Info
- PO #

Regulatory Requirements (Program/Criteria)
NJDEP

Note: Select State from menu & identify criteria.

Disposal Site Information
Please identify below location of applicable disposal facilities.

Disposal Facility:
- ☐ NJ ☐ NY
- ☐ Other:

H&A Information
- H&A Client:
- H&A Address: 299 Cherry Hill Rd #307 Parsippany NJ
- H&A Phone: 9374702292
- H&A Fax:
- H&A Email: dguaglisi@haleyaldrich.com

These samples have been previously analyzed by Alpha ☒

Other project specific requirements/comments:

- See comments for samples on hold

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
- ☐ Done
- ☐ Lab to do

Preservation
- ☐ Lab to do

(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Arsenic	Sample Specific Comments	Total Bottles
34608 -21	SB-9-SO-8-A-EX1I-1026-1555	10/26	1555	SO	DG	X	Hold	
22	SB-9-SO-8-A-EX1G-1026-1545		1545				Hold	
23	SB-AOC09-2013-104-EX1E-1026-1121		1121				Hold	
24	SB-9-SO-8-A-EX1E-1026-1605		1605				Hold	
25	SB-9-SO-8-A-EX1J-1026-1532		1532				Hold	
26	SB-AOC09-2013-104-EX1F-1026-1130		1130				Hold	
27	SB-9-SO-8-A-EX1J-1026-1521		1521				Hold	
28	SB-9-SO-8-A-EX1B-1026-1646		1646				Analyze 24-Hr	
29	SB-AOC09-2013-EX1D-1026-1109		1109				Hold	
30	SB-9-SO-8-A-EX1B-1026-1630		1630				Analyze 24-hr	

Container Type

Preservative

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code:
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	10/26 1745	BJ Baker AAL	10-26-16 1745
BJ Baker	10-26-16 2130		10-26-16 2130
	10-27-16 0130		10/27/16 0130

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. Alpha Analytical's services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement# 2015-18-Alpha Analytical by and between Haley & Aldrich, Inc., its subsidiaries and affiliates and Alpha Analytical.

Document ID: 20455 Rev 1 (1/28/2016)

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Nov 22 2016, 01:09 pm

Login Number: L1634605
Account: HALEY-OH2 Haley & Aldrich, Inc.Project: 70613-816
Received: 26OCT16 Due Date: 21NOV16

Sample #	Client ID	Mat	PR	Collected	Container
L1634605-01	SB-9-SO-8-A-EX1F-10	3	1A	26OCT16 14:47	1-Glass-AM.06

Prelim 10/31, Final 11/21 NJ-RED Package Due Date: 10/31/16

HOLD-METAL,NJ-RED,NJDEP

Sample #	Client ID	Mat	PR	Collected	Container
L1634605-02	SB-AOC09-2013-104-E	3	1A	26OCT16 09:53	1-Glass-AM.06

Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

AS-TI,PREPT,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1634605-03	SB-9-SO-8-A-EX1I-10	3	1A	26OCT16 16:00	1-Glass-AM.06

Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

HOLD-METAL

Sample #	Client ID	Mat	PR	Collected	Container
L1634605-04	SB-AOC09-2013-104-E	3	1A	26OCT16 12:01	1-Glass-AM.06

Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

AS-TI,PREPT,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1634605-05	SB-AOC09-2013-104-E	3	1A	26OCT16 10:22	1-Glass-AM.06

Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

AS-TI,PREPT,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1634605-06	SB-AOC09-2013-104-E	3	1A	26OCT16 10:27	1-Glass-AM.06

Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

AS-TI,PREPT,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1634605-07	SB-AOC09-2013-104-E	3	1A	26OCT16 11:46	1-Glass-AM.06

Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Nov 22 2016, 01:09 pm

Login Number: L1634605
Account: HALEY-OH2 Haley & Aldrich, Inc.Project: 70613-816
Received: 26OCT16 Due Date: 21NOV16

Sample #	Client ID	Mat	PR	Collected	Container

HOLD-METAL

L1634605-08 SB-AOC09-2013-104-E 3 1A 26OCT16 11:50 1-Glass-AM.06
Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

HOLD-METAL

L1634605-09 SB-9-SO-8-A-EX1H-10 3 1A 26OCT16 14:19 1-Glass-AM.06
Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

HOLD-METAL

L1634605-10 SB-AOC09-2013-104-E 3 1A 26OCT16 09:56 1-Glass-AM.06
Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

AS-TI,PREPT,TS

L1634605-11 SB-9-SO-8-A-EX1K-10 3 1A 26OCT16 14:55 1-Glass-AM.06
Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

HOLD-METAL

L1634605-12 SB-9-SO-8-A-EX1F-10 3 1A 26OCT16 14:34 1-Glass-AM.06
Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

HOLD-METAL

L1634605-13 SB-9-SO-8-A-EX1A-10 3 1A 26OCT16 16:57 1-Glass-AM.06
Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

AS-TI,PREPT,TS

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Nov 22 2016, 01:09 pm

Login Number: L1634605
Account: HALEY-OH2 Haley & Aldrich, Inc.Project: 70613-816
Received: 26OCT16 Due Date: 21NOV16

Sample #	Client ID	Mat	PR	Collected	Container
L1634605-14	SB-9-SO-8-A-EX1A-10	3	1A	26OCT16 17:00	1-Glass-AM.06

Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

AS-TI,PREPT,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1634605-15	SB-AOC09-2013-104-E	3	1A	26OCT16 12:05	1-Glass-AM.06

Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

AS-TI,PREPT,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1634605-16	SB-9-SO-8-A-EX1C-10	3	1A	26OCT16 17:10	1-Glass-AM.06

Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

AS-TI,PREPT,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1634605-17	SB-9-SO-8-A-EX1C-10	3	1A	26OCT16 17:25	1-Glass-AM.06

Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

AS-TI,PREPT,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1634605-18	SB-9-SO-8-A-EX1K-10	3	1A	26OCT16 15:03	1-Glass-AM.06

Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

HOLD-METAL

Sample #	Client ID	Mat	PR	Collected	Container
L1634605-19	SB-9-SO-8-A-EX1H-10	3	1A	26OCT16 14:47	1-Glass-AM.06

Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

HOLD-METAL

Sample #	Client ID	Mat	PR	Collected	Container
L1634605-20	SB-AOC09-2013-104-E	3	1A	26OCT16 11:11	1-Glass-AM.06

Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Nov 22 2016, 01:09 pm

Login Number: L1634605
Account: HALEY-OH2 Haley & Aldrich, Inc.Project: 70613-816
Received: 26OCT16 Due Date: 21NOV16

Sample #	Client ID	Mat	PR	Collected	Container

AS-TI,PREPT,TS

L1634605-21 SB-9-SO-8-A-EX1I-10 3 1A 26OCT16 15:55 1-Glass-AM.06
Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

HOLD-METAL

L1634605-22 SB-9-SO-8-A-EX1G-10 3 1A 26OCT16 15:45 1-Glass-AM.06
Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

AS-TI,PREPT,TS

L1634605-23 SB-AOC09-2013-104-E 3 1A 26OCT16 11:21 1-Glass-AM.06
Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

AS-TI,PREPT,TS

L1634605-24 SB-9-SO-8-A-EX1E-10 3 1A 26OCT16 16:05 1-Glass-AM.06
Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

AS-TI,PREPT,TS

L1634605-25 SB-9-SO-8-A-EX1J-10 3 1A 26OCT16 15:32 1-Glass-AM.06
Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

HOLD-METAL

L1634605-26 SB-AOC09-2013-104-E 3 1A 26OCT16 11:30 1-Glass-AM.06
Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

AS-TI,PREPT,TS

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Nov 22 2016, 01:09 pm

Login Number: L1634605
Account: HALEY-OH2 Haley & Aldrich, Inc.Project: 70613-816
Received: 26OCT16 Due Date: 21NOV16

Sample #	Client ID	Mat	PR	Collected	Container
L1634605-27	SB-9-SO-8-A-EX1J-10	3	1A	26OCT16 15:21	1-Glass-AM.06

Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

HOLD-METAL

Sample #	Client ID	Mat	PR	Collected	Container
L1634605-28	SB-9-SO-8-A-EX1B-10	3	1A	26OCT16 16:46	1-Glass-AM.06

Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

AS-TI,PREPT,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1634605-29	SB-AOC09-2013-EX1D-	3	1A	26OCT16 11:09	1-Glass-AM.06

Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

AS-TI,PREPT,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1634605-30	SB-9-SO-8-A-EX1B-10	3	1A	26OCT16 16:30	1-Glass-AM.06

Prelim 10/31, Final 11/21 Package Due Date: 10/31/16

AS-TI,PREPT,TS

Logged By: Michelle Morris

ALPHA ANALYTICAL LABORATORIES
Container Tracking Report

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1634605-01A	Glass-AM.06	INTACT	18-NOV-16		W18-S3-C CUSTODY	Sam Bardsley	W17-S3-C CUSTODY	W17-S3-C CUSTODY	Sam Bardsley
L1634605-01A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	W18-S3-C CUSTODY	W18-S3-C CUSTODY	Danielle Mott
L1634605-01A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1634605-02A	Glass-AM.06	INTACT	27-OCT-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Alp Demiroz	A2-CUSTODY-MET2-S7	A2-CUSTODY-MET2-S7	Alp Demiroz
L1634605-02A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	A2-CUSTODY-MET2-S9	Alp Demiroz	A2-METALS PREP	A2-METALS PREP	Alp Demiroz
L1634605-02A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	A2-CUSTODY	Kim L. Bailey	A2-CUSTODY-MET2-S9	A2-CUSTODY-MET2-S9	Kim L. Bailey
L1634605-02A	Glass-AM.06	INTACT	27-OCT-16	TRANSIT COURIER	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott	A2-CUSTODY	A2-CUSTODY	Steve Walcott
L1634605-02A	Glass-AM.06	INTACT	27-OCT-16	COOLER9-TRANSFER_TO_MANSFIELD	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott	TRANSIT COURIER	COOLER9-TRANSFER_TO_MANSFIELD	S
L1634605-02A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	COOLER9-TRANSFER_TO_MANSFIELD	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott
L1634605-02A	Glass-AM.06	INTACT	27-OCT-16		WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634605-02A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634605-02A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1634605-03A	Glass-AM.06	INTACT	18-NOV-16		W18-S3-C CUSTODY	Sam Bardsley	W17-S3-C CUSTODY	W17-S3-C CUSTODY	Sam Bardsley
L1634605-03A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	W18-S3-C CUSTODY	W18-S3-C CUSTODY	Danielle Mott
L1634605-03A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1634605-04A	Glass-AM.06	INTACT	27-OCT-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Alp Demiroz	A2-CUSTODY-MET2-S7	A2-CUSTODY-MET2-S7	Alp Demiroz
L1634605-04A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	A2-CUSTODY-MET2-S9	Alp Demiroz	A2-METALS PREP	A2-METALS PREP	Alp Demiroz
L1634605-04A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	A2-CUSTODY	Kim L. Bailey	A2-CUSTODY-MET2-S9	A2-CUSTODY-MET2-S9	Kim L. Bailey
L1634605-04A	Glass-AM.06	INTACT	27-OCT-16	TRANSIT COURIER	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott	A2-CUSTODY	A2-CUSTODY	Steve Walcott
L1634605-04A	Glass-AM.06	INTACT	27-OCT-16	COOLER9-TRANSFER_TO_MANSFIELD	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott	TRANSIT COURIER	COOLER9-TRANSFER_TO_MANSFIELD	S
L1634605-04A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	COOLER9-TRANSFER_TO_MANSFIELD	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott
L1634605-04A	Glass-AM.06	INTACT	27-OCT-16		WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634605-04A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634605-04A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1634605-05A	Glass-AM.06	INTACT	27-OCT-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Alp Demiroz	A2-CUSTODY-MET2-S7	A2-CUSTODY-MET2-S7	Alp Demiroz

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1634605-05A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	A2-CUSTODY-MET2-S9	Alp Demiroz	A2-METALS PREP	A2-METALS PREP	Alp Demiroz
L1634605-05A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	A2-CUSTODY	Kim L. Bailey	A2-CUSTODY-MET2-S9	A2-CUSTODY-MET2-S9	Kim L. Bailey
L1634605-05A	Glass-AM.06	INTACT	27-OCT-16	TRANSIT COURIER	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott	A2-CUSTODY	A2-CUSTODY	Steve Walcott
L1634605-05A	Glass-AM.06	INTACT	27-OCT-16	COOLER9-TRANSFER_TO_MANSFIELD	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott	TRANSIT COURIER	COOLER9-TRANSFER_TO_MANSFIELD	
L1634605-05A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	COOLER9-TRANSFER_TO_MANSFIELD	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott
L1634605-05A	Glass-AM.06	INTACT	27-OCT-16		WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634605-05A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634605-05A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1634605-06A	Glass-AM.06	INTACT	27-OCT-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Alp Demiroz	A2-CUSTODY-MET2-S7	A2-CUSTODY-MET2-S7	Alp Demiroz
L1634605-06A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	A2-CUSTODY-MET2-S9	Alp Demiroz	A2-METALS PREP	A2-METALS PREP	Alp Demiroz
L1634605-06A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	A2-CUSTODY	Kim L. Bailey	A2-CUSTODY-MET2-S9	A2-CUSTODY-MET2-S9	Kim L. Bailey
L1634605-06A	Glass-AM.06	INTACT	27-OCT-16	TRANSIT COURIER	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott	A2-CUSTODY	A2-CUSTODY	Steve Walcott
L1634605-06A	Glass-AM.06	INTACT	27-OCT-16	COOLER9-TRANSFER_TO_MANSFIELD	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott	TRANSIT COURIER	COOLER9-TRANSFER_TO_MANSFIELD	
L1634605-06A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	COOLER9-TRANSFER_TO_MANSFIELD	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott
L1634605-06A	Glass-AM.06	INTACT	27-OCT-16		WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634605-06A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634605-06A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1634605-07A	Glass-AM.06	INTACT	18-NOV-16		W18-S3-C CUSTODY	Sam Bardsley	W17-S3-C CUSTODY	W17-S3-C CUSTODY	Sam Bardsley
L1634605-07A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	W18-S3-C CUSTODY	W18-S3-C CUSTODY	Danielle Mott
L1634605-07A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1634605-08A	Glass-AM.06	INTACT	18-NOV-16		W18-S3-C CUSTODY	Sam Bardsley	W17-S3-C CUSTODY	W17-S3-C CUSTODY	Sam Bardsley
L1634605-08A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	W18-S3-C CUSTODY	W18-S3-C CUSTODY	Danielle Mott
L1634605-08A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1634605-09A	Glass-AM.06	INTACT	18-NOV-16		W18-S3-C CUSTODY	Sam Bardsley	W17-S3-C CUSTODY	W17-S3-C CUSTODY	Sam Bardsley
L1634605-09A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	W18-S3-C CUSTODY	W18-S3-C CUSTODY	Danielle Mott

Container ID	Type	Status	Transaction Date	From Response	Location	Operator	To Response	Location	Operator
L1634605-09A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1634605-10A	Glass-AM.06	INTACT	27-OCT-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Alp Demiroz	A2-CUSTODY-MET2-S7	A2-CUSTODY-MET2-S7	Alp Demiroz
L1634605-10A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	A2-CUSTODY-MET2-S9	Alp Demiroz	A2-METALS PREP	A2-METALS PREP	Alp Demiroz
L1634605-10A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	A2-CUSTODY	Kim L. Bailey	A2-CUSTODY-MET2-S9	A2-CUSTODY-MET2-S9	Kim L. Bailey
L1634605-10A	Glass-AM.06	INTACT	27-OCT-16	TRANSIT COURIER	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott	A2-CUSTODY	A2-CUSTODY	Steve Walcott
L1634605-10A	Glass-AM.06	INTACT	27-OCT-16	COOLER9-TRANSFER_TO_MANSFIELD	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott	TRANSIT COURIER	COOLER9-TRANSFER_TO_MANSFIELD	
L1634605-10A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	COOLER9-TRANSFER_TO_MANSFIELD	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott
L1634605-10A	Glass-AM.06	INTACT	27-OCT-16		WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634605-10A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634605-10A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1634605-11A	Glass-AM.06	INTACT	18-NOV-16		W18-S3-C CUSTODY	Sam Bardsley	W17-S3-C CUSTODY	W17-S3-C CUSTODY	Sam Bardsley
L1634605-11A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	W18-S3-C CUSTODY	W18-S3-C CUSTODY	Danielle Mott
L1634605-11A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1634605-12A	Glass-AM.06	INTACT	18-NOV-16		W18-S3-C CUSTODY	Sam Bardsley	W17-S3-C CUSTODY	W17-S3-C CUSTODY	Sam Bardsley
L1634605-12A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	W18-S3-C CUSTODY	W18-S3-C CUSTODY	Danielle Mott
L1634605-12A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1634605-13A	Glass-AM.06	INTACT	27-OCT-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Alp Demiroz	A2-CUSTODY-MET2-S7	A2-CUSTODY-MET2-S7	Alp Demiroz
L1634605-13A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	A2-CUSTODY-MET2-S9	Alp Demiroz	A2-METALS PREP	A2-METALS PREP	Alp Demiroz
L1634605-13A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	A2-CUSTODY	Kim L. Bailey	A2-CUSTODY-MET2-S9	A2-CUSTODY-MET2-S9	Kim L. Bailey
L1634605-13A	Glass-AM.06	INTACT	27-OCT-16	TRANSIT COURIER	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott	A2-CUSTODY	A2-CUSTODY	Steve Walcott
L1634605-13A	Glass-AM.06	INTACT	27-OCT-16	COOLER9-TRANSFER_TO_MANSFIELD	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott	TRANSIT COURIER	COOLER9-TRANSFER_TO_MANSFIELD	
L1634605-13A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	COOLER9-TRANSFER_TO_MANSFIELD	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott
L1634605-13A	Glass-AM.06	INTACT	27-OCT-16		WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634605-13A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634605-13A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1634605-14A	Glass-AM.06	INTACT	27-OCT-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Alp Demiroz	A2-CUSTODY-MET2-S7	A2-CUSTODY-MET2-S7	Alp Demiroz
L1634605-14A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	A2-CUSTODY-MET2-S9	Alp Demiroz	A2-METALS PREP	A2-METALS PREP	Alp Demiroz
L1634605-14A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	A2-CUSTODY	Kim L. Bailey	A2-CUSTODY-MET2-S9	A2-CUSTODY-MET2-S9	Kim L. Bailey
L1634605-14A	Glass-AM.06	INTACT	27-OCT-16	TRANSIT COURIER	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott	A2-CUSTODY	A2-CUSTODY	Steve Walcott
L1634605-14A	Glass-AM.06	INTACT	27-OCT-16	COOLER9-TRANSFER_TO_MANSFIELD	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott	TRANSIT COURIER	COOLER9-TRANSFER_TO_MANSFIELD	
L1634605-14A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	COOLER9-TRANSFER_TO_MANSFIELD	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott
L1634605-14A	Glass-AM.06	INTACT	27-OCT-16		WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634605-14A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634605-14A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1634605-15A	Glass-AM.06	INTACT	27-OCT-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Alp Demiroz	A2-CUSTODY-MET2-S7	A2-CUSTODY-MET2-S7	Alp Demiroz
L1634605-15A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	A2-CUSTODY-MET2-S9	Alp Demiroz	A2-METALS PREP	A2-METALS PREP	Alp Demiroz
L1634605-15A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	A2-CUSTODY	Kim L. Bailey	A2-CUSTODY-MET2-S9	A2-CUSTODY-MET2-S9	Kim L. Bailey
L1634605-15A	Glass-AM.06	INTACT	27-OCT-16	TRANSIT COURIER	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott	A2-CUSTODY	A2-CUSTODY	Steve Walcott
L1634605-15A	Glass-AM.06	INTACT	27-OCT-16	COOLER9-TRANSFER_TO_MANSFIELD	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott	TRANSIT COURIER	COOLER9-TRANSFER_TO_MANSFIELD	
L1634605-15A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	COOLER9-TRANSFER_TO_MANSFIELD	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott
L1634605-15A	Glass-AM.06	INTACT	27-OCT-16		WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634605-15A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634605-15A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1634605-16A	Glass-AM.06	INTACT	27-OCT-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Alp Demiroz	A2-CUSTODY-MET2-S7	A2-CUSTODY-MET2-S7	Alp Demiroz
L1634605-16A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	A2-CUSTODY-MET2-S9	Alp Demiroz	A2-METALS PREP	A2-METALS PREP	Alp Demiroz
L1634605-16A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	A2-CUSTODY	Kim L. Bailey	A2-CUSTODY-MET2-S9	A2-CUSTODY-MET2-S9	Kim L. Bailey
L1634605-16A	Glass-AM.06	INTACT	27-OCT-16	TRANSIT COURIER	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott	A2-CUSTODY	A2-CUSTODY	Steve Walcott
L1634605-16A	Glass-AM.06	INTACT	27-OCT-16	COOLER9-TRANSFER_TO_MANSFIELD	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott	TRANSIT COURIER	COOLER9-TRANSFER_TO_MANSFIELD	
L1634605-16A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	COOLER9-TRANSFER_TO_MANSFIELD	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott
L1634605-16A	Glass-AM.06	INTACT	27-OCT-16		WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1634605-16A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634605-16A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1634605-17A	Glass-AM.06	INTACT	27-OCT-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Alp Demiroz	A2-CUSTODY-MET2-S7	A2-CUSTODY-MET2-S7	Alp Demiroz
L1634605-17A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	A2-CUSTODY-MET2-S9	Alp Demiroz	A2-METALS PREP	A2-METALS PREP	Alp Demiroz
L1634605-17A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	A2-CUSTODY	Kim L. Bailey	A2-CUSTODY-MET2-S9	A2-CUSTODY-MET2-S9	Kim L. Bailey
L1634605-17A	Glass-AM.06	INTACT	27-OCT-16	TRANSIT COURIER	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott	A2-CUSTODY	A2-CUSTODY	Steve Walcott
L1634605-17A	Glass-AM.06	INTACT	27-OCT-16	COOLER9-TRANSFER_TO_MANSFIELD	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott	TRANSIT COURIER	COOLER9-TRANSFER_TO_MANSFIELD	
L1634605-17A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	COOLER9-TRANSFER_TO_MANSFIELD	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott
L1634605-17A	Glass-AM.06	INTACT	27-OCT-16		WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634605-17A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634605-17A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1634605-18A	Glass-AM.06	INTACT	18-NOV-16		W18-S3-C CUSTODY	Sam Bardsley	W17-S3-C CUSTODY	W17-S3-C CUSTODY	Sam Bardsley
L1634605-18A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	W18-S3-C CUSTODY	W18-S3-C CUSTODY	Danielle Mott
L1634605-18A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1634605-19A	Glass-AM.06	INTACT	18-NOV-16		W18-S3-C CUSTODY	Sam Bardsley	W17-S3-C CUSTODY	W17-S3-C CUSTODY	Sam Bardsley
L1634605-19A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	W18-S3-C CUSTODY	W18-S3-C CUSTODY	Danielle Mott
L1634605-19A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1634605-20A	Glass-AM.06	INTACT	31-OCT-16	CUSTODY	A2-CUSTODY-MET4-S3	Raldi Cabral	A2-CUSTODY-MET3-S1	A2-CUSTODY-MET3-S1	Raldi Cabral
L1634605-20A	Glass-AM.06	INTACT	30-OCT-16	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	William McClendon	A2-CUSTODY-MET4-S3	A2-CUSTODY-MET4-S3	Christina Mazza
L1634605-20A	Glass-AM.06	INTACT	30-OCT-16	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	William McClendon	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	
L1634605-20A	Glass-AM.06	INTACT	29-OCT-16		CUSTODY	William McClendon	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	William McCle
L1634605-20A	Glass-AM.06	INTACT	29-OCT-16		WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634605-20A	Glass-AM.06	INTACT	28-OCT-16		W18-S3-C CUSTODY	Ariana Summit	WETCHEM	WETCHEM	Ariana Summit
L1634605-20A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	W18-S3-C CUSTODY	W18-S3-C CUSTODY	Danielle Mott
L1634605-20A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane

Container ID	Type	Status	Transaction Date	From Response	Location	Operator	To Response	Location	Operator
L1634605-21A	Glass-AM.06	INTACT	18-NOV-16		W18-S3-C	CUSTODY Sam Bardsley	W17-S3-C	CUSTODY	W17-S3-C CUSTODY Sam Bardsley
L1634605-21A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	W18-S3-C	CUSTODY	W18-S3-C CUSTODY Danielle Mott
L1634605-21A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1634605-22A	Glass-AM.06	INTACT	31-OCT-16	CUSTODY	A2-CUSTODY-MET4-S3	Raldi Cabral	A2-CUSTODY-MET3-S1	A2-CUSTODY-MET3-S1	Raldi Cabral
L1634605-22A	Glass-AM.06	INTACT	30-OCT-16	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	William McClendon	A2-CUSTODY-MET4-S3	A2-CUSTODY-MET4-S3	Christina Mazza
L1634605-22A	Glass-AM.06	INTACT	30-OCT-16	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	William McClendon	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	
L1634605-22A	Glass-AM.06	INTACT	29-OCT-16		CUSTODY	William McClendon	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	William McCle
L1634605-22A	Glass-AM.06	INTACT	29-OCT-16		WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634605-22A	Glass-AM.06	INTACT	28-OCT-16		W18-S3-C	CUSTODY Ariana Summit	WETCHEM	WETCHEM	Ariana Summit
L1634605-22A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	W18-S3-C	CUSTODY	W18-S3-C CUSTODY Danielle Mott
L1634605-22A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1634605-23A	Glass-AM.06	INTACT	31-OCT-16	CUSTODY	A2-CUSTODY-MET4-S3	Raldi Cabral	A2-CUSTODY-MET3-S1	A2-CUSTODY-MET3-S1	Raldi Cabral
L1634605-23A	Glass-AM.06	INTACT	30-OCT-16	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	William McClendon	A2-CUSTODY-MET4-S3	A2-CUSTODY-MET4-S3	Christina Mazza
L1634605-23A	Glass-AM.06	INTACT	30-OCT-16	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	William McClendon	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	
L1634605-23A	Glass-AM.06	INTACT	29-OCT-16		CUSTODY	William McClendon	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	William McCle
L1634605-23A	Glass-AM.06	INTACT	29-OCT-16		WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634605-23A	Glass-AM.06	INTACT	28-OCT-16		W18-S3-C	CUSTODY Ariana Summit	WETCHEM	WETCHEM	Ariana Summit
L1634605-23A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	W18-S3-C	CUSTODY	W18-S3-C CUSTODY Danielle Mott
L1634605-23A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1634605-24A	Glass-AM.06	INTACT	31-OCT-16	CUSTODY	A2-CUSTODY-MET4-S3	Raldi Cabral	A2-CUSTODY-MET3-S1	A2-CUSTODY-MET3-S1	Raldi Cabral
L1634605-24A	Glass-AM.06	INTACT	30-OCT-16	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	William McClendon	A2-CUSTODY-MET4-S3	A2-CUSTODY-MET4-S3	Christina Mazza
L1634605-24A	Glass-AM.06	INTACT	30-OCT-16	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	William McClendon	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	
L1634605-24A	Glass-AM.06	INTACT	29-OCT-16		CUSTODY	William McClendon	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	William McCle
L1634605-24A	Glass-AM.06	INTACT	29-OCT-16		WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634605-24A	Glass-AM.06	INTACT	28-OCT-16		W18-S3-C	CUSTODY Ariana Summit	WETCHEM	WETCHEM	Ariana Summit

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1634605-24A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	W18-S3-C CUSTODY	W18-S3-C CUSTODY	Danielle Mott
L1634605-24A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1634605-25A	Glass-AM.06	INTACT	18-NOV-16		W18-S3-C CUSTODY	Sam Bardsley	W17-S3-C CUSTODY	W17-S3-C CUSTODY	Sam Bardsley
L1634605-25A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	W18-S3-C CUSTODY	W18-S3-C CUSTODY	Danielle Mott
L1634605-25A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1634605-26A	Glass-AM.06	INTACT	31-OCT-16	CUSTODY	A2-CUSTODY-MET4-S3	Raldi Cabral	A2-CUSTODY-MET3-S1	A2-CUSTODY-MET3-S1	Raldi Cabral
L1634605-26A	Glass-AM.06	INTACT	30-OCT-16	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	William McClendon	A2-CUSTODY-MET4-S3	A2-CUSTODY-MET4-S3	Christina Mazza
L1634605-26A	Glass-AM.06	INTACT	30-OCT-16	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	William McClendon	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	
L1634605-26A	Glass-AM.06	INTACT	29-OCT-16		CUSTODY	William McClendon	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	William McCle
L1634605-26A	Glass-AM.06	INTACT	29-OCT-16		WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634605-26A	Glass-AM.06	INTACT	28-OCT-16		W18-S3-C CUSTODY	Ariana Summit	WETCHEM	WETCHEM	Ariana Summit
L1634605-26A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	W18-S3-C CUSTODY	W18-S3-C CUSTODY	Danielle Mott
L1634605-26A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1634605-27A	Glass-AM.06	INTACT	18-NOV-16		W18-S3-C CUSTODY	Sam Bardsley	W17-S3-C CUSTODY	W17-S3-C CUSTODY	Sam Bardsley
L1634605-27A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	W18-S3-C CUSTODY	W18-S3-C CUSTODY	Danielle Mott
L1634605-27A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1634605-28A	Glass-AM.06	INTACT	27-OCT-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Alp Demiroz	A2-CUSTODY-MET2-S7	A2-CUSTODY-MET2-S7	Alp Demiroz
L1634605-28A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	A2-CUSTODY-MET2-S9	Alp Demiroz	A2-METALS PREP	A2-METALS PREP	Alp Demiroz
L1634605-28A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	A2-CUSTODY	Kim L. Bailey	A2-CUSTODY-MET2-S9	A2-CUSTODY-MET2-S9	Kim L. Bailey
L1634605-28A	Glass-AM.06	INTACT	27-OCT-16	TRANSIT COURIER	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott	A2-CUSTODY	A2-CUSTODY	Steve Walcott
L1634605-28A	Glass-AM.06	INTACT	27-OCT-16	COOLER9-TRANSFER_TO_MANSFIELD	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott	TRANSIT COURIER	COOLER9-TRANSFER_TO_MANSFIELD	
L1634605-28A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	COOLER9-TRANSFER_TO_MANSFIELD	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott
L1634605-28A	Glass-AM.06	INTACT	27-OCT-16		WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634605-28A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634605-28A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1634605-29A	Glass-AM.06	INTACT	31-OCT-16	CUSTODY	A2-CUSTODY-MET4-S3	Raldi Cabral	A2-CUSTODY-MET3-S1	A2-CUSTODY-MET3-S1	Raldi Cabral
L1634605-29A	Glass-AM.06	INTACT	30-OCT-16	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	William McClendon	A2-CUSTODY-MET4-S3	A2-CUSTODY-MET4-S3	Christina Mazza
L1634605-29A	Glass-AM.06	INTACT	30-OCT-16	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	William McClendon	TRANSIT COURIER	COOLER7-TRANSFER_TO_MANSFIELD	
L1634605-29A	Glass-AM.06	INTACT	29-OCT-16		CUSTODY	William McClendon	COOLER7-TRANSFER_TO_MANSFIELD	COOLER7-TRANSFER_TO_MANSFIELD	William McCle
L1634605-29A	Glass-AM.06	INTACT	29-OCT-16		WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634605-29A	Glass-AM.06	INTACT	28-OCT-16		W18-S3-C CUSTODY	Ariana Summit	WETCHEM	WETCHEM	Ariana Summit
L1634605-29A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	W18-S3-C CUSTODY	W18-S3-C CUSTODY	Danielle Mott
L1634605-29A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane
L1634605-30A	Glass-AM.06	INTACT	27-OCT-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Alp Demiroz	A2-CUSTODY-MET2-S7	A2-CUSTODY-MET2-S7	Alp Demiroz
L1634605-30A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	A2-CUSTODY-MET2-S9	Alp Demiroz	A2-METALS PREP	A2-METALS PREP	Alp Demiroz
L1634605-30A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	A2-CUSTODY	Kim L. Bailey	A2-CUSTODY-MET2-S9	A2-CUSTODY-MET2-S9	Kim L. Bailey
L1634605-30A	Glass-AM.06	INTACT	27-OCT-16	TRANSIT COURIER	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott	A2-CUSTODY	A2-CUSTODY	Steve Walcott
L1634605-30A	Glass-AM.06	INTACT	27-OCT-16	COOLER9-TRANSFER_TO_MANSFIELD	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott	TRANSIT COURIER	COOLER9-TRANSFER_TO_MANSFIELD	
L1634605-30A	Glass-AM.06	INTACT	27-OCT-16		CUSTODY	Danielle Mott	COOLER9-TRANSFER_TO_MANSFIELD	COOLER9-TRANSFER_TO_MANSFIELD	Danielle Mott
L1634605-30A	Glass-AM.06	INTACT	27-OCT-16		WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634605-30A	Glass-AM.06	INTACT	27-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634605-30A	Glass-AM.06	INTACT	27-OCT-16	LOGIN	LOGIN	Ashaley Kane	CUSTODY	CUSTODY	Ashaley Kane

Methodology Review

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Laboratory Chronicle

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1634605-01A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	HOLD-METAL(180)
L1634605-02A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	AS-TI(180),TS(7)
L1634605-03A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	HOLD-METAL(180)
L1634605-04A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	AS-TI(180),TS(7)
L1634605-05A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	AS-TI(180),TS(7)
L1634605-06A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	AS-TI(180),TS(7)
L1634605-07A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	HOLD-METAL(180)
L1634605-08A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	HOLD-METAL(180)
L1634605-09A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	HOLD-METAL(180)
L1634605-10A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	AS-TI(180),TS(7)
L1634605-11A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	HOLD-METAL(180)
L1634605-12A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	HOLD-METAL(180)
L1634605-13A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	AS-TI(180),TS(7)
L1634605-14A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	AS-TI(180),TS(7)
L1634605-15A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	AS-TI(180),TS(7)
L1634605-16A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	AS-TI(180),TS(7)
L1634605-17A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	AS-TI(180),TS(7)
L1634605-18A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	HOLD-METAL(180)
L1634605-19A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	HOLD-METAL(180)
L1634605-20A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	AS-TI(180),TS(7)
L1634605-21A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	HOLD-METAL(180)
L1634605-22A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	AS-TI(180),TS(7)
L1634605-23A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	AS-TI(180),TS(7)
L1634605-24A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	AS-TI(180),TS(7)
L1634605-25A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	HOLD-METAL(180)
L1634605-26A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	AS-TI(180),TS(7)
L1634605-27A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	HOLD-METAL(180)
L1634605-28A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	AS-TI(180),TS(7)
L1634605-29A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	AS-TI(180),TS(7)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1634605-30A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.1	Y	Absent	AS-TI(180),TS(7)

*Values in parentheses indicate holding time in days

NJ DEP
Data of Known Quality Protocols
Conformance/Non-Conformance
Summary Questionnaire

NJ DEP Data of Known Quality Protocols
Conformance/Non-Conformance
Summary Questionnaire

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	YES
1a	Were the method specified handling, preservation, and holding time requirements met?	YES
1b	EPH Method: Was the EPH Method conducted without significant modifications (see Section 11.3 of respective DKQ methods)?	N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	YES
3	Were all samples received at an appropriate temperature (4 ± 2° C)?	YES
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	NO
5a	Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	YES
5b	Were these reporting limits met?	YES
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	NO
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	YES

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1a or #1b is "No", the data package does not meet the requirements for "Data of Known Quality".

Conformance/Non-Conformance Summary

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Case Narrative (continued)

Report Submission

This final report replaces the partial report issued October 31, 2016, and includes the results of all requested analyses.

A previously-issued partial report replaced the partial report issued October 27, 2016. At the client's request, the analysis of Total Arsenic was performed on L1634605-20, -22, -23, -24, -26 and -29.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

DKQP Related Narratives

Metals

In reference to question 4:

The WG947133-3 MS recovery, performed on L1634605-20, is outside the acceptance criteria for arsenic (153%). A post digestion spike was performed and yielded an unacceptable recovery of 73%. This has been attributed to sample matrix.

In reference to question 6:

At the client's request, all submitted samples were not analyzed for the full DKQP list of constituents identified in the method specific analyte list presented in the DKQP documents.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Kelly Stenstrom Report Date: 11/18/16

Title: Technical Director/Representative

Glossary

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the

Data Qualifiers

reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Metals

Inorganic Data
(ICP Analysis)

Sample Results Summary

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-02	**Date Collected**	: 10/26/16 09:53
Client ID	: SB-AOC09-2013-104-EX1A-10	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/27/16 16:06
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG946313.pdf	**Instrument ID**	: TRACE4
Sample Amount	: 1.285g	**%Solids**	: 92
Digestion Method	: EPA 3050B	**Date Digested**	: 10/27/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	43	0.42	0.09	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-04	**Date Collected**	: 10/26/16 12:01
Client ID	: SB-AOC09-2013-104-EX1C-10	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/27/16 16:11
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG946313.pdf	**Instrument ID**	: TRACE4
Sample Amount	: 1.272g	**%Solids**	: 78
Digestion Method	: EPA 3050B	**Date Digested**	: 10/27/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	60	0.51	0.10	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-05	**Date Collected**	: 10/26/16 10:22
Client ID	: SB-AOC09-2013-104-EX1B-10	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/27/16 16:15
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG946313.pdf	**Instrument ID**	: TRACE4
Sample Amount	: 1.278g	**%Solids**	: 81
Digestion Method	: EPA 3050B	**Date Digested**	: 10/27/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	16	0.48	0.10	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-06	**Date Collected**	: 10/26/16 10:27
Client ID	: SB-AOC09-2013-104-EX1B-10	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/27/16 16:20
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG946313.pdf	**Instrument ID**	: TRACE4
Sample Amount	: 1.293g	**%Solids**	: 77
Digestion Method	: EPA 3050B	**Date Digested**	: 10/27/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	6.4	0.50	0.10	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-10	**Date Collected**	: 10/26/16 09:56
Client ID	: SB-AOC09-2013-104-EX1A-10	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/27/16 16:25
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG946313.pdf	**Instrument ID**	: TRACE4
Sample Amount	: 1.289g	**%Solids**	: 88
Digestion Method	: EPA 3050B	**Date Digested**	: 10/27/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	220	0.44	0.09	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-13	**Date Collected**	: 10/26/16 16:57
Client ID	: SB-9-SO-8-A-EX1A-1026-165	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/27/16 16:30
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG946313.pdf	**Instrument ID**	: TRACE4
Sample Amount	: 1.267g	**%Solids**	: 89
Digestion Method	: EPA 3050B	**Date Digested**	: 10/27/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	15	0.44	0.09	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-14	**Date Collected**	: 10/26/16 17:00
Client ID	: SB-9-SO-8-A-EX1A-1026-170	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/27/16 16:35
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG946313.pdf	**Instrument ID**	: TRACE4
Sample Amount	: 1.328g	**%Solids**	: 93
Digestion Method	: EPA 3050B	**Date Digested**	: 10/27/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	34	0.40	0.08	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-15	**Date Collected**	: 10/26/16 12:05
Client ID	: SB-AOC09-2013-104-EX1C-10	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/27/16 16:40
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG946313.pdf	**Instrument ID**	: TRACE4
Sample Amount	: 1.316g	**%Solids**	: 86
Digestion Method	: EPA 3050B	**Date Digested**	: 10/27/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	6.4	0.44	0.09	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-16	**Date Collected**	: 10/26/16 17:10
Client ID	: SB-9-SO-8-A-EX1C-1026-171	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/27/16 16:45
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG946313.pdf	**Instrument ID**	: TRACE4
Sample Amount	: 1.324g	**%Solids**	: 90
Digestion Method	: EPA 3050B	**Date Digested**	: 10/27/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	250	0.42	0.09	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-17	**Date Collected**	: 10/26/16 17:25
Client ID	: SB-9-SO-8-A-EX1C-1026-172	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/27/16 16:50
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG946313.pdf	**Instrument ID**	: TRACE4
Sample Amount	: 1.276g	**%Solids**	: 91
Digestion Method	: EPA 3050B	**Date Digested**	: 10/27/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	8.2	0.43	0.09	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-28	**Date Collected**	: 10/26/16 16:46
Client ID	: SB-9-SO-8-A-EX1B-1026-164	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/27/16 17:09
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG946313.pdf	**Instrument ID**	: TRACE4
Sample Amount	: 1.324g	**%Solids**	: 87
Digestion Method	: EPA 3050B	**Date Digested**	: 10/27/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	6.5	0.44	0.09	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-30	**Date Collected**	: 10/26/16 16:30
Client ID	: SB-9-SO-8-A-EX1B-1026-163	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/27/16 17:13
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG946313.pdf	**Instrument ID**	: TRACE4
Sample Amount	: 1.307g	**%Solids**	: 82
Digestion Method	: EPA 3050B	**Date Digested**	: 10/27/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	8.6	0.47	0.10	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: WG946393-1	**Date Collected**	: NA
Client ID	: WG946393-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 10/27/16 15:04
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG946313.pdf	**Instrument ID**	: TRACE4
Sample Amount	: 1.25g	**%Solids**	: NA
Digestion Method	: EPA 3050B	**Date Digested**	: 10/27/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	0.13	0.40	0.08	J

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-20	**Date Collected**	: 10/26/16 11:11
Client ID	: SB-AOC09-2013-104-EX1D-10	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/31/16 11:37
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG947429.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 1.276g	**%Solids**	: 74
Digestion Method	: EPA 3050B	**Date Digested**	: 10/31/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	4.7	0.53	0.11	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-22	**Date Collected**	: 10/26/16 15:45
Client ID	: SB-9-SO-8-A-EX1G-1026-154	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/31/16 11:55
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG947429.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 1.333g	**%Solids**	: 86
Digestion Method	: EPA 3050B	**Date Digested**	: 10/31/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	9.1	0.44	0.09	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-23	**Date Collected**	: 10/26/16 11:21
Client ID	: SB-AOC09-2013-104-EX1E-10	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/31/16 11:59
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG947429.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 1.289g	**%Solids**	: 85
Digestion Method	: EPA 3050B	**Date Digested**	: 10/31/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	21	0.46	0.10	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-24	**Date Collected**	: 10/26/16 16:05
Client ID	: SB-9-SO-8-A-EX1E-1026-160	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/31/16 12:03
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG947429.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 1.326g	**%Solids**	: 86
Digestion Method	: EPA 3050B	**Date Digested**	: 10/31/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	4.2	0.44	0.09	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-26	**Date Collected**	: 10/26/16 11:30
Client ID	: SB-AOC09-2013-104-EX1E-10	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/31/16 12:38
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG947429.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 1.27g	**%Solids**	: 85
Digestion Method	: EPA 3050B	**Date Digested**	: 10/31/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	4.1	0.46	0.10	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-29	**Date Collected**	: 10/26/16 11:09
Client ID	: SB-AOC09-2013-EX1D-1026-1	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/31/16 12:43
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG947429.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 1.293g	**%Solids**	: 85
Digestion Method	: EPA 3050B	**Date Digested**	: 10/31/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	12	0.46	0.10	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: WG947133-1	**Date Collected**	: NA
Client ID	: WG947133-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 10/31/16 11:29
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG947429.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 1.25g	**%Solids**	: NA
Digestion Method	: EPA 3050B	**Date Digested**	: 10/31/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	0.11	0.40	0.08	J

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: WG947133-4	**Date Collected**	: 10/26/16 11:11
Client ID	: SB-AOC09-2013-104-EX1D-10	**Date Received**	: 10/26/16
Sample Location	:	**Date Analyzed**	: 10/31/16 11:46
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG947429.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 1.333g	**%Solids**	: 74
Digestion Method	: EPA 3050B	**Date Digested**	: 10/31/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	4.6	0.51	0.11	

Blank Results Summary

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Instrument ID	: TRACE4		

		Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID	:	R913668-2		R913668-7		R913668-9		R913668-11		WG946393-1	
Date Analyzed	:	10/27/16 09:33		10/27/16 10:26		10/27/16 10:49		10/27/16 12:11		10/27/16 15:04	
Parameter		mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q	mg/kg	Q
Arsenic		0.00208	U	0.00400	J	0.00260	J	0.00220	J	0.13	J

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Instrument ID	: TRACE4		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R913668-13		R913668-15		R913668-17			
Date Analyzed :			10/27/16 13:10		10/27/16 13:46		10/27/16 14:59			
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Arsenic			0.00380	J	0.00430	J	0.00450	J		

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Instrument ID	: TRACE4		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R913668-19		R913668-21		R913668-23			
Date Analyzed :			10/27/16 15:43		10/27/16 16:01		10/27/16 17:04			
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Arsenic			0.00380	J	0.00510	J	0.00670	J		

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Instrument ID	: TRACE4		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R913668-25							
Date Analyzed :			10/27/16 17:24							
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Arsenic			0.00560	J						

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Instrument ID	: TRACE5		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R914695-4		R914695-9		R914695-11		R914695-13		WG947133-1	
Date Analyzed :	10/31/16 08:41		10/31/16 09:21		10/31/16 09:33		10/31/16 10:31		10/31/16 11:29	
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q	mg/kg	Q
Arsenic	0.00208	U	0.00250	J	0.00208	U	0.00240	J	0.11	J

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Instrument ID	: TRACE5		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R914695-15		R914695-17		R914695-19			
Date Analyzed :			10/31/16 11:24		10/31/16 12:16		10/31/16 12:34			
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Arsenic			0.00240	J	0.00208	U	0.00208	U		

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Instrument ID	: TRACE5		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R914695-21							
Date Analyzed :			10/31/16 13:26							
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Arsenic			0.00208	U						

Calibration Summary

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Instrument ID	: TRACE4	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R913668-1			R913668-6			R913668-8		R913668-10	
Date Analyzed :	10/27/16 09:28			10/27/16 10:22			10/27/16 10:44		10/27/16 12:06	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic	0.5000	0.5020	100.	0.5000	0.5250	105.	0.5350	107.	0.5410	108.

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Instrument ID	: TRACE4	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R913668-12			R913668-14		R913668-16	
Date Analyzed :				10/27/16 13:05			10/27/16 13:42		10/27/16 14:54	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic				0.5000	0.5060	101.	0.5130	103.	0.5240	105.

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Instrument ID	: TRACE4	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R913668-18			R913668-20		R913668-22	
Date Analyzed :				10/27/16 15:39			10/27/16 15:56		10/27/16 16:59	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic				0.5000	0.5260	105.	0.5060	101.	0.5000	100.

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Instrument ID	: TRACE4	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R913668-24						
Date Analyzed :				10/27/16 17:19						
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic				0.5000	0.4920	98.				

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Instrument ID	: TRACE5	**Units**	: mg/l

		Initial Calibration			Continuing Calibration(s)						
Lab ID	:	R914695-3			R914695-8			R914695-10		R914695-12	
Date Analyzed	:	10/31/16 08:37			10/31/16 09:17			10/31/16 09:29		10/31/16 10:27	
Parameter		**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic		0.5000	0.5230	105.	0.5000	0.5280	106.	0.5280	106.	0.5200	104.

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Instrument ID	: TRACE5	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R914695-14			R914695-16		R914695-18	
Date Analyzed :				10/31/16 11:20			10/31/16 12:12		10/31/16 12:30	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic				0.5000	0.5210	104.	0.5050	101.	0.5050	101.

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Instrument ID	: TRACE5	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R914695-20						
Date Analyzed :				10/31/16 13:22						
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic				0.5000	0.5100	102.				

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2B
CRI Check Standard

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Instrument ID	: TRACE4	**Units**	: mg/L

		Initial	Final
Lab ID	:	R913668-5	
Date Analyzed	:	10/27/16 10:17	

Parameter	True	Found	%R	Found	%R
Arsenic	0.020	0.027	136		

Acceptance Criteria: Methods 200.7, 6010

CRI: 70-130%

Form 2B
CRI Check Standard

Client	:	**Haley & Aldrich, Inc.**	**Lab Number**	:	**L1634605**
Project Name	:	**RACER PROPERTIES**	**Project Number**	:	**70613-816**
Instrument ID	:	**TRACE5**	**Units**	:	**mg/L**

		Initial	Final
Lab ID	:	**R914695-7**	
Date Analyzed	:	**10/31/16 09:13**	

Parameter	True	Found	%R	Found	%R
Arsenic	0.020	0.022	108		

Acceptance Criteria: Methods 200.7, 6010

CRI: 70-130%

ICP Interference Check Sample Results Summary

Form 4a
Interference Check Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Instrument ID	: TRACE4	**Concentration Units**	: mg/L

	True		Initial Found				Final Found			
Lab ID :			R913668-3		R913668-4					
Analysis Date :			10/27/16 10:07		10/27/16 10:12					
Analyte	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Arsenic		1	-0.00700		1.08	108				

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

Form 4a
Interference Check Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Instrument ID	: TRACE5	**Concentration Units**	: mg/L

		Initial Found		Final Found	
Lab ID	:	R914695-5	R914695-6		
Analysis Date	:	10/31/16 09:04	10/31/16 09:09		

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	%R	Initial Found Sol. AB	%R	Final Found Sol. A	%R	Final Found Sol. AB	%R
Arsenic		1	-0.000400		1.04	104				

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

Spike Sample Results

Form 5a
Matrix Spike

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Client Sample ID	: SB-AOC09-2013-104-EX1D-1026-1111	**Matrix**	: SOIL
Lab Sample ID	: L1634605-20		
Matrix Spike	: WG947133-3	**MS Analysis Date**	: 10/31/16 11:42
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample				Matrix Spike Duplicate					
Parameter	**Sample Conc. (mg/kg)**	**Spike Added (mg/kg)**	**Spike Conc. (mg/kg)**	**%R**		**Spike Added (mg/kg)**	**Spike Conc. (mg/kg)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Arsenic, Total	4.7	12.6	24.	153	Q					75-125	20

Duplicate Sample Results Summary

Form 6
Lab Duplicates

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Client Sample ID	: SB-AOC09-2013-104-EX1D-1026-1111	**Matrix**	: SOIL
Lab Sample ID	: L1634605-20	**Analysis Date**	: 10/31/16 11:37
Dup Sample ID	: WG947133-4	**DUP Analysis Date**	: 10/31/16 11:46

Parameter	Sample Concentration (mg/kg)	Duplicate Concentration (mg/kg)	RPD	RPD Limit
Arsenic, Total	4.7	4.6	2	20

LCS Sample Results Summary

Form 7
Laboratory Control Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Client Sample ID	: NA	**Matrix**	: SOIL
Lab Sample ID	: WG946393-2	**LCS Analysis Date**	: 10/27/16 15:09
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
	True	Found	%R	True	Found	%R	RPD	Recovery	RPD
Parameter	(mg/kg)	(mg/kg)		(mg/kg)	(mg/kg)			Limits	Limit
Arsenic, Total	145.	150.	103.					80-121	20

Form 7
Laboratory Control Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Client Sample ID	: NA	**Matrix**	: SOIL
Lab Sample ID	: WG947133-2	**LCS Analysis Date**	: 10/31/16 11:33
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
	True	Found	%R	True	Found	%R	RPD	Recovery	RPD
Parameter	(mg/kg)	(mg/kg)		(mg/kg)	(mg/kg)			Limits	Limit
Arsenic, Total	145.	150.	103.					80-121	20

Run Logs

Form 13
Analysis Run Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Instrument ID	: TRACE4	**Analysis Method**	: 1,6010C
Start Date	: 10/27/16 09:28	**End Date**	: 10/27/16 17:24

Sample Number	Dilution Factor	Analysis Time	Arsenic, Total
R913668-1 ICV	1	09:28:00	X
R913668-2 ICB	1	09:33:00	X
R913668-3 ICSA	1	10:07:00	X
R913668-4 ICSAB	1	10:12:00	X
R913668-5 CRI	1	10:17:00	X
R913668-6 CCV	1	10:22:00	X
R913668-7 CCB	1	10:26:00	X
R913668-8 CCV	1	10:44:00	X
R913668-9 CCB	1	10:49:00	X
R913668-10 CCV	1	12:06:00	X
R913668-11 CCB	1	12:11:00	X
R913668-12 CCV	1	13:05:00	X
R913668-13 CCB	1	13:10:00	X
R913668-14 CCV	1	13:42:00	X
R913668-15 CCB	1	13:46:00	X
R913668-16 CCV	1	14:54:00	X
R913668-17 CCB	1	14:59:00	X
WG946393-1 BLANK	1	15:04:00	X
WG946393-2 LCS	8	15:09:00	X
R913668-18 CCV	1	15:39:00	X
R913668-19 CCB	1	15:43:00	X
R913668-20 CCV	1	15:56:00	X
R913668-21 CCB	1	16:01:00	X
L1634605-02	1	16:06:00	X
L1634605-04	1	16:11:00	X
L1634605-05	1	16:15:00	X
L1634605-06	1	16:20:00	X

Form 13
Analysis Run Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Instrument ID	: TRACE4	**Analysis Method**	: 1,6010C
Start Date	: 10/27/16 09:28	**End Date**	: 10/27/16 17:24

Sample Number	Dilution Factor	Analysis Time	Arsenic, Total
L1634605-10	1	16:25:00	X
L1634605-13	1	16:30:00	X
L1634605-14	1	16:35:00	X
L1634605-15	1	16:40:00	X
L1634605-16	1	16:45:00	X
L1634605-17	1	16:50:00	X
R913668-22 CCV	1	16:59:00	X
R913668-23 CCB	1	17:04:00	X
L1634605-28	1	17:09:00	X
L1634605-30	1	17:13:00	X
R913668-24 CCV	1	17:19:00	X
R913668-25 CCB	1	17:24:00	X

Form 13
Analysis Run Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Instrument ID	: TRACE5	**Analysis Method**	: 1,6010C
Start Date	: 10/31/16 08:37	**End Date**	: 10/31/16 13:26

Sample Number	Dilution Factor	Analysis Time	Arsenic, Total
R914695-3 ICV	1	08:37:00	X
R914695-4 ICB	1	08:41:00	X
R914695-5 ICSA	1	09:04:00	X
R914695-6 ICSAB	1	09:09:00	X
R914695-7 CRI	1	09:13:00	X
R914695-8 CCV	1	09:17:00	X
R914695-9 CCB	1	09:21:00	X
R914695-10 CCV	1	09:29:00	X
R914695-11 CCB	1	09:33:00	X
R914695-12 CCV	1	10:27:00	X
R914695-13 CCB	1	10:31:00	X
R914695-14 CCV	1	11:20:00	X
R914695-15 CCB	1	11:24:00	X
WG947133-1 BLANK	1	11:29:00	X
WG947133-2 LCS	8	11:33:00	X
L1634605-20	1	11:37:00	X
WG947133-3 MS	1	11:42:00	X
WG947133-4 DUP	1	11:46:00	X
L1634605-22	1	11:55:00	X
L1634605-23	1	11:59:00	X
L1634605-24	1	12:03:00	X
R914695-16 CCV	1	12:12:00	X
R914695-17 CCB	1	12:16:00	X
R914695-18 CCV	1	12:30:00	X
R914695-19 CCB	1	12:34:00	X
L1634605-26	1	12:38:00	X
L1634605-29	1	12:43:00	X

Form 13
Analysis Run Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Instrument ID	: TRACE5	**Analysis Method**	: 1,6010C
Start Date	: 10/31/16 08:37	**End Date**	: 10/31/16 13:26

Sample Number	Dilution Factor	Analysis Time	Arsenic, Total
R914695-20 CCV	1	13:22:00	X
R914695-21 CCB	1	13:26:00	X

Digestion Logs
ICP

Form 12
Preparation Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Matrix	: SOIL	**Prep Method**	: EPA 3050B

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L1634605-02	10/27/16 12:34	1.28	-
L1634605-04	10/27/16 12:34	1.27	-
L1634605-05	10/27/16 12:34	1.28	-
L1634605-06	10/27/16 12:34	1.29	-
L1634605-10	10/27/16 12:34	1.29	-
L1634605-13	10/27/16 12:34	1.27	-
L1634605-14	10/27/16 12:34	1.33	-
L1634605-15	10/27/16 12:34	1.32	-
L1634605-16	10/27/16 12:34	1.32	-
L1634605-17	10/27/16 12:34	1.28	-
L1634605-28	10/27/16 12:34	1.32	-
L1634605-30	10/27/16 12:34	1.31	-
WG946393-1	10/27/16 12:34	1.25	-
WG946393-2	10/27/16 12:34	0.38	-

Form 12
Preparation Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Matrix	: SOIL	**Prep Method**	: EPA 3050B

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L1634605-20	10/31/16 09:31	1.28	-
L1634605-22	10/31/16 09:31	1.33	-
L1634605-23	10/31/16 09:31	1.29	-
L1634605-24	10/31/16 09:31	1.33	-
L1634605-26	10/31/16 09:31	1.27	-
L1634605-29	10/31/16 09:31	1.29	-
WG947133-1	10/31/16 09:31	1.25	-
WG947133-2	10/31/16 09:31	0.36	-
WG947133-3	10/31/16 09:31	1.30	-
WG947133-4	10/31/16 09:31	1.33	-

Wet Chemistry

Total Solids / Percent Moisture Analysis

Results Summary

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: WG946228-1	**Date Collected**	: 10/26/16 09:53
Client ID	: SB-AOC09-2013-104-EX1A-10	**Date Received**	: 10/26/16
Sample Location	:	**Date Analyzed**	: 10/27/16 04:57
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946228.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 92
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**91.7**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-02	**Date Collected**	: 10/26/16 09:53
Client ID	: SB-AOC09-2013-104-EX1A-10	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/27/16 04:57
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946228.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 92
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	91.8	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-04	**Date Collected**	: 10/26/16 12:01
Client ID	: SB-AOC09-2013-104-EX1C-10	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/27/16 04:57
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946228.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 78
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**77.5**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-05	**Date Collected**	: 10/26/16 10:22
Client ID	: SB-AOC09-2013-104-EX1B-10	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/27/16 04:57
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946228.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 81
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**81.2**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-06	**Date Collected**	: 10/26/16 10:27
Client ID	: SB-AOC09-2013-104-EX1B-10	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/27/16 04:57
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946228.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 77
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**77.4**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-10	**Date Collected**	: 10/26/16 09:56
Client ID	: SB-AOC09-2013-104-EX1A-10	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/27/16 04:57
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946228.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 88
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**87.8**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-13	**Date Collected**	: 10/26/16 16:57
Client ID	: SB-9-SO-8-A-EX1A-1026-165	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/27/16 04:57
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946228.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 89
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**88.6**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-14	**Date Collected**	: 10/26/16 17:00
Client ID	: SB-9-SO-8-A-EX1A-1026-170	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/27/16 04:57
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946228.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 93
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**92.8**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-15	**Date Collected**	: 10/26/16 12:05
Client ID	: SB-AOC09-2013-104-EX1C-10	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/27/16 04:57
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946228.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 86
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**85.6**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-16	**Date Collected**	: 10/26/16 17:10
Client ID	: SB-9-SO-8-A-EX1C-1026-171	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/27/16 04:57
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946228.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 90
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**89.7**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-17	**Date Collected**	: 10/26/16 17:25
Client ID	: SB-9-SO-8-A-EX1C-1026-172	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/27/16 04:57
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946228.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 91
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**91.1**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-20	**Date Collected**	: 10/26/16 11:11
Client ID	: SB-AOC09-2013-104-EX1D-10	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/29/16 01:40
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG947061.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 74
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**73.6**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-22	**Date Collected**	: 10/26/16 15:45
Client ID	: SB-9-SO-8-A-EX1G-1026-154	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/29/16 01:40
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG947061.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 86
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**86.2**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-23	**Date Collected**	: 10/26/16 11:21
Client ID	: SB-AOC09-2013-104-EX1E-10	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/29/16 01:40
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG947061.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 85
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	85.1	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-24	**Date Collected**	: 10/26/16 16:05
Client ID	: SB-9-SO-8-A-EX1E-1026-160	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/29/16 01:40
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG947061.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 86
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**85.8**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-26	**Date Collected**	: 10/26/16 11:30
Client ID	: SB-AOC09-2013-104-EX1E-10	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/29/16 01:40
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG947061.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 85
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**84.7**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-28	**Date Collected**	: 10/26/16 16:46
Client ID	: SB-9-SO-8-A-EX1B-1026-164	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/27/16 04:57
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946228.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 87
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**86.6**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-29	**Date Collected**	: 10/26/16 11:09
Client ID	: SB-AOC09-2013-EX1D-1026-1	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/29/16 01:40
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG947061.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 85
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**84.8**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Lab ID	: L1634605-30	**Date Collected**	: 10/26/16 16:30
Client ID	: SB-9-SO-8-A-EX1B-1026-163	**Date Received**	: 10/26/16
Sample Location	: EWING, NJ	**Date Analyzed**	: 10/27/16 04:57
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946228.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 82
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**81.6**	**0.100**	**NA**	

Duplicate Sample Results Summary

Form 6
Lab Duplicates

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634605
Project Name	: RACER PROPERTIES	**Project Number**	: 70613-816
Client Sample ID	: SB-AOC09-2013-104-EX1A-1026-0953	**Matrix**	: SOIL
Lab Sample ID	: L1634605-02	**Analysis Date**	: 10/27/16 04:57
Dup Sample ID	: WG946228-1	**DUP Analysis Date**	: 10/27/16 04:57

Parameter	Sample Concentration (%)	Duplicate Concentration (%)	RPD	RPD Limit
Solids, Total	91.8	91.7	0	20

ALPHA ANALYTICAL

World Class Chemistry

www.alphalab.com

Lab Number: L1634792

Client: Haley & Aldrich, Inc.

ATTN: Dimitri Quafisi

Project Name: RACER/EWING

Project Number: 70613-814

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

ANALYTICAL DATA PACKAGE FOR THE
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
TRENTON NEW JERSEY 08625

Agency/Division:	**Bureau/Office:**
Project No: 70613-814	**Contract No:**
Laboratory: Alpha Analytical	**Laboratory Location:** Westborough, Ma.
	Laboratory Phone Number: (508) 898-9220
SDG No: L1634792	**NJDEP Certification #:** MA015/MA935
Date of First Sample Receipt: 10/27/2016	**Date of Last Sample Receipt:** 10/27/2016

Agency Sample Number	Laboratory Sample Number	Sample Location	Date/Time of Collection
SB-C8-EX1D-1027-1	L1634792-01	RACER/EWING	10/27/2016 15:05
SB-C8-EX1A-1027-1	L1634792-02	RACER/EWING	10/27/2016 14:24
SB-C8-EX1B-1027-1	L1634792-03	RACER/EWING	10/27/2016 15:15
SB-C8-EX1C-1027-1	L1634792-04	RACER/EWING	10/27/2016 15:21
SB-E10-EX1B-1027-	L1634792-05	RACER/EWING	10/27/2016 16:00
CE1-IO2-EX1A-1027-	L1634792-06	RACER/EWING	10/27/2016 11:51
B7-EX2-EX1A-1027-	L1634792-07	RACER/EWING	10/27/2016 10:31
SB-9-S0-8-A-EX1D-	L1634792-08	RACER/EWING	10/27/2016 09:19

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on disk or electronically has been authorized by the laboratory director or his/her designee, as verified by the following signature.

Technical Director/Representative (Typed)	Melissa Cripps	11/02/16
Technical Director/Representative (Signature)	Melissa Cripps	

Table of Contents

New Jersey Reduced Data Deliverable Package 1
- Title Page 2
- Table of Contents 3
- Chain of Custody 5
  - External Chain of Custody 6
  - Lims COC (LN01) 7
  - Sample Receipt Tracking Report 9
- Methodology Review 15
  - Method References 16
- Laboratory Chronicle 17
  - Sample Receipt and Container Information 18
- NJ DEP DKQP Summary Questionnaire 20
  - DKQP Summary Questionnaire 21
- Conformance/Non-Conformance (Reliability) Summary 22
  - Conformance/Non-Conformance (Reliability) Report 23
- Glossary 25
  - Glossary Report 26
- Organics Analysis 28
  - GCMS 8260 Analysis 29
    - Sample Results Summary 30
      - Form 1 - Organics 31
    - Tune Results Summary 41
      - Form 5 - Organics 42
    - Blank Results Summary 44
      - Form 4 - Organics 45
    - Standards Data Summary 46
      - Form 6 - Organics 47
      - Form 7 - Organics 50
    - Surrogate Summary 53
      - Form 2 - Organics 54
    - Batch QC Summary 55
      - Form 3 - Organics 56
    - Internal Standard Summary 60
      - Form 8 - Organics 61
    - Chromatograms 62
      - Sample Raw Data 63
        - SB-C8-EX1D-1027-1505 (L1634792-01) Analyzed: 10/28/16 09:51 64
        - SB-C8-EX1A-1027-1424 (L1634792-02) Analyzed: 10/28/16 10:18 68
        - SB-C8-EX1B-1027-1515 (L1634792-03) Analyzed: 10/28/16 10:44 72
        - SB-C8-EX1C-1027-1521 (L1634792-04) Analyzed: 10/28/16 11:11 76
        - SB-E10-EX1B-1027-1600 (L1634792-05) Analyzed: 10/28/16 11:37 80
      - Method Blank Raw Data 84
        - Laboratory Method Bl (WG946796-5) Analyzed: 10/28/16 08:33 85
- Metals Analysis 96
  - Inorganic Data (ICP Analysis) 97
    - Sample Results Summary 98
      - Form 1 - Inorganics 99
    - Blank Results Summary 104
      - Form 3 - Inorganics 105
    - Calibration Summary 109

Table of Contents

Form 2A - Inorganics 110
Form 2B - Inorganics 114
ICP Interference Check Sample Results Summary 116
Form 4A - Inorganics 117
LCS Sample Results Summary 119
Form 7 - Inorganics 120
Sample Run Logs 122
Form 13 - Inorganics 123
ICP Digestion 125
Form 12 - Inorganics 126
Wet Chemistry Analysis 128
Total Solids Analysis 129
Results Summary 130
Form 1 - Inorganics 131
Duplicate Sample Results Summary 139
Form 6 - Inorganics 140
Total Solids Analysis 141
Results Summary 142
Form 1 - Inorganics 143

Chain of Custody

NEW JERSEY CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page of

Date Rec'd in Lab: 10/28/16

ALPHA Job #: L1634792

Client Information
Client:
Address:
Phone: 937 470 -2292
Fax:
Email: OQuafisi@...

Project Information
Project Name: Kacer/Ewing
Project Location: Ewing
Project # 70613
(Use Project name as Project #)
Project Manager: Dan Putt
ALPHAQuote #:

Turn-Around Time
Standard
Rush (only if pre approved)
Due Date:
# of Days:

Deliverables
NJ Full / Reduced
EQuIS (1 File) EQuIS (4 File)
Other

Billing Information
Same as Client Info
PO #

Regulatory Requirement
SRS Residential/Non Residential
SRS Impact to Groundwater
NJ Ground Water Quality Standards
NJ IGW SPLP Leachate Criteria
Other

Site Information
Is this site impacted by Petroleum? Yes
Petroleum Product:

These samples have been previously analyzed by Alpha

For EPH, selection is REQUIRED:
Category 1
Category 2

For VOC, selection is REQUIRED:
1,4-Dioxane
8011

Other project specific requirements/comments:
Please specify Metals or TAL.

ANALYSIS

Sample Filtration
Done
Lab to do
Preservation
Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL (Rush)	As (Rush)	As (Hold)	Total Bottle	Sample Specific Comments
1634792 01	SB-C8-EX1D-1027-1505	10/27	1505	Soil	DG	X				
02	SB-C8-EX1A-1027-1424	10/27	1424			X				
03	SB-C8-EX1B-1027-1515		1515			X				
04	SB-C8-EX1C-1027-1521		1521			X				
05	SB-E10-EX1B-1027-1600		1600			X				
06	E1-102-EX1A-1017-1151		1151				X			
07	B7-EX2-EX1A-1027-1031		1031				X			
08	SB-9-SO-8-4-EX1D-1027-0919		0919					X		

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type
Preservative

Relinquished By:	Date/Time	Received By:	Date/Time
	10/27 1750	BJBaker ASL	10-27-16 17:50
BJBaker	10-27-16 2200		10-27-16 2200
	10-28-16 0030		10/28/16 0030

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-14 HC (rev. 30-Sept-2013)

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Nov 02 2016, 05:34 pm

Login Number: L1634792
Account: HALEY-OH2 Haley & Aldrich, Inc.Project: 70613-814
Received: 27OCT16 Due Date: 01NOV16

Sample #	Client ID	Mat	PR	Collected	Container
L1634792-01	SB-C8-EX1D-1027-150	3	1A	27OCT16 15:05	3-Encore-5,1-Plastic-A-TS,1-SVial-F,2-SVial-W

Final 11/1 8260: TCE only, list built NJ-RED Package Due Date: 11/01/16

ENCORE,NJ-8260HLW,NJ-RED,NJDEP,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1634792-02	SB-C8-EX1A-1027-142	3	1A	27OCT16 14:24	3-Encore-5,1-Plastic-A-TS,1-SVial-F,2-SVial-W

Final 11/1 8260: TCE only, list built Package Due Date: 11/01/16

ENCORE,NJ-8260HLW,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1634792-03	SB-C8-EX1B-1027-151	3	1A	27OCT16 15:15	3-Encore-5,1-Plastic-A-TS,1-SVial-F,2-SVial-W

Final 11/1 8260: TCE only, list built Package Due Date: 11/01/16

ENCORE,NJ-8260HLW,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1634792-04	SB-C8-EX1C-1027-152	3	1A	27OCT16 15:21	3-Encore-5,1-Plastic-A-TS,1-SVial-F,2-SVial-W

Final 11/1 8260: TCE only, list built Package Due Date: 11/01/16

ENCORE,NJ-8260HLW,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1634792-05	SB-E10-EX1B-1027-16	3	1A	27OCT16 16:00	3-Encore-5,1-Plastic-A-TS,1-SVial-F,2-SVial-W

Final 11/1 8260: TCE only, list built Package Due Date: 11/01/16

ENCORE,NJ-8260HLW,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1634792-06	CE1-IO2-EX1A-1027-1	3	1A	27OCT16 11:51	1-Glass-AM.06

Final 11/1 8260: TCE only, list built Package Due Date: 11/01/16

AS-TI,PREPT,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1634792-07	B7-EX2-EX1A-1027-10	3	1A	27OCT16 10:31	1-Glass-AM.06

Final 11/1 8260: TCE only, list built Package Due Date: 11/01/16

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Nov 02 2016, 05:34 pm

Login Number: L1634792
Account: HALEY-OH2 Haley & Aldrich, Inc. Project: 70613-814
Received: 27OCT16 Due Date: 01NOV16

Sample #	Client ID	Mat	PR	Collected	Container

AS-TI,PREPT,TS

L1634792-08 SB-9-S0-8-A-EX1D-10 3 1A 27OCT16 09:19 1-Glass-AM.06
Final 11/1 8260: TCE only, list built Package Due Date: 11/01/16

A2-TS,AS-TI,PREPT

Logged By: Kristen Simonis

ALPHA ANALYTICAL LABORATORIES
Container Tracking Report

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1634792-01A	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634792-01A	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-01A	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-01B	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634792-01B	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-01B	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-01C	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634792-01C	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-01C	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-01D	Plastic-A-TS	INTACT	31-OCT-16		RETURN WALK-IN CUSTODY	Emily Keith	W20-S1-A CUSTODY	W20-S1-A CUSTODY	Emily Keith
L1634792-01D	Plastic-A-TS	INTACT	28-OCT-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1634792-01D	Plastic-A-TS	INTACT	28-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634792-01D	Plastic-A-TS	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-01X	SVial-F	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634792-01X	SVial-F	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-01X	SVial-F	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-01Y	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1634792-01Y	SVial-W	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-01Y	SVial-W	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-01Z	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Tyler Eno	CUSTODY	VOA DEAD FRIDGE	CUSTODY Tyler Eno
L1634792-01Z	SVial-W	INTACT	28-OCT-16	CUSTODY	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1634792-01Z	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1634792-01Z	SVial-W	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-01Z	SVial-W	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-02A	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1634792-02A	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-02A	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-02B	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634792-02B	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-02B	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-02C	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634792-02C	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-02C	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-02D	Plastic-A-TS	INTACT	31-OCT-16		RETURN WALK-IN CUSTODY	Emily Keith	W20-S1-A CUSTODY	W20-S1-A CUSTODY	Emily Keith
L1634792-02D	Plastic-A-TS	INTACT	28-OCT-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1634792-02D	Plastic-A-TS	INTACT	28-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634792-02D	Plastic-A-TS	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-02X	SVial-F	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634792-02X	SVial-F	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-02X	SVial-F	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-02Y	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1634792-02Y	SVial-W	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-02Y	SVial-W	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-02Z	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Tyler Eno	CUSTODY	VOA DEAD FRIDGE	CUSTODY Tyler Eno
L1634792-02Z	SVial-W	INTACT	28-OCT-16	CUSTODY	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1634792-02Z	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1634792-02Z	SVial-W	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-02Z	SVial-W	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-03A	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634792-03A	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1634792-03A	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-03B	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634792-03B	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-03B	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-03C	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634792-03C	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-03C	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-03D	Plastic-A-TS	INTACT	31-OCT-16		RETURN WALK-IN CUSTODY	Emily Keith	W20-S1-A CUSTODY	W20-S1-A CUSTODY	Emily Keith
L1634792-03D	Plastic-A-TS	INTACT	28-OCT-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1634792-03D	Plastic-A-TS	INTACT	28-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634792-03D	Plastic-A-TS	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-03X	SVial-F	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634792-03X	SVial-F	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-03X	SVial-F	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-03Y	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1634792-03Y	SVial-W	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-03Y	SVial-W	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-03Z	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Tyler Eno	CUSTODY	VOA DEAD FRIDGE	CUSTODY Tyler Eno
L1634792-03Z	SVial-W	INTACT	28-OCT-16	CUSTODY	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1634792-03Z	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1634792-03Z	SVial-W	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-03Z	SVial-W	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-04A	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634792-04A	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-04A	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1634792-04B	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634792-04B	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-04B	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-04C	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634792-04C	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-04C	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-04D	Plastic-A-TS	INTACT	31-OCT-16		RETURN WALK-IN CUSTODY	Emily Keith	W20-S1-A CUSTODY	W20-S1-A CUSTODY	Emily Keith
L1634792-04D	Plastic-A-TS	INTACT	28-OCT-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1634792-04D	Plastic-A-TS	INTACT	28-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634792-04D	Plastic-A-TS	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-04X	SVial-F	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634792-04X	SVial-F	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-04X	SVial-F	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-04Y	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1634792-04Y	SVial-W	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-04Y	SVial-W	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-04Z	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Tyler Eno	CUSTODY	VOA DEAD FRIDGE	CUSTODY Tyler Eno
L1634792-04Z	SVial-W	INTACT	28-OCT-16	CUSTODY	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1634792-04Z	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1634792-04Z	SVial-W	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-04Z	SVial-W	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-05A	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634792-05A	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-05A	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-05B	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1634792-05B	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-05B	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-05C	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634792-05C	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-05C	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-05D	Plastic-A-TS	INTACT	31-OCT-16		RETURN WALK-IN CUSTODY	Emily Keith	W20-S1-A CUSTODY	W20-S1-A CUSTODY	Emily Keith
L1634792-05D	Plastic-A-TS	INTACT	28-OCT-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1634792-05D	Plastic-A-TS	INTACT	28-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634792-05D	Plastic-A-TS	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-05X	SVial-F	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634792-05X	SVial-F	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-05X	SVial-F	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-05Y	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Tyler Eno	CUSTODY	VOA DEAD FRIDGE	CUSTODY Tyler Eno
L1634792-05Y	SVial-W	INTACT	28-OCT-16	CUSTODY	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1634792-05Y	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1634792-05Y	SVial-W	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-05Y	SVial-W	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-05Z	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1634792-05Z	SVial-W	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634792-05Z	SVial-W	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-06A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET2-S9	A2-CUSTODY-MET2-S9	Rexford Bempong
L1634792-06A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	A2-CUSTODY-MET3-S1	Rexford Bempong	A2-METALS PREP	A2-METALS PREP	Rexford Bempong
L1634792-06A	Glass-AM.06	INTACT	28-OCT-16	TRANSIT COURIER	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morrissey	A2-CUSTODY-MET3-S1	A2-CUSTODY-MET3-S1	Emily Keith
L1634792-06A	Glass-AM.06	INTACT	28-OCT-16	COOLER20-TRANSFER_TO_MANSFIELD	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morrissey	TRANSIT COURIER	COOLER20-TRANSFER_TO_MANSFI	
L1634792-06A	Glass-AM.06	INTACT	28-OCT-16		CUSTODY	Ryan Morrissey	COOLER20-TRANSFER_TO_MANSFIELD	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morris

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1634792-06A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634792-06A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634792-06A	Glass-AM.06	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-07A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET2-S9	A2-CUSTODY-MET2-S9	Rexford Bempong
L1634792-07A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	A2-CUSTODY-MET3-S1	Rexford Bempong	A2-METALS PREP	A2-METALS PREP	Rexford Bempong
L1634792-07A	Glass-AM.06	INTACT	28-OCT-16	TRANSIT COURIER	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morrissey	A2-CUSTODY-MET3-S1	A2-CUSTODY-MET3-S1	Emily Keith
L1634792-07A	Glass-AM.06	INTACT	28-OCT-16	COOLER20-TRANSFER_TO_MANSFIELD	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morrissey	TRANSIT COURIER	COOLER20-TRANSFER_TO_MANSFI	
L1634792-07A	Glass-AM.06	INTACT	28-OCT-16		CUSTODY	Ryan Morrissey	COOLER20-TRANSFER_TO_MANSFIELD	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morris
L1634792-07A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634792-07A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634792-07A	Glass-AM.06	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis
L1634792-08A	Glass-AM.06	INTACT	01-NOV-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET3-S3	A2-CUSTODY-MET3-S3	Rexford Bempong
L1634792-08A	Glass-AM.06	INTACT	01-NOV-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY-MET2-S9	Rexford Bempong	A2-METALS PREP	A2-METALS PREP	Rexford Bempong
L1634792-08A	Glass-AM.06	INTACT	29-OCT-16	A2-CUSTODY-REFRIDGE	A2-METALS PREP	Fatima Cofie	A2-CUSTODY-MET2-S9	A2-CUSTODY-MET2-S9	Fatima Cofie
L1634792-08A	Glass-AM.06	INTACT	29-OCT-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY-MET3-S1	Rexford Bempong	A2-METALS PREP	A2-METALS PREP	Rexford Bempong
L1634792-08A	Glass-AM.06	INTACT	28-OCT-16	TRANSIT COURIER	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morrissey	A2-CUSTODY-MET3-S1	A2-CUSTODY-MET3-S1	Emily Keith
L1634792-08A	Glass-AM.06	INTACT	28-OCT-16	COOLER20-TRANSFER_TO_MANSFIELD	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morrissey	TRANSIT COURIER	COOLER20-TRANSFER_TO_MANSFI	
L1634792-08A	Glass-AM.06	INTACT	28-OCT-16		CUSTODY	Ryan Morrissey	COOLER20-TRANSFER_TO_MANSFIELD	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morris
L1634792-08A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634792-08A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634792-08A	Glass-AM.06	INTACT	28-OCT-16	LOGIN	LOGIN	Kristen Simonis	CUSTODY	CUSTODY	Kristen Simonis

Methodology Review

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Laboratory Chronicle

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: 28-OCT-16 04:24

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1634792-01A	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634792-01B	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634792-01C	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634792-01D	Plastic 2oz unpreserved for TS	A	N/A	2.9	Y	Absent	TS(7)
L1634792-01X	Vial MeOH preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634792-01Y	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634792-01Z	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634792-02A	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634792-02B	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634792-02C	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634792-02D	Plastic 2oz unpreserved for TS	A	N/A	2.9	Y	Absent	TS(7)
L1634792-02X	Vial MeOH preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634792-02Y	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634792-02Z	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634792-03A	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634792-03B	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634792-03C	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634792-03D	Plastic 2oz unpreserved for TS	A	N/A	2.9	Y	Absent	TS(7)
L1634792-03X	Vial MeOH preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634792-03Y	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634792-03Z	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634792-04A	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634792-04B	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634792-04C	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634792-04D	Plastic 2oz unpreserved for TS	A	N/A	2.9	Y	Absent	TS(7)
L1634792-04X	Vial MeOH preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634792-04Y	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1634792-04Z	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634792-05A	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634792-05B	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634792-05C	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634792-05D	Plastic 2oz unpreserved for TS	A	N/A	2.9	Y	Absent	TS(7)
L1634792-05X	Vial MeOH preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634792-05Y	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634792-05Z	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634792-06A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.9	Y	Absent	AS-TI(180),TS(7)
L1634792-07A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.9	Y	Absent	AS-TI(180),TS(7)
L1634792-08A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.9	Y	Absent	AS-TI(180),A2-TS(7)

*Values in parentheses indicate holding time in days

NJ DEP
Data of Known Quality Protocols Conformance/Non-Conformance Summary Questionnaire

NJ DEP Data of Known Quality Protocols
Conformance/Non-Conformance
Summary Questionnaire

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	YES
1a	Were the method specified handling, preservation, and holding time requirements met?	YES
1b	EPH Method: Was the EPH Method conducted without significant modifications (see Section 11.3 of respective DKQ methods)?	N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	YES
3	Were all samples received at an appropriate temperature (4 ± 2° C)?	YES
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	YES
5a	Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	YES
5b	Were these reporting limits met?	YES
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	NO
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	NO

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1a or #1b is "No", the data package does not meet the requirements for "Data of Known Quality".

Conformance/Non-Conformance Summary

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Case Narrative (continued)

Report Submission

This report replaces the report issued November 1, 2016. The Client ID was changed on L1634792-08.

A previously-issued report replace the partial report issued October 28, 2016. At the client's request, the analysis of Arsenic was performed on L1634792-08.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

DKQP Related Narratives

Volatile Organics

In reference to question 6:

At the client's request, all submitted samples were not analyzed for the full DKQP list of constituents identified in the method specific analyte list presented in the DKQP documents.

Metals

In reference to question 6:

At the client's request, all submitted samples were not analyzed for the full DKQP list of constituents identified in the method specific analyte list presented in the DKQP documents.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Melissa Cripps Melissa Cripps Report Date: 11/02/16

Title: Technical Director/Representative

Glossary

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the

Data Qualifiers

reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Organics

GC/MS 8260
Analysis

Sample Results Summary

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634792-01	**Date Collected**	: 10/27/16 15:05
Client ID	: SB-C8-EX1D-1027-1505	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 09:51
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MV
Lab File ID	: V17161028A08	**Instrument ID**	: VOA117
Sample Amount	: 6.1 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 82
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
79-01-6	Trichloroethene	0.019	0.00099	0.00012	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634792-02	**Date Collected**	: 10/27/16 14:24
Client ID	: SB-C8-EX1A-1027-1424	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 10:18
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MV
Lab File ID	: V17161028A09	**Instrument ID**	: VOA117
Sample Amount	: 5.9 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 87
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
79-01-6	Trichloroethene	0.00025	0.00097	0.00012	J

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634792-03	**Date Collected**	: 10/27/16 15:15
Client ID	: SB-C8-EX1B-1027-1515	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 10:44
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MV
Lab File ID	: V17161028A10	**Instrument ID**	: VOA117
Sample Amount	: 4.9 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 82
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
79-01-6	Trichloroethene	0.015	0.0012	0.00016	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634792-04	**Date Collected**	: 10/27/16 15:21
Client ID	: SB-C8-EX1C-1027-1521	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 11:11
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MV
Lab File ID	: V17161028A11	**Instrument ID**	: VOA117
Sample Amount	: 5.4 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 86
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
79-01-6	Trichloroethene	0.00048	0.0011	0.00014	J

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634792-05	**Date Collected**	: 10/27/16 16:00
Client ID	: SB-E10-EX1B-1027-1600	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 11:37
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MV
Lab File ID	: V17161028A12	**Instrument ID**	: VOA117
Sample Amount	: 5.6 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 84
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
79-01-6	Trichloroethene	0.0059	0.0010	0.00013	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	Lab Number	: L1634792
Project Name	: RACER/EWING	Project Number	: 70613-814
Lab ID	: WG946796-5	Date Collected	: NA
Client ID	: WG946796-5BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 10/28/16 08:33
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MV
Lab File ID	: V17161028A05	Instrument ID	: VOA117
Sample Amount	: 5.0 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: NA
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.0030	0.00040	U
123-91-1	1,4-Dioxane	ND	0.10	0.014	U
106-93-4	1,2-Dibromoethane	ND	0.0030	0.00017	U
75-09-2	Methylene chloride	ND	0.0050	0.0011	U
75-34-3	1,1-Dichloroethane	ND	0.0015	0.00008	U
67-66-3	Chloroform	ND	0.0015	0.00037	U
56-23-5	Carbon tetrachloride	ND	0.0010	0.00021	U
78-87-5	1,2-Dichloropropane	ND	0.0035	0.00023	U
124-48-1	Dibromochloromethane	ND	0.0010	0.00015	U
79-00-5	1,1,2-Trichloroethane	ND	0.0015	0.00030	U
110-75-8	2-Chloroethylvinyl ether	ND	0.020	0.00062	U
127-18-4	Tetrachloroethene	ND	0.0010	0.00014	U
108-90-7	Chlorobenzene	ND	0.0010	0.00035	U
75-69-4	Trichlorofluoromethane	ND	0.0050	0.00039	U
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00011	U
71-55-6	1,1,1-Trichloroethane	ND	0.0010	0.00011	U
75-27-4	Bromodichloromethane	ND	0.0010	0.00017	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.0010	0.00012	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.0010	0.00012	U
542-75-6	1,3-Dichloropropene, Total	ND	0.0010	0.00012	U
563-58-6	1,1-Dichloropropene	ND	0.0050	0.00014	U
75-25-2	Bromoform	ND	0.0040	0.00024	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0010	0.00010	U
71-43-2	Benzene	0.00012	0.0010	0.00012	J
108-88-3	Toluene	0.00020	0.0015	0.00019	J
100-41-4	Ethylbenzene	ND	0.0010	0.00013	U
74-87-3	Chloromethane	ND	0.0050	0.00029	U

Form 1
VOA

Client	: Haley & Aldrich, Inc.	Lab Number	: L1634792
Project Name	: RACER/EWING	Project Number	: 70613-814
Lab ID	: WG946796-5	Date Collected	: NA
Client ID	: WG946796-5BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 10/28/16 08:33
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MV
Lab File ID	: V17161028A05	Instrument ID	: VOA117
Sample Amount	: 5.0 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: NA
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
74-83-9	Bromomethane	0.00043	0.0020	0.00034	J
75-01-4	Vinyl chloride	ND	0.0020	0.00012	U
75-00-3	Chloroethane	ND	0.0020	0.00032	U
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00026	U
156-60-5	trans-1,2-Dichloroethene	ND	0.0015	0.00021	U
79-01-6	Trichloroethene	ND	0.0010	0.00012	U
95-50-1	1,2-Dichlorobenzene	ND	0.0050	0.00015	U
541-73-1	1,3-Dichlorobenzene	ND	0.0050	0.00014	U
106-46-7	1,4-Dichlorobenzene	ND	0.0050	0.00014	U
1634-04-4	Methyl tert butyl ether	ND	0.0020	0.00008	U
179601-23-1	p/m-Xylene	ND	0.0020	0.00035	U
95-47-6	o-Xylene	ND	0.0020	0.00034	U
1330-20-7	Xylene (Total)	ND	0.0020	0.00034	U
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00014	U
540-59-0	1,2-Dichloroethene (total)	ND	0.0010	0.00014	U
74-95-3	Dibromomethane	ND	0.010	0.00016	U
110-56-5	1,4-Dichlorobutane	ND	0.010	0.00013	U
96-18-4	1,2,3-Trichloropropane	ND	0.010	0.00016	U
100-42-5	Styrene	ND	0.0020	0.00040	U
75-71-8	Dichlorodifluoromethane	ND	0.010	0.00019	U
67-64-1	Acetone	ND	0.036	0.0010	U
75-15-0	Carbon disulfide	ND	0.010	0.0011	U
78-93-3	2-Butanone	ND	0.010	0.00027	U
108-05-4	Vinyl acetate	ND	0.010	0.00013	U
108-10-1	4-Methyl-2-pentanone	ND	0.010	0.00024	U
591-78-6	2-Hexanone	ND	0.010	0.00067	U
97-63-2	Ethyl methacrylate	ND	0.010	0.00015	U

Form 1
VOA

Client	: Haley & Aldrich, Inc.	Lab Number	: L1634792
Project Name	: RACER/EWING	Project Number	: 70613-814
Lab ID	: WG946796-5	Date Collected	: NA
Client ID	: WG946796-5BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 10/28/16 08:33
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MV
Lab File ID	: V17161028A05	Instrument ID	: VOA117
Sample Amount	: 5.0 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: NA
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
107-02-8	Acrolein	ND	0.025	0.0081	U
107-13-1	Acrylonitrile	ND	0.0040	0.00051	U
74-97-5	Bromochloromethane	ND	0.0050	0.00028	U
109-99-9	Tetrahydrofuran	ND	0.020	0.0010	U
594-20-7	2,2-Dichloropropane	ND	0.0050	0.00023	U
142-28-9	1,3-Dichloropropane	ND	0.0050	0.00014	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0010	0.00032	U
108-86-1	Bromobenzene	ND	0.0050	0.00021	U
104-51-8	n-Butylbenzene	ND	0.0010	0.00011	U
135-98-8	sec-Butylbenzene	ND	0.0010	0.00012	U
98-06-6	tert-Butylbenzene	ND	0.0050	0.00014	U
95-49-8	o-Chlorotoluene	ND	0.0050	0.00016	U
106-43-4	p-Chlorotoluene	ND	0.0050	0.00013	U
87-68-3	Hexachlorobutadiene	ND	0.0050	0.00023	U
98-82-8	Isopropylbenzene	ND	0.0010	0.00010	U
99-87-6	p-Isopropyltoluene	ND	0.0010	0.00012	U
91-20-3	Naphthalene	0.00016	0.0050	0.00014	J
103-65-1	n-Propylbenzene	ND	0.0010	0.00011	U
87-61-6	1,2,3-Trichlorobenzene	ND	0.0050	0.00015	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.0050	0.00018	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.0050	0.00014	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.0050	0.00014	U
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.0050	0.00039	U
60-29-7	Ethyl ether	ND	0.0050	0.00026	U
79-20-9	Methyl Acetate	ND	0.0040	0.00027	U
141-78-6	Ethyl Acetate	ND	0.020	0.00092	U
108-20-3	Isopropyl Ether	ND	0.0040	0.00014	U

Form 1
VOA

Client	: Haley & Aldrich, Inc.	Lab Number	: L1634792
Project Name	: RACER/EWING	Project Number	: 70613-814
Lab ID	: WG946796-5	Date Collected	: NA
Client ID	: WG946796-5BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 10/28/16 08:33
Sample Matrix	: SOIL	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MV
Lab File ID	: V17161028A05	Instrument ID	: VOA117
Sample Amount	: 5.0 g	GC Column	: RTX-VMS
Level	: LOW	%Solids	: NA
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		mg/kg			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
110-82-7	Cyclohexane	ND	0.020	0.00015	U
75-65-0	tert-Butyl Alcohol	ND	0.10	0.0029	U
637-92-3	Ethyl-Tert-Butyl-Ether	ND	0.0040	0.00012	U
994-05-8	Tertiary-Amyl Methyl Ether	ND	0.0040	0.00009	U
108-87-2	Methyl cyclohexane	ND	0.0040	0.00015	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.020	0.00027	U
95-93-2	1,2,4,5-Tetramethylbenzene	ND	0.0040	0.00013	U
105-05-5	1,4-Diethylbenzene	ND	0.0040	0.00016	U
622-96-8	4-Ethyltoluene	ND	0.0040	0.00012	U

Tentatively Identified Compounds
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: WG946796-5	**Date Collected**	: NA
Client ID	: WG946796-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 10/28/16 08:33
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MV
Lab File ID	: V17161028A05	**Instrument ID**	: VOA117
Sample Amount	:	**GC Column**	:
Level	:	**%Solids**	: NA
Extract Volume (MeOH)	: NA	**Injection Volume**	: 1

Number TICS found: 4 **Concentration Units: mg/kg**

CAS Number	Compound Name	RT	EST. CONC.	Qualifier
	Unknown	8.35	.0028	J
	Unknown	11.30	.005	J
	Unknown	13.23	.00342	J
	Total TIC Compounds		0.011J	J

Tuning Results Summary

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: VOA117	**Analysis Date**	: 09/16/16 16:52
Tune Standard	: WG933027-1	**Tune File ID**	: V17160916BFB2_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	24
75	30.0 - 60.0% of mass 95	57.6
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.4 (.5)1
174	Greater than 50.0 of mass 95	75.6
175	5.0 - 9.0% of mass 174	5.2 (6.8)1
176	95.0 - 101% of mass 174	74.4 (98.4)1
177	5.0 - 9.0% of mass 176	4.9 (6.6)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STDL1	R901263-1	V17160916N03	09/16/16 18:20
STDL2	R901263-2	V17160916N04	09/16/16 18:47
STDL3	R901263-3	V17160916N05	09/16/16 19:14
STDL4	R901263-4	V17160916N06	09/16/16 19:40
STDL5	R901263-5	V17160916N07	09/16/16 20:07
STDL6	R901263-6	V17160916N08	09/16/16 20:34
STDL7	R901263-7	V17160916N09	09/16/16 21:00
STDL8	R901263-8	V17160916N10	09/16/16 21:27
ICV Quant Report	R901263-9	V17160916N14	09/16/16 23:13

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: VOA117	**Analysis Date**	: 10/28/16 06:24
Tune Standard	: WG946796-1	**Tune File ID**	: V17161028BF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	21.9
75	30.0 - 60.0% of mass 95	50
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	1 (1.3)1
174	Greater than 50.0 of mass 95	79.8
175	5.0 - 9.0% of mass 174	6.1 (7.6)1
176	95.0 - 101% of mass 174	79.7 (99.8)1
177	5.0 - 9.0% of mass 176	4.9 (6.1)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG946796-2CCAL	WG946796-2	V17161028A01	10/28/16 06:47
WG946796-3LCS	WG946796-3	V17161028A01	10/28/16 06:47
WG946796-4LCSD	WG946796-4	V17161028A02	10/28/16 07:14
WG946796-5BLANK	WG946796-5	V17161028A05	10/28/16 08:33
SB-C8-EX1D-1027-1505	L1634792-01	V17161028A08	10/28/16 09:51
SB-C8-EX1A-1027-1424	L1634792-02	V17161028A09	10/28/16 10:18
SB-C8-EX1B-1027-1515	L1634792-03	V17161028A10	10/28/16 10:44
SB-C8-EX1C-1027-1521	L1634792-04	V17161028A11	10/28/16 11:11
SB-E10-EX1B-1027-1600	L1634792-05	V17161028A12	10/28/16 11:37

Blank Results Summary

Method Blank Summary
Form 4

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab Sample ID	: WG946796-5	**Lab File ID**	: V17161028A05
Instrument ID	: VOA117		
Matrix	: SOIL	**Analysis Date**	: 10/28/16 08:33

Client Sample No.	Lab Sample ID	Analysis Date
WG946796-3LCS	WG946796-3	10/28/16 06:47
WG946796-4LCSD	WG946796-4	10/28/16 07:14
SB-C8-EX1D-1027-1505	L1634792-01	10/28/16 09:51
SB-C8-EX1A-1027-1424	L1634792-02	10/28/16 10:18
SB-C8-EX1B-1027-1515	L1634792-03	10/28/16 10:44
SB-C8-EX1C-1027-1521	L1634792-04	10/28/16 11:11
SB-E10-EX1B-1027-1600	L1634792-05	10/28/16 11:37

Standards Data Summary

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1634792**
Project Name	**: RACER/EWING**	**Project Number**	**: 70613-814**
Instrument ID	**: VOA117**	**Ical Ref**	**: ICAL12888**
Calibration dates	**: 09/16/16 18:20 09/16/16 21:27**		

Calibration Files
L1 =V17160916N03.D L2 =V17160916N04.D L3 =V17160916N05.D L4 =V17160916N06.D L5 =V17160916N07.D
L6 =V17160916N08.D L7 =V17160916N09.D L8 =V17160916N10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------									
2)	T	Dichlorodifluoromethane	0.273	0.305	0.290	0.288	0.283	0.292	0.291	0.283	0.288	3.24
3)	T	Chloromethane	0.437	0.431	0.390	0.373	0.368	0.364	0.370	0.368	0.388	7.71
4)	C	Vinyl chloride	0.274	0.313	0.288	0.288	0.283	0.295	0.308	0.325	0.297	5.82
5)	T	Bromomethane	0.198	0.163	0.146	0.146	0.148	0.151	0.160	0.166	0.160	10.81
6)	T	Chloroethane	0.146	0.142	0.131	0.132	0.131	0.132	0.136	0.142	0.136	4.45
7)	T	Trichlorofluoromethane	0.442	0.525	0.479	0.486	0.479	0.483	0.484	0.476	0.482	4.69
8)	T	Ethyl ether	0.105	0.110	0.106	0.098	0.097	0.099	0.101	0.100	0.102	4.53
10)	C	1,1-Dichloroethene	0.222	0.229	0.221	0.220	0.215	0.220	0.222	0.222	0.221	1.71
11)	T	Carbon disulfide		1.564	0.917	0.857	0.811	0.820	0.834	0.861	*L	0.9985
12)	T	Freon-113	0.190	0.230	0.231	0.232	0.226	0.228	0.233	0.230	0.225	6.36
14)	T	Acrolein	0.104	0.038	0.029	0.028	0.028	0.027	0.026	0.028	*L	0.9987
15)	T	Methylene chloride	0.350	0.290	0.251	0.236	0.235	0.239	0.236	0.240	*L	0.9998
17)	T	Acetone	0.206	0.082	0.055	0.052	0.050	0.045	0.046	0.048	*L	0.9989
18)	T	trans-1,2-Dichloroethene	0.255	0.262	0.242	0.242	0.243	0.246	0.248	0.245	0.248	2.91
19)	T	Methyl acetate	0.069	0.138	0.128	0.123	0.119	0.118	0.117	0.119	*L	0.9993
20)	T	Methyl tert-butyl ether	0.654	0.670	0.676	0.666	0.649	0.659	0.658	0.661	0.662	1.30
21)	T	tert-Butyl alcohol	0.020	0.021	0.022	0.022	0.021	0.021	0.021	0.023	0.021	3.30
22)	T	Diisopropyl ether	1.012	1.014	1.006	0.992	0.981	0.983	0.984	0.981	0.994	1.44
23)	T	1,1-Dichloroethane	0.559	0.595	0.563	0.556	0.550	0.557	0.561	0.556	0.562	2.46
24)	T	Halothane	0.153	0.187	0.183	0.180	0.179	0.183	0.185	0.184	0.179	6.01
25)	T	Acrylonitrile	0.053	0.066	0.068	0.063	0.063	0.063	0.065	0.065	0.063	7.09
26)	T	Ethyl tert-butyl ether	0.953	0.999	1.014	0.992	0.965	0.979	0.979	0.977	0.982	1.96
27)	T	Vinyl acetate	0.543	0.552	0.562	0.557	0.544	0.559	0.560	0.562	0.555	1.36
28)	T	cis-1,2-Dichloroethene	0.256	0.295	0.273	0.265	0.263	0.265	0.266	0.266	0.269	4.36
29)	T	2,2-Dichloropropane	0.471	0.516	0.502	0.505	0.503	0.506	0.512	0.502	0.502	2.69
30)	T	Bromochloromethane	0.099	0.105	0.107	0.104	0.101	0.101	0.100	0.098	0.102	3.08
31)	T	Cyclohexane	0.530	0.629	0.564	0.571	0.564	0.570	0.572	0.556	0.570	4.86
32)	C	Chloroform	0.507	0.558	0.553	0.534	0.527	0.532	0.536	0.530	0.535	2.92
33)	T	Ethyl acetate	0.233	0.199	0.199	0.193	0.189	0.190	0.187	0.189	0.197	7.64
34)	T	Carbon tetrachloride	0.329	0.423	0.435	0.449	0.453	0.468	0.472	0.465	0.437	10.71
35)	T	Tetrahydrofuran	0.069	0.058	0.057	0.055	0.053	0.051	0.051	0.051	0.056	10.86
36)	S	Dibromofluoromethane	0.242	0.249	0.249	0.256	0.251	0.253	0.249	0.257	0.251	1.88
37)	T	1,1,1-Trichloroethane	0.491	0.562	0.551	0.548	0.543	0.549	0.552	0.539	0.542	4.02
39)	T	2-Butanone	0.102	0.085	0.087	0.081	0.079	0.077	0.076	0.077	0.083	10.34
40)	T	1,1-Dichloropropene	0.343	0.411	0.385	0.379	0.380	0.384	0.387	0.378	0.381	4.93
41)	T	Benzene	1.290	1.188	1.055	1.024	1.007	1.012	1.019	1.018	1.077	9.75
42)	T	tert-Amyl methyl ether	0.653	0.678	0.699	0.679	0.665	0.671	0.667	0.676	0.674	1.98
43)	S	1,2-Dichloroethane-d4	0.329	0.341	0.337	0.340	0.338	0.344	0.343	0.347	0.340	1.63
44)	T	1,2-Dichloroethane	0.439	0.465	0.455	0.438	0.436	0.433	0.431	0.429	0.441	2.89

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1634792**
Project Name	**: RACER/EWING**	**Project Number**	**: 70613-814**
Instrument ID	**: VOA117**	**Ical Ref**	**: ICAL12888**
Calibration dates	**: 09/16/16 18:20 09/16/16 21:27**		

Calibration Files

L1 =V17160916N03.D L2 =V17160916N04.D L3 =V17160916N05.D L4 =V17160916N06.D L5 =V17160916N07.D

L6 =V17160916N08.D L7 =V17160916N09.D L8 =V17160916N10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
47)	T	Methyl cyclohexane	0.406	0.468	0.454	0.455	0.452	0.456	0.457	0.447	0.450	4.10
48)	T	Trichloroethene	0.327	0.327	0.322	0.311	0.311	0.311	0.313	0.311	0.317	2.41
50)	T	Dibromomethane	0.143	0.148	0.145	0.141	0.140	0.141	0.143	0.144	0.143	1.83
51)	C	1,2-Dichloropropane	0.289	0.308	0.305	0.295	0.293	0.293	0.296	0.295	0.297	2.16
53)	T	2-Chloroethyl vinyl ether	0.117	0.119	0.114	0.107	0.102	0.098	0.092	0.091	0.105	10.47
54)	T	Bromodichloromethane	0.329	0.402	0.390	0.398	0.394	0.396	0.402	0.405	0.389	6.39
57)	T	1,4-Dioxane	0.000	0.001	0.002	0.002	0.002	0.002	0.002	0.002	*L	0.9987
58)	T	cis-1,3-Dichloropropene	0.417	0.403	0.418	0.415	0.411	0.420	0.422	0.426	0.417	1.69
59)	I	Chlorobenzene-d5	----------ISTD----------									
60)	S	Toluene-d8	1.452	1.449	1.468	1.442	1.460	1.463	1.456	1.468	1.457	0.64
61)	C	Toluene	1.156	1.059	0.983	0.933	0.935	0.940	0.945	0.934	0.986	8.23
62)	T	4-Methyl-2-pentanone	0.085	0.110	0.110	0.105	0.102	0.104	0.103	0.105	0.103	7.55
63)	T	Tetrachloroethene	0.391	0.462	0.441	0.423	0.429	0.427	0.435	0.422	0.429	4.66
65)	T	trans-1,3-Dichloropropene	0.510	0.520	0.543	0.534	0.538	0.543	0.547	0.549	0.535	2.56
67)	T	Ethyl methacrylate	0.337	0.373	0.382	0.371	0.370	0.379	0.377	0.381	0.371	3.92
68)	T	1,1,2-Trichloroethane	0.232	0.236	0.243	0.234	0.232	0.232	0.230	0.231	0.234	1.83
69)	T	Chlorodibromomethane	0.294	0.305	0.343	0.333	0.338	0.343	0.351	0.355	0.333	6.58
70)	T	1,3-Dichloropropane	0.476	0.476	0.453	0.445	0.432	0.435	0.441	0.437	0.449	3.92
71)	T	1,2-Dibromoethane	0.230	0.248	0.265	0.257	0.255	0.257	0.259	0.260	0.254	4.22
72)	T	2-Hexanone	0.283	0.205	0.210	0.198	0.197	0.199	0.198	0.201	0.211	13.82
73)	T	Chlorobenzene	1.032	1.061	1.048	0.991	0.993	1.009	1.008	0.999	1.017	2.58
74)	C	Ethylbenzene	2.049	2.136	2.064	1.982	1.990	2.002	2.018	1.974	2.027	2.67
75)	T	1,1,1,2-Tetrachloroethane	0.363	0.343	0.369	0.361	0.362	0.366	0.373	0.371	0.363	2.55
76)	T	p/m Xylene	0.688	0.758	0.726	0.703	0.697	0.706	0.702	0.692	0.709	3.26
77)	T	o Xylene	0.667	0.715	0.710	0.678	0.673	0.680	0.679	0.669	0.684	2.66
78)	T	Styrene	1.140	1.166	1.179	1.109	1.116	1.124	1.123	1.104	1.133	2.40
79)	I	1,4-Dichlorobenzene-d4	----------ISTD----------									
80)	T	Bromoform	0.349	0.370	0.414	0.412	0.418	0.430	0.437	0.458	0.411	8.64
82)	T	Isopropylbenzene	3.450	3.937	3.851	3.695	3.754	3.789	3.832	3.799	3.763	3.86
83)	S	4-Bromofluorobenzene	1.103	1.071	1.103	1.113	1.114	1.122	1.104	1.120	1.106	1.47
84)	T	Bromobenzene	0.754	0.880	0.872	0.828	0.830	0.839	0.842	0.851	0.837	4.59
85)	T	n-Propylbenzene	4.498	4.876	4.725	4.580	4.631	4.688	4.701	4.646	4.668	2.38
86)	T	1,4-Dichlorobutane	1.320	1.264	1.325	1.264	1.263	1.266	1.261	1.284	1.281	2.08
87)	T	1,1,2,2-Tetrachloroethane	0.508	0.590	0.601	0.572	0.569	0.581	0.584	0.601	0.576	5.15
88)	T	4-Ethyltoluene	3.910	3.992	3.952	3.718	3.804	3.842	3.869	3.834	3.865	2.24
89)	T	2-Chlorotoluene	2.865	2.978	2.900	2.761	2.799	2.779	2.808	2.816	2.838	2.54
90)	T	1,3,5-Trimethylbenzene	3.492	3.551	3.468	3.314	3.358	3.412	3.414	3.381	3.424	2.24
91)	T	1,2,3-Trichloropropane	0.535	0.547	0.552	0.525	0.521	0.518	0.519	0.527	0.530	2.42
92)	T	trans-1,4-Dichloro-2-b...	0.260	0.249	0.261	0.255	0.247	0.257	0.262	0.265	0.257	2.45
93)	T	4-Chlorotoluene	2.977	2.943	2.972	2.818	2.856	2.891	2.934	2.914	2.913	1.91

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1634792**
Project Name	**: RACER/EWING**	**Project Number**	**: 70613-814**
Instrument ID	**: VOA117**	**Ical Ref**	**: ICAL12888**
Calibration dates	**: 09/16/16 18:20 09/16/16 21:27**		

Calibration Files
L1 =V17160916N03.D L2 =V17160916N04.D L3 =V17160916N05.D L4 =V17160916N06.D L5 =V17160916N07.D
L6 =V17160916N08.D L7 =V17160916N09.D L8 =V17160916N10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
94)	T	tert-Butylbenzene	2.656	2.814	2.746	2.640	2.710	2.720	2.710	2.714	2.714	1.96
97)	T	1,2,4-Trimethylbenzene	3.725	3.528	3.481	3.297	3.328	3.385	3.414	3.389	3.443	3.95
98)	T	sec-Butylbenzene	3.916	4.436	4.228	4.078	4.141	4.180	4.178	4.142	4.162	3.50
99)	T	p-Isopropyltoluene	3.352	3.547	3.520	3.345	3.400	3.443	3.436	3.417	3.432	2.09
100)	T	1,3-Dichlorobenzene	1.596	1.713	1.661	1.601	1.609	1.635	1.632	1.654	1.638	2.35
101)	T	1,4-Dichlorobenzene	1.668	1.679	1.619	1.563	1.573	1.597	1.597	1.599	1.612	2.60
102)	T	p-Diethylbenzene	2.100	2.156	2.196	2.106	2.114	2.136	2.156	2.137	2.137	1.48
103)	T	n-Butylbenzene	3.305	3.707	3.662	3.489	3.517	3.574	3.606	3.535	3.549	3.46
104)	T	1,2-Dichlorobenzene	1.588	1.490	1.508	1.445	1.440	1.464	1.461	1.478	1.484	3.21
105)	T	1,2,4,5-Tetramethylben...	3.466	3.494	3.547	3.424	3.461	3.501	3.535	3.521	3.494	1.19
106)	T	1,2-Dibromo-3-chloropr...	0.020	0.080	0.084	0.084	0.087	0.086	0.089	0.092	*L	0.9994
107)	T	1,3,5-Trichlorobenzene	1.429	1.415	1.483	1.408	1.391	1.421	1.420	1.408	1.422	1.91
108)	T	Hexachlorobutadiene	0.720	0.870	0.893	0.875	0.885	0.879	0.879	0.872	0.859	6.59
109)	T	1,2,4-Trichlorobenzene	1.228	1.257	1.232	1.190	1.174	1.191	1.187	1.194	1.206	2.38
110)	T	Naphthalene	2.032	1.939	1.988	1.920	1.889	1.936	1.922	1.963	1.949	2.30
111)	T	1,2,3-Trichlorobenzene	1.099	1.095	1.092	1.038	1.043	1.065	1.054	1.065	1.069	2.23

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1634792	
Project Name	: RACER/EWING	Project Number	: 70613-814	
Instrument ID	: VOA117	Calibration Date	: 10/28/16 06:47	
Lab File ID	: V17161028A01	Init. Calib. Date(s)	: 09/16/16	09/16/16
Sample No	: WG946796-2	Init. Calib. Times	: 18:20	21:27
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	117	-.01
Dichlorodifluoromethane	0.288	0.19	-	34*	20	77	0
Chloromethane	0.388	0.484	-	-24.7*	20	146	0
Vinyl chloride	0.297	0.322	-	-8.4	20	132	0
Bromomethane	0.16	0.177	-	-10.6	20	142	0
Chloroethane	0.136	0.153	-	-12.5	20	137	0
Trichlorofluoromethane	0.482	0.383	-	20.5*	20	94	0
Ethyl ether	0.102	0.112	-	-9.8	20	123	0
1,1-Dichloroethene	0.221	0.234	-	-5.9	20	124	0
Carbon disulfide	20	18.687	-	6.6	20	115	0
Freon-113	0.225	0.215	-	4.4	20	109	0
Acrolein	20	26.581	-	-32.9*	20	161	0
Methylene chloride	20	22.616	-	-13.1	20	128	0
Acetone	20	27.117	-	-35.6*	20	152	-.01
trans-1,2-Dichloroethene	0.248	0.272	-	-9.7	20	132	0
Methyl acetate	20	25.479	-	-27.4*	20	139	0
Methyl tert-butyl ether	0.662	0.651	-	1.7	20	113	0
tert-Butyl alcohol	0.021	0.022	-	-4.8	20	118	-.01
Diisopropyl ether	0.994	1.238	-	-24.5*	20	145	-.01
1,1-Dichloroethane	0.562	0.622	-	-10.7	20	130	0
Halothane	0.179	0.198	-	-10.6	20	127	-.01
Acrylonitrile	0.063	0.08	-	-27*	20	138	-.02
Ethyl tert-butyl ether	0.982	1.053	-	-7.2	20	122	-.01
Vinyl acetate	0.555	0.618	-	-11.4	20	129	-.01
cis-1,2-Dichloroethene	0.269	0.291	-	-8.2	20	125	0
2,2-Dichloropropane	0.502	0.454	-	9.6	20	106	0
Bromochloromethane	0.102	0.116	-	-13.7	20	127	-.01
Cyclohexane	0.57	0.596	-	-4.6	20	124	0
Chloroform	0.535	0.53	-	0.9	20	113	-.01
Ethyl acetate	0.197	0.224	-	-13.7	20	133	-.01
Carbon tetrachloride	0.437	0.368	-	15.8	20	100	-.01
Tetrahydrofuran	0.056	0.067	-	-19.6	20	140	-.02
Dibromofluoromethane	0.251	0.246	-	2	20	116	-.01
1,1,1-Trichloroethane	0.542	0.463	-	14.6	20	99	0
2-Butanone	0.083	0.097	-	-16.9	20	131	-.01
1,1-Dichloropropene	0.381	0.36	-	5.5	20	110	-.01
Benzene	1.077	1.128	-	-4.7	20	126	0
tert-Amyl methyl ether	0.674	0.682	-	-1.2	20	115	-.01
1,2-Dichloroethane-d4	0.34	0.278	-	18.2	20	97	0
1,2-Dichloroethane	0.441	0.384	-	12.9	20	99	-.01
Methyl cyclohexane	0.45	0.429	-	4.7	20	111	-.01
Trichloroethene	0.317	0.318	-	-0.3	20	116	-.01
Dibromomethane	0.143	0.145	-	-1.4	20	117	-.01
1,2-Dichloropropane	0.297	0.352	-	-18.5	20	136	-.01
2-Chloroethyl vinyl ether	0.105	0.131	-	-24.8*	20	136	-.01

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1634792	
Project Name	: RACER/EWING	Project Number	: 70613-814	
Instrument ID	: VOA117	Calibration Date	: 10/28/16 06:47	
Lab File ID	: V17161028A01	Init. Calib. Date(s)	: 09/16/16	09/16/16
Sample No	: WG946796-2	Init. Calib. Times	: 18:20	21:27
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Bromodichloromethane	0.389	0.37	-	4.9	20	111	0
1,4-Dioxane	1000	1129.311	-	-12.9	20	127	0
cis-1,3-Dichloropropene	0.417	0.427	-	-2.4	20	120	0
Chlorobenzene-d5	1	1	-	0	20	117	-.01
Toluene-d8	1.457	1.456	-	0.1	20	116	-.01
Toluene	0.986	1.001	-	-1.5	20	119	0
4-Methyl-2-pentanone	0.103	0.112	-	-8.7	20	119	0
Tetrachloroethene	0.429	0.444	-	-3.5	20	118	-.01
trans-1,3-Dichloropropene	0.535	0.527	-	1.5	20	114	-.01
Ethyl methacrylate	0.371	0.353	-	4.9	20	108	-.01
1,1,2-Trichloroethane	0.234	0.255	-	-9	20	123	0
Chlorodibromomethane	0.333	0.332	-	0.3	20	113	-.01
1,3-Dichloropropane	0.449	0.464	-	-3.3	20	120	0
1,2-Dibromoethane	0.254	0.268	-	-5.5	20	119	0
2-Hexanone	0.211	0.208	-	1.4	20	116	0
Chlorobenzene	1.017	1.086	-	-6.8	20	121	-.01
Ethylbenzene	2.027	2.011	-	0.8	20	114	-.01
1,1,1,2-Tetrachloroethane	0.363	0.374	-	-3	20	119	-.01
p/m Xylene	0.709	0.739	-	-4.2	20	119	0
o Xylene	0.684	0.706	-	-3.2	20	117	0
Styrene	1.133	1.147	-	-1.2	20	114	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	117	0
Bromoform	0.411	0.418	-	-1.7	20	118	0
Isopropylbenzene	3.763	3.674	-	2.4	20	112	0
4-Bromofluorobenzene	1.106	0.982	-	11.2	20	104	0
Bromobenzene	0.837	0.888	-	-6.1	20	119	0
n-Propylbenzene	4.668	4.599	-	1.5	20	114	0
1,4-Dichlorobutane	1.281	1.29	-	-0.7	20	114	0
1,1,2,2-Tetrachloroethane	0.576	0.618	-	-7.3	20	121	0
4-Ethyltoluene	3.865	3.9	-	-0.9	20	116	0
2-Chlorotoluene	2.838	2.73	-	3.8	20	110	0
1,3,5-Trimethylbenzene	3.424	3.267	-	4.6	20	110	0
1,2,3-Trichloropropane	0.53	0.512	-	3.4	20	109	-.01
trans-1,4-Dichloro-2-buten	0.257	0.225	-	12.5	20	101	0
4-Chlorotoluene	2.913	2.806	-	3.7	20	111	0
tert-Butylbenzene	2.714	2.601	-	4.2	20	111	0
1,2,4-Trimethylbenzene	3.443	3.261	-	5.3	20	110	0
sec-Butylbenzene	4.162	4.086	-	1.8	20	113	0
p-Isopropyltoluene	3.432	3.295	-	4	20	110	0
1,3-Dichlorobenzene	1.638	1.729	-	-5.6	20	122	0
1,4-Dichlorobenzene	1.612	1.7	-	-5.5	20	123	0
p-Diethylbenzene	2.137	2.186	-	-2.3	20	117	0
n-Butylbenzene	3.549	3.588	-	-1.1	20	115	0
1,2-Dichlorobenzene	1.484	1.538	-	-3.6	20	119	0
1,2,4,5-Tetramethylbenzene	3.494	3.358	-	3.9	20	111	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792	
Project Name	: RACER/EWING	**Project Number**	: 70613-814	
Instrument ID	: VOA117	**Calibration Date**	: 10/28/16 06:47	
Lab File ID	: V17161028A01	**Init. Calib. Date(s)**	: 09/16/16	09/16/16
Sample No	: WG946796-2	**Init. Calib. Times**	: 18:20	21:27
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dibromo-3-chloropropan	20	19.133	-	4.3	20	115	0
1,3,5-Trichlorobenzene	1.422	1.555	-	-9.4	20	123	0
Hexachlorobutadiene	0.859	0.837	-	2.6	20	110	0
1,2,4-Trichlorobenzene	1.206	1.25	-	-3.6	20	119	0
Naphthalene	1.949	1.915	-	1.7	20	113	0
1,2,3-Trichlorobenzene	1.069	1.096	-	-2.5	20	118	0

*** Value outside of QC limits.**

Surrogate Summary

Form 2
Surrogate Recovery
VOLATILES

Client: Haley & Aldrich, Inc.
Project Name: RACER/EWING

Lab Number: L1634792
Project Number: 70613-814
Matrix:

CLIENT ID (LAB SAMPLE NO.)	SMC1 TOL	SMC2 BFB	SMC3 DCA	SMC4 DBFM	TOT OUT
WG946796-4LCSD	99	89	81	100	0
WG946796-3LCS	100	89	82	98	0
WG946796-5BLANK	98	89	84	98	0
SB-C8-EX1A-1027-1424 (L1634792-02)	96	87	86	100	0
SB-C8-EX1B-1027-1515 (L1634792-03)	96	89	90	101	0
SB-C8-EX1C-1027-1521 (L1634792-04)	97	90	87	101	0
SB-C8-EX1D-1027-1505 (L1634792-01)	97	90	85	99	0
SB-E10-EX1B-1027-1600 (L1634792-05)	97	88	90	103	0

	QC LIMITS
TOL = TOLUENE-D8	(70-130)
BFB = 4-BROMOFLUOROBENZENE	(70-130)
DCA = 1,2-DICHLOROETHANE-D4	(70-130)
DBFM = DIBROMOFLUOROMETHANE)	(70-130)

* Values outside of QC limits

Batch QC Summary

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1634792	
Project Name	: RACER/EWING		**Project Number**	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG946796-3	**Analysis Date :** 10/28/16 06:47	**File ID**	: V17161028A01	
LCSD Sample ID	: WG946796-4	**Analysis Date :** 10/28/16 07:14	**File ID**	: V17161028A02	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,2-Dibromo-3-chloropropane	0.02	0.019	96	0.02	0.020	98	2	40-160	30
1,4-Dioxane	1	1.1	113	1	1.1	112	1	40-160	30
1,2-Dibromoethane	0.02	0.021	106	0.02	0.021	105	1	70-130	30
Methylene chloride	0.02	0.023	113	0.02	0.022	109	4	70-130	30
1,1-Dichloroethane	0.02	0.022	111	0.02	0.021	105	6	70-130	30
Chloroform	0.02	0.020	99	0.02	0.019	95	4	70-130	30
Carbon tetrachloride	0.02	0.017	84	0.02	0.016	80	5	70-130	30
1,2-Dichloropropane	0.02	0.024	119	0.02	0.023	115	3	70-130	30
Dibromochloromethane	0.02	0.020	100	0.02	0.020	101	1	70-130	30
1,1,2-Trichloroethane	0.02	0.022	109	0.02	0.022	108	1	70-130	30
2-Chloroethylvinyl ether	0.02	0.025	125	0.02	0.024	122	2	40-160	30
Tetrachloroethene	0.02	0.021	103	0.02	0.020	99	4	70-130	30
Chlorobenzene	0.02	0.021	107	0.02	0.020	103	4	70-130	30
Trichlorofluoromethane	0.02	0.016	80	0.02	0.015	76	5	40-160	30
1,2-Dichloroethane	0.02	0.017	87	0.02	0.017	86	1	70-130	30
1,1,1-Trichloroethane	0.02	0.017	86	0.02	0.016	82	5	70-130	30
Bromodichloromethane	0.02	0.019	95	0.02	0.018	91	4	70-130	30
trans-1,3-Dichloropropene	0.02	0.020	98	0.02	0.019	94	4	70-130	30
cis-1,3-Dichloropropene	0.02	0.020	103	0.02	0.020	98	5	40-160	30
1,1-Dichloropropene	0.02	0.019	94	0.02	0.018	90	4	70-130	30
Bromoform	0.02	0.020	102	0.02	0.020	101	1	40-160	30
1,1,2,2-Tetrachloroethane	0.02	0.022	107	0.02	0.021	107	0	40-160	30
Benzene	0.02	0.021	105	0.02	0.020	100	5	70-130	30
Toluene	0.02	0.020	102	0.02	0.020	98	4	70-130	30
Ethylbenzene	0.02	0.020	99	0.02	0.019	94	5	70-130	30
Chloromethane	0.02	0.025	125	0.02	0.023	115	8	40-160	30
Bromomethane	0.02	0.022	111	0.02	0.019	96	14	40-160	30
Vinyl chloride	0.02	0.022	108	0.02	0.020	101	7	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Matrix	: SOIL		
LCS Sample ID	: WG946796-3	**Analysis Date :** 10/28/16 06:47	**File ID** : V17161028A01
LCSD Sample ID	: WG946796-4	**Analysis Date :** 10/28/16 07:14	**File ID** : V17161028A02

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
Chloroethane	0.02	0.022	112	0.02	0.020	101	10	40-160	30
1,1-Dichloroethene	0.02	0.021	105	0.02	0.019	96	9	70-130	30
trans-1,2-Dichloroethene	0.02	0.022	110	0.02	0.020	102	8	70-130	30
Trichloroethene	0.02	0.020	100	0.02	0.019	97	3	70-130	30
1,2-Dichlorobenzene	0.02	0.021	104	0.02	0.020	100	4	70-130	30
1,3-Dichlorobenzene	0.02	0.021	106	0.02	0.020	102	4	70-130	30
1,4-Dichlorobenzene	0.02	0.021	105	0.02	0.021	103	2	70-130	30
Methyl tert butyl ether	0.02	0.020	98	0.02	0.019	94	4	70-130	30
p/m-Xylene	0.04	0.042	104	0.04	0.040	101	3	70-130	30
o-Xylene	0.04	0.041	103	0.04	0.040	100	3	70-130	30
cis-1,2-Dichloroethene	0.02	0.022	108	0.02	0.021	107	1	70-130	30
Dibromomethane	0.02	0.020	101	0.02	0.020	98	3	70-130	30
1,4-Dichlorobutane	0.02	0.020	101	0.02	0.020	100	1	70-130	30
1,2,3-Trichloropropane	0.02	0.019	96	0.02	0.019	93	3	70-130	30
Styrene	0.04	0.040	101	0.04	0.039	98	3	40-160	30
Dichlorodifluoromethane	0.02	0.013	66	0.02	0.013	63	5	40-160	30
Acetone	0.02	0.027	136	0.02	0.025	127	7	40-160	30
Carbon disulfide	0.02	0.019	93	0.02	0.020	98	5	40-160	30
2-Butanone	0.02	0.023	117	0.02	0.024	118	1	40-160	30
Vinyl acetate	0.02	0.022	111	0.02	0.022	108	3	70-130	30
4-Methyl-2-pentanone	0.02	0.022	109	0.02	0.021	104	5	40-160	30
2-Hexanone	0.02	0.020	98	0.02	0.019	96	2	40-160	30
Ethyl methacrylate	0.02	0.019	95	0.02	0.019	96	1	70-130	30
Acrolein	0.02	0.027	133	0.02	0.027	133	0	40-160	30
Acrylonitrile	0.02	0.025	126	0.02	0.024	118	7	70-130	30
Bromochloromethane	0.02	0.023	113	0.02	0.023	114	1	70-130	30
Tetrahydrofuran	0.02	0.024	121	0.02	0.022	110	10	70-130	30
2,2-Dichloropropane	0.02	0.018	90	0.02	0.017	86	5	40-160	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1634792	
Project Name	: RACER/EWING		**Project Number**	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG946796-3	**Analysis Date :** 10/28/16 06:47	**File ID**	: V17161028A01	
LCSD Sample ID	: WG946796-4	**Analysis Date :** 10/28/16 07:14	**File ID**	: V17161028A02	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,3-Dichloropropane	0.02	0.021	103	0.02	0.020	99	4	70-130	30
1,1,1,2-Tetrachloroethane	0.02	0.021	103	0.02	0.020	98	5	70-130	30
Bromobenzene	0.02	0.021	106	0.02	0.021	105	1	70-130	30
n-Butylbenzene	0.02	0.020	101	0.02	0.019	95	6	70-130	30
sec-Butylbenzene	0.02	0.020	98	0.02	0.019	93	5	70-130	30
tert-Butylbenzene	0.02	0.019	96	0.02	0.018	91	5	70-130	30
o-Chlorotoluene	0.02	0.019	96	0.02	0.018	92	4	70-130	30
p-Chlorotoluene	0.02	0.019	96	0.02	0.018	92	4	70-130	30
Hexachlorobutadiene	0.02	0.020	97	0.02	0.018	92	5	70-130	30
Isopropylbenzene	0.02	0.020	98	0.02	0.019	94	4	70-130	30
p-Isopropyltoluene	0.02	0.019	96	0.02	0.019	93	3	70-130	30
Naphthalene	0.02	0.020	98	0.02	0.020	98	0	40-160	30
n-Propylbenzene	0.02	0.020	98	0.02	0.019	94	4	70-130	30
1,2,3-Trichlorobenzene	0.02	0.020	102	0.02	0.020	100	2	70-130	30
1,2,4-Trichlorobenzene	0.02	0.021	104	0.02	0.020	102	2	70-130	30
1,3,5-Trimethylbenzene	0.02	0.019	95	0.02	0.018	91	4	70-130	30
1,2,4-Trimethylbenzene	0.02	0.019	95	0.02	0.018	90	5	70-130	30
trans-1,4-Dichloro-2-butene	0.02	0.018	88	0.02	0.017	86	2	70-130	30
Ethyl ether	0.02	0.022	110	0.02	0.021	103	7	70-130	30
Methyl Acetate	0.02	0.026	127	0.02	0.025	127	0	70-130	30
Ethyl Acetate	0.02	0.023	114	0.02	0.023	114	0	70-130	30
Isopropyl Ether	0.02	0.025	124	0.02	0.024	120	3	70-130	30
Cyclohexane	0.02	0.021	104	0.02	0.020	99	5	70-130	30
tert-Butyl Alcohol	0.1	0.10	103	0.1	0.10	103	0	40-160	30
Ethyl-Tert-Butyl-Ether	0.02	0.021	107	0.02	0.021	104	3	70-130	30
Tertiary-Amyl Methyl Ether	0.02	0.020	101	0.02	0.020	98	3	70-130	30
Methyl cyclohexane	0.02	0.019	95	0.02	0.018	90	5	70-130	30
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.02	0.019	96	0.02	0.018	90	6	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.		**Lab Number**	: L1634792	
Project Name	: RACER/EWING		**Project Number**	: 70613-814	
Matrix	: SOIL				
LCS Sample ID	: WG946796-3	**Analysis Date :** 10/28/16 06:47	**File ID**	: V17161028A01	
LCSD Sample ID	: WG946796-4	**Analysis Date :** 10/28/16 07:14	**File ID**	: V17161028A02	

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,2,4,5-Tetramethylbenzene	0.02	0.019	96	0.02	0.018	93	3	70-130	30
1,4-Diethylbenzene	0.02	0.020	102	0.02	0.019	97	5	70-130	30
4-Ethyltoluene	0.02	0.020	101	0.02	0.019	96	5	70-130	30

Internal Standard Summary

Internal Standard Area and RT Summary
Form 8

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: VOA117	**Analysis Date**	: 10/28/16 06:47
Sample No	: WG946796-2	**Lab File ID**	: V17161028A01

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG946796-2	221129	6.36	154300	9.93	81022	12.55
Upper Limit	442258	6.86	308600	10.43	162044	13.05
Lower Limit	110565	5.86	77150	9.43	40511	12.05
Sample ID						
WG946796-3 LCS	221129	6.36	154300	9.93	81022	12.55
WG946796-4 LCSD	219208	6.36	152817	9.93	80572	12.55
WG946796-5 BLANK	201277	6.36	143957	9.93	74948	12.55
SB-C8-EX1D-1027-1505	183079	6.36	132156	9.93	66444	12.55
SB-C8-EX1A-1027-1424	179181	6.36	128124	9.93	66921	12.55
SB-C8-EX1B-1027-1515	172599	6.36	123983	9.93	63148	12.55
SB-C8-EX1C-1027-1521	170281	6.37	122477	9.93	62417	12.55
SB-E10-EX1B-1027-1600	169217	6.37	121421	9.93	63499	12.55

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Chromatograms

Sample Raw Data

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA117\2016\161028A\
Data File : V17161028A08.D
Acq On : 28 Oct 2016 09:51 am
Operator : VOA117:MV
Sample : l1634792-01,31,6.1,5,,z
Misc : WG946796,ICAL12888
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 28 10:39:14 2016
Quant Method : I:\VOLATILES\VOA117\2016\161028A\V117_160916N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Sep 17 09:52:31 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA117\2016\161028A\V17161028A01.D
Sub List : 8260-TCE - PCE Break Down

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.363	96	183079	20.000 ug/L	0.00
Standard Area 1 = 221129			Recovery = 82.79%		
59) Chlorobenzene-d5	9.934	117	132156	20.000 ug/L	0.00
Standard Area 1 = 154300			Recovery = 85.65%		
79) 1,4-Dichlorobenzene-d4	12.550	152	66444	20.000 ug/L	0.00
Standard Area 1 = 81022			Recovery = 82.01%		
System Monitoring Compounds					
36) Dibromofluoromethane	5.535	113	45517	19.828 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 99.14%		
43) 1,2-Dichloroethane-d4	6.080	65	52991	17.029 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 85.15%		
60) Toluene-d8	8.072	98	186404	19.358 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 96.79%		
83) 4-Bromofluorobenzene	11.370	95	66063	17.977 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 89.89%		
Target Compounds					Qvalue
48) Trichloroethene	6.536	95	55603	19.182 ug/L	90

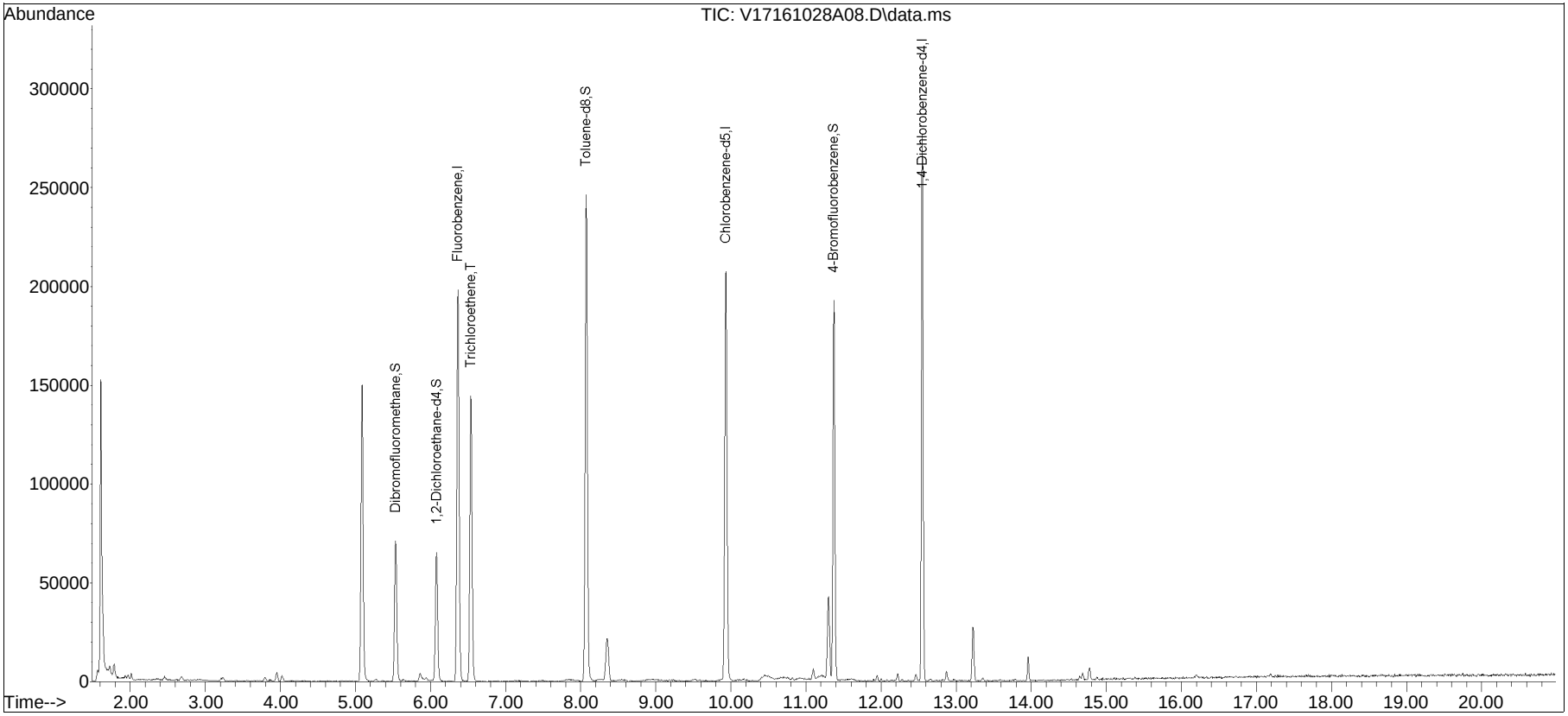
(#) = qualifier out of range (m) = manual integration (+) = signals summed

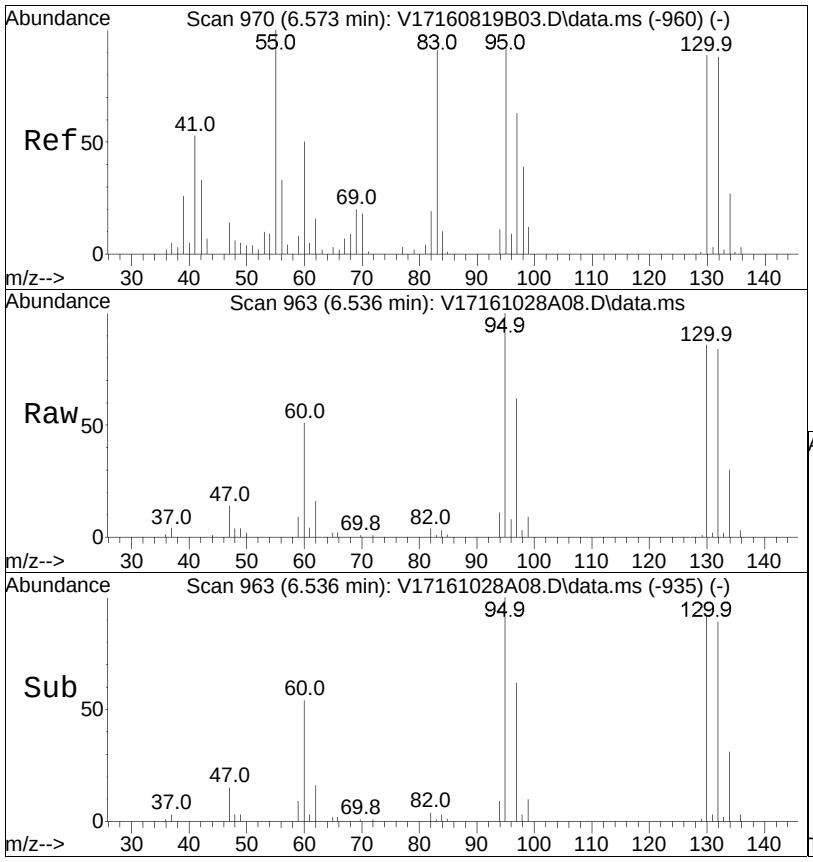
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA117\2016\161028A\
Data File : V17161028A08.D
Acq On : 28 Oct 2016 09:51 am
Operator : VOA117:MV
Sample : l1634792-01,31,6.1,5,,z
Misc : WG946796,ICAL12888
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 28 10:39:14 2016
Quant Method : I:\VOLATILES\VOA117\2016\161028A\V117_160916N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Sep 17 09:52:31 2016
Response via : Initial Calibration

Sub List : 8260-TCE - PCE Break Down016\161028A\\V17161028A01.D•

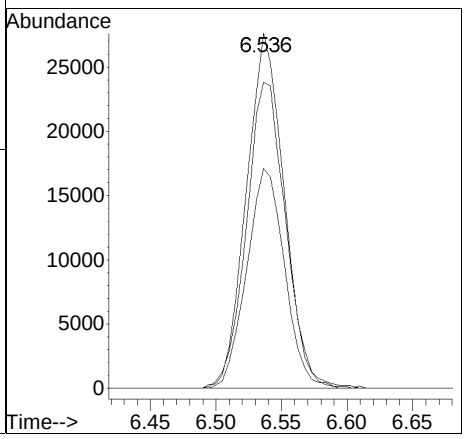




#48
Trichloroethene
Concen: 19.18 ug/L
RT: 6.536 min Scan# 963
Delta R.T. -0.006 min
Lab File: V17161028A08.D
Acq: 28 Oct 2016 09:51 am

Tgt Ion: 95 Resp: 55603

Ion	Ratio	Lower	Upper
95	100		
97	62.0	53.8	80.8
130	88.8	81.5	122.3



Manual Integration Report

Data Path	: I:\VOLATILES\VOA117\2016\1Q	Method	: V117_160916N_8260.m
Data File	: V17161028A08.D	Operator	: VOA117:MV
Date Inj'd	: 10/28/2016 9:51 am	Instrument	: VOA 117
Sample	: l1634792-01,31,6.1,5,,z	Quant Date	: 10/28/2016 10:39 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA117\2016\161028A\
Data File : V17161028A09.D
Acq On : 28 Oct 2016 10:18 am
Operator : VOA117:MV
Sample : l1634792-02,31,5.9,5,,z
Misc : WG946796,ICAL12888
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 28 10:41:19 2016
Quant Method : I:\VOLATILES\VOA117\2016\161028A\V117_160916N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Sep 17 09:52:31 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA117\2016\161028A\V17161028A01.D
Sub List : 8260-TCE - PCE Break Down

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.363	96	179181	20.000	ug/L	0.00
Standard Area 1 = 221129			Recovery = 81.03%			
59) Chlorobenzene-d5	9.934	117	128124	20.000	ug/L	0.00
Standard Area 1 = 154300			Recovery = 83.04%			
79) 1,4-Dichlorobenzene-d4	12.550	152	66921	20.000	ug/L	0.00
Standard Area 1 = 81022			Recovery = 82.60%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.535	113	44899	19.984	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 99.92%			
43) 1,2-Dichloroethane-d4	6.080	65	52375	17.197	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 85.98%			
60) Toluene-d8	8.072	98	179947	19.276	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 96.38%			
83) 4-Bromofluorobenzene	11.370	95	64214	17.349	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 86.75%			
Target Compounds						Qvalue
48) Trichloroethene	6.526	95	724	0.255	ug/L #	86

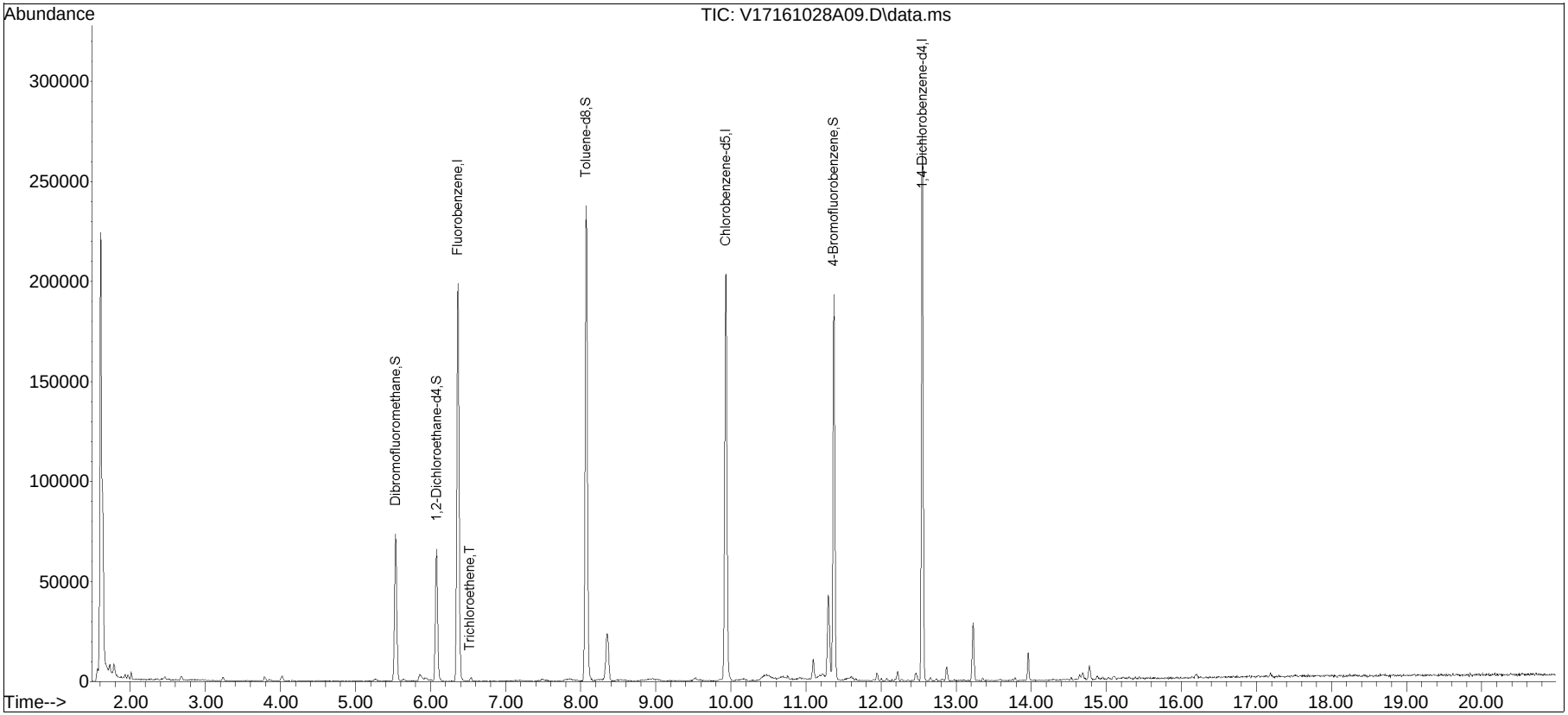
(#) = qualifier out of range (m) = manual integration (+) = signals summed

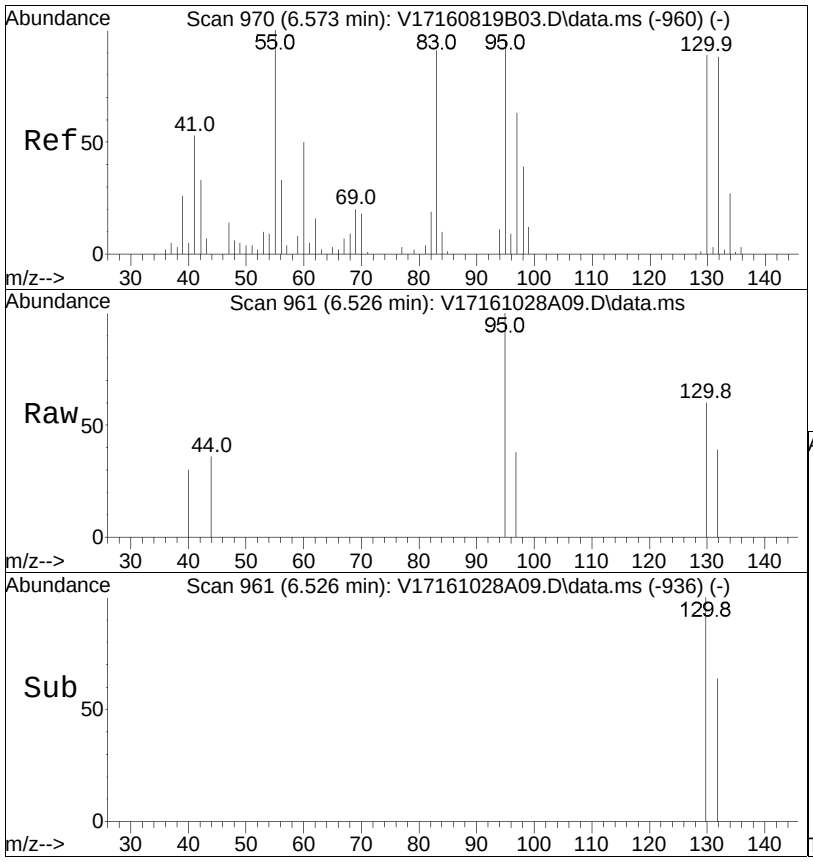
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA117\2016\161028A\
Data File : V17161028A09.D
Acq On : 28 Oct 2016 10:18 am
Operator : VOA117:MV
Sample : l1634792-02,31,5.9,5,,z
Misc : WG946796,ICAL12888
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 28 10:41:19 2016
Quant Method : I:\VOLATILES\VOA117\2016\161028A\V117_160916N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Sep 17 09:52:31 2016
Response via : Initial Calibration

Sub List : 8260-TCE - PCE Break Down016\161028A\V17161028A01.D•

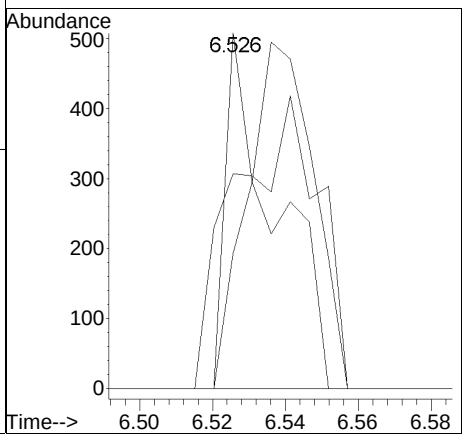




#48
Trichloroethene
Concen: 0.26 ug/L
RT: 6.526 min Scan# 961
Delta R.T. -0.016 min
Lab File: V17161028A09.D
Acq: 28 Oct 2016 10:18 am

Tgt Ion: 95 Resp: 724

Ion	Ratio	Lower	Upper
95	100		
97	52.8	53.8	80.8#
130	91.3	81.5	122.3



Manual Integration Report

Data Path	: I:\VOLATILES\VOA117\2016\1	QMethod	: V117_160916N_8260.m
Data File	: V17161028A09.D	Operator	: VOA117:MV
Date Inj'd	: 10/28/2016 10:18 am	Instrument	: VOA 117
Sample	: l1634792-02,31,5.9,5,,z	Quant Date	: 10/28/2016 10:41 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA117\2016\161028A\
Data File : V17161028A10.D
Acq On : 28 Oct 2016 10:44 am
Operator : VOA117:MV
Sample : l1634792-03,31,4.9,5,,z
Misc : WG946796,ICAL12888
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 28 11:16:24 2016
Quant Method : I:\VOLATILES\VOA117\2016\161028A\V117_160916N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Sep 17 09:52:31 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA117\2016\161028A\V17161028A01.D
Sub List : 8260-TCE - PCE Break Down

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.363	96	172599	20.000	ug/L	0.00
Standard Area 1 = 221129			Recovery = 78.05%			
59) Chlorobenzene-d5	9.934	117	123983	20.000	ug/L	0.00
Standard Area 1 = 154300			Recovery = 80.35%			
79) 1,4-Dichlorobenzene-d4	12.550	152	63148	20.000	ug/L	0.00
Standard Area 1 = 81022			Recovery = 77.94%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.535	113	43587	20.140	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 100.70%			
43) 1,2-Dichloroethane-d4	6.080	65	52879	18.024	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 90.12%			
60) Toluene-d8	8.072	98	174231	19.287	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 96.43%			
83) 4-Bromofluorobenzene	11.370	95	62345	17.850	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 89.25%			
Target Compounds						Qvalue
48) Trichloroethene	6.536	95	33690	12.328	ug/L	91

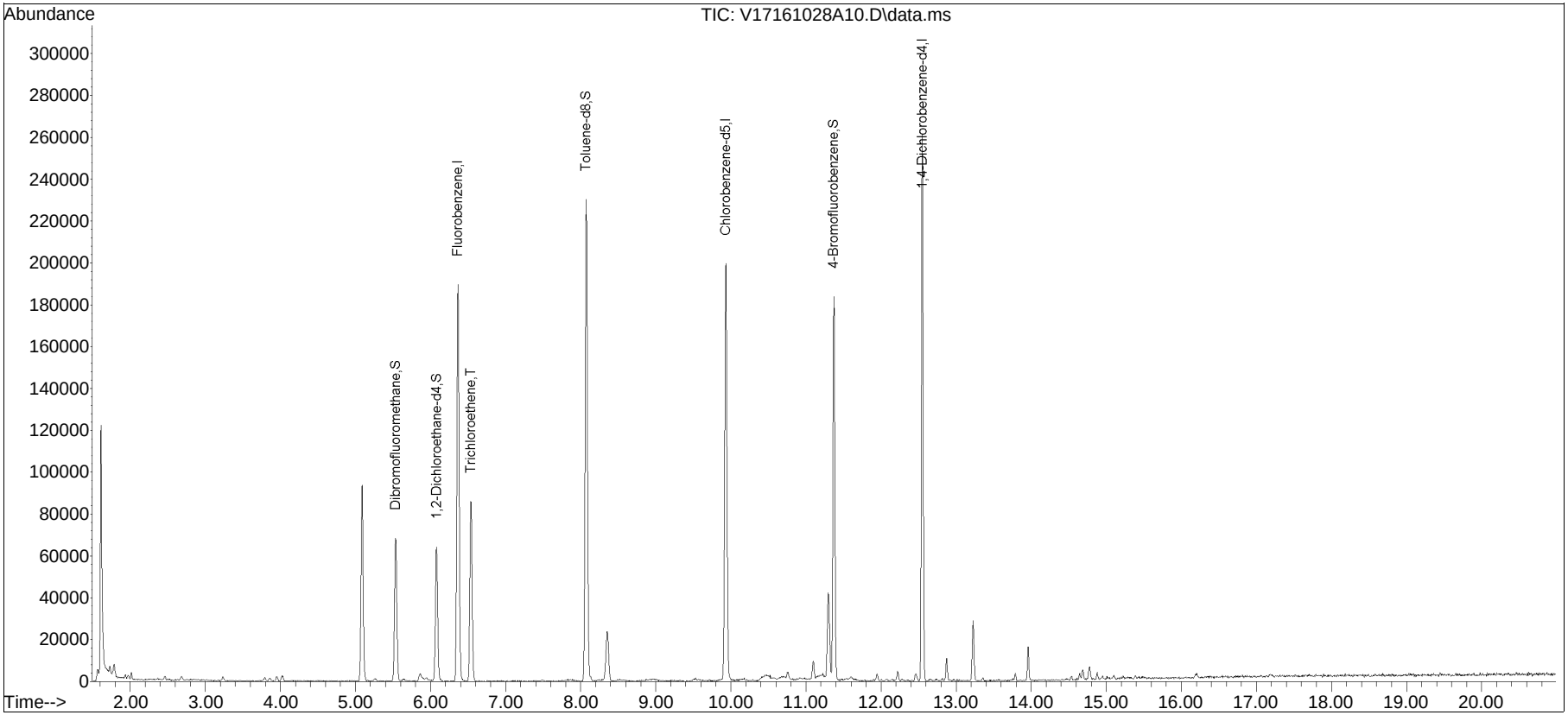
(#) = qualifier out of range (m) = manual integration (+) = signals summed

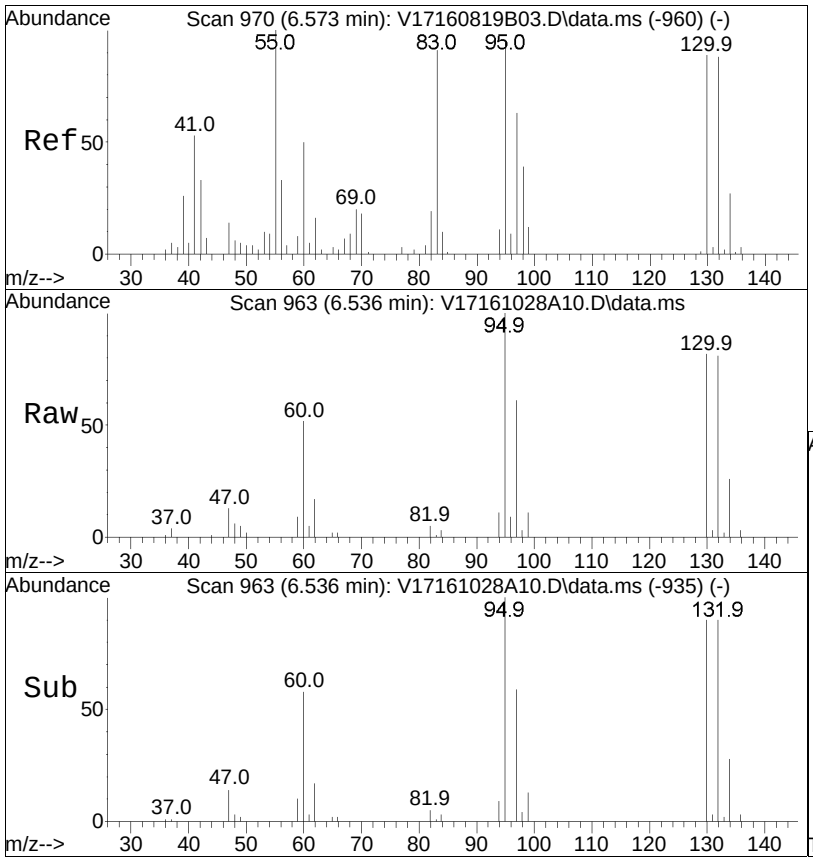
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA117\2016\161028A\
Data File : V17161028A10.D
Acq On : 28 Oct 2016 10:44 am
Operator : VOA117:MV
Sample : l1634792-03,31,4.9,5,,z
Misc : WG946796,ICAL12888
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 28 11:16:24 2016
Quant Method : I:\VOLATILES\VOA117\2016\161028A\V117_160916N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Sep 17 09:52:31 2016
Response via : Initial Calibration

Sub List : 8260-TCE - PCE Break Down016\161028A\\V17161028A01.D•

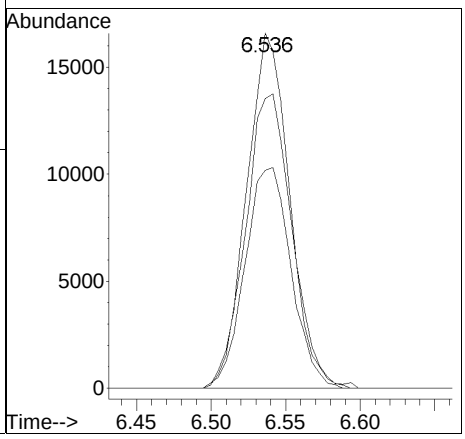




#48
Trichloroethene
Concen: 12.33 ug/L
RT: 6.536 min Scan# 963
Delta R.T. -0.006 min
Lab File: V17161028A10.D
Acq: 28 Oct 2016 10:44 am

Tgt Ion: 95 Resp: 33690

Ion	Ratio	Lower	Upper
95	100		
97	66.1	53.8	80.8
130	87.2	81.5	122.3



Manual Integration Report

Data Path	: I:\VOLATILES\VOA117\2016\1	QMethod	: V117_160916N_8260.m
Data File	: V17161028A10.D	Operator	: VOA117:MV
Date Inj'd	: 10/28/2016 10:44 am	Instrument	: VOA 117
Sample	: l1634792-03,31,4.9,5,,z	Quant Date	: 10/28/2016 11:16 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA117\2016\161028A\
Data File : V17161028A11.D
Acq On : 28 Oct 2016 11:11 am
Operator : VOA117:MV
Sample : l1634792-04,31,5.4,5,,z
Misc : WG946796,ICAL12888
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 28 11:50:06 2016
Quant Method : I:\VOLATILES\VOA117\2016\161028A\V117_160916N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Sep 17 09:52:31 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA117\2016\161028A\V17161028A01.D
Sub List : 8260-TCE - PCE Break Down

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.368	96	170281	20.000	ug/L	0.00
Standard Area 1 = 221129			Recovery = 77.01%			
59) Chlorobenzene-d5	9.934	117	122477	20.000	ug/L	0.00
Standard Area 1 = 154300			Recovery = 79.38%			
79) 1,4-Dichlorobenzene-d4	12.550	152	62417	20.000	ug/L	0.00
Standard Area 1 = 81022			Recovery = 77.04%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.535	113	43197	20.232	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 101.16%			
43) 1,2-Dichloroethane-d4	6.080	65	50422	17.421	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 87.11%			
60) Toluene-d8	8.072	98	173882	19.485	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 97.42%			
83) 4-Bromofluorobenzene	11.370	95	61910	17.933	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 89.66%			
Target Compounds						Qvalue
48) Trichloroethene	6.541	95	1197	0.444	ug/L #	72

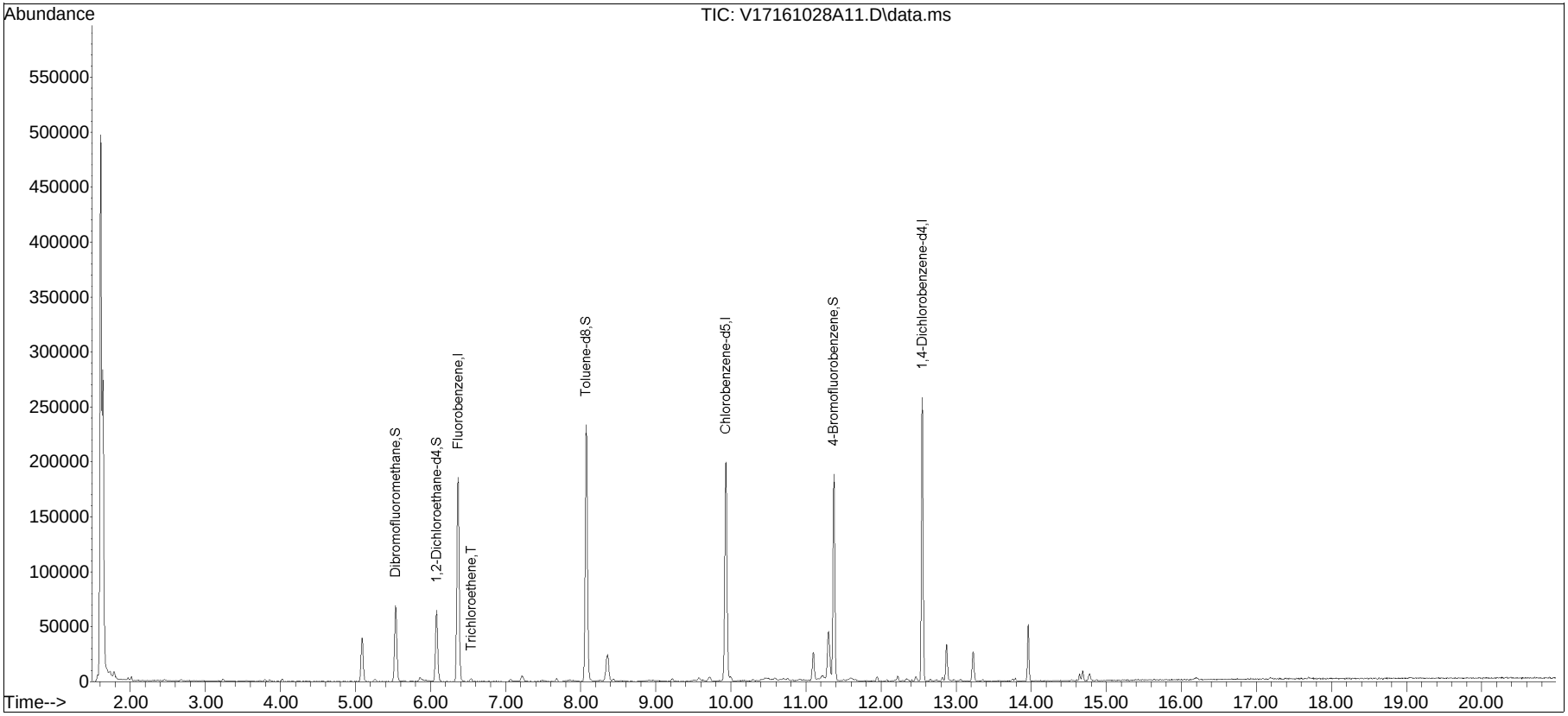
(#) = qualifier out of range (m) = manual integration (+) = signals summed

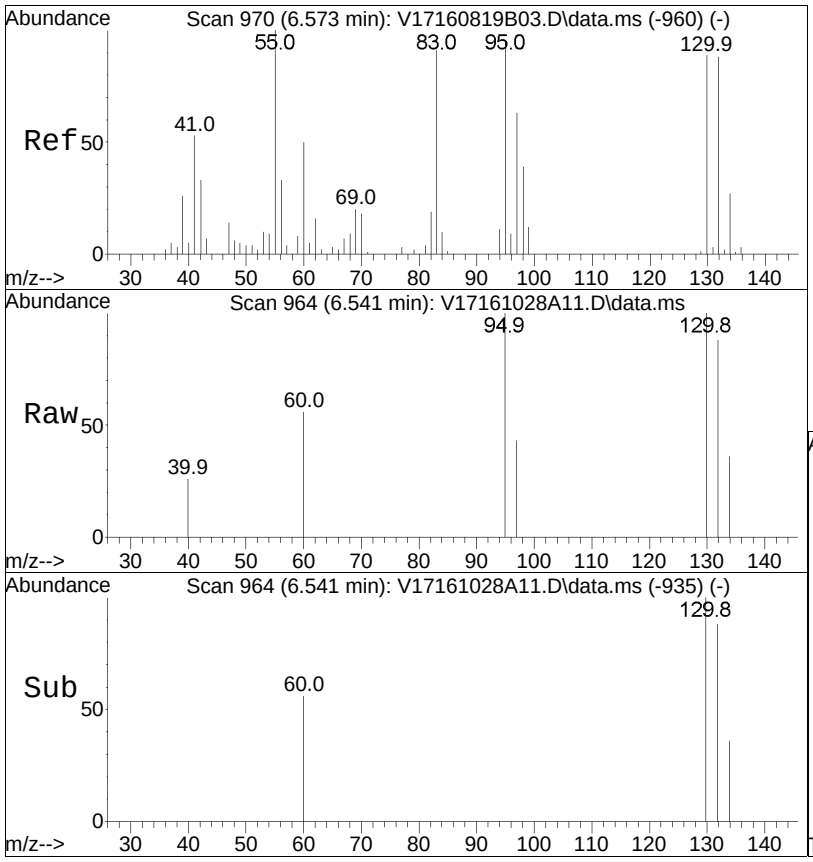
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA117\2016\161028A\
Data File : V17161028A11.D
Acq On : 28 Oct 2016 11:11 am
Operator : VOA117:MV
Sample : l1634792-04,31,5.4,5,,z
Misc : WG946796,ICAL12888
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 28 11:50:06 2016
Quant Method : I:\VOLATILES\VOA117\2016\161028A\V117_160916N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Sep 17 09:52:31 2016
Response via : Initial Calibration

Sub List : 8260-TCE - PCE Break Down016\161028A\V17161028A01.D•

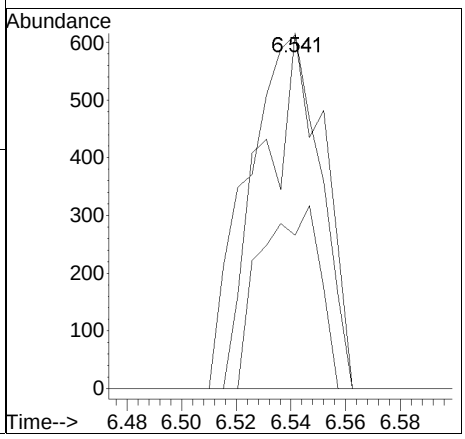




#48
Trichloroethene
Concen: 0.44 ug/L
RT: 6.541 min Scan# 964
Delta R.T. -0.001 min
Lab File: V17161028A11.D
Acq: 28 Oct 2016 11:11 am

Tgt Ion: 95 Resp: 1197

Ion	Ratio	Lower	Upper
95	100		
97	39.8	53.8	80.8#
130	77.5	81.5	122.3#



Manual Integration Report

Data Path	: I:\VOLATILES\VOA117\2016\1Q	Method	: V117_160916N_8260.m
Data File	: V17161028A11.D	Operator	: VOA117:MV
Date Inj'd	: 10/28/2016 11:11 am	Instrument	: VOA 117
Sample	: l1634792-04,31,5.4,5,,z	Quant Date	: 10/28/2016 11:50 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA117\2016\161028A\
Data File : V17161028A12.D
Acq On : 28 Oct 2016 11:37 am
Operator : VOA117:
Sample : l1634792-05,31,5.6,5,,z
Misc : WG946796,ICAL12888
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 28 12:18:29 2016
Quant Method : I:\VOLATILES\VOA117\2016\161028A\V117_160916N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Sep 17 09:52:31 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA117\2016\161028A\V17161028A01.D
Sub List : 8260-TCE - PCE Break Down

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.368	96	169217	20.000	ug/L	0.00
Standard Area 1 = 221129			Recovery = 76.52%			
59) Chlorobenzene-d5	9.934	117	121421	20.000	ug/L	0.00
Standard Area 1 = 154300			Recovery = 78.69%			
79) 1,4-Dichlorobenzene-d4	12.550	152	63499	20.000	ug/L	0.00
Standard Area 1 = 81022			Recovery = 78.37%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.535	113	43643	20.569	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 102.84%			
43) 1,2-Dichloroethane-d4	6.080	65	52035	18.091	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 90.46%			
60) Toluene-d8	8.078	98	172016	19.444	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 97.22%			
83) 4-Bromofluorobenzene	11.370	95	61705	17.569	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 87.84%			
Target Compounds						Qvalue
48) Trichloroethene	6.541	95	14964	5.585	ug/L	90

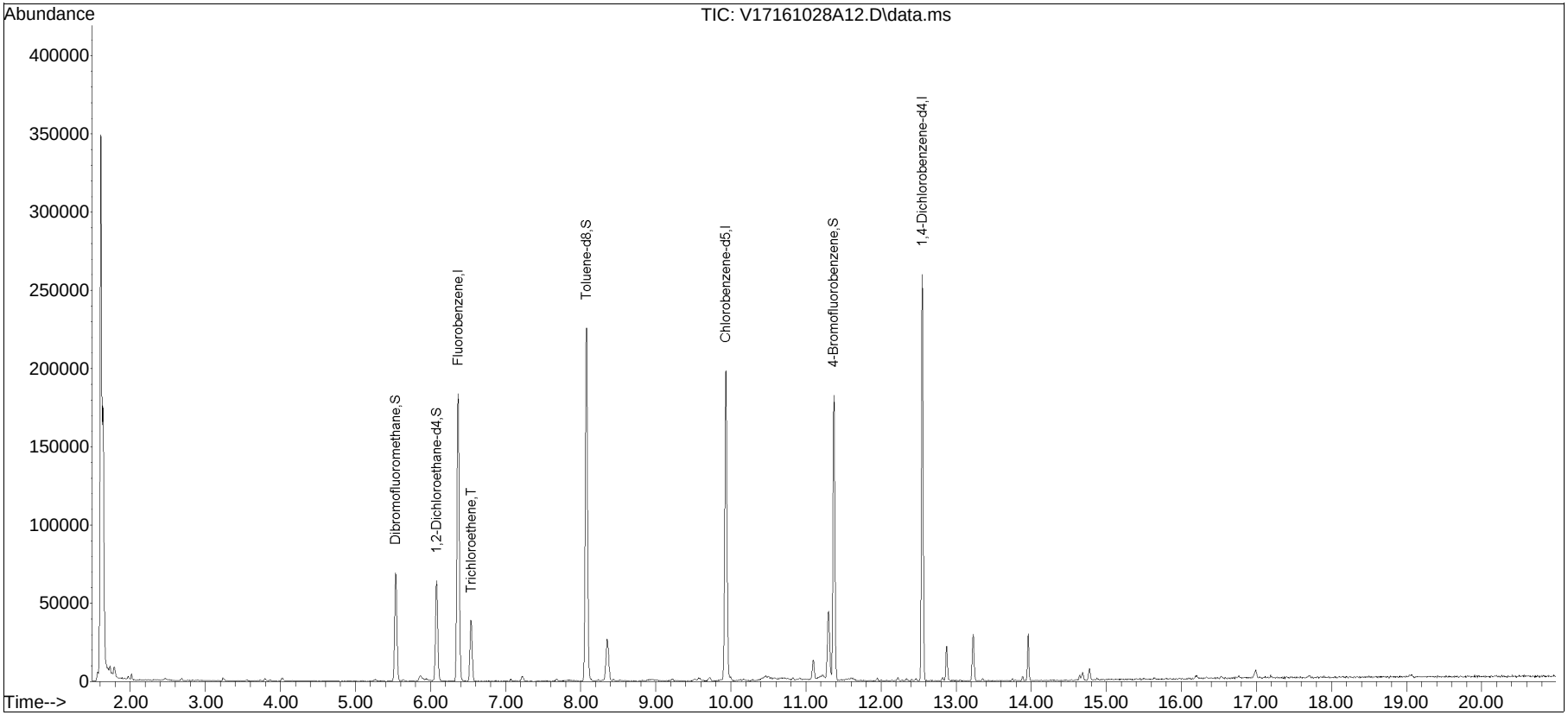
(#) = qualifier out of range (m) = manual integration (+) = signals summed

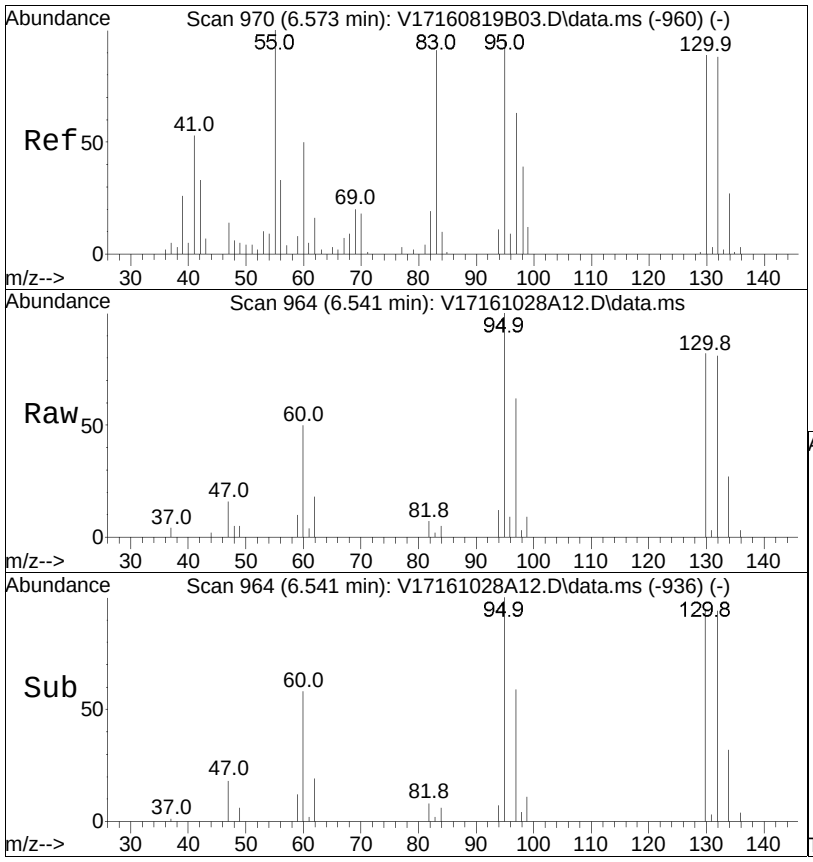
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA117\2016\161028A\
Data File : V17161028A12.D
Acq On : 28 Oct 2016 11:37 am
Operator : VOA117:
Sample : l1634792-05,31,5.6,5,,z
Misc : WG946796,ICAL12888
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 28 12:18:29 2016
Quant Method : I:\VOLATILES\VOA117\2016\161028A\V117_160916N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Sep 17 09:52:31 2016
Response via : Initial Calibration

Sub List : 8260-TCE - PCE Break Down016\161028A\V17161028A01.D•

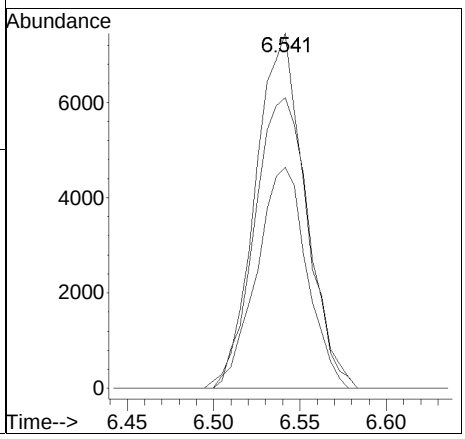




#48
Trichloroethene
Concen: 5.59 ug/L
RT: 6.541 min Scan# 964
Delta R.T. -0.001 min
Lab File: V17161028A12.D
Acq: 28 Oct 2016 11:37 am

Tgt Ion: 95 Resp: 14964

Ion	Ratio	Lower	Upper
95	100		
97	62.8	53.8	80.8
130	89.1	81.5	122.3



Manual Integration Report

Data Path	: I:\VOLATILES\VOA117\2016\1	QMethod	: V117_160916N_8260.m
Data File	: V17161028A12.D	Operator	: VOA117:
Date Inj'd	: 10/28/2016 11:37 am	Instrument	: VOA 117
Sample	: l1634792-05,31,5.6,5,,z	Quant Date	: 10/28/2016 12:18 pm

There are no manual integrations or false positives in this file.

Method Blank
Raw Data

Quantitation Report (QT/LSC Reviewed)

Data Path : I:\VOLATILES\VOA117\2016\161028A\
Data File : V17161028A05.D
Acq On : 28 Oct 2016 08:33 am
Operator : VOA117:MV
Sample : WG946796-5,31,5,5
Misc : WG946796,ICAL12888
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 28 09:09:08 2016
Quant Method : I:\VOLATILES\VOA117\2016\161028A\V117_160916N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Sep 17 09:52:31 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA117\2016\161028A\V17161028A01.D
Sub List : 8260-CurveSoil - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.358	96	201277	20.000 ug/L	-0.01
Standard Area 1 = 221129			Recovery = 91.02%		
59) Chlorobenzene-d5	9.934	117	143957	20.000 ug/L	0.00
Standard Area 1 = 154300			Recovery = 93.30%		
79) 1,4-Dichlorobenzene-d4	12.550	152	74948	20.000 ug/L	0.00
Standard Area 1 = 81022			Recovery = 92.50%		
System Monitoring Compounds					
36) Dibromofluoromethane	5.530	113	49492	19.611 ug/L	-0.01
Spiked Amount 20.000	Range 70 - 130		Recovery = 98.06%		
43) 1,2-Dichloroethane-d4	6.070	65	57414	16.782 ug/L	-0.01
Spiked Amount 20.000	Range 70 - 130		Recovery = 83.91%		
60) Toluene-d8	8.072	98	205394	19.582 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 97.91%		
83) 4-Bromofluorobenzene	11.370	95	73924	17.833 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 89.16%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.770	85	48	N.D.	
3) Chloromethane	0.000		0	N.D. d	
4) Vinyl chloride	0.000		0	N.D.	
5) Bromomethane	2.399	94	695	0.432 ug/L	85
6) Chloroethane	2.520	64	72	N.D.	
7) Trichlorofluoromethane	0.000		0	N.D.	
8) Ethyl ether	0.000		0	N.D.	
10) 1,1-Dichloroethene	0.000		0	N.D.	
11) Carbon disulfide	0.000		0	N.D. d	
12) Freon-113	0.000		0	N.D.	
14) Acrolein	0.000		0	N.D. d	
15) Methylene chloride	3.778	84	622	Below Cal	90
17) Acetone	0.000		0	N.D. d	
18) trans-1,2-Dichloroethene	0.000		0	N.D.	
19) Methyl acetate	0.000		0	N.D. d	
20) Methyl tert-butyl ether	0.000		0	N.D.	
21) tert-Butyl alcohol	0.000		0	N.D. d	
22) Diisopropyl ether	0.000		0	N.D.	
23) 1,1-Dichloroethane	0.000		0	N.D.	
24) Halothane	0.000		0	N.D.	
25) Acrylonitrile	0.000		0	N.D.	

Data Path : I:\VOLATILES\VOA117\2016\161028A\
Data File : V17161028A05.D
Acq On : 28 Oct 2016 08:33 am
Operator : VOA117:MV
Sample : WG946796-5,31,5,5
Misc : WG946796,ICAL12888
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 28 09:09:08 2016
Quant Method : I:\VOLATILES\VOA117\2016\161028A\V117_160916N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Sep 17 09:52:31 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA117\2016\161028A\V17161028A01.D
Sub List : 8260-CurveSoil - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) Ethyl tert-butyl ether	0.000		0	N.D.		
27) Vinyl acetate	4.801	43	131	N.D.		
28) cis-1,2-Dichloroethene	0.000		0	N.D.		
29) 2,2-Dichloropropane	0.000		0	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
31) Cyclohexane	0.000		0	N.D.		
32) Chloroform	5.346	83	110	N.D.		
33) Ethyl acetate	5.440	43	72	N.D.		
34) Carbon tetrachloride	0.000		0	N.D.		
35) Tetrahydrofuran	0.000		0	N.D. d		
37) 1,1,1-Trichloroethane	0.000		0	N.D.		
39) 2-Butanone	0.000		0	N.D. d		
40) 1,1-Dichloropropene	0.000		0	N.D.		
41) Benzene	5.933	78	1280	0.118	ug/L #	67
42) tert-Amyl methyl ether	0.000		0	N.D.		
44) 1,2-Dichloroethane	0.000		0	N.D.		
47) Methyl cyclohexane	0.000		0	N.D.		
48) Trichloroethene	0.000		0	N.D.		
50) Dibromomethane	0.000		0	N.D.		
51) 1,2-Dichloropropane	0.000		0	N.D.		
53) 2-Chloroethyl vinyl ether	0.000		0	N.D.		
54) Bromodichloromethane	0.000		0	N.D.		
57) 1,4-Dioxane	0.000		0	N.D.		
58) cis-1,3-Dichloropropene	0.000		0	N.D.		
61) Toluene	8.130	92	1407	0.198	ug/L	84
62) 4-Methyl-2-pentanone	0.000		0	N.D.		
63) Tetrachloroethene	0.000		0	N.D.		
65) trans-1,3-Dichloropropene	0.000		0	N.D.		
67) Ethyl methacrylate	0.000		0	N.D.		
68) 1,1,2-Trichloroethane	0.000		0	N.D.		
69) Chlorodibromomethane	0.000		0	N.D.		
70) 1,3-Dichloropropane	0.000		0	N.D.		
71) 1,2-Dibromoethane	0.000		0	N.D.		
72) 2-Hexanone	9.593	43	99	N.D.		
73) Chlorobenzene	0.000		0	N.D.		
74) Ethylbenzene	9.981	91	294	N.D.		
75) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.		
76) p/m Xylene	10.164	106	351	N.D.		
77) o Xylene	0.000		0	N.D.		
78) Styrene	10.752	104	1079	0.132	ug/L #	68

Quantitation Report (QT/LSC Reviewed)

Data Path : I:\VOLATILES\VOA117\2016\161028A\
Data File : V17161028A05.D
Acq On : 28 Oct 2016 08:33 am
Operator : VOA117:MV
Sample : WG946796-5,31,5,5
Misc : WG946796,ICAL12888
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 28 09:09:08 2016
Quant Method : I:\VOLATILES\VOA117\2016\161028A\V117_160916N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Sep 17 09:52:31 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA117\2016\161028A\V17161028A01.D
Sub List : 8260-CurveSoil - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) Bromoform	0.000		0	N.D.		
82) Isopropylbenzene	0.000		0	N.D.		
84) Bromobenzene	0.000		0	N.D.		
85) n-Propylbenzene	11.517	91	138	N.D.		
86) 1,4-Dichlorobutane	11.370	55	159	N.D.		
87) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
88) 4-Ethyltoluene	11.643	105	414	N.D.		
89) 2-Chlorotoluene	11.517	91	138	N.D.		
90) 1,3,5-Trimethylbenzene	11.643	105	414	N.D.		
91) 1,2,3-Trichloropropane	0.000		0	N.D.		
92) trans-1,4-Dichloro-2-b...	0.000		0	N.D.		
93) 4-Chlorotoluene	0.000		0	N.D.		
94) tert-Butylbenzene	0.000		0	N.D.		
97) 1,2,4-Trimethylbenzene	12.146	105	706	N.D.		
98) sec-Butylbenzene	12.146	105	706	N.D.		
99) p-Isopropyltoluene	0.000		0	N.D.		
100) 1,3-Dichlorobenzene	12.561	146	208	N.D.		
101) 1,4-Dichlorobenzene	12.561	146	208	N.D.		
102) p-Diethylbenzene	0.000		0	N.D.		
103) n-Butylbenzene	12.833	91	64	N.D.		
104) 1,2-Dichlorobenzene	0.000		0	N.D.		
105) 1,2,4,5-Tetramethylben...	0.000		0	N.D.		
106) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
107) 1,3,5-Trichlorobenzene	0.000		0	N.D.		
108) Hexachlorobutadiene	0.000		0	N.D.		
109) 1,2,4-Trichlorobenzene	14.369	180	70	N.D.		
110) Naphthalene	14.668	128	1169	0.160	ug/L	100
111) 1,2,3-Trichlorobenzene	0.000		0	N.D.		

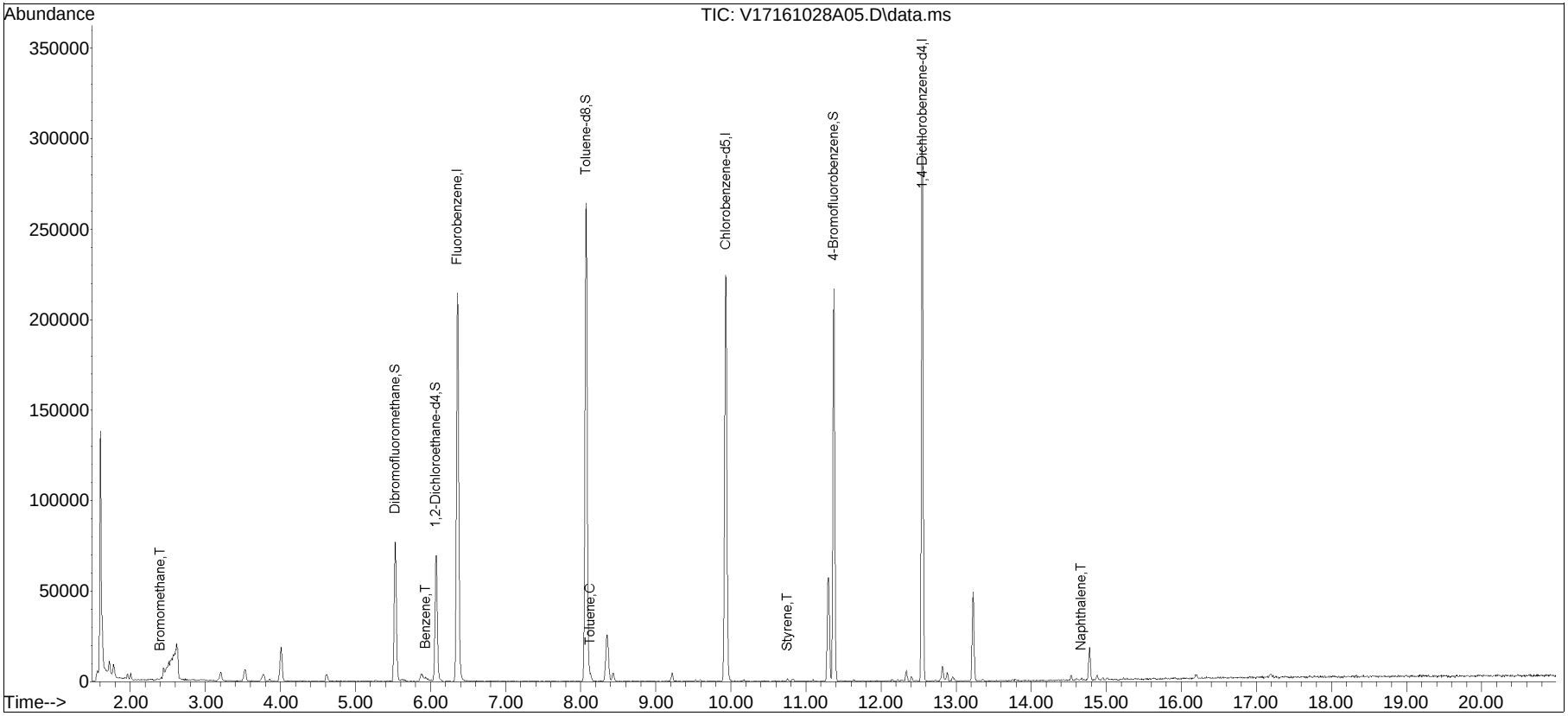
(#) = qualifier out of range (m) = manual integration (+) = signals summed

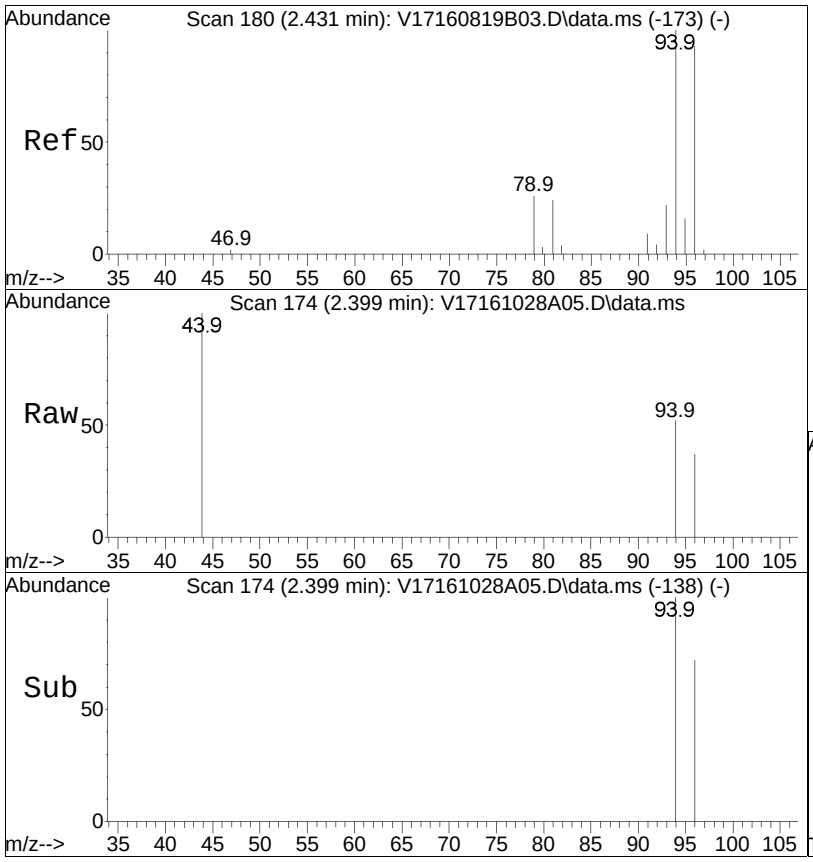
Quantitation Report (QT/LSC Reviewed)

Data Path : I:\VOLATILES\VOA117\2016\161028A\
Data File : V17161028A05.D
Acq On : 28 Oct 2016 08:33 am
Operator : VOA117:MV
Sample : WG946796-5,31,5,5
Misc : WG946796,ICAL12888
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 28 09:09:08 2016
Quant Method : I:\VOLATILES\VOA117\2016\161028A\V117_160916N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Sep 17 09:52:31 2016
Response via : Initial Calibration

Sub List : 8260-CurveSoil - Megamix plus Diox8A\\V17161028A01.D•

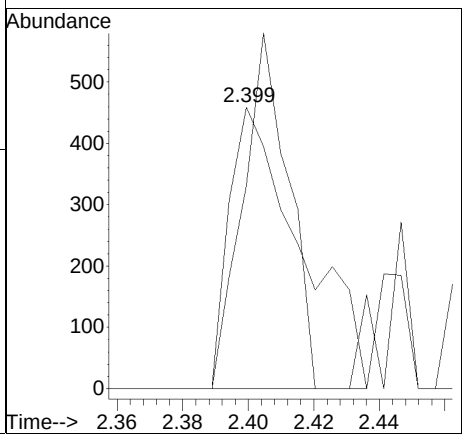


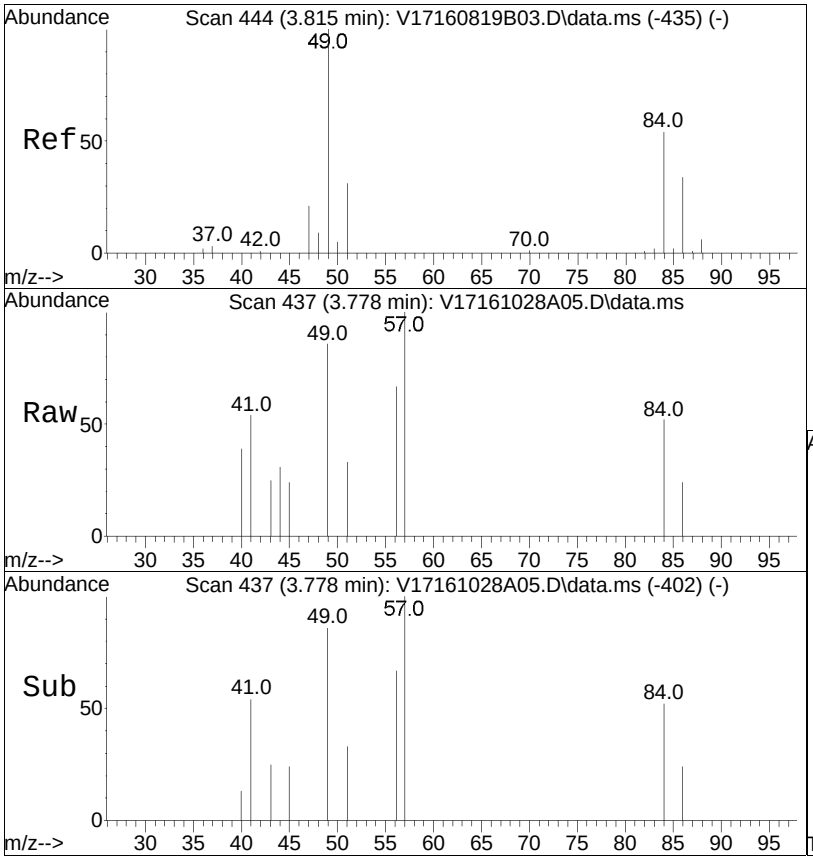


#5
Bromomethane
Concen: 0.43 ug/L
RT: 2.399 min Scan# 174
Delta R.T. -0.011 min
Lab File: V17161028A05.D
Acq: 28 Oct 2016 08:33 am

Tgt Ion: 94 Resp: 695

Ion	Ratio	Lower	Upper
94	100		
96	80.1	74.6	114.6

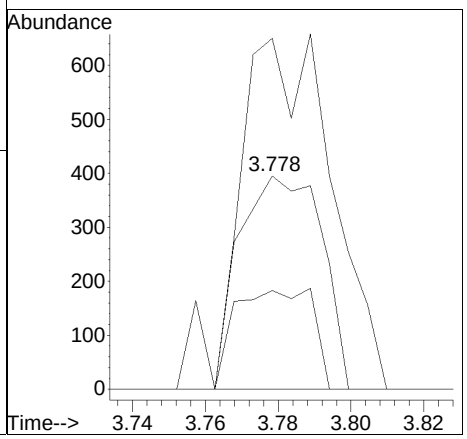


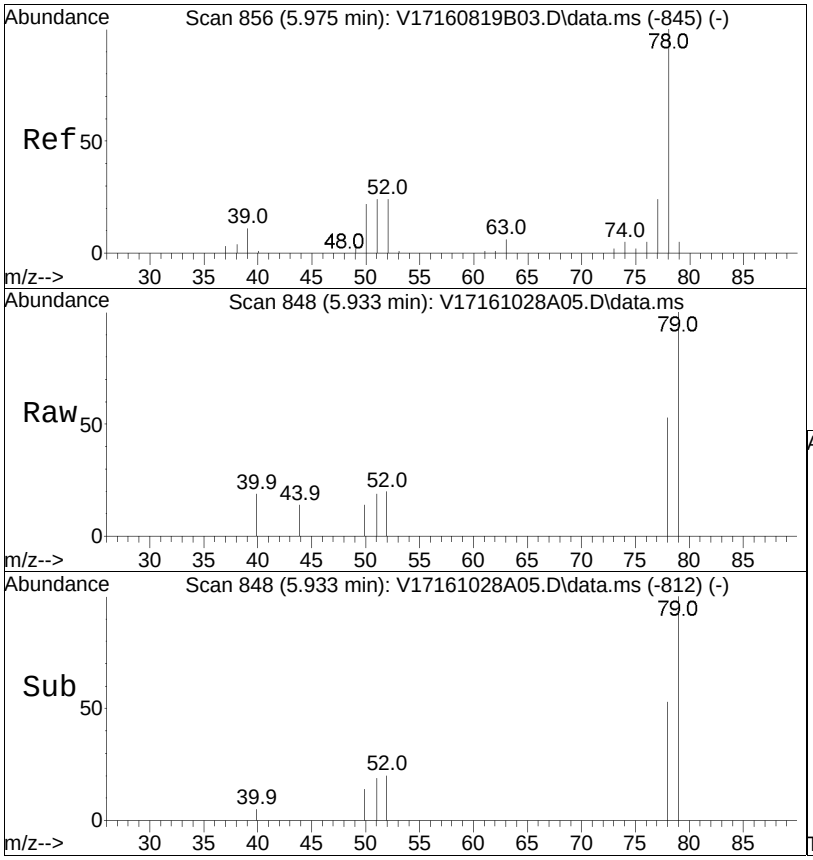


#15
Methylene chloride
Concen: Below Cal
RT: 3.778 min Scan# 437
Delta R.T. -0.016 min
Lab File: V17161028A05.D
Acq: 28 Oct 2016 08:33 am

Tgt Ion: 84 Resp: 622

Ion	Ratio	Lower	Upper
84	100		
86	43.9	42.4	88.2
49	186.0	117.3	243.5

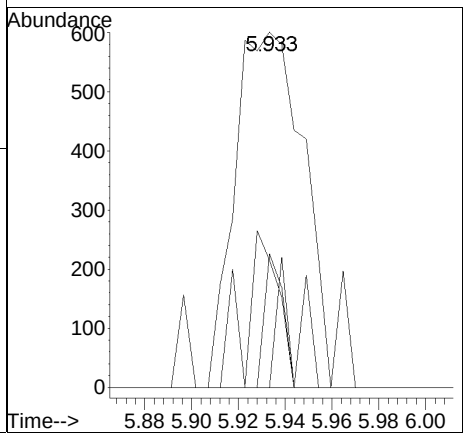


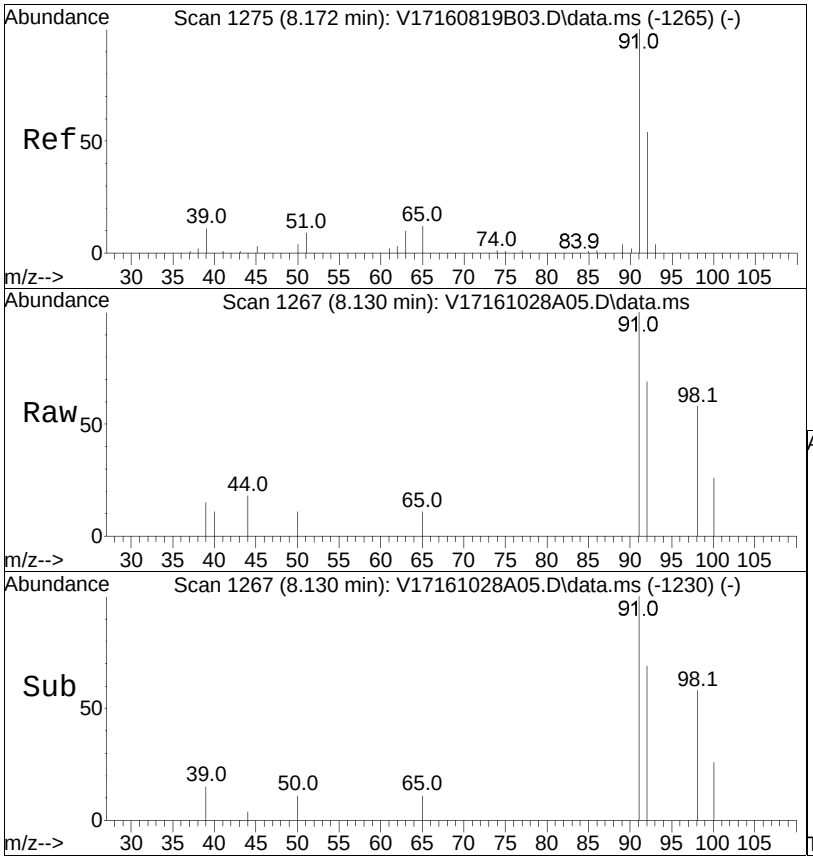


#41
Benzene
Concen: 0.12 ug/L
RT: 5.933 min Scan# 848
Delta R.T. -0.011 min
Lab File: V17161028A05.D
Acq: 28 Oct 2016 08:33 am

Tgt Ion: 78 Resp: 1280

Ion	Ratio	Lower	Upper
78	100		
77	10.1	15.0	31.1#
51	0.0	14.0	29.2#
52	9.7	14.3	29.7#

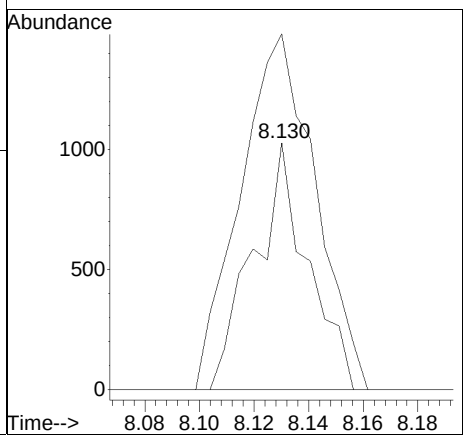


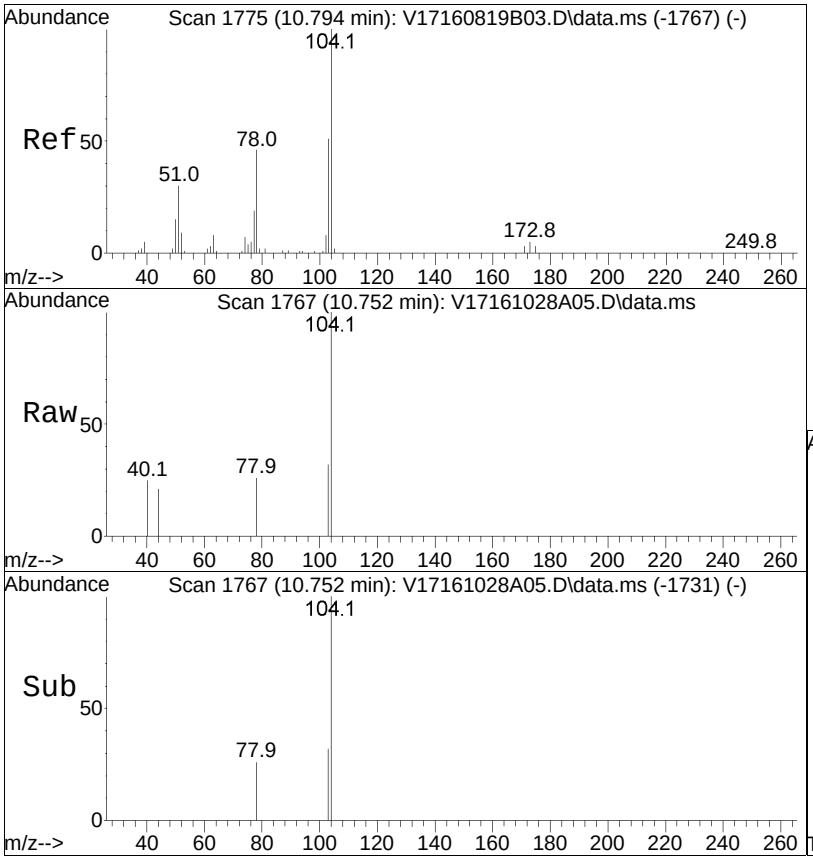


#61
Toluene
Concen: 0.20 ug/L
RT: 8.130 min Scan# 1267
Delta R.T. -0.006 min
Lab File: V17161028A05.D
Acq: 28 Oct 2016 08:33 am

Tgt Ion: 92 Resp: 1407

Ion	Ratio	Lower	Upper
92	100		
91	200.5	142.4	213.6

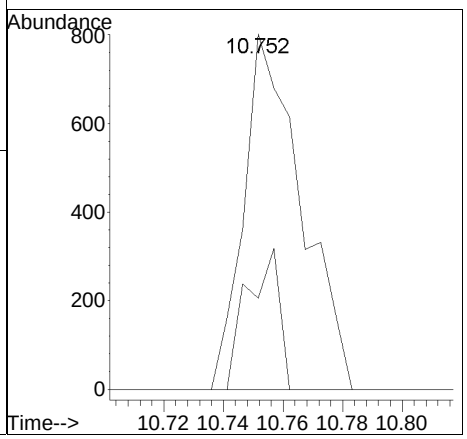


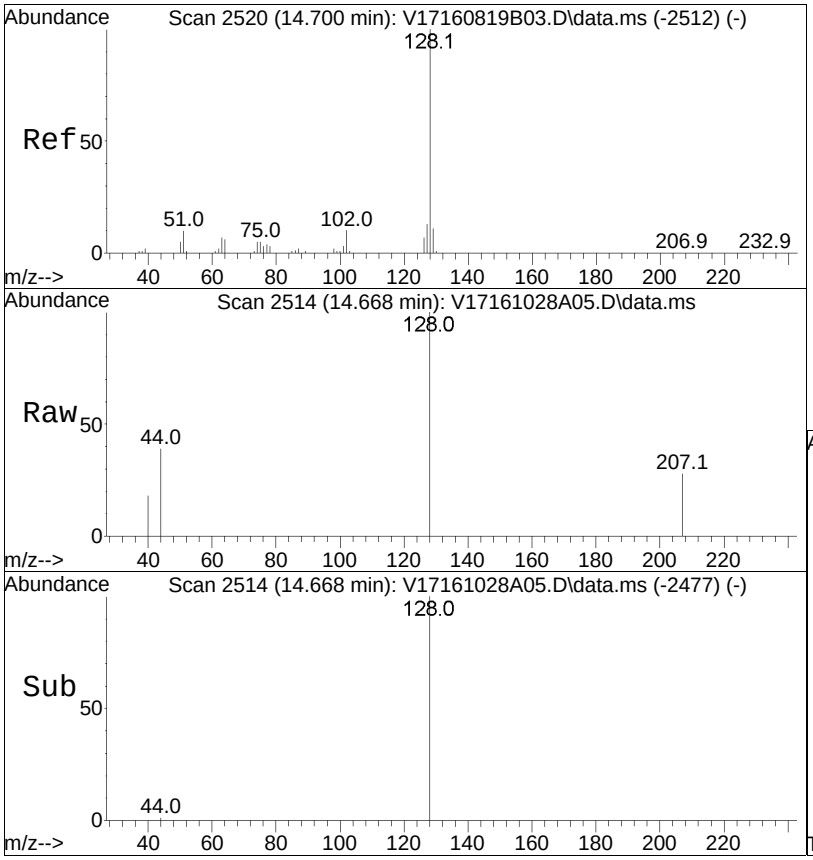


#78
Styrene
Concen: 0.13 ug/L
RT: 10.752 min Scan# 1767
Delta R.T. -0.010 min
Lab File: V17161028A05.D
Acq: 28 Oct 2016 08:33 am

Tgt Ion:104 Resp: 1079

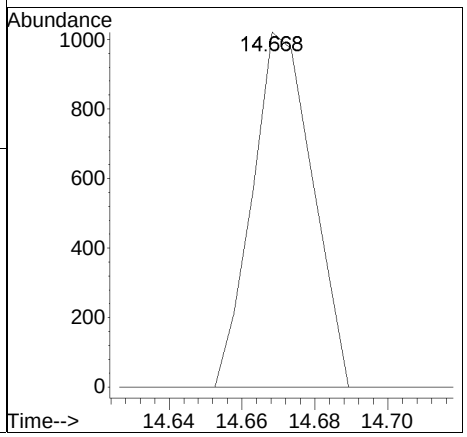
Ion	Ratio	Lower	Upper
104	100		
78	22.2	34.1	51.1#





#110
Naphthalene
Concen: 0.16 ug/L
RT: 14.668 min Scan# 2514
Delta R.T. -0.006 min
Lab File: V17161028A05.D
Acq: 28 Oct 2016 08:33 am

Tgt Ion:128 Resp: 1169



Manual Integration Report

Data Path	: I:\VOLATILES\VOA117\2016\1Q	Method	: V117_160916N_8260.m
Data File	: V17161028A05.D	Operator	: VOA117:MV
Date Inj'd	: 10/28/2016 8:33 am	Instrument	: VOA 117
Sample	: WG946796-5,31,5,5	Quant Date	: 10/28/2016 9:06 am

There are no manual integrations or false positives in this file.

Metals

Inorganic Data
(ICP Analysis)

Sample Results Summary

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634792-06	**Date Collected**	: 10/27/16 11:51
Client ID	: CE1-IO2-EX1A-1027-1151	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 12:29
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG946758.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.258g	**%Solids**	: 89
Digestion Method	: EPA 3050B	**Date Digested**	: 10/28/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	6.9	0.45	0.09	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634792-07	**Date Collected**	: 10/27/16 10:31
Client ID	: B7-EX2-EX1A-1027-1031	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 12:33
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG946758.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.275g	**%Solids**	: 88
Digestion Method	: EPA 3050B	**Date Digested**	: 10/28/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	14	0.45	0.09	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: WG946712-1	**Date Collected**	: NA
Client ID	: WG946712-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 10/28/16 11:52
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG946758.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.25g	**%Solids**	: NA
Digestion Method	: EPA 3050B	**Date Digested**	: 10/28/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	ND	0.40	0.08	U

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634792-08	**Date Collected**	: 10/27/16 09:19
Client ID	: SB-9-S0-8-A-EX1D-1027-091	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 11/01/16 12:00
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG947794.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 1.285g	**%Solids**	: 91
Digestion Method	: EPA 3050B	**Date Digested**	: 11/01/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	7.0	0.42	0.09	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: WG947782-1	**Date Collected**	: NA
Client ID	: WG947782-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 11/01/16 13:30
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG947794.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 1.25g	**%Solids**	: NA
Digestion Method	: EPA 3050B	**Date Digested**	: 11/01/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	ND	0.40	0.08	U

Blank Results Summary

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE7		

		Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID	:	R914063-2		R914063-7		R914063-10		R914063-12		WG946712-1	
Date Analyzed	:	10/28/16 09:25		10/28/16 10:07		10/28/16 11:29		10/28/16 12:25		10/28/16 11:52	
Parameter		mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q	mg/kg	Q
Arsenic		0.00208	U	0.00208	U	0.00208	U	0.00208	U	0.08	U

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE7		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R914063-14							
Date Analyzed :			10/28/16 13:14							
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Arsenic			0.00208	U						

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE5		

		Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID	:	R915051-2		R915051-7		R915051-10		R915051-12		WG947782-1	
Date Analyzed	:	11/01/16 08:24		11/01/16 09:54		11/01/16 11:03		11/01/16 12:13		11/01/16 13:30	
Parameter		mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q	mg/kg	Q
Arsenic		0.00208	U	0.00208	U	0.00208	U	0.00208	U	0.08	U

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE5		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R915051-14		R915051-16		R915051-18			
Date Analyzed :			11/01/16 12:24		11/01/16 13:16		11/01/16 14:10			
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Arsenic			0.00208	U	0.00208	U	0.00208	U		

Calibration Summary

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE7	**Units**	: mg/l

		Initial Calibration			Continuing Calibration(s)						
Lab ID	:	R914063-1			R914063-6			R914063-9		R914063-11	
Date Analyzed	:	10/28/16 09:21			10/28/16 10:03			10/28/16 11:25		10/28/16 12:21	
Parameter		**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic		0.5000	0.5070	101.	0.5000	0.5160	103.	0.5140	103.	0.5070	101.

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE7	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R914063-13						
Date Analyzed :				10/28/16 13:10						
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic				0.5000	0.5000	100				

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE5	**Units**	: mg/l

		Initial Calibration			Continuing Calibration(s)						
Lab ID	:	R915051-1			R915051-6			R915051-9		R915051-11	
Date Analyzed	:	11/01/16 08:20			11/01/16 09:50			11/01/16 10:59		11/01/16 12:09	
Parameter		**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic		0.5000	0.5170	103.	0.5000	0.5210	104.	0.5180	104.	0.5210	104.

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE5	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R915051-13			R915051-15		R915051-17	
Date Analyzed :				11/01/16 12:20			11/01/16 13:12		11/01/16 14:06	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic				0.5000	0.5140	103.	0.5260	105.	0.5260	105.

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 2B
CRI Check Standard

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE7	**Units**	: mg/L

		Initial	Final
Lab ID	:	R914063-5	
Date Analyzed	:	10/28/16 09:59	

Parameter	True	Found	%R	Found	%R
Arsenic	0.020	0.021	106		

Acceptance Criteria: Methods 200.7, 6010

CRI: 70-130%

Form 2B
CRI Check Standard

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE5	**Units**	: mg/L

		Initial	Final
Lab ID	:	R915051-5	
Date Analyzed	:	11/01/16 09:45	

Parameter	True	Found	%R	Found	%R
Arsenic	0.020	0.021	106		

Acceptance Criteria: Methods 200.7, 6010

CRI: 70-130%

ICP Interference Check Sample Results Summary

Form 4a
Interference Check Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE7	**Concentration Units**	: mg/L

	True		Initial Found				Final Found			
Lab ID :			R914063-8		R914063-4					
Analysis Date :			10/28/16 10:55		10/28/16 09:55					
Analyte	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Arsenic		1	-0.00200		1.04	104				

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

Form 4a
Interference Check Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE5	**Concentration Units**	: mg/L

	True		Initial Found				Final Found			
Lab ID :			R915051-8		R915051-4					
Analysis Date :			11/01/16 10:55		11/01/16 09:41					
Analyte	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Arsenic		1	0.000200		1.06	106				

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

LCS Sample Results Summary

Form 7
Laboratory Control Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Client Sample ID	: NA	**Matrix**	: SOIL
Lab Sample ID	: WG946712-2	**LCS Analysis Date**	: 10/28/16 11:57
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
	True	Found	%R	True	Found	%R	RPD	Recovery	RPD
Parameter	(mg/kg)	(mg/kg)		(mg/kg)	(mg/kg)			Limits	Limit
Arsenic, Total	145.	140.	96.					80-121	20

Form 7
Laboratory Control Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Client Sample ID	: NA	**Matrix**	: SOIL
Lab Sample ID	: WG947782-2	**LCS Analysis Date**	: 11/01/16 11:39
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
	True	Found	%R	True	Found	%R	RPD	Recovery	RPD
Parameter	(mg/kg)	(mg/kg)		(mg/kg)	(mg/kg)			Limits	Limit
Arsenic, Total	145.	150.	103.					80-121	20

Run Logs

Form 13
Analysis Run Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE7	**Analysis Method**	: 1,6010C
Start Date	: 10/28/16 09:21	**End Date**	: 10/28/16 13:14

Sample Number	Dilution Factor	Analysis Time	Arsenic, Total
R914063-1 ICV	1	09:21:00	X
R914063-2 ICB	1	09:25:00	X
R914063-4 ICSAB	1	09:55:00	X
R914063-5 CRI	1	09:59:00	X
R914063-6 CCV	1	10:03:00	X
R914063-7 CCB	1	10:07:00	X
R914063-8 ICSA	1	10:55:00	X
R914063-9 CCV	1	11:25:00	X
R914063-10 CCB	1	11:29:00	X
WG946712-1 BLANK	1	11:52:00	X
WG946712-2 LCS	1	11:57:00	X
R914063-11 CCV	1	12:21:00	X
R914063-12 CCB	1	12:25:00	X
L1634792-06	1	12:29:00	X
L1634792-07	1	12:33:00	X
R914063-13 CCV	1	13:10:00	X
R914063-14 CCB	1	13:14:00	X

Form 13
Analysis Run Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE5	**Analysis Method**	: 1,6010C
Start Date	: 11/01/16 08:20	**End Date**	: 11/01/16 14:10

Sample Number	Dilution Factor	Analysis Time	Arsenic, Total
R915051-1 ICV	1	08:20:00	X
R915051-2 ICB	1	08:24:00	X
R915051-4 ICSAB	1	09:41:00	X
R915051-5 CRI	1	09:45:00	X
R915051-6 CCV	1	09:50:00	X
R915051-7 CCB	1	09:54:00	X
R915051-8 ICSA	1	10:55:00	X
R915051-9 CCV	1	10:59:00	X
R915051-10 CCB	1	11:03:00	X
WG947782-2 LCS	8	11:39:00	X
L1634792-08	1	12:00:00	X
R915051-11 CCV	1	12:09:00	X
R915051-12 CCB	1	12:13:00	X
R915051-13 CCV	1	12:20:00	X
R915051-14 CCB	1	12:24:00	X
R915051-15 CCV	1	13:12:00	X
R915051-16 CCB	1	13:16:00	X
WG947782-1 BLANK	1	13:30:00	X
R915051-17 CCV	1	14:06:00	X
R915051-18 CCB	1	14:10:00	X

Digestion Logs
ICP

Form 12
Preparation Log

Client	:	**Haley & Aldrich, Inc.**	**Lab Number**	:	**L1634792**
Project Name	:	**RACER/EWING**	**Project Number**	:	**70613-814**
Matrix	:	**SOIL**	**Prep Method**	:	**EPA 3050B**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L1634792-06	10/28/16 08:00	1.26	-
L1634792-07	10/28/16 08:00	1.28	-
WG946712-1	10/28/16 08:00	1.25	-
WG946712-2	10/28/16 08:00	0.39	-

Form 12
Preparation Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Matrix	: SOIL	**Prep Method**	: EPA 3050B

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L1634792-08	11/01/16 07:45	1.28	-
WG947782-1	11/01/16 07:45	1.25	-
WG947782-2	11/01/16 07:45	0.39	-

Wet Chemistry

Total Solids / Percent Moisture Analysis

Results Summary

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: WG946656-1	**Date Collected**	: 10/27/16 11:51
Client ID	: CE1-IO2-EX1A-1027-1151DUP	**Date Received**	: 10/27/16
Sample Location	:	**Date Analyzed**	: 10/28/16 03:17
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946656.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 89
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**88.1**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634792-01	**Date Collected**	: 10/27/16 15:05
Client ID	: SB-C8-EX1D-1027-1505	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 03:17
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946656.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 82
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	82.4	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634792-02	**Date Collected**	: 10/27/16 14:24
Client ID	: SB-C8-EX1A-1027-1424	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 03:17
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946656.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 87
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	87.1	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634792-03	**Date Collected**	: 10/27/16 15:15
Client ID	: SB-C8-EX1B-1027-1515	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 03:17
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946656.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 82
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	82.1	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634792-04	**Date Collected**	: 10/27/16 15:21
Client ID	: SB-C8-EX1C-1027-1521	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 03:17
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946656.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 86
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	85.6	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634792-05	**Date Collected**	: 10/27/16 16:00
Client ID	: SB-E10-EX1B-1027-1600	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 03:17
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946656.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 84
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**84.3**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634792-06	**Date Collected**	: 10/27/16 11:51
Client ID	: CE1-IO2-EX1A-1027-1151	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 03:17
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946656.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 89
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	88.7	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634792-07	**Date Collected**	: 10/27/16 10:31
Client ID	: B7-EX2-EX1A-1027-1031	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 03:17
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946656.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 88
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**87.6**	**0.100**	**NA**	

Duplicate Sample Results Summary

Form 6
Lab Duplicates

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Client Sample ID	: CE1-IO2-EX1A-1027-1151	**Matrix**	: SOIL
Lab Sample ID	: L1634792-06	**Analysis Date**	: 10/28/16 03:17
Dup Sample ID	: WG946656-1	**DUP Analysis Date**	: 10/28/16 03:17

Parameter	Sample Concentration (%)	Duplicate Concentration (%)	RPD	RPD Limit
Solids, Total	88.7	88.1	1	20

Total Solids / Percent Moisture Analysis

Results Summary

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634792
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634792-08	**Date Collected**	: 10/27/16 09:19
Client ID	: SB-9-S0-8-A-EX1D-1027-091	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/31/16 08:15
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: SP
Lab File ID	: WG947510.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 91
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**91.4**	**0.100**	**0.100**	

ALPHA ANALYTICAL

World Class Chemistry

www.alphalab.com

Lab Number: L1634839

Client: Haley & Aldrich, Inc.

ATTN: Dimitri Quafisi

Project Name: RACER/EWING

Project Number: 70613-814

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

ANALYTICAL DATA PACKAGE FOR THE
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
TRENTON NEW JERSEY 08625

Agency/Division:	**Bureau/Office:**
Project No: 70613-814	**Contract No:**
Laboratory: Alpha Analytical	**Laboratory Location:** Westborough, Ma.
	Laboratory Phone Number: (508) 898-9220
SDG No: L1634839	**NJDEP Certification #:** MA015/MA935
Date of First Sample Receipt: 10/27/2016	**Date of Last Sample Receipt:** 10/27/2016

Agency Sample Number	Laboratory Sample Number	Sample Location	Date/Time of Collection
B7-2-EX1A-1027-103	L1634839-01	RACER/EWING	10/27/2016 10:36
CEI-102-EX1A-1027-	L1634839-02	RACER/EWING	10/27/2016 12:00
SB-9-SO-8-A-EX1D-	L1634839-03	RACER/EWING	10/27/2016 09:21
B7-2-EX1C-1027-101	L1634839-04	RACER/EWING	10/27/2016 10:19
B7-2-EX1B-1027-111	L1634839-05	RACER/EWING	10/27/2016 11:15
B7-2-EX1C-1027-102	L1634839-06	RACER/EWING	10/27/2016 10:21
B7-2-EX1A-1027-110	L1634839-07	RACER/EWING	10/27/2016 11:06

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on disk or electronically has been authorized by the laboratory director or his/her designee, as verified by the following signature.

Technical Director/Representative (Typed)	Michelle Morris	10/31/16
Technical Director/Representative (Signature)		

Table of Contents

New Jersey Reduced Data Deliverable Package 1
- Title Page 2
- Table of Contents 3
- Chain of Custody 4
  - External Chain of Custody 5
  - Lims COC (LN01) 6
  - Sample Receipt Tracking Report 8
- Methodology Review 11
  - Method References 12
- Laboratory Chronicle 13
  - Sample Receipt and Container Information 14
- NJ DEP DKQP Summary Questionnaire 15
  - DKQP Summary Questionnaire 16
- Conformance/Non-Conformance (Reliability) Summary 17
  - Conformance/Non-Conformance (Reliability) Report 18
- Glossary 20
  - Glossary Report 21
- Metals Analysis 23
  - Inorganic Data (ICP Analysis) 24
    - Sample Results Summary 25
      - Form 1 - Inorganics 26
    - Blank Results Summary 36
      - Form 3 - Inorganics 37
    - Calibration Summary 42
      - Form 2A - Inorganics 43
      - Form 2B - Inorganics 48
    - ICP Interference Check Sample Results Summary 50
      - Form 4A - Inorganics 51
    - Spike Sample Results 53
      - Form 5A - Inorganics 54
    - Duplicate Sample Results Summary 55
      - Form 6 - Inorganics 56
    - LCS Sample Results Summary 57
      - Form 7 - Inorganics 58
    - Sample Run Logs 60
      - Form 13 - Inorganics 61
    - ICP Digestion 63
      - Form 12 - Inorganics 64
- Wet Chemistry Analysis 66
  - Total Solids Analysis 67
    - Results Summary 68
      - Form 1 - Inorganics 69
    - Duplicate Sample Results Summary 76
      - Form 6 - Inorganics 77
  - Total Solids Analysis 78
    - Results Summary 79
      - Form 1 - Inorganics 80

Chain of Custody

NEW JERSEY CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page of

Date Rec'd in Lab: 10/28/16

ALPHA Job #: L1634839

Client Information

Client:
Address:
Phone: 937 470-2792
Fax:
Email: dquafisi@haleyaldrich.com

Project Information

Project Name: Racer/Ewing
Project Location: & Ewing
Project # 70613
(Use Project name as Project #)
Project Manager: Dan Putz
ALPHAQuote #:

Turn-Around Time

Standard
Rush (only if pre approved)
Due Date:
# of Days:

Deliverables

NJ Full / Reduced
EQuIS (1 File) EQuIS (4 File)
Other

Regulatory Requirement

SRS Residential/Non Residential
SRS Impact to Groundwater
NJ Ground Water Quality Standards
NJ IGW SPLP Leachate Criteria
Other

Billing Information

Same as Client Info
PO #

Site Information

Is this site impacted by Petroleum? Yes
Petroleum Product:

These samples have been previously analyzed by Alpha

For EPH, selection is REQUIRED:
Category 1
Category 2

For VOC, selection is REQUIRED:
1,4-Dioxane
8011

Other project specific requirements/comments:
See analysis for Rush (24hrs)
Please specify Metals or TAL.

ANALYSIS

Sample Filtration
Done
Lab to do
Preservation
Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	As (Rush)	As (Hold)	Total Bottle	Sample Specific Comments
34/839 -01	B7-2-EX1A-1027-1036	10/27	1036	Soil	DG	X			
-02	CEI-102-EX1A-1027-1200		1200			X			
-03	SB-9-SO-8-A-EX1D-1027-0921		0921				X		
-04	B7-2-EX1C-1027-1019		1019			X			
-05	B7-2-EX1B-1027-1115		1115			X			
-06	B7-2-EX1C-1027-1021		1021			X			
-07	B7-2-EX1A-1027-1106		1106			X			

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type
Preservative

Relinquished By:	Date/Time	Received By:	Date/Time
	10/27 1750	BP/Bala AAL	10-27-16 1750
BP/Bala	10-27-16 2200		10-27-16 2200
	10-28-16 0130		10/28/16 93

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-14 HC (rev. 30-Sept-2013)

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Nov 01 2016, 04:03 pm

Login Number: L1634839
Account: HALEY-OH2 Haley & Aldrich, Inc.Project: 70613-814
Received: 27OCT16 Due Date: 31OCT16

Sample #	Client ID	Mat	PR	Collected	Container
L1634839-01	B7-2-EX1A-1027-1036	3	1A	27OCT16 10:36	1-Glass-AM.06

Final 10/31 NJ-RED Package Due Date: 10/31/16

AS-TI,NJ-RED,NJDEP,PREPT,TS

L1634839-02	CEI-102-EX1A-1027-1	3	1A	27OCT16 12:00	1-Glass-AM.06

Final 10/31 Package Due Date: 10/31/16

AS-TI,PREPT,TS

L1634839-03	SB-9-SO-8-A-EX1D-10	3	1A	27OCT16 09:21	1-Glass-AM.06

Final 10/31 Package Due Date: 10/31/16

A2-TS,AS-TI,PREPT

L1634839-04	B7-2-EX1C-1027-1019	3	1A	27OCT16 10:19	1-Glass-AM.06

Final 10/31 Package Due Date: 10/31/16

AS-TI,PREPT,TS

L1634839-05	B7-2-EX1B-1027-1115	3	1A	27OCT16 11:15	1-Glass-AM.06

Final 10/31 Package Due Date: 10/31/16

AS-TI,PREPT,TS

L1634839-06	B7-2-EX1C-1027-1021	3	1A	27OCT16 10:21	1-Glass-AM.06

Final 10/31 Package Due Date: 10/31/16

AS-TI,PREPT,TS

L1634839-07	B7-2-EX1A-1027-1106	3	1A	27OCT16 11:06	1-Glass-AM.06

Final 10/31 Package Due Date: 10/31/16

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Nov 01 2016, 04:03 pm

Login Number: L1634839
Account: HALEY-OH2 Haley & Aldrich, Inc.Project: 70613-814
Received: 27OCT16 Due Date: 31OCT16

Sample #	Client ID	Mat	PR	Collected	Container

AS-TI,PREPT,TS

Logged By: Kristen Simonis

ALPHA ANALYTICAL LABORATORIES
Container Tracking Report

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1634839-01A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET2-S9	A2-CUSTODY-MET2-S9	Rexford Bempong
L1634839-01A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	A2-CUSTODY-MET3-S1	Rexford Bempong	A2-METALS PREP	A2-METALS PREP	Rexford Bempong
L1634839-01A	Glass-AM.06	INTACT	28-OCT-16	TRANSIT COURIER	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morrissey	A2-CUSTODY-MET3-S1	A2-CUSTODY-MET3-S1	Emily Keith
L1634839-01A	Glass-AM.06	INTACT	28-OCT-16	COOLER20-TRANSFER_TO_MANSFIELD	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morrissey	TRANSIT COURIER	COOLER20-TRANSFER_TO_MANSFIEL	
L1634839-01A	Glass-AM.06	INTACT	28-OCT-16		CUSTODY	Ryan Morrissey	COOLER20-TRANSFER_TO_MANSFIELD	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morrisse
L1634839-01A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634839-01A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634839-01A	Glass-AM.06	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634839-02A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET2-S9	A2-CUSTODY-MET2-S9	Rexford Bempong
L1634839-02A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	A2-CUSTODY-MET3-S1	Rexford Bempong	A2-METALS PREP	A2-METALS PREP	Rexford Bempong
L1634839-02A	Glass-AM.06	INTACT	28-OCT-16	TRANSIT COURIER	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morrissey	A2-CUSTODY-MET3-S1	A2-CUSTODY-MET3-S1	Emily Keith
L1634839-02A	Glass-AM.06	INTACT	28-OCT-16	COOLER20-TRANSFER_TO_MANSFIELD	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morrissey	TRANSIT COURIER	COOLER20-TRANSFER_TO_MANSFIEL	
L1634839-02A	Glass-AM.06	INTACT	28-OCT-16		CUSTODY	Ryan Morrissey	COOLER20-TRANSFER_TO_MANSFIELD	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morrisse
L1634839-02A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634839-02A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634839-02A	Glass-AM.06	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634839-03A	Glass-AM.06	INTACT	31-OCT-16	CUSTODY	A2-WET CHEMISTRY	Sonal Patel	A2-CUSTODY-MET3-S1	A2-CUSTODY-MET3-S1	Sonal Patel
L1634839-03A	Glass-AM.06	INTACT	31-OCT-16	CUSTODY	A2-CUSTODY-MET3-S1	Sonal Patel	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Sonal Patel
L1634839-03A	Glass-AM.06	INTACT	29-OCT-16	CUSTODY	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET3-S1	A2-CUSTODY-MET3-S1	Rexford Bempong
L1634839-03A	Glass-AM.06	INTACT	29-OCT-16	A2-CUSTODY-REFRIDGE	A2-CUSTODY-MET3-S1	Fatima Cofie	A2-METALS PREP	A2-METALS PREP	Fatima Cofie
L1634839-03A	Glass-AM.06	INTACT	28-OCT-16	TRANSIT COURIER	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morrissey	A2-CUSTODY-MET3-S1	A2-CUSTODY-MET3-S1	Emily Keith
L1634839-03A	Glass-AM.06	INTACT	28-OCT-16	COOLER20-TRANSFER_TO_MANSFIELD	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morrissey	TRANSIT COURIER	COOLER20-TRANSFER_TO_MANSFIEL	
L1634839-03A	Glass-AM.06	INTACT	28-OCT-16		CUSTODY	Ryan Morrissey	COOLER20-TRANSFER_TO_MANSFIELD	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morrisse
L1634839-03A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634839-03A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1634839-03A	Glass-AM.06	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634839-04A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET2-S9	A2-CUSTODY-MET2-S9	Rexford Bempong
L1634839-04A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	A2-CUSTODY-MET3-S1	Rexford Bempong	A2-METALS PREP	A2-METALS PREP	Rexford Bempong
L1634839-04A	Glass-AM.06	INTACT	28-OCT-16	TRANSIT COURIER	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morrissey	A2-CUSTODY-MET3-S1	A2-CUSTODY-MET3-S1	Emily Keith
L1634839-04A	Glass-AM.06	INTACT	28-OCT-16	COOLER20-TRANSFER_TO_MANSFIELD	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morrissey	TRANSIT COURIER	COOLER20-TRANSFER_TO_MANSFIELD	
L1634839-04A	Glass-AM.06	INTACT	28-OCT-16		CUSTODY	Ryan Morrissey	COOLER20-TRANSFER_TO_MANSFIELD	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morriss
L1634839-04A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634839-04A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634839-04A	Glass-AM.06	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634839-05A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET2-S9	A2-CUSTODY-MET2-S9	Rexford Bempong
L1634839-05A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	A2-CUSTODY-MET3-S1	Rexford Bempong	A2-METALS PREP	A2-METALS PREP	Rexford Bempong
L1634839-05A	Glass-AM.06	INTACT	28-OCT-16	TRANSIT COURIER	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morrissey	A2-CUSTODY-MET3-S1	A2-CUSTODY-MET3-S1	Emily Keith
L1634839-05A	Glass-AM.06	INTACT	28-OCT-16	COOLER20-TRANSFER_TO_MANSFIELD	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morrissey	TRANSIT COURIER	COOLER20-TRANSFER_TO_MANSFIELD	
L1634839-05A	Glass-AM.06	INTACT	28-OCT-16		CUSTODY	Ryan Morrissey	COOLER20-TRANSFER_TO_MANSFIELD	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morriss
L1634839-05A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634839-05A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634839-05A	Glass-AM.06	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634839-06A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET2-S9	A2-CUSTODY-MET2-S9	Rexford Bempong
L1634839-06A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	A2-CUSTODY-MET3-S1	Rexford Bempong	A2-METALS PREP	A2-METALS PREP	Rexford Bempong
L1634839-06A	Glass-AM.06	INTACT	28-OCT-16	TRANSIT COURIER	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morrissey	A2-CUSTODY-MET3-S1	A2-CUSTODY-MET3-S1	Emily Keith
L1634839-06A	Glass-AM.06	INTACT	28-OCT-16	COOLER20-TRANSFER_TO_MANSFIELD	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morrissey	TRANSIT COURIER	COOLER20-TRANSFER_TO_MANSFIELD	
L1634839-06A	Glass-AM.06	INTACT	28-OCT-16		CUSTODY	Ryan Morrissey	COOLER20-TRANSFER_TO_MANSFIELD	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morriss
L1634839-06A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634839-06A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634839-06A	Glass-AM.06	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1634839-07A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	A2-METALS PREP	Rexford Bempong	A2-CUSTODY-MET2-S9	A2-CUSTODY-MET2-S9	Rexford Bempong
L1634839-07A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	A2-CUSTODY-MET3-S1	Rexford Bempong	A2-METALS PREP	A2-METALS PREP	Rexford Bempong
L1634839-07A	Glass-AM.06	INTACT	28-OCT-16	TRANSIT COURIER	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morrissey	A2-CUSTODY-MET3-S1	A2-CUSTODY-MET3-S1	Emily Keith
L1634839-07A	Glass-AM.06	INTACT	28-OCT-16	COOLER20-TRANSFER_TO_MANSFIELD	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morrissey	TRANSIT COURIER	COOLER20-TRANSFER_TO_MANSFI	
L1634839-07A	Glass-AM.06	INTACT	28-OCT-16		CUSTODY	Ryan Morrissey	COOLER20-TRANSFER_TO_MANSFIELD	COOLER20-TRANSFER_TO_MANSFIELD	Ryan Morris
L1634839-07A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634839-07A	Glass-AM.06	INTACT	28-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634839-07A	Glass-AM.06	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang

Methodology Review

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Laboratory Chronicle

Sample Receipt and Container Information

Were project specific reporting limits specified? NO

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1634839-01A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.9	Y	Absent	AS-TI(180),TS(7)
L1634839-02A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.9	Y	Absent	AS-TI(180),TS(7)
L1634839-03A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.9	Y	Absent	AS-TI(180),A2-TS(7)
L1634839-04A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.9	Y	Absent	AS-TI(180),TS(7)
L1634839-05A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.9	Y	Absent	AS-TI(180),TS(7)
L1634839-06A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.9	Y	Absent	AS-TI(180),TS(7)
L1634839-07A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.9	Y	Absent	AS-TI(180),TS(7)

*Values in parentheses indicate holding time in days

NJ DEP
Data of Known Quality Protocols Conformance/Non-Conformance Summary Questionnaire

NJ DEP Data of Known Quality Protocols
Conformance/Non-Conformance
Summary Questionnaire

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	YES
1a	Were the method specified handling, preservation, and holding time requirements met?	YES
1b	EPH Method: Was the EPH Method conducted without significant modifications (see Section 11.3 of respective DKQ methods)?	N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	YES
3	Were all samples received at an appropriate temperature (4 ± 2° C)?	YES
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	NO
5a	Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	NO
5b	Were these reporting limits met?	N/A
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	NO
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	YES

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1a or #1b is "No", the data package does not meet the requirements for "Data of Known Quality".

Conformance/Non-Conformance Summary

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Case Narrative (continued)

Report Submission

This final report replaces the partial report issued October 28, 2016. At the client's request, the analysis of Total Arsenic was performed on L1634839-03.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

DKQP Related Narratives

Report Submission

In reference to question 5a:

Reporting limits were not specified.

Metals

In reference to question 4:

The WG946712-3 MS recovery, performed on L1634839-01, is outside the acceptance criteria for arsenic (26%). A post digestion spike was performed and yielded an unacceptable recovery of 60%. This has been attributed to sample matrix.

The WG946712-4 Laboratory Duplicate RPD, performed on L1634839-01, is outside the acceptance criteria for arsenic (93%). The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

In reference to question 6:

At the client's request, all submitted samples were not analyzed for the full DKQP list of constituents identified in the method specific analyte list presented in the DKQP documents.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Michelle M. Morris Report Date: 10/31/16

Title: Technical Director/Representative

Glossary

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the

Data Qualifiers

reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Metals

Inorganic Data
(ICP Analysis)

Sample Results Summary

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634839-01	**Date Collected**	: 10/27/16 10:36
Client ID	: B7-2-EX1A-1027-1036	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 12:00
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG946758.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.251g	**%Solids**	: 83
Digestion Method	: EPA 3050B	**Date Digested**	: 10/28/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	19	0.48	0.10	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634839-02	**Date Collected**	: 10/27/16 12:00
Client ID	: CEI-102-EX1A-1027-1200	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 12:37
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG946758.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.271g	**%Solids**	: 90
Digestion Method	: EPA 3050B	**Date Digested**	: 10/28/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	3.3	0.44	0.09	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634839-04	**Date Collected**	: 10/27/16 10:19
Client ID	: B7-2-EX1C-1027-1019	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 12:41
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG946758.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.268g	**%Solids**	: 76
Digestion Method	: EPA 3050B	**Date Digested**	: 10/28/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	11	0.52	0.11	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634839-05	**Date Collected**	: 10/27/16 11:15
Client ID	: B7-2-EX1B-1027-1115	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 12:45
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG946758.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.251g	**%Solids**	: 84
Digestion Method	: EPA 3050B	**Date Digested**	: 10/28/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	6.6	0.48	0.10	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634839-06	**Date Collected**	: 10/27/16 10:21
Client ID	: B7-2-EX1C-1027-1021	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 12:49
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG946758.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.265g	**%Solids**	: 85
Digestion Method	: EPA 3050B	**Date Digested**	: 10/28/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	20	0.46	0.10	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634839-07	**Date Collected**	: 10/27/16 11:06
Client ID	: B7-2-EX1A-1027-1106	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 12:53
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG946758.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.313g	**%Solids**	: 93
Digestion Method	: EPA 3050B	**Date Digested**	: 10/28/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	28	0.41	0.09	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: WG946712-1	**Date Collected**	: NA
Client ID	: WG946712-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 10/28/16 11:52
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG946758.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.25g	**%Solids**	: NA
Digestion Method	: EPA 3050B	**Date Digested**	: 10/28/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	ND	0.40	0.08	U

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: WG946712-4	**Date Collected**	: 10/27/16 10:36
Client ID	: B7-2-EX1A-1027-1036DUP	**Date Received**	: 10/27/16
Sample Location	:	**Date Analyzed**	: 10/28/16 12:05
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG946758.pdf	**Instrument ID**	: TRACE7
Sample Amount	: 1.26g	**%Solids**	: 83
Digestion Method	: EPA 3050B	**Date Digested**	: 10/28/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	52.	0.48	0.10	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634839-03	**Date Collected**	: 10/27/16 09:21
Client ID	: SB-9-SO-8-A-EX1D-1027-092	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/31/16 12:47
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG947429.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 1.275g	**%Solids**	: 87
Digestion Method	: EPA 3050B	**Date Digested**	: 10/31/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	6.0	0.45	0.09	

Form 1
METALS

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: WG947133-1	**Date Collected**	: NA
Client ID	: WG947133-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 10/31/16 11:29
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,6010C	**Analyst**	: JH
Lab File ID	: WG947429.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 1.25g	**%Solids**	: NA
Digestion Method	: EPA 3050B	**Date Digested**	: 10/31/16

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	0.11	0.40	0.08	J

Blank Results Summary

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE7		

		Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID	:	R914063-2		R914063-7		R914063-10		R914063-12		WG946712-1	
Date Analyzed	:	10/28/16 09:25		10/28/16 10:07		10/28/16 11:29		10/28/16 12:25		10/28/16 11:52	
Parameter		mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q	mg/kg	Q
Arsenic		0.00208	U	0.00208	U	0.00208	U	0.00208	U	0.08	U

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE7		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R914063-14							
Date Analyzed :			10/28/16 13:14							
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Arsenic			0.00208	U						

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE5		

		Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID	:	R914695-4		R914695-9		R914695-11		R914695-13		WG947133-1	
Date Analyzed	:	10/31/16 08:41		10/31/16 09:21		10/31/16 09:33		10/31/16 10:31		10/31/16 11:29	
Parameter		mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q	mg/kg	Q
Arsenic		0.00208	U	0.00250	J	0.00208	U	0.00240	J	0.11	J

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE5		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R914695-15		R914695-17		R914695-19			
Date Analyzed :			10/31/16 11:24		10/31/16 12:16		10/31/16 12:34			
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Arsenic			0.00240	J	0.00208	U	0.00208	U		

Form 3
Blanks

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE5		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R914695-21							
Date Analyzed :			10/31/16 13:26							
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Arsenic			0.00208	U						

Calibration Summary

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE7	**Units**	: mg/l

		Initial Calibration			Continuing Calibration(s)						
Lab ID	:	R914063-1			R914063-6			R914063-9		R914063-11	
Date Analyzed	:	10/28/16 09:21			10/28/16 10:03			10/28/16 11:25		10/28/16 12:21	
Parameter		**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic		0.5000	0.5070	101.	0.5000	0.5160	103.	0.5140	103.	0.5070	101.

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE7	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R914063-13						
Date Analyzed :				10/28/16 13:10						
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic				0.5000	0.5000	100				

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE5	**Units**	: mg/l

		Initial Calibration			Continuing Calibration(s)						
Lab ID	:	R914695-3			R914695-8			R914695-10		R914695-12	
Date Analyzed	:	10/31/16 08:37			10/31/16 09:17			10/31/16 09:29		10/31/16 10:27	
Parameter		**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic		0.5000	0.5230	105.	0.5000	0.5280	106.	0.5280	106.	0.5200	104.

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE5	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R914695-14			R914695-16		R914695-18	
Date Analyzed :				10/31/16 11:20			10/31/16 12:12		10/31/16 12:30	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic				0.5000	0.5210	104.	0.5050	101.	0.5050	101.

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE5	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R914695-20						
Date Analyzed :				10/31/16 13:22						
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic				0.5000	0.5100	102.				

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2B
CRI Check Standard

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE7	**Units**	: mg/L

		Initial	Final
Lab ID	:	R914063-5	
Date Analyzed	:	10/28/16 09:59	

Parameter	True	Found	%R	Found	%R
Arsenic	0.020	0.021	106		

Acceptance Criteria: Methods 200.7, 6010

CRI: 70-130%

Form 2B
CRI Check Standard

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE5	**Units**	: mg/L

		Initial	Final
Lab ID	:	R914695-7	
Date Analyzed	:	10/31/16 09:13	

Parameter	True	Found	%R	Found	%R
Arsenic	0.020	0.022	108		

Acceptance Criteria: Methods 200.7, 6010

CRI: 70-130%

ICP Interference Check Sample Results Summary

Form 4a
Interference Check Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE7	**Concentration Units**	: mg/L

		True		Initial Found			Final Found			
Lab ID	:			R914063-8		R914063-4				
Analysis Date	:			10/28/16 10:55		10/28/16 09:55				
Analyte		**Sol. A**	**Sol. AB**	**Sol. A**	**%R**	**Sol. AB**	**%R**	**Sol. A**	**%R**	**Sol. AB**	**%R**
Arsenic			1	-0.00200		1.04	104				

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

Form 4a
Interference Check Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE5	**Concentration Units**	: mg/L

	True		Initial Found				Final Found			
Lab ID :			R914695-5		R914695-6					
Analysis Date :			10/31/16 09:04		10/31/16 09:09					
Analyte	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Arsenic		1	-0.000400		1.04	104				

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

Spike Sample Results

Form 5a
Matrix Spike

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Client Sample ID	: B7-2-EX1A-1027-1036	**Matrix**	: SOIL
Lab Sample ID	: L1634839-01		
Matrix Spike	: WG946712-3	**MS Analysis Date**	: 10/28/16 12:09
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample				Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/kg)	Spike Added (mg/kg)	Spike Conc. (mg/kg)	%R		Spike Added (mg/kg)	Spike Conc. (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
Arsenic, Total	19.	11.4	22.	26	Q					75-125	20

Duplicate Sample Results Summary

Form 6
Lab Duplicates

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Client Sample ID	: B7-2-EX1A-1027-1036	**Matrix**	: SOIL
Lab Sample ID	: L1634839-01	**Analysis Date**	: 10/28/16 12:00
Dup Sample ID	: WG946712-4	**DUP Analysis Date**	: 10/28/16 12:05

Parameter	Sample Concentration (mg/kg)	Duplicate Concentration (mg/kg)	RPD	RPD Limit
Arsenic, Total	19	52	93 Q	20

LCS Sample Results Summary

Form 7
Laboratory Control Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Client Sample ID	: NA	**Matrix**	: SOIL
Lab Sample ID	: WG946712-2	**LCS Analysis Date**	: 10/28/16 11:57
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
	True	Found	%R	True	Found	%R	RPD	Recovery	RPD
Parameter	(mg/kg)	(mg/kg)		(mg/kg)	(mg/kg)			Limits	Limit
Arsenic, Total	145.	140.	96.					80-121	20

Form 7
Laboratory Control Sample

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Client Sample ID	: NA	**Matrix**	: SOIL
Lab Sample ID	: WG947133-2	**LCS Analysis Date**	: 10/31/16 11:33
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
	True	Found	%R	True	Found	%R	RPD	Recovery	RPD
Parameter	(mg/kg)	(mg/kg)		(mg/kg)	(mg/kg)			Limits	Limit
Arsenic, Total	145.	150.	103.					80-121	20

Run Logs

Form 13
Analysis Run Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE7	**Analysis Method**	: 1,6010C
Start Date	: 10/28/16 09:21	**End Date**	: 10/28/16 13:14

Sample Number	Dilution Factor	Analysis Time	Arsenic, Total
R914063-1 ICV	1	09:21:00	X
R914063-2 ICB	1	09:25:00	X
R914063-4 ICSAB	1	09:55:00	X
R914063-5 CRI	1	09:59:00	X
R914063-6 CCV	1	10:03:00	X
R914063-7 CCB	1	10:07:00	X
R914063-8 ICSA	1	10:55:00	X
R914063-9 CCV	1	11:25:00	X
R914063-10 CCB	1	11:29:00	X
WG946712-1 BLANK	1	11:52:00	X
WG946712-2 LCS	1	11:57:00	X
L1634839-01	1	12:00:00	X
WG946712-4 DUP	1	12:05:00	X
WG946712-3 MS	1	12:09:00	X
R914063-11 CCV	1	12:21:00	X
R914063-12 CCB	1	12:25:00	X
L1634839-02	1	12:37:00	X
L1634839-04	1	12:41:00	X
L1634839-05	1	12:45:00	X
L1634839-06	1	12:49:00	X
L1634839-07	1	12:53:00	X
R914063-13 CCV	1	13:10:00	X
R914063-14 CCB	1	13:14:00	X

Form 13
Analysis Run Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: TRACE5	**Analysis Method**	: 1,6010C
Start Date	: 10/31/16 08:37	**End Date**	: 10/31/16 13:26

Sample Number	Dilution Factor	Analysis Time	Arsenic, Total
R914695-3 ICV	1	08:37:00	X
R914695-4 ICB	1	08:41:00	X
R914695-5 ICSA	1	09:04:00	X
R914695-6 ICSAB	1	09:09:00	X
R914695-7 CRI	1	09:13:00	X
R914695-8 CCV	1	09:17:00	X
R914695-9 CCB	1	09:21:00	X
R914695-10 CCV	1	09:29:00	X
R914695-11 CCB	1	09:33:00	X
R914695-12 CCV	1	10:27:00	X
R914695-13 CCB	1	10:31:00	X
R914695-14 CCV	1	11:20:00	X
R914695-15 CCB	1	11:24:00	X
WG947133-1 BLANK	1	11:29:00	X
WG947133-2 LCS	8	11:33:00	X
R914695-16 CCV	1	12:12:00	X
R914695-17 CCB	1	12:16:00	X
R914695-18 CCV	1	12:30:00	X
R914695-19 CCB	1	12:34:00	X
L1634839-03	1	12:47:00	X
R914695-20 CCV	1	13:22:00	X
R914695-21 CCB	1	13:26:00	X

Digestion Logs
ICP

Form 12
Preparation Log

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Matrix	: SOIL	**Prep Method**	: EPA 3050B

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L1634839-01	10/28/16 08:00	1.25	-
L1634839-02	10/28/16 08:00	1.27	-
L1634839-04	10/28/16 08:00	1.27	-
L1634839-05	10/28/16 08:00	1.25	-
L1634839-06	10/28/16 08:00	1.26	-
L1634839-07	10/28/16 08:00	1.31	-
WG946712-1	10/28/16 08:00	1.25	-
WG946712-2	10/28/16 08:00	0.39	-
WG946712-3	10/28/16 08:00	1.27	-
WG946712-4	10/28/16 08:00	1.26	-

Form 12
Preparation Log

Client	:	**Haley & Aldrich, Inc.**	**Lab Number**	:	**L1634839**
Project Name	:	**RACER/EWING**	**Project Number**	:	**70613-814**
Matrix	:	**SOIL**	**Prep Method**	:	**EPA 3050B**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L1634839-03	10/31/16 09:31	1.28	-
WG947133-1	10/31/16 09:31	1.25	-
WG947133-2	10/31/16 09:31	0.36	-

Wet Chemistry

Total Solids / Percent Moisture Analysis

Results Summary

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: WG946654-1	**Date Collected**	: 10/27/16 10:36
Client ID	: B7-2-EX1A-1027-1036DUP	**Date Received**	: 10/27/16
Sample Location	:	**Date Analyzed**	: 10/28/16 02:59
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946654.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 83
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**79.6**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634839-01	**Date Collected**	: 10/27/16 10:36
Client ID	: B7-2-EX1A-1027-1036	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 02:59
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946654.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 83
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	82.9	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634839-02	**Date Collected**	: 10/27/16 12:00
Client ID	: CEI-102-EX1A-1027-1200	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 02:59
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946654.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 90
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	89.7	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634839-04	**Date Collected**	: 10/27/16 10:19
Client ID	: B7-2-EX1C-1027-1019	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 02:59
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946654.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 76
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	75.5	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634839-05	**Date Collected**	: 10/27/16 11:15
Client ID	: B7-2-EX1B-1027-1115	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 02:59
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946654.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 84
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	83.9	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634839-06	**Date Collected**	: 10/27/16 10:21
Client ID	: B7-2-EX1C-1027-1021	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 02:59
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946654.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 85
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**84.9**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634839-07	**Date Collected**	: 10/27/16 11:06
Client ID	: B7-2-EX1A-1027-1106	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 02:59
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946654.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 93
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**93.3**	**0.100**	**NA**	

Duplicate Sample Results Summary

Form 6
Lab Duplicates

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Client Sample ID	: B7-2-EX1A-1027-1036	**Matrix**	: SOLID
Lab Sample ID	: L1634839-01	**Analysis Date**	: 10/28/16 02:59
Dup Sample ID	: WG946654-1	**DUP Analysis Date**	: 10/28/16 02:59

Parameter	Sample Concentration (%)	Duplicate Concentration (%)	RPD	RPD Limit
Solids, Total	82.9	79.6	4	20

Total Solids / Percent Moisture Analysis

Results Summary

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634839
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634839-03	**Date Collected**	: 10/27/16 09:21
Client ID	: SB-9-SO-8-A-EX1D-1027-092	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/31/16 08:15
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: SP
Lab File ID	: WG947510.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 87
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**86.8**	**0.100**	**0.100**	

ALPHA ANALYTICAL

World Class Chemistry

www.alphalab.com

Lab Number: L1634840

Client: Haley & Aldrich, Inc.

ATTN: Dimitri Quafisi

Project Name: RACER/EWING

Project Number: 70613-814

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

ANALYTICAL DATA PACKAGE FOR THE
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
TRENTON NEW JERSEY 08625

Agency/Division:	**Bureau/Office:**
Project No: 70613-814	**Contract No:**
Laboratory: Alpha Analytical	**Laboratory Location:** Westborough, Ma.
	Laboratory Phone Number: (508) 898-9220
SDG No: L1634840	**NJDEP Certification #:** MA935
Date of First Sample Receipt: 10/27/2016	**Date of Last Sample Receipt:** 10/27/2016

Agency Sample Number	Laboratory Sample Number	Sample Location	Date/Time of Collection
SB-F10-EX1D-1027-	L1634840-01	RACER/EWING	10/27/2016 16:10
SB-F10-EX1A-1027-	L1634840-02	RACER/EWING	10/27/2016 16:35
SB-F10-EX1B-1027-	L1634840-03	RACER/EWING	10/27/2016 16:05
SB-F10-EX1C-1027-	L1634840-04	RACER/EWING	10/27/2016 15:45
SB-F10-EX1C-1027-	L1634840-05	RACER/EWING	10/27/2016 15:40
SB-C8-EX1C-1027-1	L1634840-06	RACER/EWING	10/27/2016 15:18
SB-C8-EX1A-1027-1	L1634840-07	RACER/EWING	10/27/2016 14:30
SB-C8-EX1B-1027-1	L1634840-08	RACER/EWING	10/27/2016 14:40
TRIP BLANK	L1634840-09	RACER/EWING	10/25/2016 00:00

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on disk or electronically has been authorized by the laboratory director or his/her designee, as verified by the following signature.

Technical Director/Representative (Typed)	Lura Troy	10/31/16
Technical Director/Representative (Signature)		

Table of Contents

New Jersey Reduced Data Deliverable Package 1
- Title Page 2
- Table of Contents 3
- Chain of Custody 4
  - External Chain of Custody 5
  - Lims COC (LN01) 6
  - Sample Receipt Tracking Report 8
- Methodology Review 16
  - Method References 17
- Laboratory Chronicle 18
  - Sample Receipt and Container Information 19
- NJ DEP DKQP Summary Questionnaire 21
  - DKQP Summary Questionnaire 22
- Conformance/Non-Conformance (Reliability) Summary 23
  - Conformance/Non-Conformance (Reliability) Report 24
- Glossary 26
  - Glossary Report 27
- Organics Analysis 29
  - GCMS 8260 Analysis 30
    - Sample Results Summary 31
      - Form 1 - Organics 32
    - Tune Results Summary 41
      - Form 5 - Organics 42
    - Blank Results Summary 44
      - Form 4 - Organics 45
    - Standards Data Summary 46
      - Form 6 - Organics 47
      - Form 7 - Organics 50
    - Surrogate Summary 53
      - Form 2 - Organics 54
    - Batch QC Summary 55
      - Form 3 - Organics 56
    - Internal Standard Summary 60
      - Form 8 - Organics 61
    - Chromatograms 62
      - Sample Raw Data 63
        - SB-F10-EX1D-1027-1610 (L1634840-01) Analyzed: 10/28/16 08:55 64
        - SB-F10-EX1A-1027-1635 (L1634840-02) Analyzed: 10/28/16 09:21 68
        - SB-F10-EX1B-1027-1605 (L1634840-03) Analyzed: 10/28/16 09:46 72
        - SB-F10-EX1C-1027-1545 (L1634840-04) Analyzed: 10/28/16 10:12 76
        - SB-F10-EX1C-1027-1540 (L1634840-05) Analyzed: 10/28/16 10:37 79
        - SB-C8-EX1C-1027-1518 (L1634840-06) Analyzed: 10/28/16 11:03 82
        - SB-C8-EX1A-1027-1430 (L1634840-07) Analyzed: 10/28/16 11:29 86
        - SB-C8-EX1B-1027-1440 (L1634840-08) Analyzed: 10/28/16 11:54 90
      - Method Blank Raw Data 94
        - Laboratory Method Bl (WG946843-5) Analyzed: 10/28/16 08:30 95
- Wet Chemistry Analysis 98
  - Total Solids Analysis 99
    - Results Summary 100
      - Form 1 - Inorganics 101

Chain of Custody

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-9288

NEW JERSEY CHAIN OF CUSTODY

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of

Date Rec'd in Lab: 10/28/16

ALPHA Job #: L1634840

Client Information
Client:
Address:
Phone: (937) 470-2292
Fax:
Email: DQuafisi@haleyaldrich.com

Project Information
Project Name: Keeler / Ewing
Project Location: Keeler Ewing
Project #
(Use Project name as Project #) ☐
Project Manager: Dan Putz
ALPHAQuote #:

Turn-Around Time
Standard ☐
Rush (only if pre approved) ☑
Due Date:
# of Days:

Deliverables
☐ NJ Full / Reduced
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☐ SRS Residential/Non Residential
☐ SRS Impact to Groundwater
☐ NJ Ground Water Quality Standards
☐ NJ IGW SPLP Leachate Criteria
☐ Other

Billing Information
☐ Same as Client Info
PO #

Site Information
Is this site impacted by Petroleum? Yes ☐
Petroleum Product:

These samples have been previously analyzed by Alpha ☐

For EPH, selection is REQUIRED:
☐ Category 1
☐ Category 2

For VOC, selection is REQUIRED:
☐ 1,4-Dioxane
☐ 8011

Other project specific requirements/comments:
see Analysis for Rush Info
Please specify Metals or TAL. All rush are 24 hrs.

ANALYSIS
TCE (Rush)

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

Sample Specific Comments

Total Bottle

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCE (Rush)
34840 -01	SB-F10-EX1B-1027-1610	10/27	1610	Soil	DG	X
	~~SB-F10-EX1B-1027-1635~~		~~1635~~			
-02	SB-F10-EX1A-1027-1635		1635			
-03	SB-F10-EX1B-1027-1605		1605			X
-04	SB-F10-EX1C-1027-1545		1545			X
-05	SB-F10-EX1C-1027-1540		1540			X
-06	SB-C8-EX1C-1027-1518		1518			X
-07	SB-C8-EX1A-1027-1430		1430			X
	~~SB-C8-EX1B-1027-1505~~		~~1505~~			X
-08	SB-C8-EX1B-1027-1440		1440			X

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type
Preservative

Relinquished By:	Date/Time	Received By:	Date/Time
	10/27 1750	B.J.Bola-AAL	10-27-16 17:50
B.J.Bola	10-27-16 2200		10-27-16 2200
	10-28-16 0130		10/28/16 0130

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-14 HC (rev. 30-Sept-2013)

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Oct 31 2016, 12:28 pm

Login Number: L1634840
Account: HALEY-OH2 Haley & Aldrich, Inc.Project: 70613-814
Received: 27OCT16 Due Date: 31OCT16

Sample #	Client ID	Mat	PR	Collected	Container
L1634840-01	SB-F10-EX1D-1027-16	3	1A	27OCT16 16:10	3-Encore-5,1-Plastic-A-TS,1-SVial-F,2-SVial-W

Samples -01 throught -08 due 10/28, sample -09 due 10/31 NJ-8260HLW: report TCE NJ-RED Package Due Date: 10/28/16

ENCORE,NJ-8260HLW,NJ-RED,NJDEP,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1634840-02	SB-F10-EX1A-1027-16	3	1A	27OCT16 16:35	3-Encore-5,1-Plastic-A-TS,1-SVial-F,2-SVial-W

Samples -01 throught -08 due 10/28, sample -09 due 10/31 NJ-8260HLW: report TCE Package Due Date: 10/28/16

ENCORE,NJ-8260HLW,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1634840-03	SB-F10-EX1B-1027-16	3	1A	27OCT16 16:05	3-Encore-5,1-Plastic-A-TS,1-SVial-F,2-SVial-W

Samples -01 throught -08 due 10/28, sample -09 due 10/31 NJ-8260HLW: report TCE Package Due Date: 10/28/16

ENCORE,NJ-8260HLW,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1634840-04	SB-F10-EX1C-1027-15	3	1A	27OCT16 15:45	3-Encore-5,1-Plastic-A-TS,1-SVial-F,2-SVial-W

Samples -01 throught -08 due 10/28, sample -09 due 10/31 NJ-8260HLW: report TCE Package Due Date: 10/28/16

ENCORE,NJ-8260HLW,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1634840-05	SB-F10-EX1C-1027-15	3	1A	27OCT16 15:40	3-Encore-5,1-Plastic-A-TS,1-SVial-F,2-SVial-W

Samples -01 throught -08 due 10/28, sample -09 due 10/31 NJ-8260HLW: report TCE Package Due Date: 10/28/16

ENCORE,NJ-8260HLW,TS

Sample #	Client ID	Mat	PR	Collected	Container
L1634840-06	SB-C8-EX1C-1027-151	3	1A	27OCT16 15:18	3-Encore-5,1-Plastic-A-TS,1-SVial-F,2-SVial-W

Samples -01 throught -08 due 10/28, sample -09 due 10/31 NJ-8260HLW: report TCE Package Due Date: 10/28/16

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Oct 31 2016, 12:28 pm

Login Number: L1634840
Account: HALEY-OH2 Haley & Aldrich, Inc.Project: 70613-814
Received: 27OCT16 Due Date: 31OCT16

Sample #	Client ID	Mat	PR	Collected	Container

ENCORE,NJ-8260HLW,TS

L1634840-07 SB-C8-EX1A-1027-143 3 1A 27OCT16 14:30 3-Encore-5,1-Plastic-A-TS,1-SVial-F,2-SVial-W
Samples -01 throught -08 due 10/28, sample -09 due 10/31 NJ-8260HLW: report TCE Package Due Date: 10/28/16

ENCORE,NJ-8260HLW,TS

L1634840-08 SB-C8-EX1B-1027-144 3 1A 27OCT16 14:40 3-Encore-5,1-Plastic-A-TS,1-SVial-F,2-SVial-W
Samples -01 throught -08 due 10/28, sample -09 due 10/31 NJ-8260HLW: report TCE Package Due Date: 10/28/16

ENCORE,NJ-8260HLW,TS

L1634840-09 TRIP BLANK 1 1A 25OCT16 00:00 2-Vial-B
Samples -01 throught -08 due 10/28, sample -09 due 10/31 NJ-8260HLW: report TCE Package Due Date: 10/28/16

NJ-8260

Logged By: Melissa Cripps

ALPHA ANALYTICAL LABORATORIES
Container Tracking Report

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1634840-01A	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-01A	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-01A	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-01B	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-01B	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-01B	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-01C	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-01C	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-01C	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-01D	Plastic-A-TS	INTACT	31-OCT-16		RETURN WALK-IN CUSTODY	Emily Keith	W20-S1-A CUSTODY	W20-S1-A CUSTODY	Emily Keith
L1634840-01D	Plastic-A-TS	INTACT	28-OCT-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1634840-01D	Plastic-A-TS	INTACT	28-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634840-01D	Plastic-A-TS	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-01X	SVial-F	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-01X	SVial-F	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-01X	SVial-F	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-01Y	SVial-W	INTACT	28-OCT-16	GC/MS	VOA CUSTODY	Tyler Eno	CUSTODY	VOA DEAD FRIDGE	CUSTODY Tyler Eno
L1634840-01Y	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Tyler Eno	CUSTODY	VOA CUSTODY	Tyler Eno
L1634840-01Y	SVial-W	INTACT	28-OCT-16	CUSTODY	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1634840-01Y	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1634840-01Y	SVial-W	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-01Y	SVial-W	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-01Z	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1634840-01Z	SVial-W	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-01Z	SVial-W	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1634840-02A	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-02A	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-02A	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-02B	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-02B	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-02B	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-02C	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-02C	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-02C	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-02D	Plastic-A-TS	INTACT	31-OCT-16		RETURN WALK-IN CUSTODY	Emily Keith	W20-S1-A CUSTODY	W20-S1-A CUSTODY	Emily Keith
L1634840-02D	Plastic-A-TS	INTACT	28-OCT-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1634840-02D	Plastic-A-TS	INTACT	28-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634840-02D	Plastic-A-TS	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-02X	SVial-F	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-02X	SVial-F	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-02X	SVial-F	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-02Y	SVial-W	INTACT	28-OCT-16	GC/MS	VOA CUSTODY	Tyler Eno	CUSTODY	VOA DEAD FRIDGE	CUSTODY Tyler Eno
L1634840-02Y	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Tyler Eno	CUSTODY	VOA CUSTODY	Tyler Eno
L1634840-02Y	SVial-W	INTACT	28-OCT-16	CUSTODY	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1634840-02Y	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1634840-02Y	SVial-W	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-02Y	SVial-W	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-02Z	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1634840-02Z	SVial-W	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-02Z	SVial-W	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1634840-03A	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-03A	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-03A	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-03B	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-03B	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-03B	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-03C	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-03C	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-03C	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-03D	Plastic-A-TS	INTACT	31-OCT-16		RETURN WALK-IN CUSTODY	Emily Keith	W20-S1-A CUSTODY	W20-S1-A CUSTODY	Emily Keith
L1634840-03D	Plastic-A-TS	INTACT	28-OCT-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1634840-03D	Plastic-A-TS	INTACT	28-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634840-03D	Plastic-A-TS	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-03X	SVial-F	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-03X	SVial-F	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-03X	SVial-F	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-03Y	SVial-W	INTACT	28-OCT-16	GC/MS	VOA CUSTODY	Tyler Eno	CUSTODY	VOA DEAD FRIDGE	CUSTODY Tyler Eno
L1634840-03Y	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Tyler Eno	CUSTODY	VOA CUSTODY	Tyler Eno
L1634840-03Y	SVial-W	INTACT	28-OCT-16	CUSTODY	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1634840-03Y	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1634840-03Y	SVial-W	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-03Y	SVial-W	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-03Z	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1634840-03Z	SVial-W	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-03Z	SVial-W	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1634840-04A	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-04A	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-04A	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-04B	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-04B	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-04B	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-04C	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-04C	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-04C	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-04D	Plastic-A-TS	INTACT	31-OCT-16		RETURN WALK-IN CUSTODY	Emily Keith	W20-S1-A CUSTODY	W20-S1-A CUSTODY	Emily Keith
L1634840-04D	Plastic-A-TS	INTACT	28-OCT-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1634840-04D	Plastic-A-TS	INTACT	28-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634840-04D	Plastic-A-TS	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-04X	SVial-F	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-04X	SVial-F	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-04X	SVial-F	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-04Y	SVial-W	INTACT	28-OCT-16	GC/MS	VOA CUSTODY	Tyler Eno	CUSTODY	VOA DEAD FRIDGE	CUSTODY Tyler Eno
L1634840-04Y	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Tyler Eno	CUSTODY	VOA CUSTODY	Tyler Eno
L1634840-04Y	SVial-W	INTACT	28-OCT-16	CUSTODY	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1634840-04Y	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1634840-04Y	SVial-W	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-04Y	SVial-W	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-04Z	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1634840-04Z	SVial-W	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-04Z	SVial-W	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1634840-05A	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-05A	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-05A	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-05B	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-05B	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-05B	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-05C	Encore-5	EMPTY	28-OCT-16	CUSTODY	WETCHEM	Vivian Boahen	CUSTODY	CUSTODY	Vivian Boahen
L1634840-05C	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634840-05C	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-05X	SVial-F	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-05X	SVial-F	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-05X	SVial-F	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-05Y	SVial-W	INTACT	28-OCT-16	GC/MS	VOA CUSTODY	Tyler Eno	CUSTODY	VOA DEAD FRIDGE	CUSTODY Tyler Eno
L1634840-05Y	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Tyler Eno	CUSTODY	VOA CUSTODY	Tyler Eno
L1634840-05Y	SVial-W	INTACT	28-OCT-16	CUSTODY	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1634840-05Y	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1634840-05Y	SVial-W	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-05Y	SVial-W	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-06A	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-06A	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-06A	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-06B	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-06B	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-06B	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-06C	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1634840-06C	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-06C	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-06D	Plastic-A-TS	INTACT	31-OCT-16		RETURN WALK-IN CUSTODY	Emily Keith	W20-S1-A CUSTODY	W20-S1-A CUSTODY	Emily Keith
L1634840-06D	Plastic-A-TS	INTACT	28-OCT-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1634840-06D	Plastic-A-TS	INTACT	28-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634840-06D	Plastic-A-TS	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-06X	SVial-F	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-06X	SVial-F	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-06X	SVial-F	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-06Y	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1634840-06Y	SVial-W	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-06Y	SVial-W	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-06Z	SVial-W	INTACT	28-OCT-16	GC/MS	VOA CUSTODY	Tyler Eno	CUSTODY	VOA DEAD FRIDGE	CUSTODY Tyler Eno
L1634840-06Z	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Tyler Eno	CUSTODY	VOA CUSTODY	Tyler Eno
L1634840-06Z	SVial-W	INTACT	28-OCT-16	CUSTODY	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1634840-06Z	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1634840-06Z	SVial-W	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-06Z	SVial-W	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-07A	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-07A	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-07A	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-07B	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-07B	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-07B	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-07C	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1634840-07C	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-07C	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-07D	Plastic-A-TS	INTACT	31-OCT-16		RETURN WALK-IN CUSTODY	Emily Keith	W20-S1-A CUSTODY	W20-S1-A CUSTODY	Emily Keith
L1634840-07D	Plastic-A-TS	INTACT	28-OCT-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1634840-07D	Plastic-A-TS	INTACT	28-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634840-07D	Plastic-A-TS	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-07X	SVial-F	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-07X	SVial-F	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-07X	SVial-F	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-07Y	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1634840-07Y	SVial-W	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-07Y	SVial-W	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-07Z	SVial-W	INTACT	28-OCT-16	GC/MS	VOA CUSTODY	Tyler Eno	CUSTODY	VOA DEAD FRIDGE	CUSTODY Tyler Eno
L1634840-07Z	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Tyler Eno	CUSTODY	VOA CUSTODY	Tyler Eno
L1634840-07Z	SVial-W	INTACT	28-OCT-16	CUSTODY	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1634840-07Z	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1634840-07Z	SVial-W	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-07Z	SVial-W	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-08A	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-08A	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-08A	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-08B	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-08B	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-08B	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-08C	Encore-5	EMPTY	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1634840-08C	Encore-5	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-08C	Encore-5	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-08D	Plastic-A-TS	INTACT	31-OCT-16		RETURN WALK-IN CUSTODY	Emily Keith	W20-S1-A CUSTODY	W20-S1-A CUSTODY	Emily Keith
L1634840-08D	Plastic-A-TS	INTACT	28-OCT-16		WETCHEM	Vivian Boahen	RETURN WALK-IN CUSTODY	RETURN WALK-IN CUSTODY	Vivian Boahen
L1634840-08D	Plastic-A-TS	INTACT	28-OCT-16	CUSTODY	CUSTODY	Vivian Boahen	WETCHEM	WETCHEM	Vivian Boahen
L1634840-08D	Plastic-A-TS	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-08X	SVial-F	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	VOA CUSTODY	Edward Beauregard
L1634840-08X	SVial-F	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-08X	SVial-F	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-08Y	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1634840-08Y	SVial-W	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-08Y	SVial-W	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-08Z	SVial-W	INTACT	28-OCT-16	GC/MS	VOA CUSTODY	Tyler Eno	CUSTODY	VOA DEAD FRIDGE	CUSTODY Tyler Eno
L1634840-08Z	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Tyler Eno	CUSTODY	VOA CUSTODY	Tyler Eno
L1634840-08Z	SVial-W	INTACT	28-OCT-16	CUSTODY	F-VOA CUSTODY	Mike Vickery	GC/MS	GC/MS	Mike Vickery
L1634840-08Z	SVial-W	INTACT	28-OCT-16	GC/MS	GC/MS	Edward Beauregard	CUSTODY	F-VOA CUSTODY	Edward Beauregard
L1634840-08Z	SVial-W	INTACT	28-OCT-16	CUSTODY	CUSTODY	Edward Beauregard	GC/MS	GC/MS	Edward Beauregard
L1634840-08Z	SVial-W	INTACT	28-OCT-16	LOGIN	LOGIN	Michael Chang	CUSTODY	CUSTODY	Michael Chang
L1634840-09A	Vial-B	INTACT	29-OCT-16	GC/MS	GC/MS	Piotr Duczmalewski	CUSTODY	VOA DEAD FRIDGE	CUSTODY Piotr Duczmalewski
L1634840-09A	Vial-B	INTACT	29-OCT-16	CUSTODY	CUSTODY	Piotr Duczmalewski	GC/MS	GC/MS	Piotr Duczmalewski
L1634840-09A	Vial-B	INTACT	28-OCT-16	LOGIN	LOGIN	Graham Phillips	CUSTODY	CUSTODY	Graham Phillips
L1634840-09B	Vial-B	INTACT	31-OCT-16		CUSTODY	John Knoud	VOA CUSTODY	VOA CUSTODY	John Knoud
L1634840-09B	Vial-B	INTACT	28-OCT-16	LOGIN	LOGIN	Graham Phillips	CUSTODY	CUSTODY	Graham Phillips

Methodology Review

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Laboratory Chronicle

Sample Receipt and Container Information

Were project specific reporting limits specified? NO

Reagent H2O Preserved Vials Frozen on: 28-OCT-16 04:24

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1634840-01A	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634840-01B	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634840-01C	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634840-01D	Plastic 2oz unpreserved for TS	A	N/A	2.9	Y	Absent	TS(7)
L1634840-01X	Vial MeOH preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634840-01Y	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634840-01Z	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634840-02A	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634840-02B	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634840-02C	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634840-02D	Plastic 2oz unpreserved for TS	A	N/A	2.9	Y	Absent	TS(7)
L1634840-02X	Vial MeOH preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634840-02Y	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634840-02Z	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634840-03A	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634840-03B	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634840-03C	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634840-03D	Plastic 2oz unpreserved for TS	A	N/A	2.9	Y	Absent	TS(7)
L1634840-03X	Vial MeOH preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634840-03Y	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634840-03Z	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634840-04A	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634840-04B	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634840-04C	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634840-04D	Plastic 2oz unpreserved for TS	A	N/A	2.9	Y	Absent	TS(7)
L1634840-04X	Vial MeOH preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634840-04Y	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1634840-04Z	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634840-05A	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634840-05B	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634840-05C	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	TS(7)
L1634840-05D	Plastic 2oz unpreserved for TS	A	N/A	2.9	Y	Absent	-
L1634840-05X	Vial MeOH preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634840-05Y	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634840-05Z	Vial Water preserved split	A	N/A	2.9	Y	Absent	-
L1634840-06A	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634840-06B	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634840-06C	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634840-06D	Plastic 2oz unpreserved for TS	A	N/A	2.9	Y	Absent	TS(7)
L1634840-06X	Vial MeOH preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634840-06Y	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634840-06Z	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634840-07A	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634840-07B	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634840-07C	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634840-07D	Plastic 2oz unpreserved for TS	A	N/A	2.9	Y	Absent	TS(7)
L1634840-07X	Vial MeOH preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634840-07Y	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634840-07Z	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634840-08A	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634840-08B	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634840-08C	5 gram Encore Sampler	A	N/A	2.9	Y	Absent	NJ-8260HLW(2)
L1634840-08D	Plastic 2oz unpreserved for TS	A	N/A	2.9	Y	Absent	TS(7)
L1634840-08X	Vial MeOH preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634840-08Y	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634840-08Z	Vial Water preserved split	A	N/A	2.9	Y	Absent	NJ-8260HLW(14)
L1634840-09A	Vial HCl preserved	A	N/A	2.9	Y	Absent	NJ-8260(14)
L1634840-09B	Vial HCl preserved	A	N/A	2.9	Y	Absent	NJ-8260(14)

*Values in parentheses indicate holding time in days

NJ DEP
Data of Known Quality Protocols
Conformance/Non-Conformance
Summary Questionnaire

NJ DEP Data of Known Quality Protocols
Conformance/Non-Conformance
Summary Questionnaire

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	YES
1a	Were the method specified handling, preservation, and holding time requirements met?	YES
1b	EPH Method: Was the EPH Method conducted without significant modifications (see Section 11.3 of respective DKQ methods)?	N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	YES
3	Were all samples received at an appropriate temperature (4 ± 2° C)?	YES
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	YES
5a	Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	NO
5b	Were these reporting limits met?	N/A
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	NO
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	NO

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1a or #1b is "No", the data package does not meet the requirements for "Data of Known Quality".

Conformance/Non-Conformance Summary

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Case Narrative (continued)

Report Submission

This final report replaces the partial report issued October 28, 2016, and includes the results of all requested analyses.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

DKQP Related Narratives

Report Submission

In reference to question 5a:

Reporting limits were not specified.

Volatile Organics

In reference to question 6:

At the client's request, all submitted samples were not analyzed for the full DKQP list of constituents identified in the method specific analyte list presented in the DKQP documents.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Report Date: 10/31/16

Title: Technical Director/Representative

Glossary

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the

Data Qualifiers

reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Organics

GC/MS 8260
Analysis

Sample Results Summary

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634840
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634840-01	**Date Collected**	: 10/27/16 16:10
Client ID	: SB-F10-EX1D-1027-1610	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 08:55
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MV
Lab File ID	: V10161028A06	**Instrument ID**	: VOA110
Sample Amount	: 5.7 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 81
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
79-01-6	Trichloroethene	0.015	0.0011	0.00014	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634840
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634840-02	**Date Collected**	: 10/27/16 16:35
Client ID	: SB-F10-EX1A-1027-1635	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 09:21
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MV
Lab File ID	: V10161028A07	**Instrument ID**	: VOA110
Sample Amount	: 4.3 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 84
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
79-01-6	Trichloroethene	0.0054	0.0014	0.00017	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634840
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634840-03	**Date Collected**	: 10/27/16 16:05
Client ID	: SB-F10-EX1B-1027-1605	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 09:46
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MV
Lab File ID	: V10161028A08	**Instrument ID**	: VOA110
Sample Amount	: 5.8 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 77
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
79-01-6	Trichloroethene	0.084	0.0011	0.00014	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634840
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634840-04	**Date Collected**	: 10/27/16 15:45
Client ID	: SB-F10-EX1C-1027-1545	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 10:12
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MV
Lab File ID	: V10161028A09	**Instrument ID**	: VOA110
Sample Amount	: 4.9 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 91
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
79-01-6	Trichloroethene	ND	0.0011	0.00014	U

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634840
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634840-05	**Date Collected**	: 10/27/16 15:40
Client ID	: SB-F10-EX1C-1027-1540	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 10:37
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MV
Lab File ID	: V10161028A10	**Instrument ID**	: VOA110
Sample Amount	: 5.8 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 90
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
79-01-6	Trichloroethene	ND	0.00096	0.00012	U

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634840
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634840-06	**Date Collected**	: 10/27/16 15:18
Client ID	: SB-C8-EX1C-1027-1518	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 11:03
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MV
Lab File ID	: V10161028A11	**Instrument ID**	: VOA110
Sample Amount	: 5.7 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 79
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
79-01-6	Trichloroethene	0.0038	0.0011	0.00014	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634840
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634840-07	**Date Collected**	: 10/27/16 14:30
Client ID	: SB-C8-EX1A-1027-1430	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 11:29
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MV
Lab File ID	: V10161028A12	**Instrument ID**	: VOA110
Sample Amount	: 6.1 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 80
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
79-01-6	Trichloroethene	0.0045	0.0010	0.00013	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634840
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: L1634840-08	**Date Collected**	: 10/27/16 14:40
Client ID	: SB-C8-EX1B-1027-1440	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 11:54
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MV
Lab File ID	: V10161028A13	**Instrument ID**	: VOA110
Sample Amount	: 5.6 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: 80
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
79-01-6	Trichloroethene	0.0016	0.0011	0.00014	

Form 1
VOA

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634840
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab ID	: WG946843-5	**Date Collected**	: NA
Client ID	: WG946843-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 10/28/16 08:30
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 1,8260C	**Analyst**	: MV
Lab File ID	: V10161028A05	**Instrument ID**	: VOA110
Sample Amount	: 5.0 g	**GC Column**	: RTX-VMS
Level	: LOW	**%Solids**	: NA
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		mg/kg			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
79-01-6	Trichloroethene	ND	0.0010	0.00012	U

Tuning Results Summary

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634840
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: VOA110	**Analysis Date**	: 09/29/16 10:42
Tune Standard	: WG937298-1	**Tune File ID**	: V10160929BFB_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	21
75	30.0 - 60.0% of mass 95	59.2
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0 (0)1
174	Greater than 50.0 of mass 95	79
175	5.0 - 9.0% of mass 174	6 (7.6)1
176	95.0 - 101% of mass 174	75.2 (95.2)1
177	5.0 - 9.0% of mass 176	5.3 (7)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STDL1	R905219-1	V10160929A03	09/29/16 11:59
STDL3	R905219-2	V10160929A05	09/29/16 12:50
STDL4	R905219-3	V10160929A06	09/29/16 13:16
STDL5	R905219-4	V10160929A07	09/29/16 13:41
STDL6	R905219-6	V10160929A08	09/29/16 14:07
STDL7	R905219-5	V10160929A09	09/29/16 14:32
STDL8	R905219-7	V10160929A10	09/29/16 14:58
STDL2	R905219-8	V10160929A13	09/29/16 16:15
ICV Quant Report	R905219-9	V10160929A15	09/29/16 17:06

Instrument Performance Check
Bromofluorobenzene (BFB)
Form 5

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634840
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: VOA110	**Analysis Date**	: 10/28/16 06:26
Tune Standard	: WG946843-1	**Tune File ID**	: V10161028BF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	18.8
75	30.0 - 60.0% of mass 95	56.3
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0 (0)1
174	Greater than 50.0 of mass 95	77
175	5.0 - 9.0% of mass 174	5.7 (7.5)1
176	95.0 - 101% of mass 174	73.5 (95.4)1
177	5.0 - 9.0% of mass 176	4.9 (6.6)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG946843-2CCAL	WG946843-2	V10161028A01	10/28/16 06:48
WG946843-3LCS	WG946843-3	V10161028A01	10/28/16 06:48
WG946843-4LCSD	WG946843-4	V10161028A02	10/28/16 07:14
WG946843-5BLANK	WG946843-5	V10161028A05	10/28/16 08:30
SB-F10-EX1D-1027-1610	L1634840-01	V10161028A06	10/28/16 08:55
SB-F10-EX1A-1027-1635	L1634840-02	V10161028A07	10/28/16 09:21
SB-F10-EX1B-1027-1605	L1634840-03	V10161028A08	10/28/16 09:46
SB-F10-EX1C-1027-1545	L1634840-04	V10161028A09	10/28/16 10:12
SB-F10-EX1C-1027-1540	L1634840-05	V10161028A10	10/28/16 10:37
SB-C8-EX1C-1027-1518	L1634840-06	V10161028A11	10/28/16 11:03
SB-C8-EX1A-1027-1430	L1634840-07	V10161028A12	10/28/16 11:29
SB-C8-EX1B-1027-1440	L1634840-08	V10161028A13	10/28/16 11:54

Blank Results Summary

Method Blank Summary
Form 4

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634840
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Lab Sample ID	: WG946843-5	**Lab File ID**	: V10161028A05
Instrument ID	: VOA110		
Matrix	: SOIL	**Analysis Date**	: 10/28/16 08:30

Client Sample No.	Lab Sample ID	Analysis Date
WG946843-3LCS	WG946843-3	10/28/16 06:48
WG946843-4LCSD	WG946843-4	10/28/16 07:14
SB-F10-EX1D-1027-1610	L1634840-01	10/28/16 08:55
SB-F10-EX1A-1027-1635	L1634840-02	10/28/16 09:21
SB-F10-EX1B-1027-1605	L1634840-03	10/28/16 09:46
SB-F10-EX1C-1027-1545	L1634840-04	10/28/16 10:12
SB-F10-EX1C-1027-1540	L1634840-05	10/28/16 10:37
SB-C8-EX1C-1027-1518	L1634840-06	10/28/16 11:03
SB-C8-EX1A-1027-1430	L1634840-07	10/28/16 11:29
SB-C8-EX1B-1027-1440	L1634840-08	10/28/16 11:54

Standards Data Summary

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1634840**
Project Name	**: RACER/EWING**	**Project Number**	**: 70613-814**
Instrument ID	**: VOA110**	**Ical Ref**	**: ICAL12930**
Calibration dates	**: 09/29/16 11:59 09/29/16 16:15**		

Calibration Files

L1 =V10160929A03.D L2 =V10160929A13.D L3 =V10160929A05.D L4 =V10160929A06.D L5 =V10160929A07.D

L6 =V10160929A08.D L7 =V10160929A09.D L8 =V10160929A10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------									
2)	T	Dichlorodifluoromethane	0.252	0.178	0.264	0.285	0.288	0.306	0.301	0.292	*L	0.9987
3)	T	Chloromethane	0.263	0.232	0.243	0.243	0.248	0.256	0.247	0.238	0.246	4.05
4)	C	Vinyl chloride	0.205	0.164	0.220	0.235	0.234	0.242	0.244	0.237	0.223	12.15
5)	T	Bromomethane	0.146	0.136	0.117	0.120	0.120	0.132	0.127	0.125	0.128	7.59
6)	T	Chloroethane	0.130	0.111	0.112	0.110	0.112	0.113	0.096		0.112	8.69
7)	T	Trichlorofluoromethane	0.300	0.211	0.327	0.342	0.343	0.350	0.330	0.314	0.315	14.26
8)	T	Ethyl ether	0.126	0.142	0.150	0.152	0.156	0.166	0.158	0.153	0.150	7.94
10)	C	1,1-Dichloroethene	0.160	0.162	0.199	0.209	0.220	0.232	0.228	0.219	0.204	13.83
11)	T	Carbon disulfide	1.427	0.986	0.697	0.778	0.776	0.797	0.785	0.757	*L	0.9991
12)	T	Freon-113	0.202	0.130	0.211	0.231	0.235	0.245	0.237	0.229	*L	0.9984
14)	T	Acrolein	0.004	0.028	0.028	0.029	0.032	0.036	0.035	0.034	*L	0.9980
15)	T	Methylene chloride	0.250	0.251	0.245	0.245	0.250	0.262	0.252	0.242	0.250	2.43
17)	T	Acetone	0.111	0.073	0.060	0.054	0.059	0.063	0.060	0.060	*L	0.9989
18)	T	trans-1,2-Dichloroethene	0.198	0.198	0.227	0.239	0.244	0.253	0.248	0.238	0.231	9.35
19)	T	Methyl acetate	0.091	0.115	0.134	0.138	0.144	0.158	0.151	0.148	*L	0.9988
20)	T	Methyl tert-butyl ether	0.568	0.637	0.667	0.712	0.756	0.811	0.794	0.781	0.716	12.00
21)	T	tert-Butyl alcohol	0.011	0.015	0.017	0.018	0.021	0.023	0.023	0.024	*L	0.9950
22)	T	Diisopropyl ether	0.563	0.699	0.744	0.795	0.824	0.861	0.828	0.794	0.764	12.53
23)	T	1,1-Dichloroethane	0.372	0.388	0.428	0.445	0.456	0.472	0.454	0.436	0.431	8.01
24)	T	Halothane	0.102	0.117	0.141	0.152	0.158	0.166	0.165	0.159	*L	0.9990
25)	T	Acrylonitrile		0.044	0.057	0.061	0.065	0.070	0.067	0.066	0.062	14.66
26)	T	Ethyl tert-butyl ether	0.524	0.638	0.688	0.744	0.786	0.835	0.813	0.788	0.727	14.44
27)	T	Vinyl acetate	0.084	0.362	0.492	0.542	0.587	0.632	0.610	0.596	*L	0.9984
28)	T	cis-1,2-Dichloroethene	0.204	0.240	0.250	0.256	0.263	0.275	0.265	0.257	0.251	8.64
29)	T	2,2-Dichloropropane	0.225	0.257	0.314	0.353	0.375	0.410	0.412	0.404	*L	0.9975
30)	T	Bromochloromethane	0.087	0.100	0.110	0.112	0.114	0.118	0.114	0.109	0.108	9.35
31)	T	Cyclohexane	0.258	0.198	0.342	0.387	0.389	0.407	0.390	0.373	*L	0.9979
32)	C	Chloroform	0.414	0.433	0.462	0.471	0.480	0.508	0.490	0.468	0.466	6.53
33)	T	Ethyl acetate	0.052	0.170	0.184	0.207	0.215	0.238	0.229	0.227	*L	0.9985
34)	T	Carbon tetrachloride	0.177	0.195	0.292	0.339	0.353	0.383	0.387	0.379	*L	0.9975
35)	T	Tetrahydrofuran	0.024	0.065	0.072	0.067	0.070	0.072	0.067	0.066	*L	0.9984
36)	S	Dibromofluoromethane	0.252	0.254	0.261	0.267	0.269	0.271	0.273	0.271	0.265	3.05
37)	T	1,1,1-Trichloroethane	0.331	0.308	0.386	0.423	0.433	0.461	0.450	0.436	0.403	14.05
39)	T	2-Butanone	0.004	0.073	0.086	0.092	0.085	0.093	0.092	0.091	*L	0.9995
40)	T	1,1-Dichloropropene	0.233	0.234	0.308	0.335	0.342	0.360	0.349	0.334	*L	0.9987
41)	T	Benzene	0.954	0.881	0.956	0.967	0.990	1.019	0.983	0.949	0.962	4.20
42)	T	tert-Amyl methyl ether	0.442	0.534	0.588	0.638	0.678	0.729	0.731	0.728	*L	0.9982
43)	S	1,2-Dichloroethane-d4	0.369	0.350	0.359	0.363	0.360	0.361	0.365	0.368	0.362	1.71
44)	T	1,2-Dichloroethane	0.355	0.383	0.395	0.399	0.404	0.421	0.401	0.388	0.393	4.86

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1634840**
Project Name	**: RACER/EWING**	**Project Number**	**: 70613-814**
Instrument ID	**: VOA110**	**Ical Ref**	**: ICAL12930**
Calibration dates	**: 09/29/16 11:59 09/29/16 16:15**		

Calibration Files

L1 =V10160929A03.D L2 =V10160929A13.D L3 =V10160929A05.D L4 =V10160929A06.D L5 =V10160929A07.D

L6 =V10160929A08.D L7 =V10160929A09.D L8 =V10160929A10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
47)	T	Methyl cyclohexane	0.276	0.203	0.347	0.392	0.398	0.418	0.409	0.398	*L	0.9984
48)	T	Trichloroethene	0.231	0.217	0.249	0.257	0.262	0.273	0.266	0.258	0.252	7.48
50)	T	Dibromomethane	0.102	0.133	0.143	0.150	0.155	0.166	0.162	0.160	0.146	14.28
51)	C	1,2-Dichloropropane	0.179	0.204	0.217	0.224	0.232	0.240	0.234	0.226	0.220	9.03
53)	T	2-Chloroethyl vinyl ether	0.031	0.084	0.105	0.122	0.133	0.153	0.147	0.146	*L	0.9962
54)	T	Bromodichloromethane	0.222	0.265	0.299	0.323	0.346	0.371	0.376	0.368	*L	0.9980
57)	T	1,4-Dioxane	0.001	0.002	0.002	0.002	0.003	0.003	0.003	0.003	*L	0.9984
58)	T	cis-1,3-Dichloropropene	0.170	0.248	0.319	0.359	0.381	0.417	0.419	0.414	*L	0.9975
59)	I	Chlorobenzene-d5	----------ISTD----------									
60)	S	Toluene-d8	1.366	1.376	1.375	1.355	1.358	1.337	1.296	1.287	1.344	2.58
61)	C	Toluene	0.817	0.803	0.825	0.819	0.841	0.858	0.806	0.779	0.818	2.94
62)	T	4-Methyl-2-pentanone	0.007	0.056	0.073	0.087	0.097	0.108	0.104	0.104	*L	0.9966
63)	T	Tetrachloroethene	0.316	0.269	0.336	0.346	0.358	0.369	0.360	0.361	0.339	9.80
65)	T	trans-1,3-Dichloropropene	0.187	0.314	0.388	0.438	0.478	0.516	0.505	0.499	*L	0.9979
67)	T	Ethyl methacrylate	0.111	0.215	0.320	0.378	0.418	0.458	0.444	0.441	*L	0.9968
68)	T	1,1,2-Trichloroethane	0.183	0.207	0.238	0.237	0.246	0.249	0.231	0.224	0.227	9.74
69)	T	Chlorodibromomethane	0.137	0.207	0.260	0.281	0.311	0.333	0.331	0.334	*L	0.9977
70)	T	1,3-Dichloropropane	0.394	0.476	0.499	0.502	0.519	0.526	0.487	0.475	0.485	8.48
71)	T	1,2-Dibromoethane	0.167	0.215	0.250	0.256	0.268	0.279	0.269	0.267	*L	0.9995
72)	T	2-Hexanone		0.078	0.136	0.146	0.174	0.194	0.196	0.198	*L	0.9963
73)	T	Chlorobenzene	0.793	0.837	0.878	0.876	0.887	0.913	0.872	0.859	0.864	4.19
74)	C	Ethylbenzene	1.183	1.334	1.535	1.572	1.627	1.665	1.585	1.536	1.505	10.84
75)	T	1,1,1,2-Tetrachloroethane	0.197	0.238	0.284	0.294	0.312	0.327	0.322	0.317	*L	0.9992
76)	T	p/m Xylene	0.374	0.474	0.565	0.582	0.599	0.618	0.595	0.578	*L	0.9993
77)	T	o Xylene	0.344	0.457	0.544	0.550	0.581	0.596	0.581	0.561	*L	0.9993
78)	T	Styrene	0.504	0.702	0.908	0.945	0.994	1.033	1.007	0.970	*L	0.9991
79)	I	1,4-Dichlorobenzene-d4	----------ISTD----------									
80)	T	Bromoform	0.123	0.224	0.275	0.320	0.359	0.406	0.423	0.430	*L	0.9929
82)	T	Isopropylbenzene	1.761	2.130	2.642	2.810	2.855	2.955	2.864	2.781	*L	0.9993
83)	S	4-Bromofluorobenzene	1.007	1.016	0.995	1.006	0.999	0.985	0.973	0.986	0.996	1.42
84)	T	Bromobenzene	0.583	0.647	0.673	0.685	0.706	0.728	0.721	0.714	0.682	7.05
85)	T	n-Propylbenzene	2.426	2.781	3.347	3.469	3.540	3.605	3.428	3.307	3.238	12.79
86)	T	1,4-Dichlorobutane	0.638	0.786	0.840	0.856	0.876	0.895	0.834	0.799	0.815	9.85
87)	T	1,1,2,2-Tetrachloroethane	0.523	0.575	0.615	0.640	0.657	0.675	0.634	0.616	0.617	7.84
88)	T	4-Ethyltoluene	1.910	2.284	2.796	2.930	3.001	3.078	2.921	2.839	2.720	14.95
89)	T	2-Chlorotoluene	1.893	1.933	2.112	2.134	2.163	2.149	2.091	1.989	2.058	5.08
90)	T	1,3,5-Trimethylbenzene	1.527	1.985	2.360	2.427	2.489	2.511	2.399	2.292	2.249	14.89
91)	T	1,2,3-Trichloropropane	0.488	0.546	0.572	0.573	0.579	0.599	0.544	0.533	0.554	6.21
92)	T	trans-1,4-Dichloro-2-b...	0.051	0.121	0.155	0.171	0.187	0.206	0.201	0.197	*L	0.9977
93)	T	4-Chlorotoluene	1.608	1.972	2.132	2.159	2.206	2.246	2.140	2.059	2.065	9.84

Initial Calibration Summary
Form 6

Client	**: Haley & Aldrich, Inc.**	**Lab Number**	**: L1634840**
Project Name	**: RACER/EWING**	**Project Number**	**: 70613-814**
Instrument ID	**: VOA110**	**Ical Ref**	**: ICAL12930**
Calibration dates	**: 09/29/16 11:59 09/29/16 16:15**		

Calibration Files
L1 =V10160929A03.D L2 =V10160929A13.D L3 =V10160929A05.D L4 =V10160929A06.D L5 =V10160929A07.D
L6 =V10160929A08.D L7 =V10160929A09.D L8 =V10160929A10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
94)	T	tert-Butylbenzene	1.242	1.436	1.853	1.940	1.999	2.075	2.004	1.949	*L	0.9992
97)	T	1,2,4-Trimethylbenzene	1.374	1.923	2.342	2.426	2.486	2.540	2.445	2.351	*L	0.9990
98)	T	sec-Butylbenzene	1.778	2.232	2.888	3.028	3.101	3.165	3.030	2.899	*L	0.9987
99)	T	p-Isopropyltoluene	1.429	1.769	2.325	2.477	2.544	2.635	2.535	2.459	*L	0.9991
100)	T	1,3-Dichlorobenzene	1.065	1.284	1.320	1.334	1.371	1.406	1.357	1.342	1.310	8.03
101)	T	1,4-Dichlorobenzene	1.254	1.362	1.343	1.337	1.375	1.416	1.336	1.339	1.345	3.41
102)	T	p-Diethylbenzene	0.850	1.040	1.424	1.517	1.586	1.627	1.563	1.528	*L	0.9991
103)	T	n-Butylbenzene	1.565	1.837	2.433	2.482	2.541	2.594	2.412	2.309	*L	0.9978
104)	T	1,2-Dichlorobenzene	1.041	1.170	1.204	1.228	1.266	1.298	1.243	1.241	1.211	6.49
105)	T	1,2,4,5-Tetramethylben...	1.142	1.631	2.220	2.372	2.519	2.624	2.512	2.480	*L	0.9990
106)	T	1,2-Dibromo-3-chloropr...	0.015	0.051	0.061	0.074	0.083	0.096	0.096	0.100	*L	0.9923
107)	T	1,3,5-Trichlorobenzene	0.880	0.970	1.048	1.076	1.121	1.172	1.111	1.135	1.064	9.07
108)	T	Hexachlorobutadiene	0.381	0.349	0.423	0.448	0.472	0.490	0.483	0.487	0.441	12.00
109)	T	1,2,4-Trichlorobenzene	0.629	0.816	0.854	0.893	0.947	0.993	0.943	0.984	0.882	13.53
110)	T	Naphthalene	0.926	1.270	1.602	1.747	1.878	1.991	1.859	1.929	*L	0.9985
111)	T	1,2,3-Trichlorobenzene	0.633	0.751	0.805	0.833	0.868	0.910	0.866	0.906	0.821	11.29

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1634840	
Project Name	: RACER/EWING	Project Number	: 70613-814	
Instrument ID	: VOA110	Calibration Date	: 10/28/16 06:48	
Lab File ID	: V10161028A01	Init. Calib. Date(s)	: 09/29/16	09/29/16
Sample No	: WG946843-2	Init. Calib. Times	: 11:59	16:15
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	114	0
Dichlorodifluoromethane	20	12.971	-	35.1*	20	80	0
Chloromethane	0.246	0.204	-	17.1	20	96	0
Vinyl chloride	0.223	0.205	-	8.1	20	106	0
Bromomethane	0.128	0.121	-	5.5	20	119	0
Chloroethane	0.112	0.117	-	-4.5	20	120	0
Trichlorofluoromethane	0.315	0.328	-	-4.1	20	115	0
Ethyl ether	0.15	0.148	-	1.3	20	113	0
1,1-Dichloroethene	0.204	0.209	-	-2.5	20	121	0
Carbon disulfide	20	16.843	-	15.8	20	111	0
Freon-113	20	19.406	-	3	20	120	0
Acrolein	20	23.81	-	-19	20	158	0
Methylene chloride	0.25	0.255	-	-2	20	119	0
Acetone	20	24.979	-	-24.9*	20	146	0
trans-1,2-Dichloroethene	0.231	0.243	-	-5.2	20	123	0
Methyl acetate	20	20.402	-	-2	20	127	0
Methyl tert-butyl ether	0.716	0.766	-	-7	20	131	0
tert-Butyl alcohol	100	107.804	-	-7.8	20	161	0
Diisopropyl ether	0.764	0.813	-	-6.4	20	125	0
1,1-Dichloroethane	0.431	0.458	-	-6.3	20	122	0
Halothane	20	19.979	-	0.1	20	126	0
Acrylonitrile	0.062	0.063	-	-1.6	20	126	0
Ethyl tert-butyl ether	0.727	0.786	-	-8.1	20	131	0
Vinyl acetate	20	19.876	-	0.6	20	131	0
cis-1,2-Dichloroethene	0.251	0.265	-	-5.6	20	121	0
2,2-Dichloropropane	20	20.834	-	-4.2	20	146	0
Bromochloromethane	0.108	0.121	-	-12	20	126	0
Cyclohexane	20	20.571	-	-2.9	20	128	0
Chloroform	0.466	0.484	-	-3.9	20	120	0
Ethyl acetate	20	21.014	-	-5.1	20	141	0
Carbon tetrachloride	20	19.407	-	3	20	136	0
Tetrahydrofuran	20	20.573	-	-2.9	20	108	0
Dibromofluoromethane	0.265	0.274	-	-3.4	20	120	0
1,1,1-Trichloroethane	0.403	0.439	-	-8.9	20	130	0
2-Butanone	20	18.81	-	6	20	109	-.01
1,1-Dichloropropene	20	20.139	-	-0.7	20	125	0
Benzene	0.962	1.002	-	-4.2	20	120	0
tert-Amyl methyl ether	20	20.181	-	-0.9	20	136	0
1,2-Dichloroethane-d4	0.362	0.351	-	3	20	112	0
1,2-Dichloroethane	0.393	0.4	-	-1.8	20	116	0
Methyl cyclohexane	20	19.64	-	1.8	20	126	0
Trichloroethene	0.252	0.262	-	-4	20	121	0
Dibromomethane	0.146	0.153	-	-4.8	20	122	0
1,2-Dichloropropane	0.22	0.234	-	-6.4	20	123	0
2-Chloroethyl vinyl ether	20	17.458	-	12.7	20	128	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	Lab Number	: L1634840	
Project Name	: RACER/EWING	Project Number	: 70613-814	
Instrument ID	: VOA110	Calibration Date	: 10/28/16 06:48	
Lab File ID	: V10161028A01	Init. Calib. Date(s)	: 09/29/16	09/29/16
Sample No	: WG946843-2	Init. Calib. Times	: 11:59	16:15
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Bromodichloromethane	20	18.84	-	5.8	20	127	0
1,4-Dioxane	1000	1000.569	-	-0.1	20	131	0
cis-1,3-Dichloropropene	20	19.415	-	2.9	20	135	0
Chlorobenzene-d5	1	1	-	0	20	118	0
Toluene-d8	1.344	1.362	-	-1.3	20	117	0
Toluene	0.818	0.87	-	-6.4	20	125	0
4-Methyl-2-pentanone	20	18.702	-	6.5	20	145	0
Tetrachloroethene	0.339	0.359	-	-5.9	20	126	0
trans-1,3-Dichloropropene	20	19.312	-	3.4	20	139	0
Ethyl methacrylate	20	17.602	-	12	20	133	0
1,1,2-Trichloroethane	0.227	0.244	-	-7.5	20	122	0
Chlorodibromomethane	20	18.679	-	6.6	20	133	0
1,3-Dichloropropane	0.485	0.512	-	-5.6	20	121	0
1,2-Dibromoethane	20	20.232	-	-1.2	20	126	0
2-Hexanone	20	18.995	-	5	20	132	0
Chlorobenzene	0.864	0.924	-	-6.9	20	125	0
Ethylbenzene	1.505	1.582	-	-5.1	20	122	0
1,1,1,2-Tetrachloroethane	20	20.129	-	-0.6	20	130	0
p/m Xylene	40	41.401	-	-3.5	20	126	0
o Xylene	40	40.615	-	-1.5	20	124	0
Styrene	40	38.55	-	3.6	20	121	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	117	0
Bromoform	20	16.955	-	15.2	20	137	0
Isopropylbenzene	20	20.497	-	-2.5	20	125	0
4-Bromofluorobenzene	0.996	1.023	-	-2.7	20	120	0
Bromobenzene	0.682	0.713	-	-4.5	20	123	0
n-Propylbenzene	3.238	3.518	-	-8.6	20	122	0
1,4-Dichlorobutane	0.815	0.871	-	-6.9	20	121	0
1,1,2,2-Tetrachloroethane	0.617	0.649	-	-5.2	20	123	0
4-Ethyltoluene	2.72	2.996	-	-10.1	20	125	0
2-Chlorotoluene	2.058	2.187	-	-6.3	20	121	0
1,3,5-Trimethylbenzene	2.249	2.503	-	-11.3	20	124	0
1,2,3-Trichloropropane	0.554	0.604	-	-9	20	123	0
trans-1,4-Dichloro-2-buten	20	18.612	-	6.9	20	130	0
4-Chlorotoluene	2.065	2.206	-	-6.8	20	121	0
tert-Butylbenzene	20	20.714	-	-3.6	20	126	0
1,2,4-Trimethylbenzene	20	20.923	-	-4.6	20	124	0
sec-Butylbenzene	20	20.9	-	-4.5	20	124	0
p-Isopropyltoluene	20	20.647	-	-3.2	20	127	0
1,3-Dichlorobenzene	1.31	1.388	-	-6	20	123	0
1,4-Dichlorobenzene	1.345	1.385	-	-3	20	120	0
p-Diethylbenzene	20	20.436	-	-2.2	20	126	0
n-Butylbenzene	20	21.462	-	-7.3	20	122	0
1,2-Dichlorobenzene	1.211	1.279	-	-5.6	20	124	0
1,2,4,5-Tetramethylbenzene	20	19.236	-	3.8	20	122	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634840	
Project Name	: RACER/EWING	**Project Number**	: 70613-814	
Instrument ID	: VOA110	**Calibration Date**	: 10/28/16 06:48	
Lab File ID	: V10161028A01	**Init. Calib. Date(s)**	: 09/29/16	09/29/16
Sample No	: WG946843-2	**Init. Calib. Times**	: 11:59	16:15
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dibromo-3-chloropropan	20	17.688	-	11.6	20	149	0
1,3,5-Trichlorobenzene	1.064	1.083	-	-1.8	20	120	0
Hexachlorobutadiene	0.441	0.418	-	5.2	20	115	0
1,2,4-Trichlorobenzene	0.882	0.883	-	-0.1	20	120	0
Naphthalene	20	19.298	-	3.5	20	128	0
1,2,3-Trichlorobenzene	0.821	0.833	-	-1.5	20	121	0

*** Value outside of QC limits.**

Surrogate Summary

Form 2
Surrogate Recovery
VOLATILES

Client: Haley & Aldrich, Inc.
Project Name: RACER/EWING

Lab Number: L1634840
Project Number: 70613-814
Matrix:

CLIENT ID (LAB SAMPLE NO.)	SMC1 TOL	SMC2 BFB	SMC3 DCA	SMC4 DBFM	TOT OUT
WG946843-4LCSD	100	105	93	101	0
WG946843-3LCS	101	103	97	104	0
WG946843-5BLANK	100	107	98	92	0
SB-C8-EX1A-1027-1430 (L1634840-07)	99	105	107	104	0
SB-C8-EX1B-1027-1440 (L1634840-08)	98	103	110	106	0
SB-C8-EX1C-1027-1518 (L1634840-06)	98	104	107	103	0
SB-F10-EX1A-1027-1635 (L1634840-02)	100	105	101	100	0
SB-F10-EX1B-1027-1605 (L1634840-03)	98	106	104	101	0
SB-F10-EX1C-1027-1540 (L1634840-05)	98	106	105	101	0
SB-F10-EX1C-1027-1545 (L1634840-04)	102	106	102	101	0
SB-F10-EX1D-1027-1610 (L1634840-01)	100	107	102	100	0

	QC LIMITS
TOL = TOLUENE-D8	(70-130)
BFB = 4-BROMOFLUOROBENZENE	(70-130)
DCA = 1,2-DICHLOROETHANE-D4	(70-130)
DBFM = DIBROMOFLUOROMETHANE)	(70-130)

* Values outside of QC limits

Batch QC Summary

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634840
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Matrix	: SOIL		
LCS Sample ID	: WG946843-3	**Analysis Date :** 10/28/16 06:48	**File ID** : V10161028A01
LCSD Sample ID	: WG946843-4	**Analysis Date :** 10/28/16 07:14	**File ID** : V10161028A02

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,2-Dibromo-3-chloropropane	0.02	0.018	88	0.02	0.017	84	5	40-160	30
1,4-Dioxane	1	1.0	100	1	0.96	96	4	40-160	30
1,2-Dibromoethane	0.02	0.020	101	0.02	0.019	97	4	70-130	30
Methylene chloride	0.02	0.020	102	0.02	0.020	99	3	70-130	30
1,1-Dichloroethane	0.02	0.021	106	0.02	0.020	102	4	70-130	30
Chloroform	0.02	0.021	104	0.02	0.020	101	3	70-130	30
Carbon tetrachloride	0.02	0.019	97	0.02	0.019	94	3	70-130	30
1,2-Dichloropropane	0.02	0.021	107	0.02	0.021	104	3	70-130	30
Dibromochloromethane	0.02	0.019	93	0.02	0.018	90	3	70-130	30
1,1,2-Trichloroethane	0.02	0.022	108	0.02	0.021	103	5	70-130	30
2-Chloroethylvinyl ether	0.02	0.017	87	0.02	0.018	88	1	40-160	30
Tetrachloroethene	0.02	0.021	106	0.02	0.021	104	2	70-130	30
Chlorobenzene	0.02	0.021	107	0.02	0.021	104	3	70-130	30
Trichlorofluoromethane	0.02	0.021	104	0.02	0.020	99	5	40-160	30
1,2-Dichloroethane	0.02	0.020	102	0.02	0.020	99	3	70-130	30
1,1,1-Trichloroethane	0.02	0.022	109	0.02	0.021	107	2	70-130	30
Bromodichloromethane	0.02	0.019	94	0.02	0.018	91	3	70-130	30
trans-1,3-Dichloropropene	0.02	0.019	97	0.02	0.019	94	3	70-130	30
cis-1,3-Dichloropropene	0.02	0.019	97	0.02	0.019	95	2	40-160	30
1,1-Dichloropropene	0.02	0.020	101	0.02	0.020	100	1	70-130	30
Bromoform	0.02	0.017	85	0.02	0.017	83	2	40-160	30
1,1,2,2-Tetrachloroethane	0.02	0.021	105	0.02	0.020	102	3	40-160	30
Benzene	0.02	0.021	104	0.02	0.021	103	1	70-130	30
Toluene	0.02	0.021	106	0.02	0.020	102	4	70-130	30
Ethylbenzene	0.02	0.021	105	0.02	0.021	105	0	70-130	30
Chloromethane	0.02	0.017	83	0.02	0.016	81	2	40-160	30
Bromomethane	0.02	0.019	95	0.02	0.019	94	1	40-160	30
Vinyl chloride	0.02	0.018	92	0.02	0.017	85	8	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634840
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Matrix	: SOIL		
LCS Sample ID	: WG946843-3	**Analysis Date :** 10/28/16 06:48	**File ID** : V10161028A01
LCSD Sample ID	: WG946843-4	**Analysis Date :** 10/28/16 07:14	**File ID** : V10161028A02

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
Chloroethane	0.02	0.021	104	0.02	0.021	103	1	40-160	30
1,1-Dichloroethene	0.02	0.021	103	0.02	0.020	98	5	70-130	30
trans-1,2-Dichloroethene	0.02	0.021	106	0.02	0.020	101	5	70-130	30
Trichloroethene	0.02	0.021	104	0.02	0.021	104	0	70-130	30
1,2-Dichlorobenzene	0.02	0.021	106	0.02	0.021	105	1	70-130	30
1,3-Dichlorobenzene	0.02	0.021	106	0.02	0.021	107	1	70-130	30
1,4-Dichlorobenzene	0.02	0.021	103	0.02	0.021	104	1	70-130	30
Methyl tert butyl ether	0.02	0.021	107	0.02	0.020	102	5	70-130	30
p/m-Xylene	0.04	0.041	104	0.04	0.041	103	1	70-130	30
o-Xylene	0.04	0.041	102	0.04	0.040	100	2	70-130	30
cis-1,2-Dichloroethene	0.02	0.021	105	0.02	0.021	104	1	70-130	30
Dibromomethane	0.02	0.021	104	0.02	0.020	100	4	70-130	30
1,4-Dichlorobutane	0.02	0.021	107	0.02	0.021	107	0	70-130	30
1,2,3-Trichloropropane	0.02	0.022	109	0.02	0.021	107	2	70-130	30
Styrene	0.04	0.039	96	0.04	0.038	94	2	40-160	30
Dichlorodifluoromethane	0.02	0.013	65	0.02	0.013	63	3	40-160	30
Acetone	0.02	0.025	125	0.02	0.022	112	11	40-160	30
Carbon disulfide	0.02	0.017	84	0.02	0.018	89	6	40-160	30
2-Butanone	0.02	0.019	94	0.02	0.018	87	8	40-160	30
Vinyl acetate	0.02	0.020	99	0.02	0.019	94	5	70-130	30
4-Methyl-2-pentanone	0.02	0.019	94	0.02	0.017	86	9	40-160	30
2-Hexanone	0.02	0.019	95	0.02	0.018	88	8	40-160	30
Ethyl methacrylate	0.02	0.018	88	0.02	0.017	83	6	70-130	30
Acrolein	0.02	0.024	119	0.02	0.019	94	23	40-160	30
Acrylonitrile	0.02	0.020	102	0.02	0.019	96	6	70-130	30
Bromochloromethane	0.02	0.022	112	0.02	0.022	109	3	70-130	30
Tetrahydrofuran	0.02	0.021	103	0.02	0.019	96	7	70-130	30
2,2-Dichloropropane	0.02	0.021	104	0.02	0.020	102	2	40-160	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634840
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Matrix	: SOIL		
LCS Sample ID	: WG946843-3	**Analysis Date :** 10/28/16 06:48	**File ID** : V10161028A01
LCSD Sample ID	: WG946843-4	**Analysis Date :** 10/28/16 07:14	**File ID** : V10161028A02

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,3-Dichloropropane	0.02	0.021	106	0.02	0.020	102	4	70-130	30
1,1,1,2-Tetrachloroethane	0.02	0.020	101	0.02	0.020	100	1	70-130	30
Bromobenzene	0.02	0.021	104	0.02	0.021	104	0	70-130	30
n-Butylbenzene	0.02	0.022	107	0.02	0.021	106	1	70-130	30
sec-Butylbenzene	0.02	0.021	104	0.02	0.021	106	2	70-130	30
tert-Butylbenzene	0.02	0.021	104	0.02	0.021	104	0	70-130	30
o-Chlorotoluene	0.02	0.021	106	0.02	0.021	107	1	70-130	30
p-Chlorotoluene	0.02	0.021	107	0.02	0.022	108	1	70-130	30
Hexachlorobutadiene	0.02	0.019	95	0.02	0.019	94	1	70-130	30
Isopropylbenzene	0.02	0.020	102	0.02	0.021	104	2	70-130	30
p-Isopropyltoluene	0.02	0.021	103	0.02	0.021	104	1	70-130	30
Naphthalene	0.02	0.019	96	0.02	0.018	92	4	40-160	30
n-Propylbenzene	0.02	0.022	109	0.02	0.022	108	1	70-130	30
1,2,3-Trichlorobenzene	0.02	0.020	101	0.02	0.020	100	1	70-130	30
1,2,4-Trichlorobenzene	0.02	0.020	100	0.02	0.020	99	1	70-130	30
1,3,5-Trimethylbenzene	0.02	0.022	111	0.02	0.022	112	1	70-130	30
1,2,4-Trimethylbenzene	0.02	0.021	105	0.02	0.021	104	1	70-130	30
trans-1,4-Dichloro-2-butene	0.02	0.019	93	0.02	0.018	90	3	70-130	30
Ethyl ether	0.02	0.020	99	0.02	0.019	94	5	70-130	30
Methyl Acetate	0.02	0.020	102	0.02	0.018	92	10	70-130	30
Ethyl Acetate	0.02	0.021	105	0.02	0.019	95	10	70-130	30
Isopropyl Ether	0.02	0.021	106	0.02	0.021	104	2	70-130	30
Cyclohexane	0.02	0.021	103	0.02	0.020	98	5	70-130	30
tert-Butyl Alcohol	0.1	0.11	108	0.1	0.099	99	9	40-160	30
Ethyl-Tert-Butyl-Ether	0.02	0.022	108	0.02	0.021	103	5	70-130	30
Tertiary-Amyl Methyl Ether	0.02	0.020	101	0.02	0.019	96	5	70-130	30
Methyl cyclohexane	0.02	0.020	98	0.02	0.020	99	1	70-130	30
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.02	0.019	97	0.02	0.019	95	2	70-130	30

Laboratory Control Sample
Form 3

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634840
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Matrix	: SOIL		
LCS Sample ID	: WG946843-3	**Analysis Date** : 10/28/16 06:48	**File ID** : V10161028A01
LCSD Sample ID	: WG946843-4	**Analysis Date** : 10/28/16 07:14	**File ID** : V10161028A02

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/kg)	Found (mg/kg)	%R	True (mg/kg)	Found (mg/kg)	%R	RPD	Recovery Limits	RPD Limit
1,2,4,5-Tetramethylbenzene	0.02	0.019	96	0.02	0.019	95	1	70-130	30
1,4-Diethylbenzene	0.02	0.020	102	0.02	0.020	101	1	70-130	30
4-Ethyltoluene	0.02	0.022	110	0.02	0.022	111	1	70-130	30

Internal Standard Summary

Internal Standard Area and RT Summary
Form 8

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634840
Project Name	: RACER/EWING	**Project Number**	: 70613-814
Instrument ID	: VOA110	**Analysis Date**	: 10/28/16 06:48
Sample No	: WG946843-2	**Lab File ID**	: V10161028A01

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG946843-2	258215	6.20	188774	9.76	99934	12.42
Upper Limit	516430	6.70	377548	10.26	199868	12.92
Lower Limit	129108	5.70	94387	9.26	49967	11.92
Sample ID						
WG946843-3 LCS	258215	6.20	188774	9.76	99934	12.42
WG946843-4 LCSD	246621	6.21	180800	9.76	93929	12.42
WG946843-5 BLANK	224500	6.20	162063	9.76	77981	12.43
SB-F10-EX1D-1027-1610	228820	6.21	167339	9.76	80478	12.42
SB-F10-EX1A-1027-1635	220014	6.21	160945	9.76	78836	12.42
SB-F10-EX1B-1027-1605	219519	6.21	161762	9.76	76079	12.43
SB-F10-EX1C-1027-1545	213212	6.21	153413	9.76	74039	12.42
SB-F10-EX1C-1027-1540	206859	6.21	152790	9.76	70300	12.42
SB-C8-EX1C-1027-1518	212284	6.21	153040	9.76	73935	12.43
SB-C8-EX1A-1027-1430	206106	6.21	151379	9.76	72375	12.43
SB-C8-EX1B-1027-1440	203779	6.21	151104	9.76	71831	12.43

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Chromatograms

Sample Raw Data

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\161028A\
Data File : V10161028A06.D
Acq On : 28 Oct 2016 8:55 am
Operator : VOA110:MV
Sample : l1634840-01,31,5.7,5,,y
Misc : WG946843,ICAL12930
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 28 10:36:05 2016
Quant Method : I:\VOLATILES\VOA110\2016\161028A\V110_160929_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Sep 29 18:24:09 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA110\2016\161028A\V10161028A01.D
Sub List : 8260-TCE - PCE Break Down

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.206	96	228820	20.000	ug/L	0.00
Standard Area 1 = 258215			Recovery = 88.62%			
59) Chlorobenzene-d5	9.756	117	167339	20.000	ug/L	0.00
Standard Area 1 = 188774			Recovery = 88.65%			
79) 1,4-Dichlorobenzene-d4	12.424	152	80478	20.000	ug/L	0.00
Standard Area 1 = 99934			Recovery = 80.53%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.394	113	60576	19.999	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 99.99%			
43) 1,2-Dichloroethane-d4	5.923	65	84413	20.394	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 101.97%			
60) Toluene-d8	7.905	98	225354	20.043	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 100.21%			
83) 4-Bromofluorobenzene	11.224	95	86078	21.482	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 107.41%			
Target Compounds						Qvalue
48) Trichloroethene	6.385	95	40523	14.076	ug/L	90

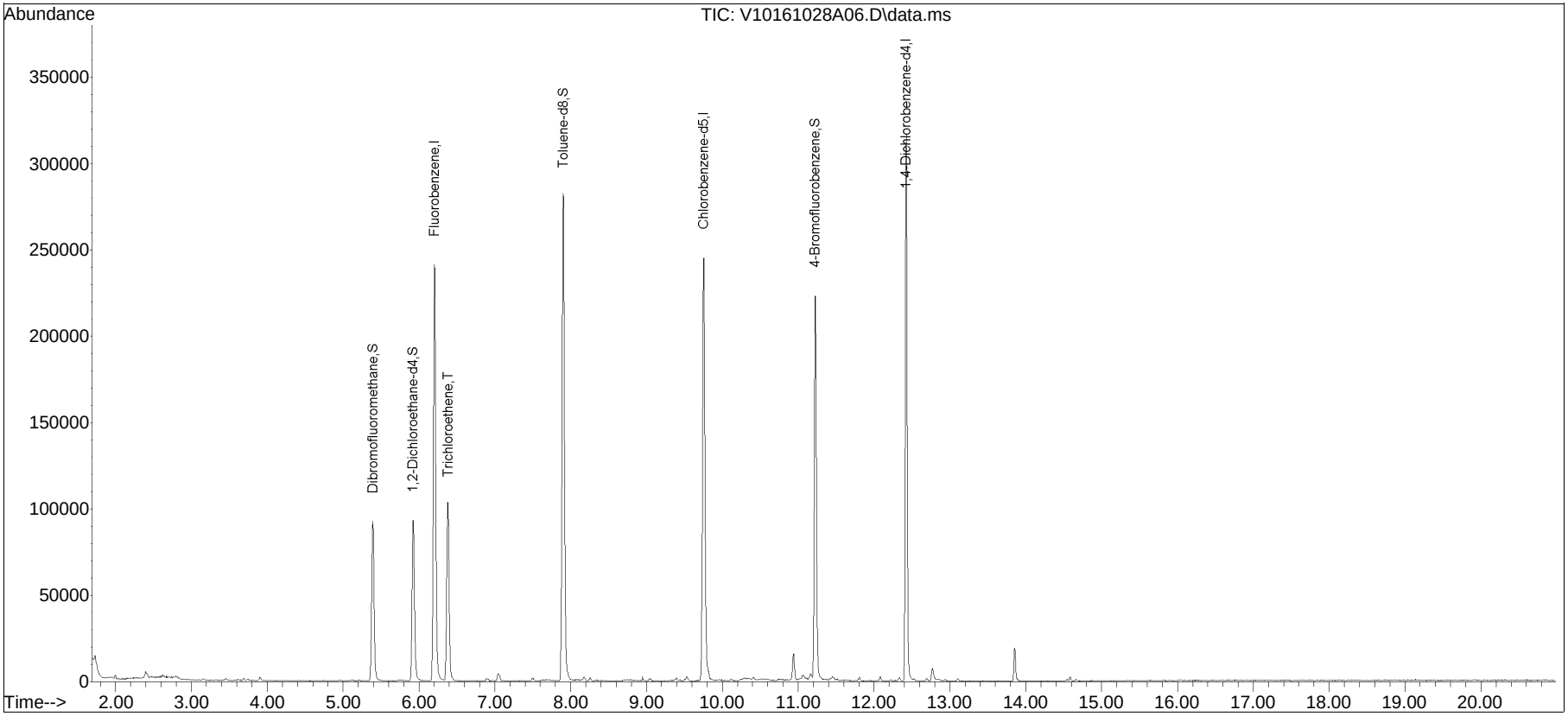
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

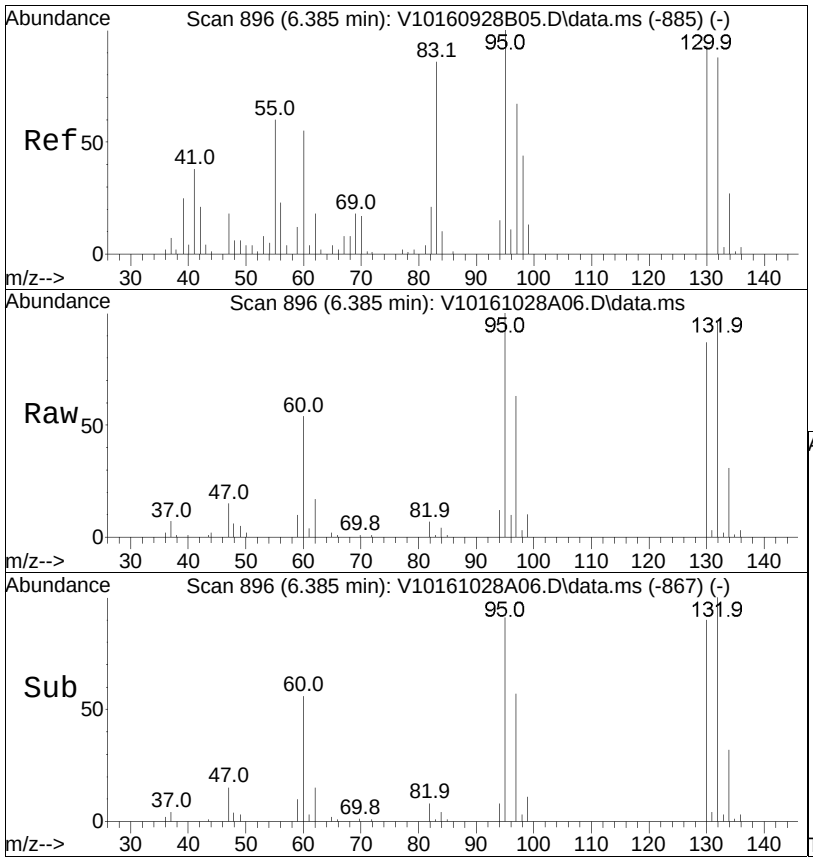
Data Path : I:\VOLATILES\VOA110\2016\161028A\
Data File : V10161028A06.D
Acq On : 28 Oct 2016 8:55 am
Operator : VOA110:MV
Sample : l1634840-01,31,5.7,5,,y
Misc : WG946843,ICAL12930
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 28 10:36:05 2016
Quant Method : I:\VOLATILES\VOA110\2016\161028A\V110_160929_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Sep 29 18:24:09 2016
Response via : Initial Calibration

Sub List : 8260-TCE - PCE Break Down016\161028A\V10161028A01.D•



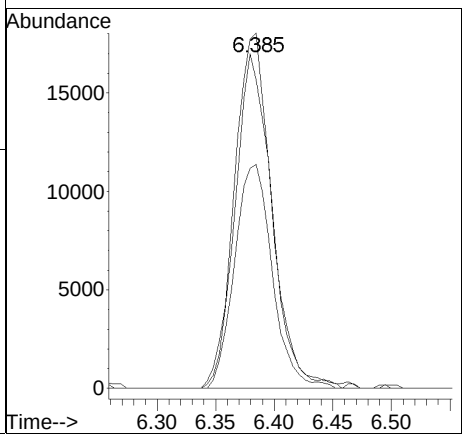
V110_160929_8260.m Fri Oct 28 11:37:55 2016 Page 2 : 2



#48
Trichloroethene
Concen: 14.08 ug/L
RT: 6.385 min Scan# 896
Delta R.T. -0.000 min
Lab File: V10161028A06.D
Acq: 28 Oct 2016 8:55 am

Tgt Ion: 95 Resp: 40523

Ion	Ratio	Lower	Upper
95	100		
97	63.1	54.4	81.6
130	91.4	82.8	124.2



Manual Integration Report

Data Path	: I:\VOLATILES\VOA110\2016\1	QMethod	: V110_160929_8260.m
Data File	: V10161028A06.D	Operator	: VOA110:MV
Date Inj'd	: 10/28/2016 8:55 am	Instrument	: VOA110
Sample	: l1634840-01,31,5.7,5,,y	Quant Date	: 10/28/2016 10:36 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\161028A\
Data File : V10161028A07.D
Acq On : 28 Oct 2016 9:21 am
Operator : VOA110:MV
Sample : l1634840-02,31,4.3,5,,y
Misc : WG946843,ICAL12930
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 28 10:36:11 2016
Quant Method : I:\VOLATILES\VOA110\2016\161028A\V110_160929_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Sep 29 18:24:09 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA110\2016\161028A\V10161028A01.D
Sub List : 8260-TCE - PCE Break Down

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.206	96	220014	20.000	ug/L	0.00
Standard Area 1 = 258215			Recovery = 85.21%			
59) Chlorobenzene-d5	9.756	117	160945	20.000	ug/L	0.00
Standard Area 1 = 188774			Recovery = 85.26%			
79) 1,4-Dichlorobenzene-d4	12.424	152	78836	20.000	ug/L	0.00
Standard Area 1 = 99934			Recovery = 78.89%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.394	113	58217	19.990	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 99.95%			
43) 1,2-Dichloroethane-d4	5.923	65	80051	20.115	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 100.57%			
60) Toluene-d8	7.900	98	215344	19.914	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 99.57%			
83) 4-Bromofluorobenzene	11.224	95	82669	21.061	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 105.31%			
Target Compounds						Qvalue
48) Trichloroethene	6.390	95	10900	3.938	ug/L	91

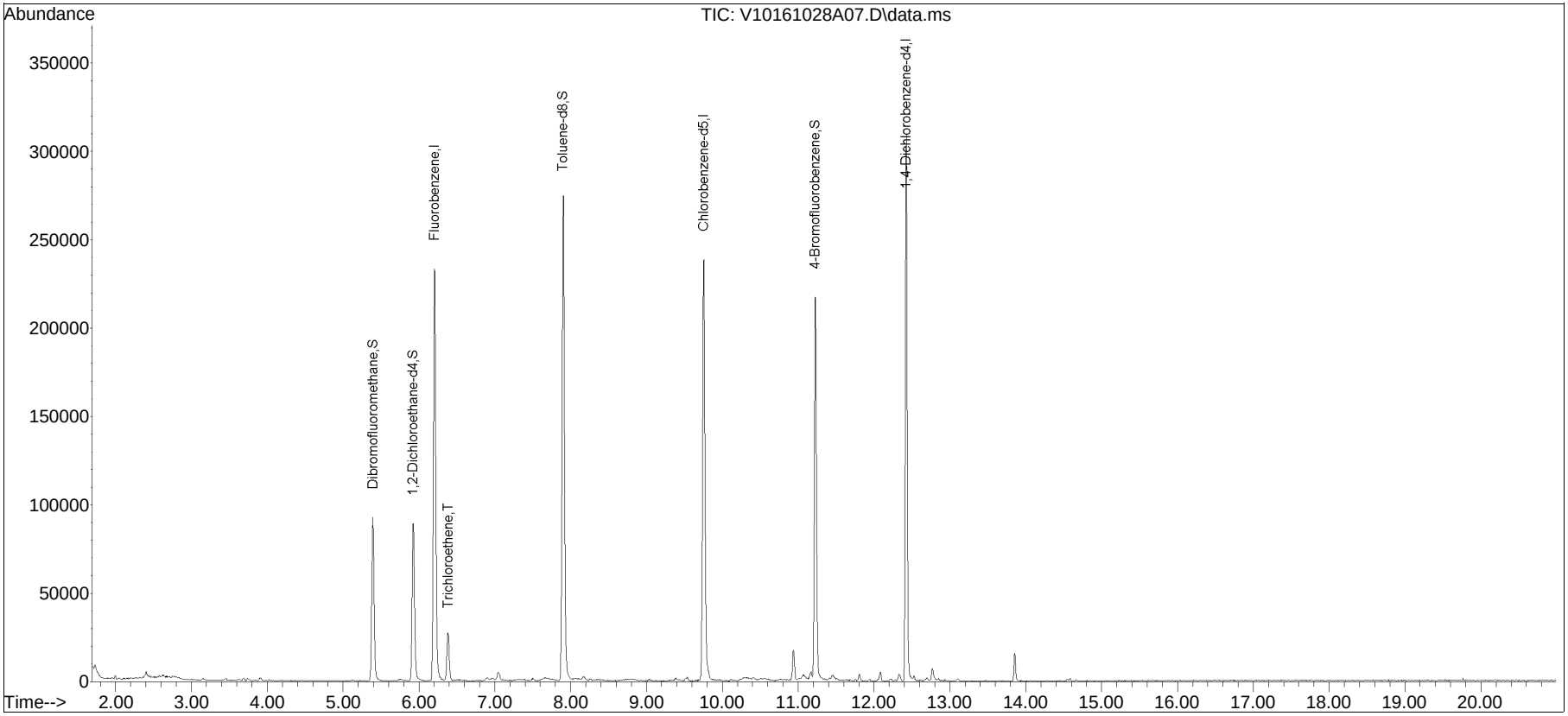
(#) = qualifier out of range (m) = manual integration (+) = signals summed

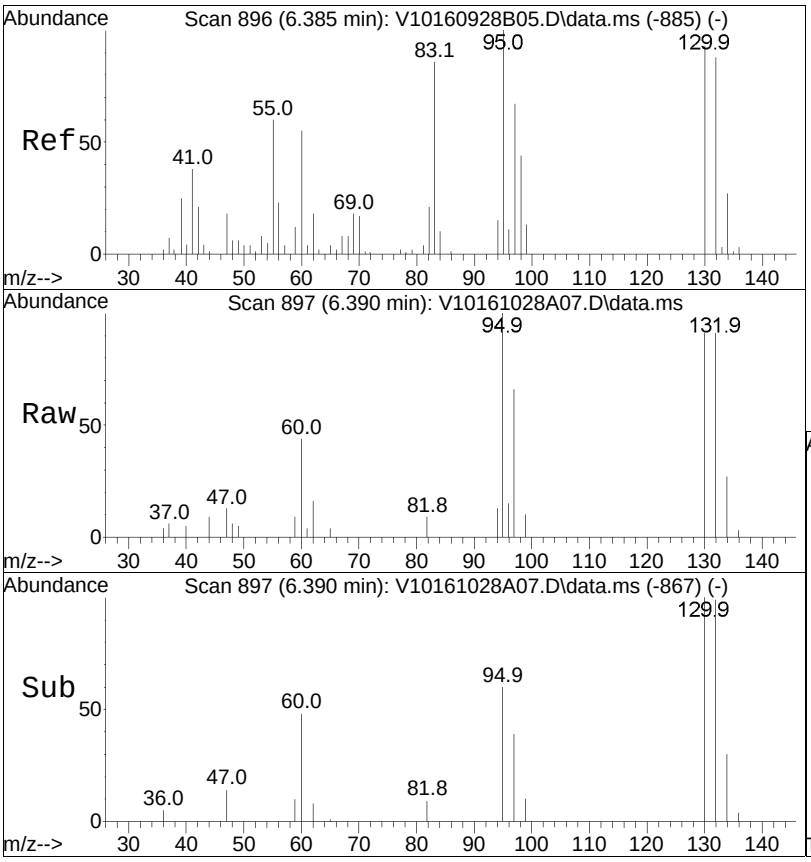
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\161028A\
Data File : V10161028A07.D
Acq On : 28 Oct 2016 9:21 am
Operator : VOA110:MV
Sample : l1634840-02,31,4.3,5,,y
Misc : WG946843,ICAL12930
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 28 10:36:11 2016
Quant Method : I:\VOLATILES\VOA110\2016\161028A\V110_160929_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Sep 29 18:24:09 2016
Response via : Initial Calibration

Sub List : 8260-TCE - PCE Break Down016\161028A\V10161028A01.D•

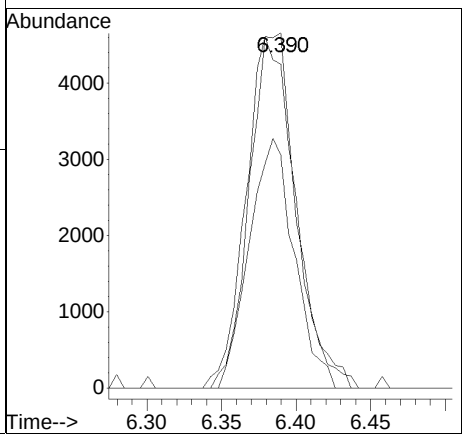




#48
Trichloroethene
Concen: 3.94 ug/L
RT: 6.390 min Scan# 897
Delta R.T. 0.005 min
Lab File: V10161028A07.D
Acq: 28 Oct 2016 9:21 am

Tgt Ion: 95 Resp: 10900

Ion	Ratio	Lower	Upper
95	100		
97	63.5	54.4	81.6
130	91.7	82.8	124.2



Manual Integration Report

Data Path	: I:\VOLATILES\VOA110\2016\1	QMethod	: V110_160929_8260.m
Data File	: V10161028A07.D	Operator	: VOA110:MV
Date Inj'd	: 10/28/2016 9:21 am	Instrument	: VOA110
Sample	: l1634840-02,31,4.3,5,,y	Quant Date	: 10/28/2016 10:36 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\161028A\
Data File : V10161028A08.D
Acq On : 28 Oct 2016 9:46 am
Operator : VOA110:MV
Sample : l1634840-03,31,5.8,5,,y
Misc : WG946843,ICAL12930
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 28 10:36:16 2016
Quant Method : I:\VOLATILES\VOA110\2016\161028A\V110_160929_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Sep 29 18:24:09 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA110\2016\161028A\V10161028A01.D
Sub List : 8260-TCE - PCE Break Down

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.206	96	219519	20.000	ug/L	0.00
Standard Area 1 = 258215			Recovery = 85.01%			
59) Chlorobenzene-d5	9.756	117	161762	20.000	ug/L	0.00
Standard Area 1 = 188774			Recovery = 85.69%			
79) 1,4-Dichlorobenzene-d4	12.425	152	76079	20.000	ug/L	0.00
Standard Area 1 = 99934			Recovery = 76.13%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.394	113	58464	20.120	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 100.60%			
43) 1,2-Dichloroethane-d4	5.923	65	82458	20.766	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 103.83%			
60) Toluene-d8	7.900	98	213879	19.678	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 98.39%			
83) 4-Bromofluorobenzene	11.224	95	80211	21.175	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 105.88%			
Target Compounds						Qvalue
48) Trichloroethene	6.379	95	208257	75.406	ug/L	92

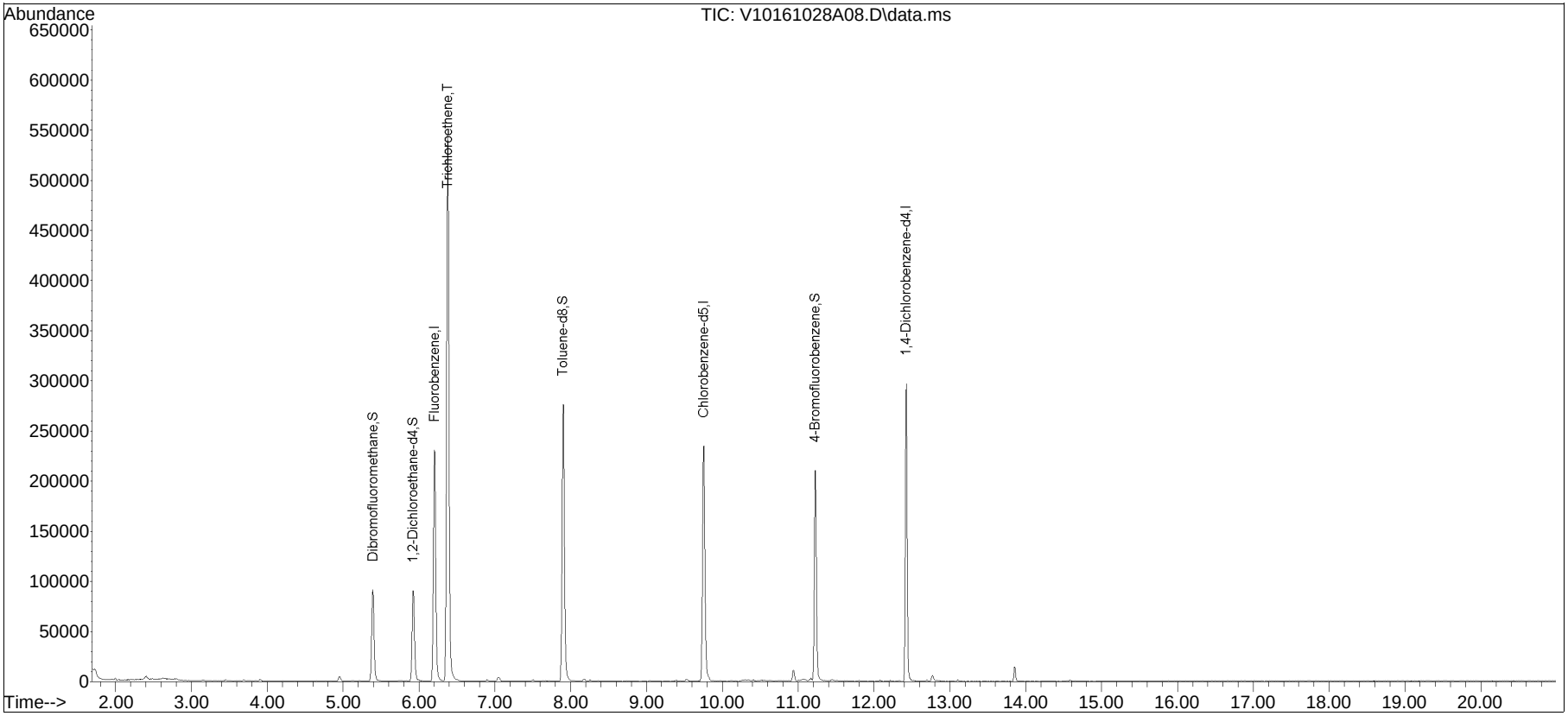
(#) = qualifier out of range (m) = manual integration (+) = signals summed

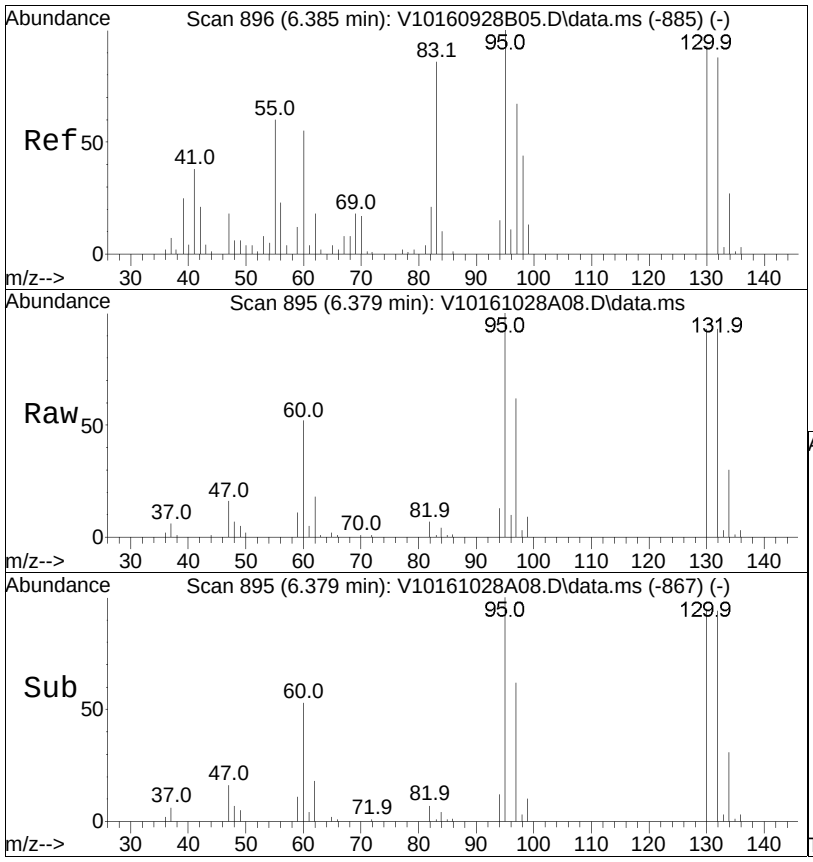
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\161028A\
Data File : V10161028A08.D
Acq On : 28 Oct 2016 9:46 am
Operator : VOA110:MV
Sample : l1634840-03,31,5.8,5,,y
Misc : WG946843,ICAL12930
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 28 10:36:16 2016
Quant Method : I:\VOLATILES\VOA110\2016\161028A\V110_160929_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Sep 29 18:24:09 2016
Response via : Initial Calibration

Sub List : 8260-TCE - PCE Break Down016\161028A\V10161028A01.D•

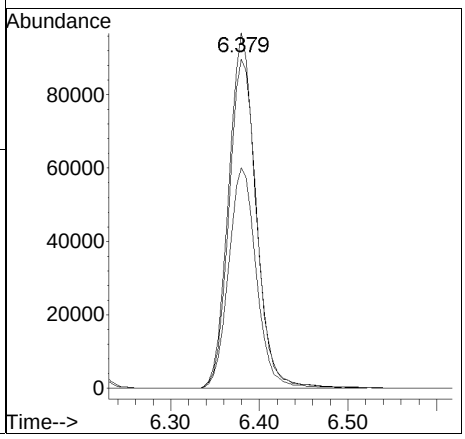




#48
Trichloroethene
Concen: 75.41 ug/L
RT: 6.379 min Scan# 895
Delta R.T. -0.006 min
Lab File: V10161028A08.D
Acq: 28 Oct 2016 9:46 am

Tgt Ion: 95 Resp: 208257

Ion	Ratio	Lower	Upper
95	100		
97	63.2	54.4	81.6
130	94.1	82.8	124.2



Manual Integration Report

Data Path	: I:\VOLATILES\VOA110\2016\1	QMethod	: V110_160929_8260.m
Data File	: V10161028A08.D	Operator	: VOA110:MV
Date Inj'd	: 10/28/2016 9:46 am	Instrument	: VOA110
Sample	: l1634840-03,31,5.8,5,,y	Quant Date	: 10/28/2016 10:36 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\161028A\
Data File : V10161028A09.D
Acq On : 28 Oct 2016 10:12 am
Operator : VOA110:MV
Sample : l1634840-04,31,4.9,5,,y
Misc : WG946843,ICAL12930
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 28 10:36:22 2016
Quant Method : I:\VOLATILES\VOA110\2016\161028A\V110_160929_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Sep 29 18:24:09 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA110\2016\161028A\V10161028A01.D
Sub List : 8260-TCE - PCE Break Down

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.206	96	213212	20.000	ug/L	0.00
Standard Area 1 = 258215			Recovery = 82.57%			
59) Chlorobenzene-d5	9.756	117	153413	20.000	ug/L	0.00
Standard Area 1 = 188774			Recovery = 81.27%			
79) 1,4-Dichlorobenzene-d4	12.424	152	74039	20.000	ug/L	0.00
Standard Area 1 = 99934			Recovery = 74.09%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.394	113	56909	20.164	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 100.82%			
43) 1,2-Dichloroethane-d4	5.923	65	78330	20.310	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 101.55%			
60) Toluene-d8	7.900	98	209594	20.334	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 101.67%			
83) 4-Bromofluorobenzene	11.224	95	77871	21.124	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 105.62%			
Target Compounds						Qvalue
48) Trichloroethene	0.000		0	N.D.		

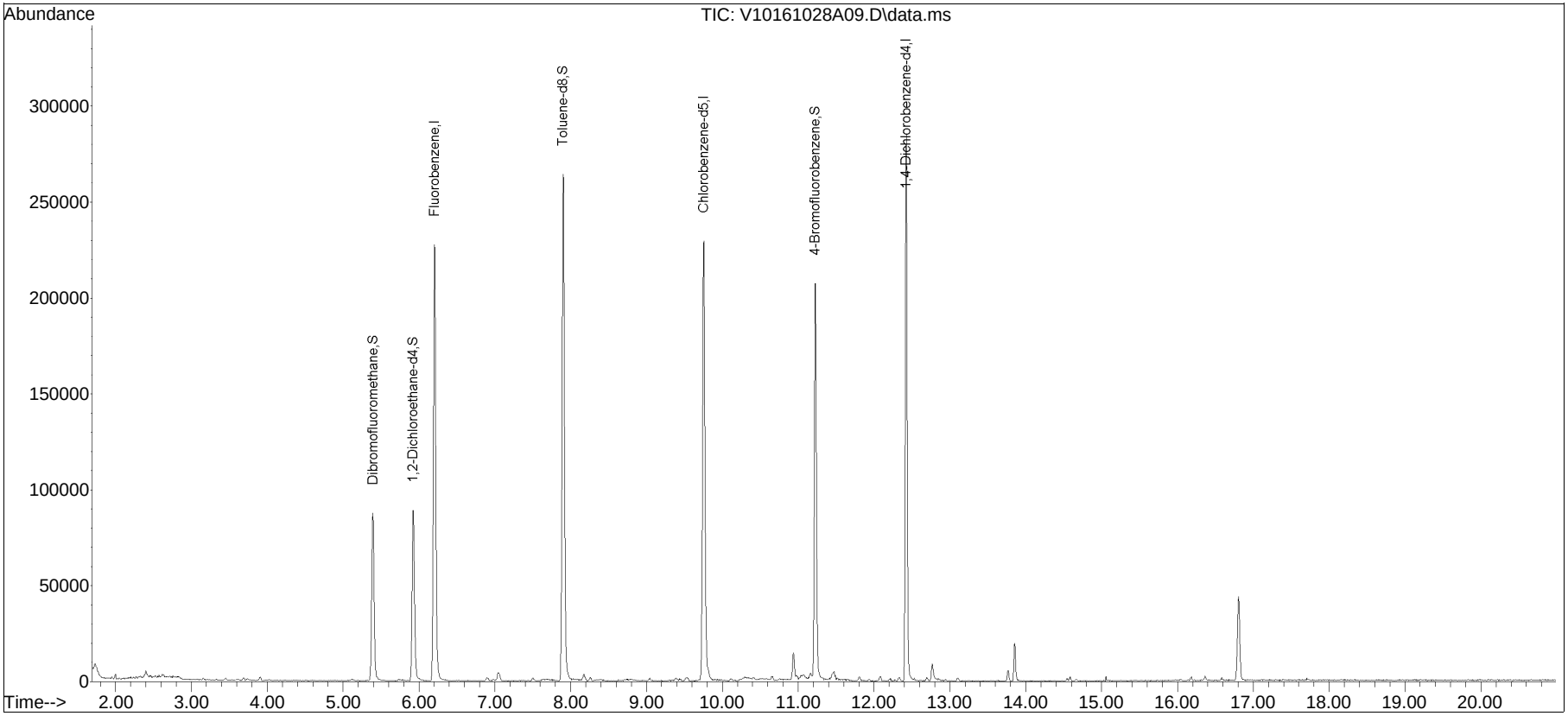
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\161028A\
Data File : V10161028A09.D
Acq On : 28 Oct 2016 10:12 am
Operator : VOA110:MV
Sample : l1634840-04,31,4.9,5,,y
Misc : WG946843,ICAL12930
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 28 10:36:22 2016
Quant Method : I:\VOLATILES\VOA110\2016\161028A\V110_160929_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Sep 29 18:24:09 2016
Response via : Initial Calibration

Sub List : 8260-TCE - PCE Break Down016\161028A\V10161028A01.D•



V110_160929_8260.m Fri Oct 28 11:38:27 2016 Page 2 : 2

Manual Integration Report

Data Path	: I:\VOLATILES\VOA110\2016\1	QMethod	: V110_160929_8260.m
Data File	: V10161028A09.D	Operator	: VOA110:MV
Date Inj'd	: 10/28/2016 10:12 am	Instrument	: VOA110
Sample	: l1634840-04,31,4.9,5,,y	Quant Date	: 10/28/2016 10:36 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\161028A\
Data File : V10161028A10.D
Acq On : 28 Oct 2016 10:37 am
Operator : VOA110:MV
Sample : l1634840-05,31,5.8,5,,y
Misc : WG946843,ICAL12930
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 28 11:31:25 2016
Quant Method : I:\VOLATILES\VOA110\2016\161028A\V110_160929_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Sep 29 18:24:09 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA110\2016\161028A\V10161028A01.D
Sub List : 8260-TCE - PCE Break Down

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.206	96	206859	20.000	ug/L	0.00
Standard Area 1 = 258215			Recovery = 80.11%			
59) Chlorobenzene-d5	9.756	117	152790	20.000	ug/L	0.00
Standard Area 1 = 188774			Recovery = 80.94%			
79) 1,4-Dichlorobenzene-d4	12.424	152	70300	20.000	ug/L	0.00
Standard Area 1 = 99934			Recovery = 70.35%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.388	113	55554	20.288	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 101.44%			
43) 1,2-Dichloroethane-d4	5.923	65	78204	20.900	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 104.50%			
60) Toluene-d8	7.900	98	201316	19.610	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 98.05%			
83) 4-Bromofluorobenzene	11.224	95	74059	21.158	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 105.79%			
Target Compounds						Qvalue
48) Trichloroethene	0.000		0	N.D.		

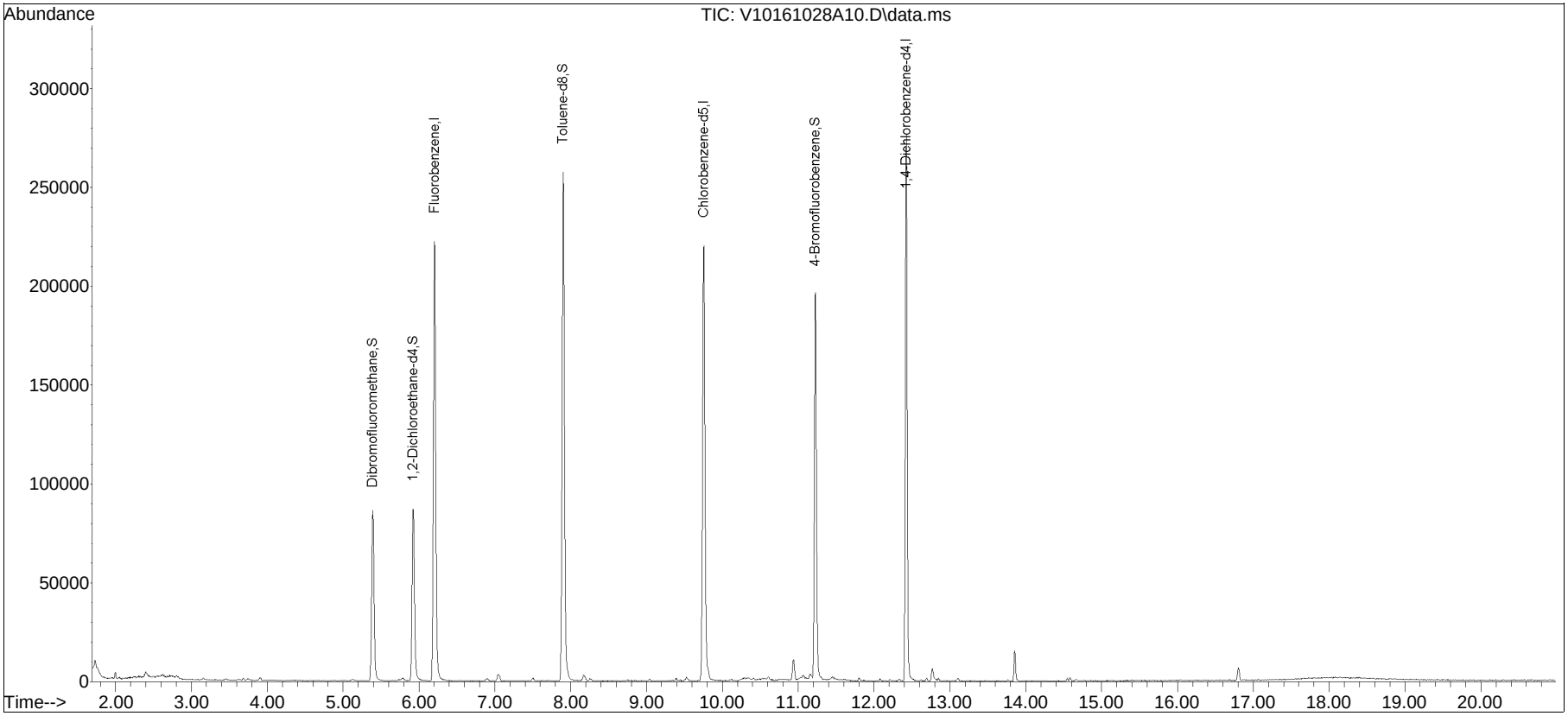
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\161028A\
Data File : V10161028A10.D
Acq On : 28 Oct 2016 10:37 am
Operator : VOA110:MV
Sample : l1634840-05,31,5.8,5,,y
Misc : WG946843,ICAL12930
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 28 11:31:25 2016
Quant Method : I:\VOLATILES\VOA110\2016\161028A\V110_160929_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Sep 29 18:24:09 2016
Response via : Initial Calibration

Sub List : 8260-TCE - PCE Break Down016\161028A\V10161028A01.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA110\2016\1Q	Method	: V110_160929_8260.m
Data File	: V10161028A10.D	Operator	: VOA110:MV
Date Inj'd	: 10/28/2016 10:37 am	Instrument	: VOA110
Sample	: l1634840-05,31,5.8,5,,y	Quant Date	: 10/28/2016 11:31 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\161028A\
Data File : V10161028A11.D
Acq On : 28 Oct 2016 11:03 am
Operator : VOA110:MV
Sample : l1634840-06,31,5.7,5,,y
Misc : WG946843,ICAL12930
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 28 11:31:33 2016
Quant Method : I:\VOLATILES\VOA110\2016\161028A\V110_160929_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Sep 29 18:24:09 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA110\2016\161028A\V10161028A01.D
Sub List : 8260-TCE - PCE Break Down

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.206	96	212284	20.000	ug/L	0.00
Standard Area 1 = 258215			Recovery = 82.21%			
59) Chlorobenzene-d5	9.756	117	153040	20.000	ug/L	0.00
Standard Area 1 = 188774			Recovery = 81.07%			
79) 1,4-Dichlorobenzene-d4	12.425	152	73935	20.000	ug/L	0.00
Standard Area 1 = 99934			Recovery = 73.98%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.394	113	57691	20.530	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 102.65%			
43) 1,2-Dichloroethane-d4	5.928	65	82443	21.470	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 107.35%			
60) Toluene-d8	7.900	98	200509	19.500	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 97.50%			
83) 4-Bromofluorobenzene	11.224	95	76240	20.711	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 103.55%			
Target Compounds						Qvalue
48) Trichloroethene	6.379	95	9070	3.396	ug/L	89

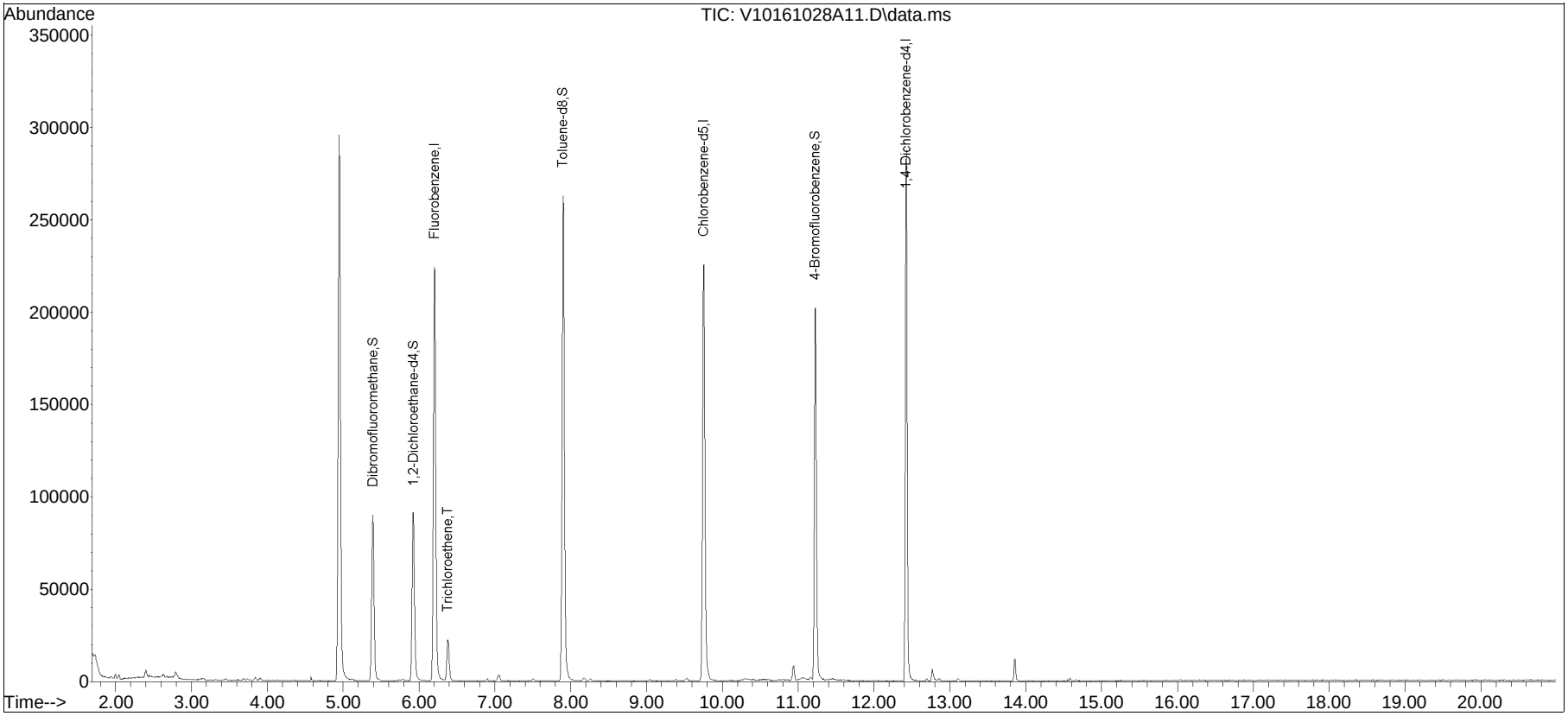
(#) = qualifier out of range (m) = manual integration (+) = signals summed

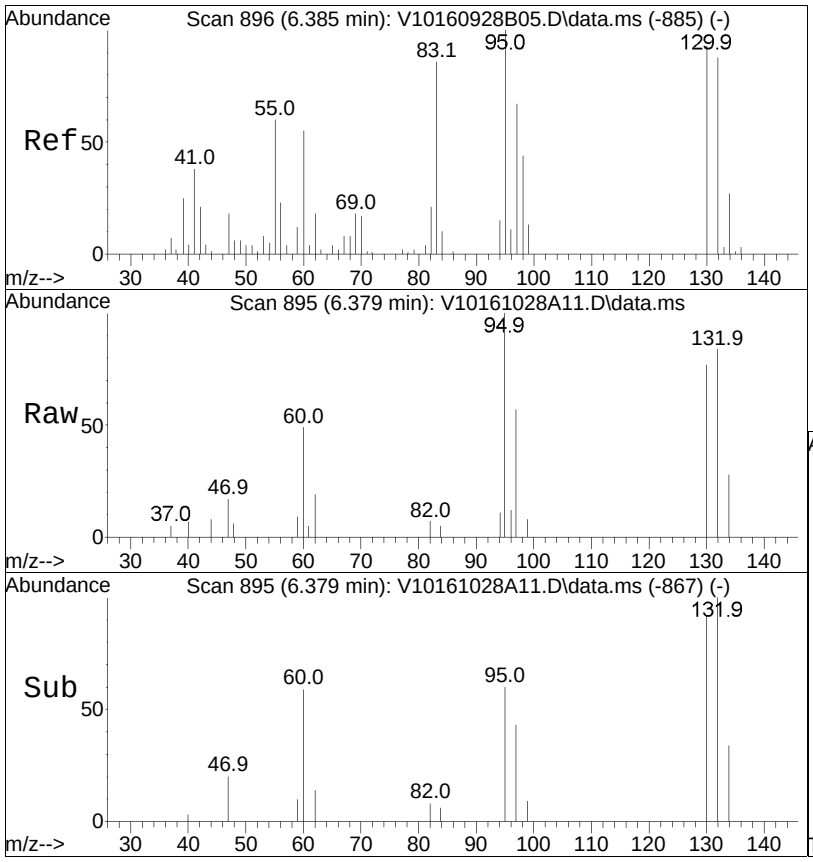
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\161028A\
Data File : V10161028A11.D
Acq On : 28 Oct 2016 11:03 am
Operator : VOA110:MV
Sample : l1634840-06,31,5.7,5,,y
Misc : WG946843,ICAL12930
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 28 11:31:33 2016
Quant Method : I:\VOLATILES\VOA110\2016\161028A\V110_160929_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Sep 29 18:24:09 2016
Response via : Initial Calibration

Sub List : 8260-TCE - PCE Break Down016\161028A\V10161028A01.D•

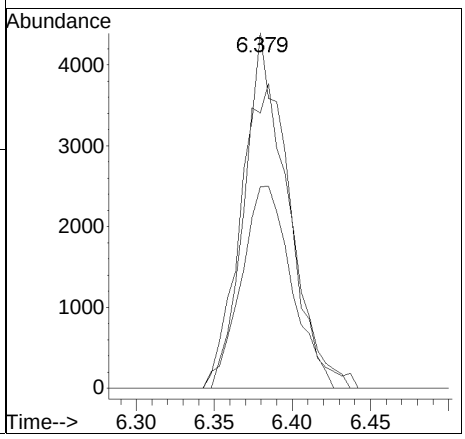




#48
Trichloroethene
Concen: 3.40 ug/L
RT: 6.379 min Scan# 895
Delta R.T. -0.006 min
Lab File: V10161028A11.D
Acq: 28 Oct 2016 11:03 am

Tgt Ion: 95 Resp: 9070

Ion	Ratio	Lower	Upper
95	100		
97	62.2	54.4	81.6
130	90.5	82.8	124.2



Manual Integration Report

Data Path	: I:\VOLATILES\VOA110\2016\1Q	Method	: V110_160929_8260.m
Data File	: V10161028A11.D	Operator	: VOA110:MV
Date Inj'd	: 10/28/2016 11:03 am	Instrument	: VOA110
Sample	: l1634840-06,31,5.7,5,,y	Quant Date	: 10/28/2016 11:31 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\161028A\
Data File : V10161028A12.D
Acq On : 28 Oct 2016 11:29
Operator : VOA110:
Sample : l1634840-07,31,6.1,5,,y
Misc : WG946843,ICAL12930
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 28 12:30:14 2016
Quant Method : I:\VOLATILES\VOA110\2016\161028A\V110_160929_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Sep 29 18:24:09 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA110\2016\161028A\V10161028A01.D
Sub List : 8260-TCE - PCE Break Down

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.206	96	206106	20.000 ug/L	0.00
Standard Area 1 = 258215			Recovery = 79.82%		
59) Chlorobenzene-d5	9.756	117	151379	20.000 ug/L	0.00
Standard Area 1 = 188774			Recovery = 80.19%		
79) 1,4-Dichlorobenzene-d4	12.425	152	72375	20.000 ug/L	0.00
Standard Area 1 = 99934			Recovery = 72.42%		
System Monitoring Compounds					
36) Dibromofluoromethane	5.394	113	56758	20.804 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 104.02%		
43) 1,2-Dichloroethane-d4	5.923	65	79575	21.344 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 106.72%		
60) Toluene-d8	7.900	98	202006	19.861 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 99.30%		
83) 4-Bromofluorobenzene	11.224	95	75537	20.962 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 104.81%		
Target Compounds					Qvalue
48) Trichloroethene	6.379	95	11557	4.457 ug/L	93

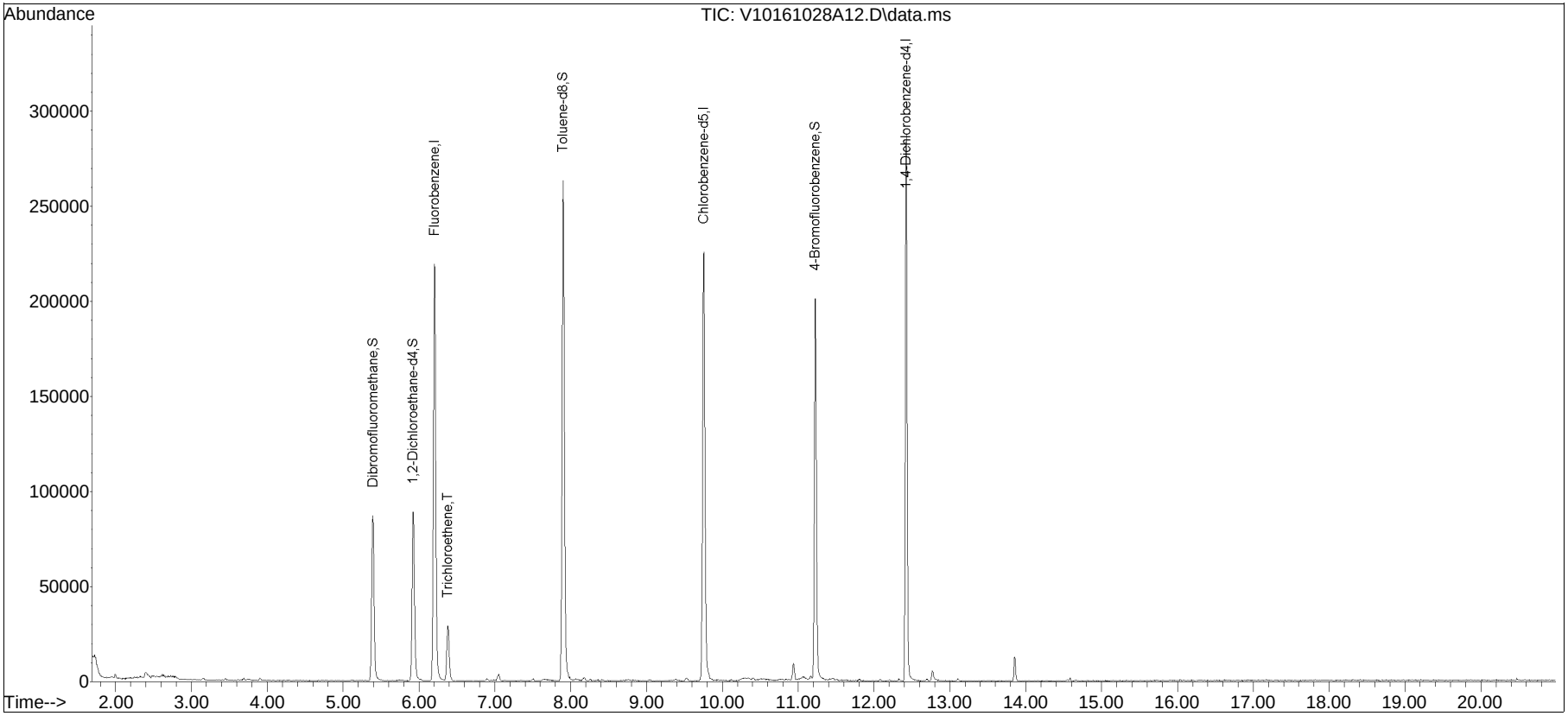
(#) = qualifier out of range (m) = manual integration (+) = signals summed

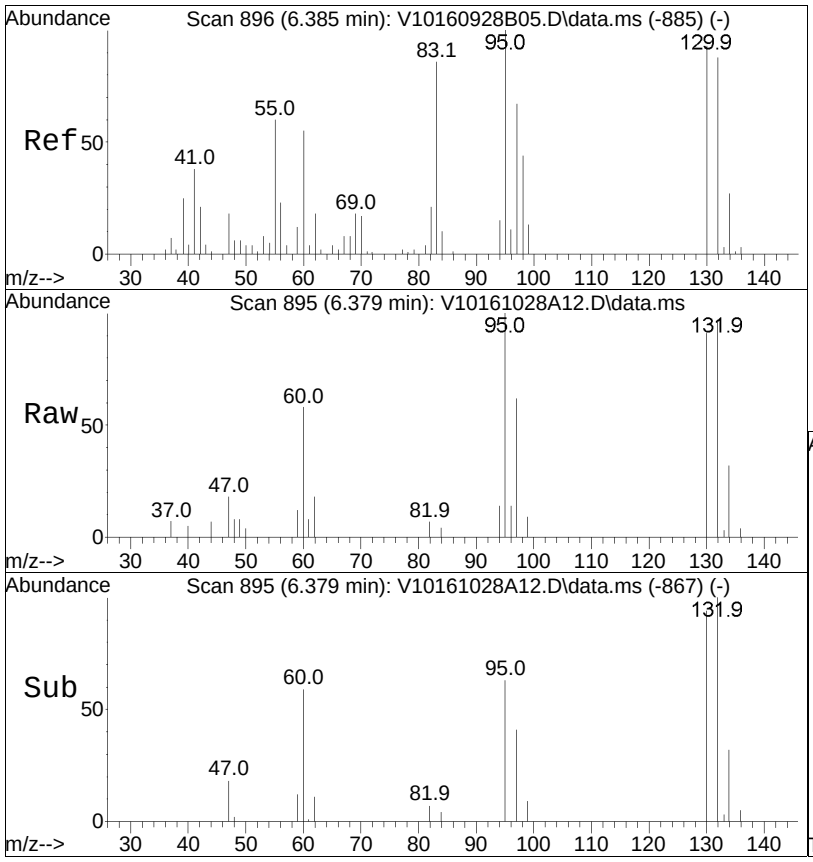
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\161028A\
Data File : V10161028A12.D
Acq On : 28 Oct 2016 11:29
Operator : VOA110:
Sample : l1634840-07,31,6.1,5,,y
Misc : WG946843,ICAL12930
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 28 12:30:14 2016
Quant Method : I:\VOLATILES\VOA110\2016\161028A\V110_160929_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Sep 29 18:24:09 2016
Response via : Initial Calibration

Sub List : 8260-TCE - PCE Break Down016\161028A\V10161028A01.D•

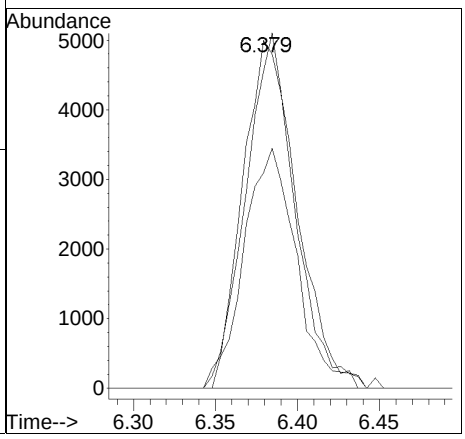




#48
Trichloroethene
Concen: 4.46 ug/L
RT: 6.379 min Scan# 895
Delta R.T. -0.006 min
Lab File: V10161028A12.D
Acq: 28 Oct 2016 11:29

Tgt Ion: 95 Resp: 11557

Ion	Ratio	Lower	Upper
95	100		
97	66.3	54.4	81.6
130	92.5	82.8	124.2



Manual Integration Report

Data Path	: I:\VOLATILES\VOA110\2016\1	QMethod	: V110_160929_8260.m
Data File	: V10161028A12.D	Operator	: VOA110:
Date Inj'd	: 10/28/2016 11:29	Instrument	: VOA110
Sample	: l1634840-07,31,6.1,5,,y	Quant Date	: 10/28/2016 12:30 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\161028A\
Data File : V10161028A13.D
Acq On : 28 Oct 2016 11:54
Operator : VOA110:
Sample : l1634840-08,31,5.6,5,,y
Misc : WG946843,ICAL12930
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 28 12:30:19 2016
Quant Method : I:\VOLATILES\VOA110\2016\161028A\V110_160929_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Sep 29 18:24:09 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA110\2016\161028A\V10161028A01.D
Sub List : 8260-TCE - PCE Break Down

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.206	96	203779	20.000	ug/L	0.00
Standard Area 1 = 258215			Recovery = 78.92%			
59) Chlorobenzene-d5	9.756	117	151104	20.000	ug/L	0.00
Standard Area 1 = 188774			Recovery = 80.04%			
79) 1,4-Dichlorobenzene-d4	12.425	152	71831	20.000	ug/L	0.00
Standard Area 1 = 99934			Recovery = 71.88%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.394	113	56993	21.129	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 105.65%			
43) 1,2-Dichloroethane-d4	5.923	65	80841	21.932	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 109.66%			
60) Toluene-d8	7.905	98	198190	19.521	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 97.61%			
83) 4-Bromofluorobenzene	11.229	95	73748	20.620	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 103.10%			
Target Compounds						Qvalue
48) Trichloroethene	6.379	95	3753	1.464	ug/L	86

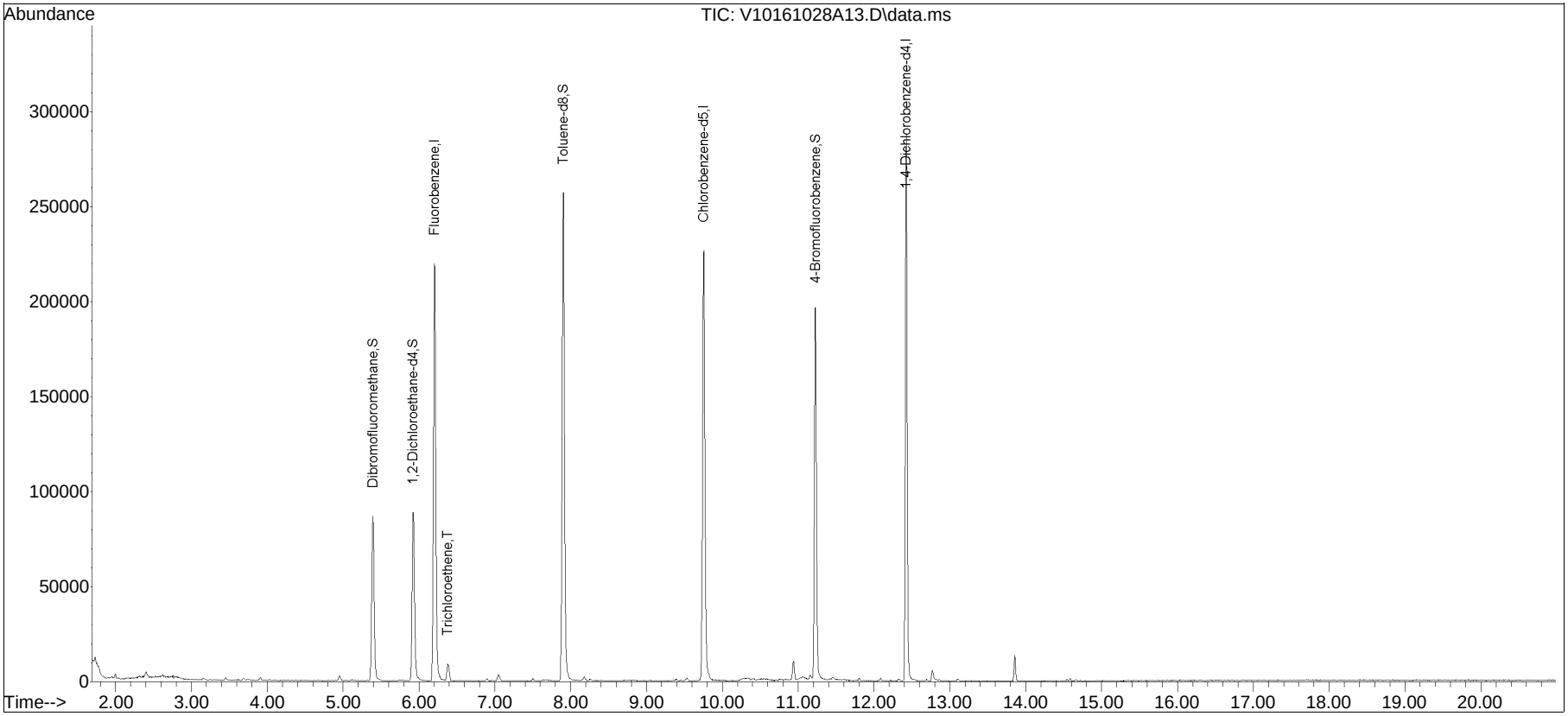
(#) = qualifier out of range (m) = manual integration (+) = signals summed

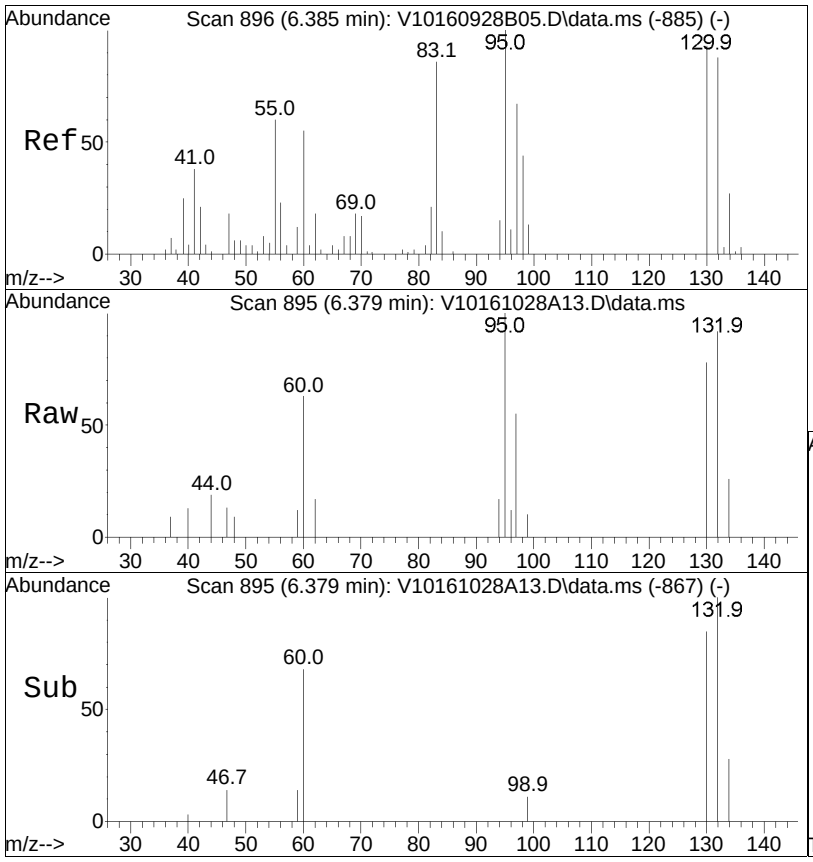
Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\161028A\
Data File : V10161028A13.D
Acq On : 28 Oct 2016 11:54
Operator : VOA110:
Sample : l1634840-08,31,5.6,5,,y
Misc : WG946843,ICAL12930
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 28 12:30:19 2016
Quant Method : I:\VOLATILES\VOA110\2016\161028A\V110_160929_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Sep 29 18:24:09 2016
Response via : Initial Calibration

Sub List : 8260-TCE - PCE Break Down016\161028A\V10161028A01.D•

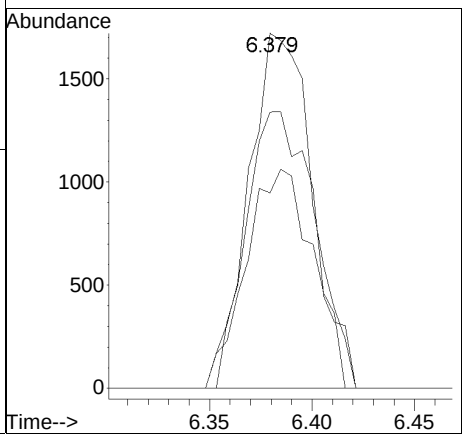




#48
Trichloroethene
Concen: 1.46 ug/L
RT: 6.379 min Scan# 895
Delta R.T. -0.006 min
Lab File: V10161028A13.D
Acq: 28 Oct 2016 11:54

Tgt Ion: 95 Resp: 3753

Ion	Ratio	Lower	Upper
95	100		
97	64.8	54.4	81.6
130	82.9	82.8	124.2



Manual Integration Report

Data Path	: I:\VOLATILES\VOA110\2016\1	QMethod	: V110_160929_8260.m
Data File	: V10161028A13.D	Operator	: VOA110:
Date Inj'd	: 10/28/2016 11:54	Instrument	: VOA110
Sample	: l1634840-08,31,5.6,5,,y	Quant Date	: 10/28/2016 12:30 pm

There are no manual integrations or false positives in this file.

Method Blank
Raw Data

Quantitation Report (QT/LSC Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\161028A\
Data File : V10161028A05.D
Acq On : 28 Oct 2016 8:30 am
Operator : VOA110:MV
Sample : WG946843-5,31,5,5
Misc : WG946843,ICAL12930
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 28 09:05:06 2016
Quant Method : I:\VOLATILES\VOA110\2016\161028A\V110_160929_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Sep 29 18:24:09 2016
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA110\2016\161028A\V10161028A01.D
Sub List : 8260-CurveSoil - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.201	96	224500	20.000	ug/L	0.00
Standard Area 1 = 258215			Recovery = 86.94%			
59) Chlorobenzene-d5	9.756	117	162063	20.000	ug/L	0.00
Standard Area 1 = 188774			Recovery = 85.85%			
79) 1,4-Dichlorobenzene-d4	12.425	152	77981	20.000	ug/L	0.00
Standard Area 1 = 99934			Recovery = 78.03%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.388	113	54441	18.320	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 91.60%			
43) 1,2-Dichloroethane-d4	5.918	65	79311	19.531	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 97.65%			
60) Toluene-d8	7.900	98	218099	20.029	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 100.15%			
83) 4-Bromofluorobenzene	11.224	95	83219	21.434	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 107.17%			
Target Compounds						Qvalue
48) Trichloroethene	6.264	95	196	N.D.		

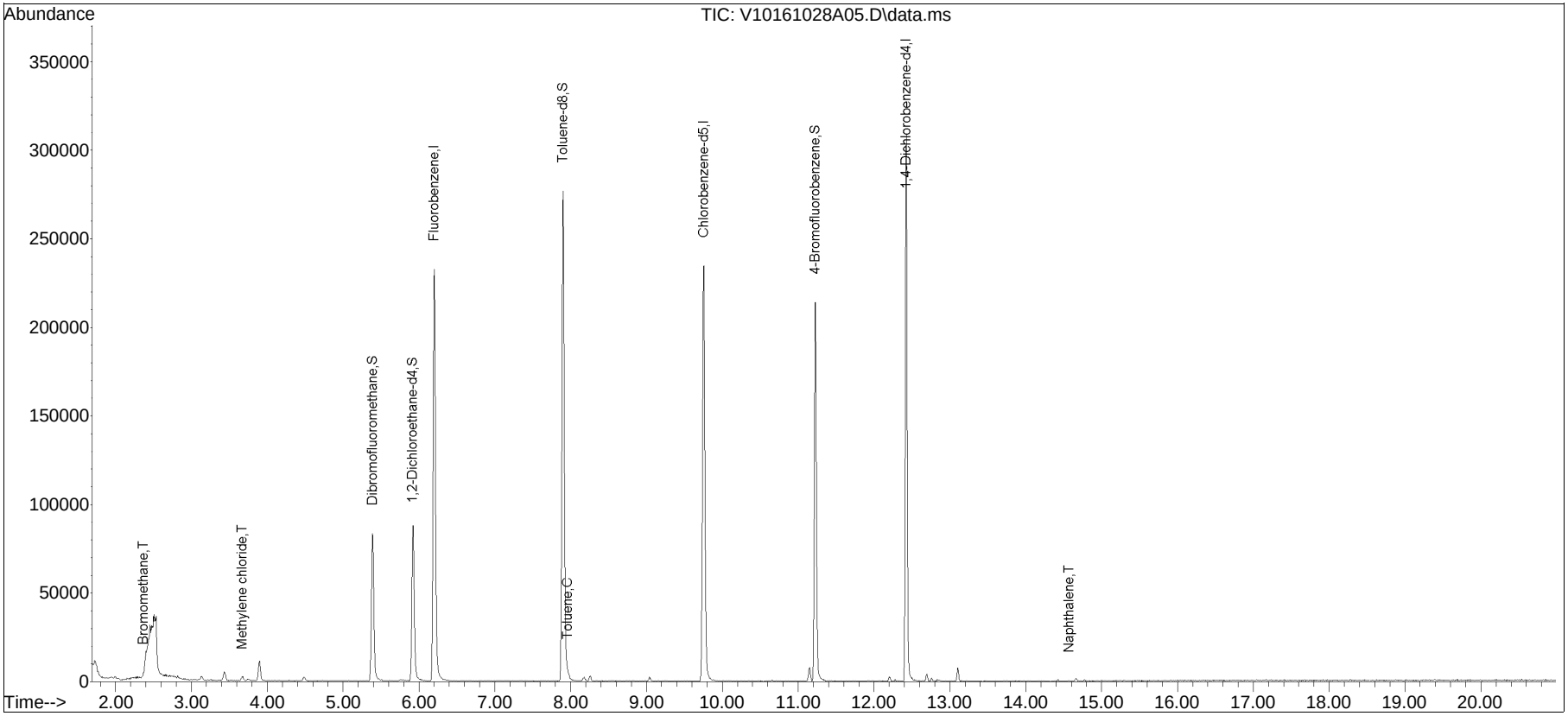
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : I:\VOLATILES\VOA110\2016\161028A\
Data File : V10161028A05.D
Acq On : 28 Oct 2016 8:30 am
Operator : VOA110:MV
Sample : WG946843-5,31,5,5
Misc : WG946843,ICAL12930
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 28 09:05:06 2016
Quant Method : I:\VOLATILES\VOA110\2016\161028A\V110_160929_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Sep 29 18:24:09 2016
Response via : Initial Calibration

Sub List : 8260-CurveSoil - Megamix plus Diox8A\V10161028A01.D•



V110_160929_8260.m Fri Oct 28 11:37:43 2016 Page 2 : 4

Manual Integration Report

Data Path	: I:\VOLATILES\VOA110\2016\1	QMethod	: V110_160929_8260.m
Data File	: V10161028A05.D	Operator	: VOA110:MV
Date Inj'd	: 10/28/2016 8:30 am	Instrument	: VOA110
Sample	: WG946843-5,31,5,5	Quant Date	: 10/28/2016 8:58 am

There are no manual integrations or false positives in this file.

Wet Chemistry

Total Solids / Percent Moisture Analysis

Results Summary

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634840
Project Name	: RACER/EWING	**Project Number**	: 70613
Lab ID	: L1634840-01	**Date Collected**	: 10/27/16 16:10
Client ID	: SB-F10-EX1D-1027-1610	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 03:17
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946656.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 81
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**80.6**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634840
Project Name	: RACER/EWING	**Project Number**	: 70613
Lab ID	: L1634840-02	**Date Collected**	: 10/27/16 16:35
Client ID	: SB-F10-EX1A-1027-1635	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 03:17
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946656.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 84
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	83.9	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634840
Project Name	: RACER/EWING	**Project Number**	: 70613
Lab ID	: L1634840-03	**Date Collected**	: 10/27/16 16:05
Client ID	: SB-F10-EX1B-1027-1605	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 03:17
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946656.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 77
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**77.1**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634840
Project Name	: RACER/EWING	**Project Number**	: 70613
Lab ID	: L1634840-04	**Date Collected**	: 10/27/16 15:45
Client ID	: SB-F10-EX1C-1027-1545	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 03:17
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946656.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 91
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**90.5**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634840
Project Name	: RACER/EWING	**Project Number**	: 70613
Lab ID	: L1634840-05	**Date Collected**	: 10/27/16 15:40
Client ID	: SB-F10-EX1C-1027-1540	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 03:17
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946656.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 90
Digestion Method	:	**Date Digested**	:

		%			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**89.7**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634840
Project Name	: RACER/EWING	**Project Number**	: 70613
Lab ID	: L1634840-06	**Date Collected**	: 10/27/16 15:18
Client ID	: SB-C8-EX1C-1027-1518	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 03:17
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946656.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 79
Digestion Method	:	**Date Digested**	:

CAS NO.	Parameter	% Results	RL	MDL	Qualifier
NONE	Solids, Total	78.5	0.100	NA	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634840
Project Name	: RACER/EWING	**Project Number**	: 70613
Lab ID	: L1634840-07	**Date Collected**	: 10/27/16 14:30
Client ID	: SB-C8-EX1A-1027-1430	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 03:17
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946656.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 80
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**80.3**	**0.100**	**NA**	

Form 1
WETCHEM

Client	: Haley & Aldrich, Inc.	**Lab Number**	: L1634840
Project Name	: RACER/EWING	**Project Number**	: 70613
Lab ID	: L1634840-08	**Date Collected**	: 10/27/16 14:40
Client ID	: SB-C8-EX1B-1027-1440	**Date Received**	: 10/27/16
Sample Location	: EWING	**Date Analyzed**	: 10/28/16 03:17
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 121,2540G	**Analyst**	: VB
Lab File ID	: WG946656.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: 80
Digestion Method	:	**Date Digested**	:

			%		
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total**	**80.0**	**0.100**	**NA**	

APPENDIX H

Synthetic Precipitation Leachate Procedure Calculations

NJDEP SPLP Spreadsheet, V3.1, November 2013

Case name/area of concern:	Former Delphi Interior and Lighting Systems Division
Case number:	E97070
Sampling date:	9/12-16/2016
Contaminant:	Arsenic (total)
CAS No:	7440-38-2
Water solubility (mg/L)	NA
Aqueous reporting limit (µg/L):	3.00E+00
Soil reporting limit (mg/kg):	1.00E+00
Health-based GWQC (µg/L)	2.00E-02
DAF (20, or site-specific if approved):	20
Leachate Criterion (µg/L):	3.00E+00 adjusted from 0.4
Henry's law constant (dimensionless):	0.00E+00

CALCULATE SITE SPECIFIC IGW STANDARD

Reset Spreadsheet

Print Results

Instructions

CLICK HERE if chemical is not on drop-down list, or to enter alternate GWQC

Print to file

Exit

NOTE:
USE ONE PAGE PER CONTAMINANT, do not leave empty rows between samples
Do not enter samples with soil concentrations at or below the reporting limit
When leachate concentration is non-detect, enter the aqueous reporting limit
Enter site-specific dilution-attenuation factor (DAF) if desired

Data entry cells (do not skip rows)
Optional data entry
Calculated or locked cells
Indicates that Alternative Remediation Standard needs to be recalculated

Sample ID	Soil sample weight (kg)	Leachate Volume (L)	Total Soil Concentration (mg/kg)	SPLP Leachate Concentration (µg/L)	Final pH of Leachate (except VOCs)	Optional data				Kd (L/kg)	% Contaminant in Leachate	Field leachate concentration (µg/L)	Pass or fail?
						Sampling Depth (ft)	Soil Type	Organic Carbon (mg/kg)	Organic Carbon (%)				
B9-9	0.1	2	62	8.42	9.6	0 - 0.5				7343.4	0.27	8.44	FAIL
B9-2R	0.1	2	34	10.1	9.7	0 - 0.5				3346.3	0.59	10.16	FAIL
ISO6-103R	0.1	2	46	10.8	9.7	1 - 1.5				4239.3	0.47	10.85	FAIL
ISO7-103R	0.1	2	45	11.6	10.1	2.5 - 3				3859.3	0.52	11.66	FAIL
ISO6R	0.1	2	62	13	8	1 - 1.5				4749.2	0.42	13.05	FAIL
B9-2-100R	0.1	2	24	13.6	9.7	0 - 0.5				1744.7	1.13	13.75	FAIL
B9-2-103R	0.1	2	47	16.4	3.2	0 - 0.5				2845.9	0.70	16.51	FAIL
B9-16	0.1	2	69	17.6	9.2	0 - 0.5				3900.5	0.51	17.69	FAIL
B9-16-100	0.1	2	50	24.6	9.8	0 - 0.5				2012.5	0.98	24.84	FAIL
B9-2-101R	0.1	2	68	54.6	9.7	0 - 0.5				1225.4	1.61	55.48	FAIL

SPLP RESULTS for

OPTION 1a: All adjusted leachate concentrations are below the leachate criterion
OPTION 1a NOT VALID

OPTION 1b: Simple inspection of tabulated results to find highest acceptable standard
THE LOWEST SOIL CONCENTRATION FAILED, USE OPTIONS 2 OR 3

OPTION 2: Remediation standard using site-specific Kd value
Kd ratio = 5.99, AVERAGING Kds OK
Kd USED FOR CALCULATING STANDARD = 3526.65 L/kg
result before rounding = 10.5804 mg/kg
REMEDIATION STANDARD = 19 mg/kg (controlled by natural background for arsenic)

OPTION 3: Remediation standard using linear regression
Number of points = 10
Soil concentration midrange = 46.5
Number of points above midrange = 6
Enough points above midrange? YES
R-Square high enough? NO
Leachate criterion within range of leachate concentrations? NO
OPTION 3 NOT VALID

NJDEP SPLP Spreadsheet, V3.1, November 2013

CALCULATE SITE SPECIFIC IGW STANDARD | Reset Spreadsheet | Print Results | Instructions | Print to file | Exit

Case name/area of concern:	Former Delphi Interior and Lighting Systems Division
Case number:	E97070
Sampling date:	2012
Contaminant:	Chromium
CAS No:	7440-47-3 (enter NA if inorganic)
Water solubility (mg/L)	NA
Aqueous reporting limit (µg/L):	2.80E+00
Soil reporting limit (mg/kg):	1.07E+01 (if unavailable, enter a value below lowest concentration measured)
Health-based GWQC (µg/L)	7.00E+01
DAF (20, or site-specific if approved):	**20**
Leachate Criterion (µg/L):	1.40E+03
Henry's law constant (dimensionless):	(enter 0 if inorganic)

NOTE:
USE ONE PAGE PER CONTAMINANT, do not leave empty rows between samples
Do not enter samples with soil concentrations at or below the reporting limit.
When leachate concentration is non-detect, enter the aqueous reporting limit
Enter site-specific dilution-attenuation factor (DAF) if desired

Data entry cells (do not skip rows)
Optional data entry
Calculated or locked cells
Indicates that Alternative Remediation Standard needs to be recalculated

Sample ID	Soil sample weight (kg)	Leachate Volume (L)	Total Soil Concentration (mg/kg)	SPLP Leachate Concentration (µg/L)	Final pH of Leachate (except VOCs)	Optional data				Kd (L/kg)	% Contaminant in Leachate	Field leachate concentration (µg/L)	Pass or fail?
						Sampling Depth (ft)	Soil Type	Organic Carbon (mg/kg)	Organic Carbon (%)				
SB-11-SO-200	0.1	2	12.9	2.8	7.2	0 - 0.5 (ft)				4587.1	0.43	2.80	PASS
PL05-200	0.1	2	15.1	2.8	10	0.5 - 1 (ft)				5372.9	0.37	2.80	PASS
PL05-201	0.1	2	15.1	2.8	10	0.5 - 1 (ft)				5372.9	0.37	2.80	PASS
SB-11-SO-200	0.1	2	19.4	2.8	7.2	3.5 - 4 (ft)				6908.6	0.29	2.80	PASS
B9-16-200	0.1	2	19.5	2.8	7.9	5 - 5.5 (ft)				6944.3	0.29	2.80	PASS
SB-11-SO-201	0.1	2	20.9	2.8	7.3	0 - 0.5 (ft)				7444.3	0.27	2.80	PASS
B6-201	0.1	2	23.3	2.8	10.6	9.5 - 10 (ft)				8301.4	0.24	2.80	PASS
GS08-200	0.1	2	24.5	2.8	10.6	11.5 - 12 (ft)				8730.0	0.23	2.80	PASS
PL05-200	0.1	2	26.8	2.8	7.5	2.5 - 3 (ft)				9551.4	0.21	2.80	PASS
PL05-201	0.1	2	28.9	2.8	6.3	2.5 - 3 (ft)				10301.4	0.19	2.80	PASS
SB-11-SO-201	0.1	2	29.5	2.8	6.2	3.5 - 4 (ft)				10515.7	0.19	2.80	PASS
TP9-2-202	0.1	2	108	2.8	8.1	2.5 - 3 (ft)				38551.4	0.05	2.80	PASS
B3-4-200	0.1	2	22.6	3.9	10.5	0.5 - 1 (ft)				5774.9	0.35	3.91	PASS
B3-4-200	0.1	2	27.4	4.7	10.8	9.5 - 10 (ft)				5809.8	0.34	4.72	PASS
TP9-3-203	0.1	2	1540	5.5	7.9	2.5 - 3 (ft)				279980.0	0.01	5.50	PASS
GS08-200	0.1	2	31.2	7	10.3	0.5 - 1 (ft)				4437.1	0.45	7.03	PASS
B9-16-200	0.1	2	10.7	7.1	8.5	0 - 0.5 (ft)				1487.0	1.33	7.19	PASS
TP9-3-203	0.1	2	24.3	17.1	7.8	9 - 9.5 (ft)				1401.1	1.41	17.34	PASS
TP9-2-202	0.1	2	20.8	19	8.1	9 - 9.5 (ft)				1074.7	1.83	19.35	PASS
B6-201	0.1	2	26.7	22.7	11.8	0.5 - 1 (ft)				1156.2	1.70	23.09	PASS
PL05-202	0.1	2	19	23.8	9.5	2.5 - 3 (ft)				778.3	2.51	24.41	PASS
PL05-202	0.1	2	51.4	35.5	9.5	0.5 - 1 (ft)				1427.9	1.38	35.99	PASS

SPLP RESULTS for

OPTION 1a: All adjusted leachate concentrations are below the leachate criterion

REMEDIATION STANDARD = 1540 mg/kg

OPTION 1b: Simple inspection of tabulated results to find highest acceptable standard
EVERYTHING PASSED, OPTION 1b NOT VALID

OPTION 2: Remediation standard using site-specific Kd value
Kd ratio = 359.72, USE MINIMUM Kd
Kd USED FOR CALCULATING STANDARD = 778.32 L/kg
result before rounding = 1089.8617 mg/kg

REMEDIATION STANDARD = 1100 mg/kg

OPTION 3: Remediation standard using linear regression

Number of points = 10
(points were eliminated because leachate concentrations were not above the aqueous reporting limit)
Soil concentration midrange = 775.35
Number of points above midrange = 1
Enough points above midrange? NO
R-Square high enough? NO
Leachate criterion within range of leachate concentrations? NO
OPTION 3 NOT VALID

NJDEP SPLP Spreadsheet, V3.1, November 2013

Case name/area of concern:	Former Delphi Interior and Lighting Systems Division
Case number:	E97070
Sampling date:	9/12-16/2016
Contaminant:	Nickel (total)
CAS No:	7440-02-0
Water solubility (mg/L)	NA
Aqueous reporting limit (µg/L):	4.00E+00
Soil reporting limit (mg/kg):	4.00E+00
Health-based GWQC (µg/L)	1.00E+02
DAF (20, or site-specific if approved):	20
Leachate Criterion (µg/L):	2.00E+03
Henry's law constant (dimensionless):	0.00E+00

CALCULATE SITE SPECIFIC IGW STANDARD

Reset Spreadsheet

Print Results

Instructions

CLICK HERE if chemical is not on drop-down list, or to enter alternate GWQC

Print to file

Exit

NOTE:

USE ONE PAGE PER CONTAMINANT, do not leave empty rows between samples
Do not enter samples with soil concentrations at or below the reporting limit
When leachate concentration is non-detect, enter the aqueous reporting limit
Enter site-specific dilution-attenuation factor (DAF) if desired

Data entry cells (do not skip rows)
Optional data entry
Calculated or locked cells
Indicates that Alternative Remediation Standard needs to be recalculated

Sample ID	Soil sample weight (kg)	Leachate Volume (L)	Total Soil Concentration (mg/kg)	SPLP Leachate Concentration (µg/L)	Final pH of Leachate (except VOCs)	Optional data				Kd (L/kg)	% Contaminant in Leachate	Field leachate concentration (µg/L)	Pass or fail?
						Sampling Depth (ft)	Soil Type	Organic Carbon (mg/kg)	Organic Carbon (%)				
SB-10-SO-5A	0.1	2	860	0.962	11					893950.9	0.00	0.96	PASS
B7-3R	0.1	2	630	1.05	9.8					599980.0	0.00	1.05	PASS
B7-3R	0.1	2	2300	4	9.76					574980.0	0.00	4.00	PASS
B8-8-1	0.1	2	220	5.77	9.82					38108.2	0.05	5.77	PASS
ISO5/ISO5-100R	0.1	2	720	12.1	9.15					59484.1	0.03	12.10	PASS
B8-4	0.1	2	4200	69.8	8.32					60151.9	0.03	69.82	PASS
PL07-107R	0.1	2	5300	70.3	7.21					75371.2	0.03	70.32	PASS
PL07-01R	0.1	2	930	103	9.08					9009.1	0.22	103.23	PASS
SB-10-SO-10	0.1	2	480	122	9.2					3914.4	0.51	122.62	PASS
SB-10-SO-10	0.1	2	5000	127	8.83					39350.1	0.05	127.06	PASS
SB-AOC010-2013-100	0.1	2	550	162	9.47					3375.1	0.59	162.95	PASS
TP9-3-305R	0.1	2	360	204	3.68					1744.7	1.13	206.32	PASS
PL07-01	0.1	2	1100	348	9.94					3140.9	0.63	350.20	PASS
SB-AOC8B-2013-105	0.1	2	3000	767	9.03					3891.3	0.51	770.91	PASS
268-2R	0.1	2	3000	1640	10.1					1809.3	1.09	1657.99	PASS
268-2R	0.1	2	9200	1850	10.1					4953.0	0.40	1857.41	PASS
SB-AOC8B-2013-104	0.1	2	480	1760	7.27					252.7	7.33	1898.13	PASS

One sample is removed due to anomaly

SPLP RESULTS for

OPTION 1a: All adjusted leachate concentrations are below the leachate criterion

REMEDIATION STANDARD = 9200 mg/kg

OPTION 1b: Simple inspection of tabulated results to find highest acceptable standard
EVERYTHING PASSED, OPTION 1b NOT VALID

OPTION 2: Remediation standard using site-specific Kd value
Kd ratio = 3537.22, USE MINIMUM Kd
Kd USED FOR CALCULATING STANDARD = 252.73 L/kg
result before rounding = 505.7612 mg/kg
REMEDIATION STANDARD = 510 mg/kg

OPTION 3: Remediation standard using linear regression
Number of points = 14

(points were eliminated because leachate concentrations were not above the aqueous reporting limit)
Soil concentration midrange = 4710.
Number of points above midrange = 3
Enough points above midrange? NO
R-Square high enough? NO
Leachate criterion within range of leachate concentrations? NO
OPTION 3 NOT VALID

NJDEP SPLP Spreadsheet, V3.1, November 2013

Case name/area of concern:	Former Delphi Interior and Lighting Systems Division
Case number:	E97070
Sampling date:	9/12-16/2016
Contaminant:	Zinc (total)
CAS No:	7440-66-6
Water solubility (mg/L)	NA
Aqueous reporting limit (µg/L):	1.00E+01
Soil reporting limit (mg/kg):	6.00E+00
Health-based GWQC (µg/L)	2.00E+03
DAF (20, or site-specific if approved):	20
Leachate Criterion (µg/L):	4.00E+04
Henry's law constant (dimensionless):	0.00E+00

CALCULATE SITE SPECIFIC IGW STANDARD

Reset Spreadsheet

Print Results

Instructions

CLICK HERE if chemical is not on drop-down list, or to enter alternate GWQC

Print to file

Exit

NOTE:

USE ONE PAGE PER CONTAMINANT, do not leave empty rows between samples

Do not enter samples with soil concentrations at or below the reporting limit

When leachate concentration is non-detect, enter the aqueous reporting limit

Enter site-specific dilution-attenuation factor (DAF) if desired

Data entry cells (do not skip rows)

Optional data entry

Calculated or locked cells

Indicates that Alternative Remediation Standard needs to be recalculated

Sample ID	Soil sample weight (kg)	Leachate Volume (L)	Total Soil Concentration (mg/kg)	SPLP Leachate Concentration (µg/L)	Final pH of Leachate (except VOCs)	Optional data				Kd (L/kg)	% Contaminant in Leachate	Field leachate concentration (µg/L)	Pass or fail?
						Sampling Depth (ft)	Soil Type	Organic Carbon (mg/kg)	Organic Carbon (%)				
B3-4-200	0.1	2	23.5	10	10.8					2330.0	0.85	10.00	PASS
B9-16-200	0.1	2	23.6	10	7.9					2340.0	0.85	10.00	PASS
SB-11-SO-200	0.1	2	26.3	10	7.2					2610.0	0.76	10.00	PASS
GS08-200	0.1	2	31.7	10	10.6					3150.0	0.63	10.00	PASS
B3-4-200	0.1	2	32.8	10	10.5					3260.0	0.61	10.00	PASS
B6-201	0.1	2	33	10	10.6					3280.0	0.61	10.00	PASS
PL05-201	0.1	2	34.1	10	10					3390.0	0.59	10.00	PASS
PL05-201	0.1	2	34.3	10	6.3					3410.0	0.58	10.00	PASS
SB-11-SO-200	0.1	2	39.6	10	7.2					3940.0	0.51	10.00	PASS
PL05-200	0.1	2	42	10	10					4180.0	0.48	10.00	PASS
SB-11-SO-201	0.1	2	160	10	7.3					15980.0	0.13	10.00	PASS
PL05-202	0.1	2	34	28.3	9.5					1181.4	1.66	28.78	PASS
SB-11-SO-201	0.1	2	48.3	31.5	6.2					1513.3	1.30	31.91	PASS
TP9-3-203	0.1	2	55.3	32	7.8					1708.1	1.16	32.37	PASS
GS08-200	0.1	2	85.4	34.3	10.3					2469.8	0.80	34.58	PASS
PL05-200	0.1	2	32.3	50.1	7.5					624.7	3.10	51.69	PASS
PL05-202	0.1	2	31.6	50.2	9.5					609.5	3.18	51.83	PASS
B6-201	0.1	2	142	63.3	10.6					2223.3	0.89	63.87	PASS
TP9-3-203	0.1	2	10500	100	7.9					104980.0	0.02	100.02	PASS
TP9-2-202	0.1	2	14200	133	8.09					106746.9	0.02	133.02	PASS
B9-16-200	0.1	2	35.5	168	8.5					191.3	9.46	185.41	PASS
TP9-2-202	0.1	2	52.6	325	8.1					141.8	12.36	370.42	PASS

SPLP RESULTS for

OPTION 1a: All adjusted leachate concentrations are below the leachate criterion

REMEDIATION STANDARD = 14200 mg/kg

OPTION 1b: Simple inspection of tabulated results to find highest acceptable standard

EVERYTHING PASSED, OPTION 1b NOT VALID

OPTION 2: Remediation standard using site-specific Kd value

Kd ratio = 752.55, USE MINIMUM Kd

Kd USED FOR CALCULATING STANDARD = 141.85 L/kg

result before rounding = 5679.9795 mg/kg

REMEDIATION STANDARD = 5700 mg/kg

OPTION 3: Remediation standard using linear regression

Number of points = 11

(points were eliminated because leachate concentrations were not above the aqueous reporting limit)

Soil concentration midrange = 7115.8

Number of points above midrange = 2

Enough points above midrange? NO

R-Square high enough? NO

Leachate criterion within range of leachate concentrations? NO

OPTION 3 NOT VALID

NJDEP SPLP Spreadsheet, V3.1, November 2013

Case name/area of concern:	Former Delphi Interior and Lighting Systems Division
Case number:	E97070
Sampling date:	9/12-16/2016
Contaminant:	Benzene
CAS No:	71-43-2
Water solubility (mg/L)	1.75E+03
Aqueous reporting limit (µg/L):	1.00E+00
Soil reporting limit (mg/kg):	5.00E-03
Health-based GWQC (µg/L)	2.00E-01
DAF (20, or site-specific if approved):	20
Leachate Criterion (µg/L):	4.00E+00
Henry's law constant (dimensionless):	2.28E-01

CALCULATE SITE SPECIFIC IGW STANDARD

Reset Spreadsheet

Print Results

Instructions

CLICK HERE if chemical is not on drop-down list, or to enter alternate GWQC

Print to file

Exit

NOTE:
USE ONE PAGE PER CONTAMINANT, do not leave empty rows between samples
Do not enter samples with soil concentrations at or below the reporting limit
When leachate concentration is non-detect, enter the aqueous reporting limit
Enter site-specific dilution-attenuation factor (DAF) if desired

Data entry cells (do not skip rows)
Optional data entry
Calculated or locked cells
Indicates that Alternative Remediation Standard needs to be recalculated

Sample ID	Soil sample weight (kg)	Leachate Volume (L)	Total Soil Concentration (mg/kg)	SPLP Leachate Concentration (µg/L)	Final pH of Leachate (except VOCs)	Optional data				Kd (L/kg)	% Contaminant in Leachate	Field leachate concentration (µg/L)	Pass or fail?
						Sampling Depth (ft)	Soil Type	Organic Carbon (mg/kg)	Organic Carbon (%)				
SB-10-SO-10-103	0.1	2	0.094	1.1	7.94	6.5 - 7 (ft)				65.5	23.40	1.43	PASS
B8-4-100	0.1	2	0.086	1.3	7.74	8 - 8.5 (ft)				46.2	30.23	1.86	PASS
TP9-2-300RR	0.1	2	0.2	3	7.3	4.5 - 5 (ft)				46.7	30.00	4.27	FAIL
TP9-2-300RR	0.1	2	0.1	2.7	6.4	3 - 3.5 (ft)				17.0	54.00	5.81	FAIL
SB-AOC010-2013-100	0.1	2	0.18	3.9	9.47	5 - 5.5 (ft)				26.2	43.33	6.84	FAIL
SB-AOC010-2013-117	0.1	2	0.12	3.5	8.61	4 - 4.5 (ft)				14.3	58.33	8.30	FAIL
SB-10-SO-10-100	0.1	2	0.61	9.6	7.38	6 - 6.5 (ft)				43.5	31.48	13.95	FAIL
B8-4-102	0.1	2	2.6	29	7.99	8 - 8.5 (ft)				69.7	22.31	37.23	FAIL

SPLP RESULTS for

OPTION 1a: All adjusted leachate concentrations are below the leachate criterion
OPTION 1a NOT VALID

OPTION 1b: Simple inspection of tabulated results to find highest acceptable standard

REMEDIATION STANDARD = 0.094 mg/kg

OPTION 2: Remediation standard using site-specific Kd value
Kd ratio = 4.88, AVERAGING Kds OK
Kd USED FOR CALCULATING STANDARD = 41.12 L/kg
result before rounding = 0.1652 mg/kg
REMEDIATION STANDARD = 0.2 mg/kg

OPTION 3: Remediation standard using linear regression
Number of points = 8
Soil concentration midrange = 1.34
Number of points above midrange = 1
Enough points above midrange? NO
R-Square high enough? YES
Leachate criterion within range of leachate concentrations? YES
OPTION 3 NOT VALID

NJDEP SPLP Spreadsheet, V3.1, November 2013

Case name/area of concern:	Former Delphi Interior and Lighting Systems Division
Case number:	E97070
Sampling date:	9/12-16/2016
Contaminant:	Chlorobenzene
CAS No:	108-90-7
Water solubility (mg/L)	4.72E+02
Aqueous reporting limit (µg/L):	1.00E+00
Soil reporting limit (mg/kg):	5.00E-03
Health-based GWQC (µg/L)	5.00E+01
DAF (20, or site-specific if approved):	20
Leachate Criterion (µg/L):	1.00E+03
Henry's law constant (dimensionless):	1.52E-01

CALCULATE SITE SPECIFIC IGW STANDARD

Reset Spreadsheet

Print Results

Instructions

CLICK HERE if chemical is not on drop-down list, or to enter alternate GWQC

Print to file

Exit

NOTE:

USE ONE PAGE PER CONTAMINANT, do not leave empty rows between samples
Do not enter samples with soil concentrations at or below the reporting limit
When leachate concentration is non-detect, enter the aqueous reporting limit
Enter site-specific dilution-attenuation factor (DAF) if desired

Data entry cells (do not skip rows)
Optional data entry
Calculated or locked cells
Indicates that Alternative Remediation Standard needs to be recalculated

Sample ID	Soil sample weight (kg)	Leachate Volume (L)	Total Soil Concentration (mg/kg)	SPLP Leachate Concentration (µg/L)	Final pH of Leachate (except VOCs)	Optional data				Kd (L/kg)	% Contaminant in Leachate	Field leachate concentration (µg/L)	Pass or fail?
						Sampling Depth (ft)	Soil Type	Organic Carbon (mg/kg)	Organic Carbon (%)				
SB-8-SO-14	0.1	2	5.7	28	7.34	8 - 10 (ft)				183.6	9.82	31.02	PASS
SB-10-SO-10-103	0.1	2	3.4	34	7.94	6.5 - 7 (ft)				80.0	20.00	42.41	PASS
B8-4-100	0.1	2	2.6	42	7.74					41.9	32.31	61.79	PASS
B8-8-2-102	0.1	2	6.9	58	7.63	9.5 - 10 (ft)				99.0	16.81	69.60	PASS
SB-10-SO-10	0.1	2	2.9	53	9.2	3 - 4 (ft)				34.7	36.55	83.12	PASS
B8-8-2-100	0.1	2	24	130	7.38	9.5 - 10 (ft)				164.6	10.83	145.64	PASS
SB-10-SO-10-103	0.1	2	5.3	110	7.83	4.5 - 5 (ft)				28.2	41.51	186.93	PASS
B8-8-2-102	0.1	2	22	180	8.11	7.8 - 8.3 (ft)				102.2	16.36	214.86	PASS
SB-10-SO-10	0.1	2	12	160	8.83	4 - 6 (ft)				55.0	26.67	217.50	PASS
SB-10-SO-10-100	0.1	2	29	280	7.38	6 - 6.5 (ft)				83.6	19.31	346.30	PASS
B8-8-2-101	0.1	2	22	270	7.95	7.8 - 8.3 (ft)				61.5	24.55	356.84	PASS
B8-4-102	0.1	2	83	470	7.99					156.6	11.33	529.45	PASS
B8-8-2-100	0.1	2	20	460	8.17	7.8 - 8.3 (ft)				23.5	46.00	845.67	PASS

SPLP RESULTS for

OPTION 1a: All adjusted leachate concentrations are below the leachate criterion

REMEDIATION STANDARD = 83 mg/kg

OPTION 1b: Simple inspection of tabulated results to find highest acceptable standard
EVERYTHING PASSED, OPTION 1b NOT VALID

OPTION 2: Remediation standard using site-specific Kd value
Kd ratio = 7.82, AVERAGING Kds OK
Kd USED FOR CALCULATING STANDARD = 85.72 L/kg
result before rounding = 85.8873 mg/kg
REMEDIATION STANDARD = 83 mg/kg (controlled by maximum soil concentration)

OPTION 3: Remediation standard using linear regression
Number of points = 13
Soil concentration midrange = 42.8
Number of points above midrange = 1
Enough points above midrange? NO
R-Square high enough? NO

Leachate criterion within range of leachate concentrations? NO
OPTION 3 NOT VALID

NJDEP SPLP Spreadsheet, V3.1, November 2013

Case name/area of concern:	Former Delphi Interior and Lighting Systems Division
Case number:	E97070
Sampling date:	9/12-16/2016
Contaminant:	Trichloroethene (TCE) (Trichloroethyle
CAS No:	79-01-6
Water solubility (mg/L)	1.10E+03
Aqueous reporting limit (µg/L):	1.00E+00
Soil reporting limit (mg/kg):	5.00E-03
Health-based GWQC (µg/L)	1.00E+00
DAF (20, or site-specific if approved):	**20**
Leachate Criterion (µg/L):	2.00E+01
Henry's law constant (dimensionless):	4.22E-01

CALCULATE SITE SPECIFIC IGW STANDARD

Reset Spreadsheet

Print Results

Instructions

CLICK HERE if chemical is not on drop-down list, or to enter alternate GWQC

Print to file

Exit

NOTE:

USE ONE PAGE PER CONTAMINANT, do not leave empty rows between samples

Do not enter samples with soil concentrations at or below the reporting limit

When leachate concentration is non-detect, enter the aqueous reporting limit

Enter site-specific dilution-attenuation factor (DAF) if desired

Data entry cells (do not skip rows)

Optional data entry

Calculated or locked cells

Indicates that Alternative Remediation Standard needs to be recalculated

Sample ID	Soil sample weight (kg)	Leachate Volume (L)	Total Soil Concentration (mg/kg)	SPLP Leachate Concentration (µg/L)	Final pH of Leachate (except VOCs)	Optional data				Kd (L/kg)	% Contaminant in Leachate	Field leachate concentration (µg/L)	Pass or fail?
						Sampling Depth (ft)	Soil Type	Organic Carbon (mg/kg)	Organic Carbon (%)				
SB-AOC010-2013-100	0.1	2	0.097	0.17	9.47	5 - 5.5 (ft)				550.6	3.51	0.17	PASS
SB-AOC8B-2013-105	0.1	2	0.13	1.1	9.03	9.5 - 10 (ft)				98.2	16.92	1.32	PASS
SB-F10R	0.1	2	0.064	2.6	6.62	1.5 - 2 (ft)				4.6	81.25	13.28	PASS
SB-C8R	0.1	2	35	260	10.4	2 - 2.5 (ft)				114.6	14.86	304.83	FAIL

SPLP RESULTS for

OPTION 1a: All adjusted leachate concentrations are below the leachate criterion

OPTION 1a NOT VALID

OPTION 1b: Simple inspection of tabulated results to find highest acceptable standard

REMEDIATION STANDARD = 0.13 mg/kg

OPTION 2: Remediation standard using site-specific Kd value

Kd ratio = 119.29, USE MINIMUM Kd

Kd USED FOR CALCULATING STANDARD = 4.62 L/kg

result before rounding = 0.0964 mg/kg

REMEDIATION STANDARD = 0.1 mg/kg

OPTION 3: Remediation standard using linear regression

Number of points = 3

(points were eliminated because leachate concentrations were not above the aqueous reporting limit)

Soil concentration midrange = 17.53

Number of points above midrange = 1

Enough points above midrange? NO

R-Square high enough? YES

Leachate criterion within range of leachate concentrations? YES

OPTION 3 NOT VALID

NJDEP SPLP Spreadsheet, V3.1, November 2013

Case name/area of concern:	Former Delphi Interior and Lighting Systems Division
Case number:	E97070
Sampling date:	9/12-16/2016
Contaminant:	Vinyl chloride
CAS No:	75-01-4
Water solubility (mg/L)	2.76E+03
Aqueous reporting limit (µg/L):	1.00E+00
Soil reporting limit (mg/kg):	5.00E-03
Health-based GWQC (µg/L)	8.00E-02
DAF (20, or site-specific if approved):	20
Leachate Criterion (µg/L):	2.00E+00 adjusted from 1.6
Henry's law constant (dimensionless):	1.11E+00

CALCULATE SITE SPECIFIC IGW STANDARD

Reset Spreadsheet

Print Results

Instructions

CLICK HERE if chemical is not on drop-down list, or to enter alternate GWQC

Print to file

Exit

NOTE:

USE ONE PAGE PER CONTAMINANT, do not leave empty rows between samples

Do not enter samples with soil concentrations at or below the reporting limit

When leachate concentration is non-detect, enter the aqueous reporting limit

Enter site-specific dilution-attenuation factor (DAF) if desired

Data entry cells (do not skip rows)

Optional data entry

Calculated or locked cells

Indicates that Alternative Remediation Standard needs to be recalculated

Sample ID	Soil sample weight (kg)	Leachate Volume (L)	Total Soil Concentration (mg/kg)	SPLP Leachate Concentration (µg/L)	Final pH of Leachate (except VOCs)	Optional data				Kd (L/kg)	% Contaminant in Leachate	Field leachate concentration (µg/L)	Pass or fail?
						Sampling Depth (ft)	Soil Type	Organic Carbon (mg/kg)	Organic Carbon (%)				
SB-7-SO-3-101R	0.1	2	0.06	0.49	8.49	1.5 - 2 (ft)				102.4	16.33	0.49	PASS
ISO5-103R	0.1	2	0.08	3.4	7.59	9.5 - 10 (ft)				3.5	85.00	20.96	FAIL
ISO5/ISO5-100R	0.1	2	0.31	14	7.77	5 - 5.5 (ft)				2.1	90.32	127.60	FAIL

SPLP RESULTS for

OPTION 1a: All adjusted leachate concentrations are below the leachate criterion

OPTION 1a NOT VALID

OPTION 1b: Simple inspection of tabulated results to find highest acceptable standard

REMEDIATION STANDARD = 0.06 mg/kg

OPTION 2: Remediation standard using site-specific Kd value

Kd ratio = 47.81, USE MINIMUM Kd

Kd USED FOR CALCULATING STANDARD = 2.14 L/kg

result before rounding = 0.0049 mg/kg

REMEDIATION STANDARD = 0.005 mg/kg (controlled by soil PQL)

OPTION 3: Remediation standard using linear regression

Number of points = 2

(points were eliminated because leachate concentrations were not above the aqueous reporting limit)

Less than three points with leachate concentrations above the aqueous reporting limit

LINEAR REGRESSION CANNOT BE CONDUCTED

APPENDIX I

Chromium Evaluation

TABLE I-1
COMPARISON OF TOTAL CHROMIUM TO HEXAVALENT CHROMIUM CONCENTRATIONS
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

					Chromium VI (mg/kg)		Total Chromium (mg/kg)	
Location	AOC	Date	Sample Depth (ft bgs)	Remedial Action	Concentration	Detection	Concentration	Detection
~~PL06-02~~	~~AOC-01C~~	~~3/17/2004~~	~~3.5 - 4~~	~~Excavated~~	~~4920~~	~~Y~~	~~67500~~	~~Y~~
~~PL06-03~~	~~AOC-01C~~	~~3/17/2004~~	~~3 - 3.5~~	~~Excavated~~	~~12200~~	~~Y~~	~~13900~~	~~Y~~
~~SB-AOC10-2013-102~~	~~AOC-10~~	~~2/22/2013~~	~~9.5 - 10~~	~~Not Excavated~~	~~104~~	~~Y~~	~~11900~~	~~Y~~
~~PL07-02~~	~~AOC-01C~~	~~3/18/2004~~	~~3 - 3.5~~	~~Not Excavated~~	~~993~~	~~Y~~	~~5080~~	~~Y~~
SB-AOC10-2013-119	AOC-10	2/21/2013	4 - 4.5	Not Excavated	9.3	Y	4500	Y
SB-AOC10-2013-106	AOC-10	2/22/2013	5 - 5.5	Not Excavated	4.6	Y	3590	Y
SB-AOC10-2013-124	AOC-10	2/21/2013	3.5 - 4	Not Excavated	3.9	Y	2850	Y
PL06-105	AOC-01C	12/7/2010	3.5 - 4	Excavated	182	Y	2280	Y
SB-10-SO-209	AOC-10	2/6/2014	9.5 - 10	Not Excavated	4	Y	2260	Y
SB-AOC10-2013-122	AOC-10	2/21/2013	0 - 0.5	Not Excavated	1.8	Y	2040	Y
PL06-107	AOC-01C	12/7/2010	0.5 - 1	Excavated	115	Y	1880	Y
PL06-105	AOC-01C	12/7/2010	0.5 - 1	Excavated	163	Y	1860	Y
TP9-3-203	AOC-09	4/27/2012	2.5 - 3	Not Excavated	0.4	Y	1540	Y
SB-AOC10-2013-121	AOC-10	2/21/2013	0 - 0.5	Not Excavated	2.5	Y	1470	Y
SB-AOC10-2013-127	AOC-10	2/21/2013	3.5 - 4	Not Excavated	0.72	Y	1340	Y
SB-AOC10-2013-113	AOC-10	2/22/2013	4.5 - 5	Not Excavated	0.92	Y	1170	Y
PL07-04	AOC-01C	3/18/2004	8 - 8.5	Not Excavated	4.2	Y	1100	Y
TP7-5	AOC-07B	1/10/2008	0 - 0.5	Excavated	51	Y	1100	Y
PL12-06	AOC-01C	3/17/2004	4.5 - 5	Not Excavated	349	Y	1010	Y
TP7-3	AOC-07B	1/10/2008	9.5 - 10	Not Excavated	18.8	Y	977	Y
PL07-102	AOC-01C	12/3/2010	4.5 - 5	Not Excavated	101	Y	926	Y
SB-AOC10-2013-124	AOC-10	2/21/2013	0.5 - 4	Not Excavated	2.7	Y	876	Y
SB-AOC10-2013-102	AOC-10	2/22/2013	0 - 0.5	Not Excavated	0.73	Y	864	Y
PL06-106	AOC-01C	12/7/2010	3.5 - 4	Excavated	137	Y	857	Y
PL06-01	AOC-01C	3/17/2004	3 - 3.5	Excavated	167	Y	853	Y
PL12-08	AOC-01C	3/17/2004	4.5 - 5	Not Excavated	110	Y	840	Y
PL06-01	AOC-01C	3/17/2004	6.5 - 7	Excavated	36	Y	742	Y
PL07-102	AOC-01C	12/3/2010	0.5 - 1	Not Excavated	67.1	Y	731	Y
SB-AOC10-2013-118	AOC-10	2/21/2013	4 - 4.5	Not Excavated	46	Y	690	Y
PL06-104	AOC-01C	12/7/2010	0.5 - 1	Excavated	69.8	Y	675	Y
B8-3	AOC-10	7/14/1998	4.5 - 5	Not Excavated	11	Y	640	Y
SB-AOC10-2013-115	AOC-10	2/21/2013	9.5 - 10	Not Excavated	1.9	Y	568	Y
SB-AOC10-2013-108	AOC-10	2/22/2013	6.5 - 7	Not Excavated	1.9	Y	548	Y
PL06-104	AOC-01C	12/7/2010	3.5 - 4	Excavated	143	Y	546	Y
PL07-102	AOC-01C	12/3/2010	3.5 - 4	Not Excavated	79.4	Y	546	Y
SB-AOC10-2013-107	AOC-10	2/22/2013	6.5 - 7	Not Excavated	2	Y	546	Y
JSO22	AOC-08B	10/3/2002	0 - 0.5	Excavated	10.3	Y	539	Y
PL12-110B	AOC-01C	12/3/2010	0.5 - 1	Not Excavated	22.9	Y	488	Y
TP7-4	AOC-07B	1/10/2008	0 - 0.5	Not Excavated	13.5	Y	485	Y
SB-AOC10-2013-128	AOC-10	2/21/2013	0 - 0.5	Not Excavated	2.2	Y	449	Y
SB-10-SO-214	AOC-10	2/7/2014	9.5 - 10	Not Excavated	0.94	Y	408	Y
PL12-112	AOC-01C	12/3/2010	0.5 - 1	Not Excavated	57.1	Y	400	Y
PL12-113	AOC-01C	12/3/2010	4.5 - 5	Not Excavated	118	Y	377	Y
PL05-102	AOC-01C	12/6/2010	0.5 - 1	Not Excavated	18.1	Y	373	Y
PL06-106	AOC-01C	12/7/2010	0.5 - 1	Excavated	8.2	Y	351	Y
PL06-107	AOC-01C	12/7/2010	3.5 - 4	Excavated	130	Y	337	Y
WSO3	AOC-11	10/2/2002	0 - 0.5	Excavated	60.6	Y	337	Y
TP7-5	AOC-07B	1/10/2008	10 - 10.5	Not Excavated	47	Y	327	Y
WSO5	AOC-10	10/2/2002	1 - 1.5	Excavated	40.6	Y	318	Y
ISO7	AOC-07A	9/12/2002	1 - 1.5	Not Excavated	3.6	Y	316	Y
PL06-106	AOC-01C	12/7/2010	6.5 - 7	Not Excavated	88.3	Y	292	Y
ZSO5	AOC-08A	9/27/2002	11 - 11.5	Not Excavated	57.1	Y	288	Y
PL12-112	AOC-01C	12/3/2010	4.5 - 5	Not Excavated	68.2	Y	281	Y
BF-S1	AOC-11	9/25/2000	0 - 0.5	Excavated	31.9	Y	279	Y
SB-AOC10-2013-109	AOC-10	2/22/2013	3.5 - 4	Not Excavated	3.2	Y	271	Y
SB-AOC10-2013-120	AOC-10	2/21/2013	4 - 4.5	Not Excavated	3.1	Y	252	Y
ISO14	AOC-12	6/4/2003	0 - 0.5	Excavated	19.5	Y	246	Y
PL12-111B	AOC-01C	12/2/2010	0.5 - 1	Not Excavated	30.7	Y	231	Y
PL10-11	AOC-01D	3/5/2004	3 - 3.5	Not Excavated	5.9	Y	224	Y
SB-AOC10-2013-119	AOC-10	2/21/2013	0 - 0.5	Not Excavated	3.7	Y	208	Y
SB-AOC10-2013-123	AOC-10	2/21/2013	0 - 0.5	Not Excavated	0.72	Y	203	Y
PL07-105	AOC-01C	12/3/2010	4.5 - 5	Not Excavated	3.9	Y	192	Y

TABLE I-1
COMPARISON OF TOTAL CHROMIUM TO HEXAVALENT CHROMIUM CONCENTRATIONS
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

					Chromium VI (mg/kg)		Total Chromium (mg/kg)	
Location	AOC	Date	Sample Depth (ft bgs)	Remedial Action	Concentration	Detection	Concentration	Detection
PL12-111B	AOC-01C	12/2/2010	4.5 - 5	Not Excavated	58	Y	184	Y
WSO4	AOC-11	10/2/2002	0 - 0.5	Excavated	29.2	Y	152	Y
SB-AOC10-2013-120	AOC-10	2/21/2013	7.5 - 8	Not Excavated	5	Y	149	Y
PL06-107	AOC-01C	12/7/2010	6.5 - 7	Not Excavated	90.2	Y	143	Y
BF-S3	AOC-11	9/25/2000	0 - 0.5	Excavated	12.2	Y	141	Y
PL06-104	AOC-01C	12/7/2010	6.5 - 7	Not Excavated	55.5	Y	139	Y
PL06-105	AOC-01C	12/7/2010	6.5 - 7	Not Excavated	82	Y	134	Y
ZSO5	AOC-08A	9/27/2002	8.5 - 9	Not Excavated	11.2	Y	128	Y
PL10-100	AOC-01D	12/16/2010	3 - 3.5	Not Excavated	1.9	Y	127	Y
JSO6	AOC-08A	9/19/2002	0.5 - 1	Not Excavated	17.8	Y	120	Y
PL07-100	AOC-01C	12/3/2010	4.5 - 5	Not Excavated	5.5	Y	112	Y
PL12-08	AOC-01C	3/17/2004	8 - 8.5	Not Excavated	94.7	Y	112	Y
ISO11	AOC-07B	9/25/2002	0.5 - 1	Not Excavated	7.7	Y	112	Y
SB-AOC10-2013-110	AOC-10	2/22/2013	0 - 0.5	Not Excavated	43.6	Y	112	Y
SB-AOC10-2013-129	AOC-10	2/21/2013	3.5 - 4	Not Excavated	8.2	Y	111	Y
TP9-2-202	AOC-09	4/26/2012	2.5 - 3	Not Excavated	0.76	Y	108	Y
PL12-113	AOC-01C	12/3/2010	8 - 8.5	Not Excavated	62.5	Y	107	Y
JSO5	AOC-08A	9/19/2002	0.5 - 1	Not Excavated	6.4	Y	103	Y
SB-AOC8B-2013-101	AOC-08B	2/25/2013	9.5 - 10	Not Excavated	1.2	Y	102	Y
SB-AOC10-2013-120	AOC-10	2/21/2013	0 - 0.5	Not Excavated	0.61	Y	100	Y
TP7-3	AOC-07B	1/10/2008	0 - 0.5	Not Excavated	3.1	Y	98.2	Y
BF-S2	AOC-11	9/25/2000	0 - 0.5	Excavated	7.3	Y	91.7	Y
SB-AOC10-2013-123	AOC-10	2/21/2013	3.5 - 4	Not Excavated	3.5	Y	88.7	Y
SB-AOC10-2013-110	AOC-10	2/22/2013	4.5 - 5	Not Excavated	2	Y	84.4	Y
PL05-102	AOC-01C	12/6/2010	3.5 - 4	Not Excavated	14.2	Y	81.7	Y
SB-AOC8B-2013-107	AOC-08B	2/25/2013	7.5 - 8	Not Excavated	1.3	Y	68.2	Y
ZB-2	AOC-01A	3/4/2004	2.75 - 3	Not Excavated	4.4	Y	68	Y
RW-101	AOC-01D	5/31/2012	3.5 - 4	Not Excavated	2.6	Y	66.2	Y
L1-1	AOC-01A	3/9/2004	4.5 - 5	Not Excavated	18.2	Y	63.5	Y
PL06-103	AOC-01C	12/7/2010	3.5 - 4	Not Excavated	39.2	Y	61.6	Y
SB-AOC8B-2013-104	AOC-08B	2/25/2013	1 - 1.5	Not Excavated	0.62	Y	60.8	Y
PL07-104	AOC-01C	12/3/2010	0.5 - 1	Not Excavated	1.7	Y	59.5	Y
WSO5	AOC-10	10/2/2002	0 - 0.5	Excavated	5.8	Y	59.3	Y
PL10-14	AOC-01D	3/5/2004	2.75 - 3	Not Excavated	8.2	Y	58.7	Y
WSO7	AOC-10	10/11/2002	1 - 1.5	Not Excavated	3.2	Y	58.6	Y
PL12-112	AOC-01C	12/3/2010	8 - 8.5	Not Excavated	16.6	Y	56.2	Y
SB-AOC8B-2013-102	AOC-08B	2/25/2013	0 - 0.5	Not Excavated	0.82	Y	53	Y
PL05-202	AOC-01C	4/25/2012	0.5 - 1	Excavated	2.4	Y	51.4	Y
SB-10-SO-214	AOC-10	2/7/2014	11.5 - 12	Not Excavated	0.85	Y	50	Y
SB-AOC10-2013-122	AOC-10	2/21/2013	6.5 - 7	Not Excavated	0.66	Y	46	Y
MW-80	AOC-01C	5/21/2012	6.5 - 7	Not Excavated	0.14	Y	40.1	Y
TP7-2	AOC-07A	1/10/2008	10 - 10.5	Not Excavated	3.2	Y	39.2	Y
PL12-108	AOC-01C	12/2/2010	0.5 - 1	Not Excavated	1.3	Y	38.2	Y
PL12-07	AOC-01C	3/4/2004	0.5 - 1	Not Excavated	10.2	Y	37.5	Y
PL12-108	AOC-01C	12/2/2010	8 - 8.5	Not Excavated	14.9	Y	36.3	Y
PL11-03	AOC-01A	3/17/2004	3 - 3.5	Not Excavated	2.6	Y	35.7	Y
SB-AOC8B-2013-101	AOC-08B	2/25/2013	1 - 1.5	Not Excavated	0.82	Y	35.4	Y
PL06-103	AOC-01C	12/7/2010	6.5 - 7	Not Excavated	7.1	Y	35.2	Y
SB-AOC10-2013-129	AOC-10	2/21/2013	0 - 0.5	Not Excavated	2.8	Y	34.4	Y
PL06-100	AOC-01C	12/7/2010	6.5 - 7	Not Excavated	1.3	Y	34.2	Y
PL07-105	AOC-01C	12/3/2010	3.5 - 4	Not Excavated	3.5	Y	34.1	Y
SB-10-SO-208	AOC-10	2/6/2014	9.5 - 10	Not Excavated	0.82	Y	33.4	Y
ZB-4	AOC-01A	3/4/2004	2.75 - 3	Not Excavated	3.7	Y	32.7	Y
PL12-109	AOC-01C	12/2/2010	8 - 8.5	Not Excavated	6	Y	31.6	Y
GS08-200	AOC-02	4/24/2012	0.5 - 1	Not Excavated	2.1	Y	31.2	Y
PL10-17	AOC-01D	3/17/2004	2.5 - 3	Not Excavated	3.7	Y	30.9	Y
PL10-102	AOC-01D	12/6/2010	3 - 3.5	Not Excavated	1.8	Y	30.8	Y
WSO6	AOC-10	10/11/2002	0 - 0.5	Not Excavated	3.3	Y	29.8	Y
PL10-102	AOC-01D	12/6/2010	0.5 - 1	Not Excavated	3.2	Y	29.6	Y
PL05-201	AOC-01C	4/25/2012	2.5 - 3	Not Excavated	0.49	Y	28.9	Y
SB-10-SO-210	AOC-10	2/6/2014	9.5 - 10	Not Excavated	1.4	Y	28	Y
JSO11	AOC-08B	9/20/2002	0.5 - 1	Not Excavated	7.3	Y	27.1	Y

TABLE I-1
COMPARISON OF TOTAL CHROMIUM TO HEXAVALENT CHROMIUM CONCENTRATIONS
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

					Chromium VI (mg/kg)		Total Chromium (mg/kg)	
Location	AOC	Date	Sample Depth (ft bgs)	Remedial Action	Concentration	Detection	Concentration	Detection
PL05-200	AOC-01C	4/25/2012	2.5 - 3	Not Excavated	2.1	Y	26.8	Y
PL12-109	AOC-01C	12/2/2010	0.5 - 1	Not Excavated	1.1	Y	26.4	Y
PL12-110B	AOC-01C	12/3/2010	4.5 - 5	Not Excavated	3	Y	26.4	Y
MW-80	AOC-01C	5/21/2012	3.5 - 4	Not Excavated	0.14	Y	25.4	Y
PL05-102	AOC-01C	12/6/2010	6.5 - 7	Not Excavated	0.8	Y	25.4	Y
JSO23	AOC-08B	10/3/2002	0 - 0.5	Not Excavated	4.2	Y	25.3	Y
JSO12	AOC-08B	9/20/2002	0.5 - 1	Not Excavated	4.8	Y	24.5	Y
PL10-100	AOC-01D	12/16/2010	0.5 - 1	Not Excavated	1.5	Y	24.4	Y
TP9-3-203	AOC-09	4/27/2012	9 - 9.5	Not Excavated	0.19	Y	24.3	Y
PL06-100	AOC-01C	12/7/2010	3.5 - 4	Not Excavated	1.6	Y	23.6	Y
PL10-02	AOC-01D	3/11/2004	4.5 - 5	Not Excavated	2.5	Y	23.5	Y
PL06-100	AOC-01C	12/7/2010	0.5 - 1	Not Excavated	0.63	Y	22	Y
PL07-104	AOC-01C	12/3/2010	3.5 - 4	Not Excavated	0.65	Y	21.9	Y
PL12-107B	AOC-01C	12/2/2010	8 - 8.5	Not Excavated	1.6	Y	21.6	Y
PL12-110B	AOC-01C	12/3/2010	8 - 8.5	Not Excavated	1.2	Y	21.6	Y
MW-81	AOC-01C	5/22/2012	3.5 - 4	Not Excavated	0.81	Y	21.5	Y
SB-11-SO-201	AOC-11	4/25/2012	0 - 0.5	Not Excavated	1.4	Y	20.9	Y
SB-AOC8B-2013-109	AOC-08B	2/25/2013	1 - 1.5	Not Excavated	0.62	Y	20.3	Y
SB-AOC10-2013-118	AOC-10	2/21/2013	7.5 - 8	Not Excavated	0.78	Y	19.6	Y
B9-16-200	AOC-09	4/25/2012	5 - 5.5	Not Excavated	0.21	Y	19.5	Y
PL05-202	AOC-01C	4/25/2012	2.5 - 3	Excavated	0.47	Y	19	Y
PL12-100	AOC-01C	12/3/2010	8 - 8.5	Not Excavated	0.75	Y	18.2	Y
ZSO5	AOC-08A	9/27/2002	13 - 13.5	Not Excavated	2.9	Y	17.5	Y
PL12-114	AOC-01C	12/3/2010	0.5 - 1	Not Excavated	2	Y	17.3	Y
MW-80	AOC-01C	5/21/2012	0.5 - 1	Not Excavated	0.2	Y	16.5	Y
PL12-104	AOC-01C	12/3/2010	0.5 - 1	Not Excavated	0.65	Y	16.4	Y
PL10-05	AOC-01D	3/11/2004	2.5 - 3	Not Excavated	2.6	Y	15.6	Y
PL05-200	AOC-01C	4/25/2012	0.5 - 1	Not Excavated	0.4	Y	15.1	Y
PL05-201	AOC-01C	4/25/2012	0.5 - 1	Not Excavated	1.4	Y	15.1	Y
PL12-115	AOC-01C	12/3/2010	6.5 - 7	Not Excavated	0.55	Y	14.7	Y
SB-11-SO-200	AOC-11	4/25/2012	0 - 0.5	Not Excavated	0.81	Y	12.9	Y
PL10-13	AOC-01D	3/17/2004	3 - 3.5	Not Excavated	3.2	Y	11.5	Y
ZSO5	AOC-08A	9/27/2002	15 - 15.5	Not Excavated	3	Y	10	Y
WSO4	AOC-11	10/2/2002	2 - 2.5	Not Excavated	3.7	Y	8.4	Y
PL11-01	AOC-01A	3/18/2004	5.5 - 6	Not Excavated	2.2	Y	5.4	Y
B8-8-2	AOC-08B	1/23/2008	19.5 - 20	Not Excavated	3	Y	3.3	Y
SB-AOC8B-2013-104	AOC-08B	2/25/2013	19.5 - 20	Not Excavated	0.89	Y	3.3	Y
SB-AOC10-2013-115	AOC-10	2/21/2013	4.5 - 5	Not Excavated	7.4	N	10800	Y
B8-4	AOC-08B	7/14/1998	12-Nov	Not Excavated	30	N	2800	Y
B8-4	AOC-08B	7/14/1998	8-Jun	Not Excavated	14	N	2400	Y
SB-AOC8B-2013-105	AOC-08B	2/25/2013	9.5 - 10	Not Excavated	2.5	N	1520	Y
B7-2	AOC-07B	7/9/1998	3 - 3.5	Not Excavated	0.13	N	1300	Y
SB-AOC10-2013-126	AOC-10	2/21/2013	0 - 0.5	Not Excavated	2.5	N	1160	Y
SB-AOC10-2013-101	AOC-10	2/22/2013	5 - 5.5	Not Excavated	2.7	N	916	Y
B8-8	AOC-08B	7/15/1998	12 - 12.5	Not Excavated	16	N	840	Y
SB-AOC10-2013-116	AOC-10	2/21/2013	4.5 - 5	Not Excavated	2.6	N	800	Y
B8-8-1	AOC-08B	1/17/2008	12 - 12.5	Not Excavated	3.58	N	792	Y
B8-6	AOC-08B	7/14/1998	8-Jun	Not Excavated	15	N	730	Y
SB-AOC10-2013-118	AOC-10	2/21/2013	0 - 0.5	Not Excavated	2.6	N	671	Y
B8-8	AOC-08B	7/15/1998	10-Sep	Not Excavated	13	N	650	Y
SB-AOC8B-2013-104	AOC-08B	2/25/2013	9.5 - 10	Not Excavated	2.9	N	617	Y
SB-AOC10-2013-117	AOC-10	2/21/2013	4 - 4.5	Not Excavated	2.7	N	617	Y
SB-AOC10-2013-100	AOC-10	2/22/2013	5 - 5.5	Not Excavated	2.6	N	575	Y
B8-8-1	AOC-08B	1/17/2008	7.75 - 8.25	Not Excavated	2.68	N	563	Y
SB-AOC10-2013-111	AOC-10	2/22/2013	0 - 0.5	Not Excavated	2.7	N	530	Y
SB-AOC10-2013-109	AOC-10	2/22/2013	7.5 - 9	Not Excavated	2.7	N	518	Y
SB-AOC10-2013-100	AOC-10	2/22/2013	0 - 0.5	Not Excavated	2.7	N	511	Y
B8-2	AOC-10	7/13/1998	3.5 - 4	Not Excavated	12	N	500	Y
SB-AOC10-2013-104	AOC-10	2/22/2013	9.5 - 10	Not Excavated	2.6	N	469	Y
ISO7	AOC-07A	9/12/2002	8.5 - 9	Not Excavated	2	N	457	Y
SB-AOC10-2013-103	AOC-10	2/22/2013	5 - 5.5	Not Excavated	2.4	N	453	Y
SB-10-SO-212	AOC-10	2/7/2014	9.5 - 10	Not Excavated	2.6	N	428	Y

TABLE I-1
COMPARISON OF TOTAL CHROMIUM TO HEXAVALENT CHROMIUM CONCENTRATIONS
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

					Chromium VI (mg/kg)		Total Chromium (mg/kg)	
Location	AOC	Date	Sample Depth (ft bgs)	Remedial Action	Concentration	Detection	Concentration	Detection
SB-AOC10-2013-103	AOC-10	2/22/2013	7.5 - 8	Not Excavated	2.8	N	426	Y
SB-AOC10-2013-128	AOC-10	2/21/2013	3.5 - 4	Not Excavated	2.5	N	390	Y
SB-AOC10-2013-101	AOC-10	2/22/2013	0 - 0.5	Not Excavated	3.1	N	385	Y
SB-AOC10-2013-111	AOC-10	2/22/2013	9.5 - 10	Not Excavated	2.5	N	373	Y
SB-AOC10-2013-111	AOC-10	2/22/2013	4.5 - 5	Not Excavated	2.6	N	371	Y
B10-3	AOC-10	7/16/1998	4-Feb	Not Excavated	15	N	350	Y
PL07-107	AOC-01C	12/3/2010	4.5 - 5	Not Excavated	2.3	N	327	Y
B7-3	AOC-07A	7/9/1998	3.5 - 4	Not Excavated	13	N	300	Y
SB-AOC10-2013-125	AOC-10	2/21/2013	0 - 0.5	Not Excavated	2.4	N	276	Y
ISO5	AOC-07A	9/12/2002	1 - 1.5	Not Excavated	2	N	254	Y
SB-AOC10-2013-127	AOC-10	2/21/2013	0 - 0.5	Not Excavated	2.4	N	225	Y
TP7-1	AOC-07B	1/10/2008	0 - 0.5	Not Excavated	2.38	N	207	Y
SB-10-SO-213	AOC-10	2/7/2014	9.5 - 10	Not Excavated	2.6	N	171	Y
BF-S14	AOC-11	10/23/2000	0 - 0.5	Excavated	2	N	169	Y
SB-AOC10-2013-117	AOC-10	2/21/2013	0 - 0.5	Not Excavated	2.7	N	160	Y
ISO15	AOC-12	6/4/2003	0 - 0.5	Excavated	2	N	160	Y
B8-5	AOC-08A	7/14/1998	0 - 0.5	Not Excavated	11	N	140	Y
B7-9	AOC-12	7/31/1998	0 - 0.5	Excavated	13	N	140	Y
SB-AOC10-2013-116	AOC-10	2/21/2013	0 - 0.5	Not Excavated	2.6	N	128	Y
ISO6	AOC-07A	9/12/2002	1 - 1.5	Not Excavated	2	N	127	Y
SB-AOC10-2013-108	AOC-10	2/22/2013	3.5 - 4	Not Excavated	2.3	N	122	Y
B8-8	AOC-08B	7/15/1998	0 - 0.5	Not Excavated	12	N	120	Y
SB-10-SO-213	AOC-10	2/7/2014	11.5 - 12	Not Excavated	2.3	N	119	Y
SB-AOC10-2013-126	AOC-10	2/21/2013	3.5 - 4	Not Excavated	2.4	N	118	Y
SB-AOC8B-2013-107	AOC-08B	2/25/2013	1 - 1.5	Not Excavated	2.3	N	98.2	Y
SB-AOC8B-2013-102	AOC-08B	2/25/2013	19.5 - 20	Not Excavated	2.3	N	98	Y
SB-AOC8B-2013-102	AOC-08B	2/25/2013	1 - 1.5	Not Excavated	2.2	N	96.6	Y
SB-AOC10-2013-125	AOC-10	2/21/2013	3.5 - 4	Not Excavated	2.5	N	96.4	Y
ISO11	AOC-07B	9/25/2002	4 - 4.5	Not Excavated	2	N	94.8	Y
TP7-2	AOC-07A	1/10/2008	0 - 0.5	Not Excavated	2.29	N	94.3	Y
ISO20	AOC-12	6/4/2003	0 - 0.5	Not Excavated	2	N	90.7	Y
B10-5	AOC-10	7/16/1998	0 - 0.5	Excavated	12	N	90	Y
ISO4	AOC-07A	9/12/2002	0.5 - 1	Not Excavated	2	N	87.2	Y
B8-2	AOC-10	7/13/1998	0 - 0.5	Not Excavated	11	N	86	Y
B8-2	AOC-10	7/13/1998	10 - 10.5	Not Excavated	13	N	86	Y
SB-AOC10-2013-107	AOC-10	2/22/2013	3.5 - 4	Not Excavated	2.3	N	83.2	Y
WSO10	OFF-SITE	6/2/2003	0 - 0.5	Not Excavated	2	N	77.3	Y
MW-22	AOC-12	7/8/1998	12 - 12.5	Not Excavated	14	N	76	Y
PL07-01	AOC-01C	3/18/2004	3 - 3.5	Not Excavated	2	N	75.9	Y
SB-AOC8B-2013-105	AOC-08B	2/25/2013	1 - 1.5	Not Excavated	2.3	N	74.5	Y
SB-AOC10-2013-105	AOC-10	2/22/2013	5 - 5.5	Not Excavated	2.4	N	69.2	Y
B8-8-2	AOC-08B	1/23/2008	9 - 9.5	Not Excavated	2.39	N	68.7	Y
B10-2	AOC-09	7/16/1998	4-Feb	Not Excavated	12	N	67	Y
PL07-04	AOC-01C	3/18/2004	4 - 4.5	Not Excavated	2	N	66.7	Y
SB-AOC10-2013-104	AOC-10	2/22/2013	0 - 0.5	Not Excavated	2.4	N	66.3	Y
SB-AOC10-2013-108	AOC-10	2/22/2013	0 - 0.5	Not Excavated	2.3	N	62	Y
SB-AOC10-2013-115	AOC-10	2/21/2013	0 - 0.5	Not Excavated	2.5	N	61.3	Y
B8-6	AOC-08B	7/14/1998	15.5 - 16	Not Excavated	12	N	59	Y
SB-AOC10-2013-103	AOC-10	2/22/2013	0 - 0.5	Not Excavated	2.4	N	57.1	Y
MW-22	AOC-12	7/8/1998	8 - 8.5	Not Excavated	12	N	57	Y
ISO16	AOC-12	6/4/2003	0 - 0.5	Not Excavated	2	N	55.9	Y
SB-AOC10-2013-114	AOC-10	2/22/2013	0 - 0.5	Not Excavated	2.4	N	55	Y
SB-AOC10-2013-113	AOC-10	2/22/2013	0 - 0.5	Not Excavated	2.2	N	52.1	Y
B8-5	AOC-08A	7/14/1998	7.5 - 8	Not Excavated	13	N	52	Y
SB-AOC8B-2013-100	AOC-08B	2/25/2013	0 - 0.5	Not Excavated	2.7	N	51.2	Y
PL10-108	AOC-01D	12/16/2010	0.5 - 1	Not Excavated	2.3	N	50	Y
SB-AOC10-2013-121	AOC-10	2/21/2013	3.5 - 4	Not Excavated	2.2	N	47.3	Y
ASO3	AOC-12	9/9/2002	0 - 0.5	Excavated	2	N	47.1	Y
B7-5	AOC-07B	7/10/1998	8 - 8.5	Not Excavated	13	N	47	Y
B10-4	AOC-09	7/16/1998	5 - 5.5	Not Excavated	12	N	46	Y
ZB-5	AOC-01A	3/5/2004	3 - 3.5	Not Excavated	2	N	45.7	Y
ZB-1-100	AOC-01A	12/16/2010	3 - 3.5	Not Excavated	2.3	N	45	Y

TABLE I-1
COMPARISON OF TOTAL CHROMIUM TO HEXAVALENT CHROMIUM CONCENTRATIONS
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

					Chromium VI (mg/kg)		Total Chromium (mg/kg)	
Location	AOC	Date	Sample Depth (ft bgs)	Remedial Action	Concentration	Detection	Concentration	Detection
PL07-100	AOC-01C	12/3/2010	0.5 - 1	Not Excavated	2.3	N	44.2	Y
MOA-B-BS3R	AOC-08A	1/17/2008	5.5 - 6	Not Excavated	2.36	N	44.1	Y
MW-22	AOC-12	7/8/1998	3.5 - 4	Not Excavated	11	N	44	Y
B8-7	AOC-08B	7/15/1998	0 - 0.5	Not Excavated	11	N	43	Y
SB-10-SO-208	AOC-10	2/6/2014	14.5 - 15	Not Excavated	2.6	N	42.5	Y
B7-3	AOC-07A	7/9/1998	10 - 10.5	Not Excavated	12	N	40	Y
B8-1	AOC-09	7/13/1998	3.5 - 4	Not Excavated	12	N	39	Y
ASO3	AOC-12	9/9/2002	0.5 - 1	Excavated	2	N	38.5	Y
SB-AOC8B-2013-109	AOC-08B	2/25/2013	19.5 - 20	Not Excavated	2.3	N	37.4	Y
JSO28	AOC-08A	6/3/2003	0 - 0.5	Not Excavated	2	N	37.3	Y
B7-1	AOC-07B	7/7/1998	0 - 0.5	Not Excavated	11	N	37	Y
B10-7	AOC-10	7/16/1998	3.5 - 4	Not Excavated	0.11	N	37	Y
SB-AOC10-2013-107	AOC-10	2/22/2013	0 - 0.5	Not Excavated	2.3	N	36.2	Y
RW-100	AOC-01D	5/31/2012	4.5 - 5	Not Excavated	2.3	N	36	Y
B8-5	AOC-08A	7/14/1998	11.5 - 12	Not Excavated	13	N	36	Y
SB-AOC10-2013-112	AOC-10	2/22/2013	0 - 0.5	Not Excavated	2.2	N	35.8	Y
B8-8-1	AOC-08B	1/17/2008	0 - 0.5	Not Excavated	2.4	N	35.5	Y
PL10-106	AOC-01D	12/16/2010	0.5 - 1	Not Excavated	2.3	N	35.3	Y
SB-AOC8B-2013-105	AOC-08B	2/25/2013	0 - 0.5	Not Excavated	2.3	N	35.3	Y
PL06-101	AOC-01C	12/7/2010	6.5 - 7	Not Excavated	2.4	N	35.2	Y
PL07-03	AOC-01C	3/18/2004	2.75 - 3.25	Not Excavated	2	N	34.8	Y
ZSO6-8	AOC-08A	9/27/2002	13 - 13.5	Not Excavated	2	N	34.8	Y
JSO20R	AOC-08A	1/17/2008	1.5 - 2	Not Excavated	2.31	N	34.7	Y
SB-AOC8B-2013-100	AOC-08B	2/25/2013	9.5 - 10	Not Excavated	2.4	N	34.7	Y
PL10-15	AOC-01D	3/17/2004	3 - 3.5	Not Excavated	2	N	34.6	Y
PL10-10	AOC-01D	3/5/2004	2.5 - 3	Not Excavated	2	N	34.1	Y
B8-8-4	AOC-08B	1/23/2008	12 - 12.5	Not Excavated	2.75	N	33.1	Y
PL12-01	AOC-01C	3/17/2004	4.5 - 5	Not Excavated	2	N	33	Y
PL10-101	AOC-01D	12/16/2010	0.5 - 1	Not Excavated	2.2	N	32.9	Y
PL12-105	AOC-01C	12/6/2010	8 - 8.5	Not Excavated	2.5	N	32.7	Y
B8-6	AOC-08B	7/14/1998	0 - 0.5	Not Excavated	11	N	32	Y
B8-7	AOC-08B	7/15/1998	10-Sep	Not Excavated	12	N	32	Y
B8-8-2	AOC-08B	1/23/2008	0 - 0.5	Not Excavated	2.31	N	32	Y
B10-6	AOC-09	7/16/1998	0 - 0.5	Not Excavated	12	N	32	Y
B10-5	AOC-10	7/16/1998	5 - 5.5	Not Excavated	12	N	32	Y
PL07-03	AOC-01C	3/18/2004	6 - 6.5	Not Excavated	2	N	31.7	Y
PL05-104	AOC-01C	12/6/2010	6.5 - 7	Not Excavated	2.5	N	31.1	Y
PL10-101	AOC-01D	12/16/2010	3 - 3.5	Not Excavated	2.2	N	31	Y
SB-AOC8B-2013-102	AOC-08B	2/25/2013	9.5 - 10	Not Excavated	2.5	N	31	Y
B10-8	AOC-10	7/17/1998	5.5 - 6	Not Excavated	12	N	31	Y
B8-3	AOC-10	7/14/1998	0 - 0.5	Not Excavated	11	N	31	Y
ASO8	AOC-12	9/11/2002	0 - 0.5	Excavated	2	N	30.9	Y
PL10-01	AOC-01D	3/11/2004	2.5 - 3	Not Excavated	2	N	30.6	Y
B8-8-2	AOC-08B	1/23/2008	12 - 12.5	Not Excavated	2.38	N	30.6	Y
SB-AOC10-2013-104	AOC-10	2/22/2013	5 - 5.5	Not Excavated	2.4	N	30	Y
SB-AOC8B-2013-100	AOC-08B	2/25/2013	19.5 - 20	Not Excavated	2.1	N	29.6	Y
ZB-1	AOC-01A	3/5/2004	2.75 - 3	Not Excavated	2	N	29.5	Y
SB-11-SO-201	AOC-11	4/25/2012	3.5 - 4	Not Excavated	0.47	N	29.5	Y
ASO32	AOC-12	7/23/2003	0 - 0.5	Excavated	2	N	29.2	Y
B7-5	AOC-07B	7/10/1998	12 - 12.5	Not Excavated	0.12	N	29	Y
B3-15	AOC-03	7/22/1998	0 - 0.5	Not Excavated	10	N	28	Y
B3-16	AOC-03	7/22/1998	0.5 - 1	Not Excavated	10	N	28	Y
B7-2	AOC-07B	7/9/1998	6 - 6.5	Not Excavated	13	N	28	Y
PL10-107	AOC-01D	12/16/2010	0.5 - 1	Not Excavated	2.3	N	27.4	Y
B3-4-200	AOC-03	4/23/2012	9.5 - 10	Not Excavated	0.48	N	27.4	Y
PL06-102	AOC-01C	12/7/2010	6.5 - 7	Not Excavated	2.3	N	27.2	Y
MOA-B-BS2R	AOC-08A	1/17/2008	5.5 - 6	Not Excavated	2.33	N	27.1	Y
SB-AOC10-2013-112	AOC-10	2/22/2013	9.5 - 10	Not Excavated	2.3	N	27.1	Y
SB-AOC10-2013-117	AOC-10	2/21/2013	7.5 - 8	Not Excavated	2.4	N	27.1	Y
PL12-05	AOC-01C	3/17/2004	4 - 4.5	Not Excavated	2	N	27	Y
ZSO6	AOC-08A	9/27/2002	0 - 0.5	Not Excavated	2	N	27	Y
B8-7	AOC-08B	7/15/1998	18 - 18.5	Not Excavated	12	N	27	Y

TABLE I-1
COMPARISON OF TOTAL CHROMIUM TO HEXAVALENT CHROMIUM CONCENTRATIONS
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

					Chromium VI (mg/kg)		Total Chromium (mg/kg)	
Location	AOC	Date	Sample Depth (ft bgs)	Remedial Action	Concentration	Detection	Concentration	Detection
SB-AOC10-2013-106	AOC-10	2/22/2013	0 - 0.5	Not Excavated	2.4	N	27	Y
PL12-111B	AOC-01C	12/2/2010	8 - 8.5	Not Excavated	2.3	N	26.9	Y
PL05-107	AOC-01C	12/6/2010	6.5 - 7	Not Excavated	2.3	N	26.8	Y
B6-201	AOC-03	4/23/2012	0.5 - 1	Not Excavated	0.47	N	26.7	Y
SB-AOC10-2013-100	AOC-10	2/22/2013	9.5 - 10	Not Excavated	2.4	N	26.7	Y
PL07-106	AOC-01C	12/7/2010	4.5 - 5	Not Excavated	2.3	N	26.6	Y
ASO33	AOC-12	7/23/2003	0 - 0.5	Excavated	2	N	26.4	Y
PL05-100	AOC-01C	12/6/2010	6.5 - 7	Not Excavated	2.3	N	26.3	Y
PL10-104	AOC-01D	12/16/2010	3 - 3.5	Not Excavated	2.4	N	26.2	Y
SB-AOC10-2013-116	AOC-10	2/21/2013	9.5 - 10	Not Excavated	2.5	N	26.2	Y
PL12-106	AOC-01C	12/6/2010	8 - 8.5	Not Excavated	2.5	N	26.1	Y
B3-14	AOC-03	7/22/1998	0 - 0.5	Not Excavated	12	N	26	Y
B7-5	AOC-07B	7/10/1998	2.5 - 3	Not Excavated	12	N	26	Y
JSO14R	AOC-08A	1/17/2008	5.5 - 6	Not Excavated	2.32	N	25.9	Y
SB-AOC8B-2013-106	AOC-08B	2/25/2013	0 - 0.5	Not Excavated	2.3	N	25.8	Y
L1-2	AOC-01A	3/9/2004	5.5 - 6	Not Excavated	2	N	25.6	Y
PL05-106	AOC-01C	12/7/2010	6.5 - 7	Not Excavated	2.2	N	25.6	Y
B8-8-4	AOC-08B	1/23/2008	0 - 0.5	Not Excavated	2.28	N	25.6	Y
TK6-PE-3	AOC-01A	4/8/2008	11 - 11.5	Not Excavated	2	N	25.5	Y
PL07-103	AOC-01C	12/7/2010	0.5 - 1	Not Excavated	2.4	N	25.2	Y
ZSO6	AOC-08A	9/27/2002	8.5 - 9	Not Excavated	2	N	25.2	Y
PL05-103	AOC-01C	12/6/2010	3.5 - 4	Not Excavated	2.4	N	25.1	Y
PL07-103	AOC-01C	12/7/2010	4.5 - 5	Not Excavated	2.5	N	25.1	Y
B8-8-3	AOC-08B	1/18/2008	9 - 9.5	Not Excavated	2.38	N	24.8	Y
PL05-104	AOC-01C	12/6/2010	3.5 - 4	Not Excavated	2.5	N	24.7	Y
ZSO6	AOC-08A	9/27/2002	4 - 4.5	Not Excavated	2	N	24.7	Y
SB-AOC8B-2013-107	AOC-08B	2/25/2013	0 - 0.5	Not Excavated	2.3	N	24.7	Y
GS08-200	AOC-02	4/24/2012	11.5 - 12	Not Excavated	0.5	N	24.5	Y
JSO24	OFF-SITE	6/2/2003	0 - 0.5	Not Excavated	2	N	24.5	Y
B8-8-3	AOC-08B	1/18/2008	0 - 0.5	Not Excavated	2.4	N	24.4	Y
ZB-1-101	AOC-01A	12/16/2010	0.5 - 1	Not Excavated	2.2	N	24.3	Y
PL05-104	AOC-01C	12/6/2010	0.5 - 1	Not Excavated	2.5	N	24.2	Y
B3-17	AOC-03	7/24/1998	0.8 - 1.3	Not Excavated	11	N	24	Y
SB-10-SO-211	AOC-10	2/7/2014	11.5 - 12	Not Excavated	2.4	N	24	Y
ISO13	AOC-08A	6/4/2003	0 - 0.5	Not Excavated	2	N	23.8	Y
JSO27	OFF-SITE	6/3/2003	0 - 0.5	Not Excavated	2	N	23.7	Y
PL12-100	AOC-01C	12/3/2010	4.5 - 5	Not Excavated	2.3	N	23.6	Y
PL12-103	AOC-01C	12/3/2010	4.5 - 5	Not Excavated	2.5	N	23.6	Y
PL12-104	AOC-01C	12/3/2010	8 - 8.5	Not Excavated	2.3	N	23.6	Y
PL05-101	AOC-01C	12/6/2010	6.5 - 7	Not Excavated	2.1	N	23.5	Y
PL12-115	AOC-01C	12/3/2010	0.5 - 1	Not Excavated	2.4	N	23.5	Y
SB-AOC10-2013-122	AOC-10	2/21/2013	3.5 - 4	Not Excavated	2.4	N	23.4	Y
B6-201	AOC-03	4/23/2012	9.5 - 10	Not Excavated	0.49	N	23.3	Y
PL07-105	AOC-01C	12/3/2010	0.5 - 1	Not Excavated	2.3	N	23.2	Y
PL12-102	AOC-01C	12/3/2010	0.5 - 1	Not Excavated	2.3	N	23.2	Y
SB-AOC10-2013-106	AOC-10	2/22/2013	9.5 - 10	Not Excavated	2.4	N	23.2	Y
SB-10-SO-212	AOC-10	2/7/2014	11.5 - 12	Not Excavated	2.4	N	23.1	Y
SB-AOC10-2013-101	AOC-10	2/22/2013	7.5 - 8	Not Excavated	2.5	N	23.1	Y
ZB-1-101	AOC-01A	12/16/2010	3 - 3.5	Not Excavated	2.2	N	23	Y
PL06-102	AOC-01C	12/7/2010	3.5 - 4	Not Excavated	2.4	N	23	Y
PL12-103	AOC-01C	12/3/2010	8 - 8.5	Not Excavated	2.2	N	23	Y
B7-3	AOC-07A	7/9/1998	6 - 6.5	Not Excavated	11	N	23	Y
B8-6	AOC-08B	7/14/1998	19.5 - 20	Not Excavated	13	N	23	Y
B10-6	AOC-09	7/16/1998	6-May	Not Excavated	12	N	23	Y
ASO16	OFF-SITE	6/2/2003	0 - 0.5	Excavated	2	N	22.9	Y
PL12-100	AOC-01C	12/3/2010	0.5 - 1	Not Excavated	2.4	N	22.8	Y
ZSO6-7	AOC-08A	9/27/2002	11.5 - 12	Not Excavated	2	N	22.8	Y
PL05-105	AOC-01C	12/6/2010	6.5 - 7	Not Excavated	2.2	N	22.7	Y
SB-AOC10-2013-119	AOC-10	2/21/2013	7.5 - 8	Not Excavated	2.5	N	22.7	Y
BF-S13	AOC-11	10/23/2000	0 - 0.5	Not Excavated	2	N	22.7	Y
PL06-101	AOC-01C	12/7/2010	3.5 - 4	Not Excavated	2.4	N	22.6	Y
PL07-03	AOC-01C	3/18/2004	8 - 8.5	Not Excavated	2	N	22.6	Y

TABLE I-1
COMPARISON OF TOTAL CHROMIUM TO HEXAVALENT CHROMIUM CONCENTRATIONS
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

					Chromium VI (mg/kg)		Total Chromium (mg/kg)	
Location	AOC	Date	Sample Depth (ft bgs)	Remedial Action	Concentration	Detection	Concentration	Detection
PL07-101	AOC-01C	12/3/2010	3 - 3.5	Not Excavated	2.5	N	22.6	Y
B3-4-200	AOC-03	4/23/2012	0.5 - 1	Not Excavated	0.47	N	22.6	Y
PL05-105	AOC-01C	12/6/2010	3.5 - 4	Not Excavated	2.4	N	22.5	Y
RW-100	AOC-01D	5/31/2012	1.5 - 2	Not Excavated	2.3	N	22.4	Y
PL05-101	AOC-01C	12/6/2010	0.5 - 1	Not Excavated	2.4	N	22.2	Y
SB-AOC10-2013-125	AOC-10	2/21/2013	6.5 - 7	Not Excavated	2.2	N	22.1	Y
PL12-101	AOC-01C	12/3/2010	0.5 - 1	Not Excavated	2.4	N	22	Y
B10-1	AOC-09	7/15/1998	4.5 - 5	Not Excavated	12	N	22	Y
SB-AOC10-2013-124	AOC-10	2/21/2013	6.5 - 7	Not Excavated	2.4	N	22	Y
PL12-114	AOC-01C	12/3/2010	8 - 8.5	Not Excavated	2.3	N	21.9	Y
PL05-107	AOC-01C	12/6/2010	3.5 - 4	Not Excavated	2.5	N	21.8	Y
PL07-101	AOC-01C	12/3/2010	4.5 - 5	Not Excavated	2.3	N	21.7	Y
PL10-09	AOC-01D	3/5/2004	2.5 - 3	Not Excavated	2	N	21.6	Y
PL12-108	AOC-01C	12/2/2010	4.5 - 5	Not Excavated	2.5	N	21.5	Y
JSO26	OFF-SITE	6/3/2003	0 - 0.5	Not Excavated	2	N	21.5	Y
BF-S4	AOC-11	9/25/2000	0 - 0.5	Excavated	2	N	21.3	Y
ISO19	AOC-12	6/4/2003	0 - 0.5	Not Excavated	2	N	21.3	Y
ZSO6-9	AOC-08A	9/27/2002	15 - 15.5	Not Excavated	2	N	21.2	Y
PL12-105	AOC-01C	12/6/2010	4.5 - 5	Not Excavated	2.5	N	21.1	Y
SB-AOC8B-2013-103	AOC-08B	2/25/2013	1 - 1.5	Not Excavated	2.2	N	21	Y
SB-AOC8B-2013-104	AOC-08B	2/25/2013	0 - 0.5	Not Excavated	2.3	N	20.9	Y
PL05-100	AOC-01C	12/6/2010	3.5 - 4	Not Excavated	2.4	N	20.8	Y
SB-AOC8B-2013-108	AOC-08B	2/25/2013	0 - 0.5	Not Excavated	2.4	N	20.8	Y
TP9-2-202	AOC-09	4/26/2012	9 - 9.5	Not Excavated	0.49	N	20.8	Y
ASO8	AOC-12	9/11/2002	3.5 - 4	Not Excavated	2	N	20.8	Y
PL10-17	AOC-01D	3/17/2004	3.5 - 4	Not Excavated	2	N	20.7	Y
ZB-1-100	AOC-01A	12/16/2010	0.5 - 1	Not Excavated	2.2	N	20.6	Y
PL07-107	AOC-01C	12/3/2010	3 - 3.5	Not Excavated	2.4	N	20.6	Y
JSO23	AOC-08B	10/3/2002	3.5 - 4	Not Excavated	2	N	20.6	Y
PL12-107B	AOC-01C	12/2/2010	4.5 - 5	Not Excavated	2.5	N	20.5	Y
ISO18	AOC-12	6/4/2003	0 - 0.5	Not Excavated	2	N	20.5	Y
PL05-103	AOC-01C	12/6/2010	0.5 - 1	Not Excavated	2.5	N	20.4	Y
PL07-101	AOC-01C	12/3/2010	0.5 - 1	Not Excavated	2.3	N	20.4	Y
SB-AOC10-2013-113	AOC-10	2/22/2013	9.5 - 10	Not Excavated	2.5	N	20.4	Y
ASO2	AOC-12	9/9/2002	0 - 0.5	Excavated	2	N	20.4	Y
PL05-103	AOC-01C	12/6/2010	6.5 - 7	Not Excavated	2.3	N	20.3	Y
SB-AOC10-2013-121	AOC-10	2/21/2013	6.5 - 7	Not Excavated	2.4	N	20.2	Y
PL10-03	AOC-01D	3/5/2004	6 - 6.5	Not Excavated	2	N	20.1	Y
SB-AOC8B-2013-108	AOC-08B	2/25/2013	1 - 1.5	Not Excavated	2.3	N	20.1	Y
B10-8	AOC-10	7/17/1998	0 - 0.5	Not Excavated	12	N	20	Y
ZSO6	AOC-08A	9/27/2002	6 - 6.5	Not Excavated	2	N	19.9	Y
ASO1	AOC-12	9/9/2002	0 - 0.5	Not Excavated	2	N	19.8	Y
PL12-107B	AOC-01C	12/2/2010	3.5 - 4	Not Excavated	2.3	N	19.7	Y
ASO4	AOC-12	9/11/2002	3.5 - 4	Not Excavated	2	N	19.7	Y
PL05-101	AOC-01C	12/6/2010	0.5 - 4	Not Excavated	2.4	N	19.6	Y
PL12-105	AOC-01C	12/6/2010	0.5 - 1	Not Excavated	2.4	N	19.6	Y
WSO11	OFF-SITE	6/2/2003	0 - 0.5	Not Excavated	2	N	19.6	Y
PL06-101	AOC-01C	12/7/2010	0.5 - 1	Not Excavated	2.3	N	19.5	Y
PL12-115	AOC-01C	12/3/2010	4.5 - 5	Not Excavated	2.3	N	19.5	Y
RW-102	AOC-01D	5/30/2012	0.5 - 1	Not Excavated	2.3	N	19.4	Y
SB-AOC8B-2013-103	AOC-08B	2/25/2013	0 - 0.5	Not Excavated	2.1	N	19.4	Y
SB-11-SO-200	AOC-11	4/25/2012	3.5 - 4	Not Excavated	0.44	N	19.4	Y
PL06-103	AOC-01C	12/7/2010	0.5 - 1	Not Excavated	2.4	N	19.2	Y
ASO15	OFF-SITE	6/2/2003	0 - 0.5	Not Excavated	2	N	19.2	Y
PL05-107	AOC-01C	12/6/2010	0.5 - 1	Not Excavated	2.3	N	19	Y
SB-AOC10-2013-127	AOC-10	2/21/2013	6.5 - 7	Not Excavated	2.2	N	19	Y
JSO25	OFF-SITE	6/3/2003	0 - 0.5	Not Excavated	2	N	19	Y
SB-AOC8B-2013-109	AOC-08B	2/25/2013	0 - 0.5	Not Excavated	2.3	N	18.9	Y
ASO1	AOC-12	9/9/2002	0.5 - 1	Not Excavated	2	N	18.9	Y
PL12-103	AOC-01C	12/3/2010	0.5 - 1	Not Excavated	2.4	N	18.8	Y
PL10-04	AOC-01D	3/11/2004	2.5 - 3	Not Excavated	2	N	18.7	Y
PL07-106	AOC-01C	12/7/2010	3 - 3.5	Not Excavated	2.2	N	18.6	Y

TABLE I-1
COMPARISON OF TOTAL CHROMIUM TO HEXAVALENT CHROMIUM CONCENTRATIONS
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

					Chromium VI (mg/kg)		Total Chromium (mg/kg)	
Location	AOC	Date	Sample Depth (ft bgs)	Remedial Action	Concentration	Detection	Concentration	Detection
SB-AOC8B-2013-106	AOC-08B	2/25/2013	1 - 1.5	Not Excavated	2.3	N	18.6	Y
ASO7	AOC-12	9/9/2002	0 - 0.5	Excavated	2	N	18.5	Y
PL12-101	AOC-01C	12/3/2010	4.5 - 5	Not Excavated	2.4	N	18.4	Y
PL10-105	AOC-01D	12/16/2010	3 - 3.5	Not Excavated	2.2	N	18.4	Y
TP7-4	AOC-07B	1/10/2008	9.5 - 10	Not Excavated	2.47	N	18.3	Y
B8-8-4	AOC-08B	1/23/2008	9 - 9.5	Not Excavated	2.48	N	18.3	Y
ZSO5	AOC-08A	9/27/2002	16 - 16.5	Not Excavated	2	N	18.2	Y
SB-AOC10-2013-105	AOC-10	2/22/2013	9.5 - 10	Not Excavated	2.4	N	18.2	Y
SB-AOC10-2013-114	AOC-10	2/22/2013	4.5 - 5	Not Excavated	2.4	N	18.2	Y
SB-AOC8B-2013-109	AOC-08B	2/25/2013	9.5 - 10	Not Excavated	2.5	N	18.1	Y
ISO17	AOC-12	6/4/2003	0 - 0.5	Not Excavated	2	N	18.1	Y
PL05-106	AOC-01C	12/7/2010	3.5 - 4	Not Excavated	2.4	N	18	Y
B3-14	AOC-03	7/22/1998	3.5 - 4	Not Excavated	12	N	18	Y
B3-15	AOC-03	7/22/1998	2 - 2.5	Not Excavated	11	N	18	Y
B7-1	AOC-07B	7/7/1998	13 - 13.5	Not Excavated	11	N	18	Y
PL05-100	AOC-01C	12/6/2010	0.5 - 1	Not Excavated	2.3	N	17.9	Y
PL07-103	AOC-01C	12/7/2010	3 - 3.5	Not Excavated	2.4	N	17.9	Y
PL12-102	AOC-01C	12/3/2010	4.5 - 5	Not Excavated	2.1	N	17.9	Y
PL12-114	AOC-01C	12/3/2010	4.5 - 5	Not Excavated	2.6	N	17.9	Y
PL10-12	AOC-01D	3/17/2004	3 - 3.5	Not Excavated	2	N	17.9	Y
ZB-3	AOC-01A	3/11/2004	2.5 - 3	Not Excavated	2	N	17.8	Y
ISO6	AOC-07A	9/12/2002	15.5 - 16	Not Excavated	2	N	17.7	Y
SB-AOC10-2013-128	AOC-10	2/21/2013	6.5 - 7	Not Excavated	2.2	N	17.7	Y
WSO8	AOC-09	10/11/2002	1 - 1.5	Not Excavated	2	N	17.6	Y
PL06-102	AOC-01C	12/7/2010	0.5 - 1	Not Excavated	2.4	N	17.5	Y
PL10-108	AOC-01D	12/16/2010	3 - 3.5	Not Excavated	2.2	N	17.2	Y
PL12-109	AOC-01C	12/2/2010	4.5 - 5	Not Excavated	2.4	N	17.1	Y
JSO25	OFF-SITE	6/3/2003	5.5 - 6	Not Excavated	2	N	17.1	Y
B8-1	AOC-09	7/13/1998	11.5 - 12	Not Excavated	12	N	17	Y
PL05-106	AOC-01C	12/7/2010	0.5 - 1	Not Excavated	2.4	N	16.9	Y
PL12-03	AOC-01C	3/4/2004	7 - 7.5	Not Excavated	2	N	16.9	Y
SB-AOC10-2013-105	AOC-10	2/22/2013	0 - 0.5	Not Excavated	2.3	N	16.9	Y
SB-AOC10-2013-129	AOC-10	2/21/2013	6.5 - 7	Not Excavated	2.4	N	16.7	Y
BF-S22	AOC-11	10/23/2000	0 - 0.5	Not Excavated	2	N	16.5	Y
ASO2	AOC-12	9/9/2002	1 - 1.5	Excavated	2	N	16.5	Y
ASO7	AOC-12	9/9/2002	3.5 - 4	Not Excavated	2	N	16.5	Y
MW-81	AOC-01C	5/22/2012	12 - 12.5	Not Excavated	0.45	N	16.4	Y
SB-AOC10-2013-102	AOC-10	2/22/2013	5 - 5.5	Not Excavated	2.1	N	16.4	Y
SB-AOC8B-2013-106	AOC-08B	2/25/2013	7.5 - 8	Not Excavated	2.3	N	16.3	Y
JSO26	OFF-SITE	6/3/2003	2 - 2.5	Not Excavated	2	N	16.3	Y
B8-9	AOC-08A	7/15/1998	5.5 - 6	Not Excavated	13	N	16	Y
B8-7	AOC-08B	7/15/1998	15.5 - 16	Not Excavated	12	N	16	Y
B8-3	AOC-10	7/14/1998	11.5 - 12	Not Excavated	12	N	16	Y
ASO4	AOC-12	9/11/2002	0 - 0.5	Not Excavated	2	N	16	Y
ZSO6	AOC-08A	9/27/2002	2 - 2.5	Not Excavated	2	N	15.9	Y
SB-AOC10-2013-110	AOC-10	2/22/2013	9.5 - 10	Not Excavated	2.4	N	15.9	Y
SB-AOC10-2013-123	AOC-10	2/21/2013	6.5 - 7	Not Excavated	2.5	N	15.9	Y
WSO11	OFF-SITE	6/2/2003	5 - 5.5	Not Excavated	2	N	15.9	Y
PL10-18	AOC-01D	3/17/2004	2.5 - 3	Not Excavated	2	N	15.7	Y
PL12-02	AOC-01C	3/4/2004	6.5 - 7	Not Excavated	2	N	15.6	Y
BF-S21	AOC-11	10/23/2000	0 - 0.5	Not Excavated	2	N	15.6	Y
ASO9	AOC-12	9/11/2002	0 - 0.5	Excavated	2	N	15.5	Y
PL07-100	AOC-01C	12/3/2010	3 - 3.5	Not Excavated	2.3	N	15.4	Y
SB-AOC10-2013-126	AOC-10	2/21/2013	6.5 - 7	Not Excavated	2.2	N	15.4	Y
WSO9	AOC-10	10/11/2002	0.5 - 1	Not Excavated	2	N	15.4	Y
MW-81	AOC-01C	5/22/2012	0.5 - 1	Not Excavated	0.44	N	15.2	Y
PL10-106	AOC-01D	12/16/2010	3 - 3.5	Not Excavated	2.3	N	15.2	Y
PL07-107	AOC-01C	12/3/2010	0.5 - 1	Not Excavated	2.4	N	15.1	Y
PL12-113	AOC-01C	12/3/2010	0.5 - 1	Not Excavated	2.5	N	15.1	Y
PL10-08	AOC-01D	3/5/2004	2.5 - 3	Not Excavated	2	N	15.1	Y
B7-6	AOC-08A	7/10/1998	8 - 8.5	Not Excavated	12	N	15	Y
B8-1	AOC-09	7/13/1998	0 - 0.5	Not Excavated	10	N	15	Y

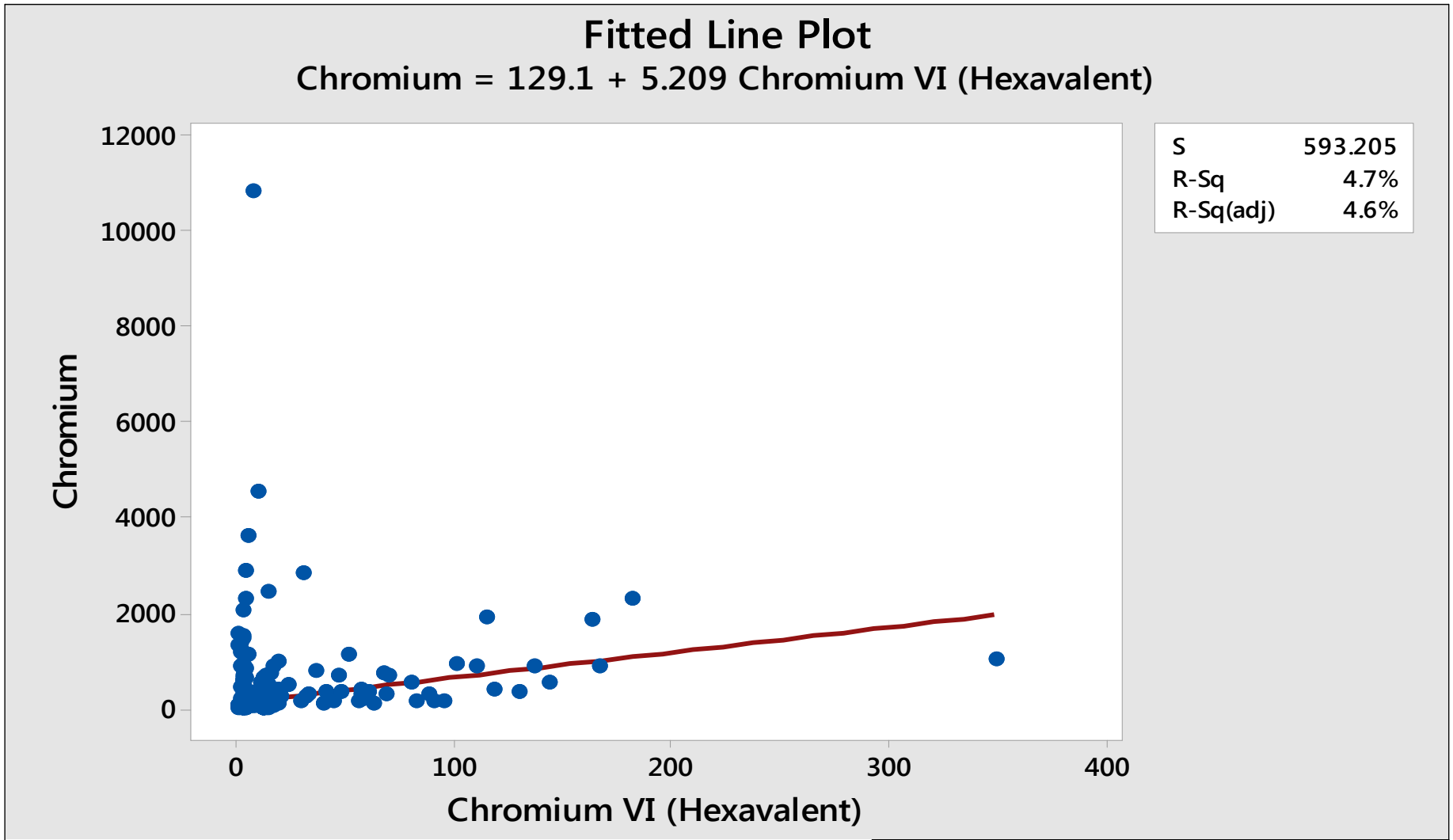
TABLE I-1
COMPARISON OF TOTAL CHROMIUM TO HEXAVALENT CHROMIUM CONCENTRATIONS
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

					Chromium VI (mg/kg)		Total Chromium (mg/kg)	
Location	AOC	Date	Sample Depth (ft bgs)	Remedial Action	Concentration	Detection	Concentration	Detection
JSO28	AOC-08A	6/3/2003	3 - 3.5	Not Excavated	2	N	14.9	Y
PL10-03	AOC-01D	3/5/2004	5 - 5.5	Not Excavated	2	N	14.8	Y
PL10-103	AOC-01D	12/16/2010	0.5 - 1	Not Excavated	2.3	N	14.8	Y
ASO5	AOC-12	9/11/2002	0 - 0.5	Not Excavated	2	N	14.8	Y
PL10-103	AOC-01D	12/16/2010	3 - 3.5	Not Excavated	2.3	N	14.6	Y
WSO3	AOC-11	10/2/2002	2.5 - 3	Not Excavated	2	N	14.6	Y
ASO5	AOC-12	9/11/2002	3.5 - 4	Not Excavated	2	N	14.6	Y
PL10-08	AOC-01D	3/5/2004	0.5 - 1	Not Excavated	2	N	14.5	Y
SB-AOC8B-2013-101	AOC-08B	2/25/2013	0 - 0.5	Not Excavated	2.2	N	14.5	Y
SB-AOC10-2013-109	AOC-10	2/22/2013	0 - 0.5	Not Excavated	2.3	N	14.5	Y
PL07-01	AOC-01C	3/18/2004	4.5 - 5	Not Excavated	2	N	14.4	Y
SB-AOC8B-2013-101	AOC-08B	2/25/2013	19.5 - 20	Not Excavated	2.3	N	14.2	Y
SB-AOC10-2013-112	AOC-10	2/22/2013	4.5 - 5	Not Excavated	2.3	N	14.1	Y
PL10-06	AOC-01A	3/17/2004	2.75 - 3.25	Not Excavated	2	N	14	Y
B8-9	AOC-08A	7/15/1998	10.5 - 11	Not Excavated	12	N	14	Y
B8-3	AOC-10	7/14/1998	15 - 15.5	Not Excavated	12	N	14	Y
ASO6	AOC-12	9/11/2002	3.5 - 4	Not Excavated	2	N	13.7	Y
TP7-1	AOC-07B	1/10/2008	12 - 12.5	Not Excavated	2.52	N	13.6	Y
PL10-16	AOC-01D	3/17/2004	2.5 - 3	Not Excavated	2	N	13.4	Y
JSO22	AOC-08B	10/3/2002	3.5 - 4	Not Excavated	2	N	13.4	Y
ASO9	AOC-12	9/11/2002	3.5 - 4	Not Excavated	2	N	13.3	Y
PL05-105	AOC-01C	12/6/2010	0.5 - 1	Not Excavated	2.4	N	13	Y
B3-16	AOC-03	7/22/1998	4 - 4.5	Not Excavated	12	N	13	Y
B7-2	AOC-07B	7/9/1998	18 - 18.5	Not Excavated	12	N	13	Y
ASO15	OFF-SITE	6/2/2003	3.25 - 3.75	Not Excavated	2	N	13	Y
PL12-102	AOC-01C	12/3/2010	7.5 - 8	Not Excavated	2.2	N	12.9	Y
SB-AOC8B-2013-108	AOC-08B	2/25/2013	7.5 - 8	Not Excavated	2.2	N	12.9	Y
SB-10-SO-208	AOC-10	2/6/2014	19.5 - 20	Not Excavated	2.5	N	12.8	Y
PL10-104	AOC-01D	12/16/2010	0.5 - 1	Not Excavated	2.2	N	12.6	Y
PL07-104	AOC-01C	12/3/2010	4.5 - 5	Not Excavated	2.3	N	12.4	Y
PL12-106	AOC-01C	12/6/2010	4.5 - 5	Not Excavated	2.5	N	12.4	Y
WSO10	OFF-SITE	6/2/2003	4 - 4.5	Not Excavated	2	N	12.4	Y
RW-101	AOC-01D	5/31/2012	1 - 1.5	Not Excavated	2.2	N	12.3	Y
PL12-101	AOC-01C	12/3/2010	7.5 - 8	Not Excavated	2.2	N	12	Y
B7-4	AOC-07B	7/9/1998	2.5 - 3	Not Excavated	12	N	12	Y
B7-4	AOC-07B	7/9/1998	6.5 - 7	Not Excavated	11	N	12	Y
B7-6	AOC-08A	7/10/1998	3 - 3.5	Not Excavated	12	N	12	Y
B8-8-3	AOC-08B	1/18/2008	11.5 - 12	Not Excavated	2.43	N	12	Y
ISO4	AOC-07A	9/12/2002	16 - 16.5	Not Excavated	2	N	11.9	Y
CSO4	OFF-SITE	6/2/2003	0 - 0.5	Not Excavated	2	N	11.9	Y
PL10-105	AOC-01D	12/16/2010	0.5 - 1	Not Excavated	2.2	N	11.7	Y
SB-AOC8B-2013-103	AOC-08B	2/25/2013	19.5 - 20	Not Excavated	2.3	N	11.6	Y
SB-AOC10-2013-114	AOC-10	2/22/2013	9.5 - 10	Not Excavated	2.4	N	11.6	Y
ASO6	AOC-12	9/11/2002	0 - 0.5	Not Excavated	2	N	11.5	Y
SB-AOC8B-2013-105	AOC-08B	2/25/2013	19.5 - 20	Not Excavated	2.5	N	11.2	Y
SB-10-SO-207	AOC-10	2/6/2014	19.5 - 20	Not Excavated	2.4	N	11.2	Y
PL12-106	AOC-01C	12/6/2010	0.5 - 1	Not Excavated	2.3	N	11.1	Y
B8-9	AOC-08A	7/15/1998	16.5 - 16.9	Not Excavated	10	N	11	Y
B10-4	AOC-09	7/16/1998	11.5 - 12	Not Excavated	12	N	11	Y
JSO24	OFF-SITE	6/2/2003	5.5 - 6	Not Excavated	2	N	11	Y
PL12-104	AOC-01C	12/3/2010	4.5 - 5	Not Excavated	2.2	N	10.9	Y
SB-AOC8B-2013-100	AOC-08B	2/25/2013	1 - 1.5	Not Excavated	2.4	N	10.9	Y
PL10-07	AOC-01D	3/5/2004	2.5 - 3	Not Excavated	2	N	10.8	Y
B9-16-200	AOC-09	4/25/2012	0 - 0.5	Not Excavated	0.44	N	10.7	Y
PL12-04	AOC-01C	3/17/2004	4 - 4.5	Not Excavated	2	N	10.3	Y
JSO27	OFF-SITE	6/3/2003	2 - 2.5	Not Excavated	2	N	10.3	Y
SB-10-SO-209	AOC-10	2/6/2014	14.5 - 15	Not Excavated	2.6	N	10.2	Y
ASO16	OFF-SITE	6/2/2003	8 - 8.5	Not Excavated	2	N	9.9	Y
B8-4	AOC-08B	7/14/1998	21.5 - 22	Not Excavated	12	N	9.8	Y
PL10-107	AOC-01D	12/16/2010	3 - 3.5	Not Excavated	2.2	N	9.5	Y
SB-10-SO-209	AOC-10	2/6/2014	19.5 - 20	Not Excavated	2.5	N	8.9	Y
B8-8-3	AOC-08B	1/18/2008	19.5 - 20	Not Excavated	2.57	N	8.7	Y

TABLE I-1
COMPARISON OF TOTAL CHROMIUM TO HEXAVALENT CHROMIUM CONCENTRATIONS
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

					Chromium VI (mg/kg)		Total Chromium (mg/kg)	
Location	AOC	Date	Sample Depth (ft bgs)	Remedial Action	Concentration	Detection	Concentration	Detection
SB-10-SO-210	AOC-10	2/6/2014	14.5 - 15	Not Excavated	2.3	N	8.7	Y
SB-10-SO-207	AOC-10	2/6/2014	14.5 - 15	Not Excavated	2.4	N	8.6	Y
B8-1	AOC-09	7/13/1998	17 - 17.5	Not Excavated	12	N	8.5	Y
B10-6	AOC-09	7/16/1998	11.5 - 12	Not Excavated	12	N	8.3	Y
B10-8	AOC-10	7/17/1998	1.5 - 2	Not Excavated	12	N	8.2	Y
B3-17	AOC-03	7/24/1998	4.3 - 4.8	Not Excavated	11	N	8	Y
SB-AOC8B-2013-103	AOC-08B	2/25/2013	9.5 - 10	Not Excavated	2.3	N	7.8	Y
CSO4	OFF-SITE	6/2/2003	6.5 - 7	Not Excavated	2	N	7.8	Y
SB-10-SO-210	AOC-10	2/6/2014	19.5 - 20	Not Excavated	2.4	N	7.6	Y
B7-1	AOC-07B	7/7/1998	18 - 18.5	Not Excavated	11	N	7.3	Y
B8-2	AOC-10	7/13/1998	15.5 - 15.8	Not Excavated	13	N	7.1	Y
B8-8-1	AOC-08B	1/17/2008	19.5 - 20	Not Excavated	2.38	N	6.7	Y
B7-6	AOC-08A	7/10/1998	18 - 18.5	Not Excavated	14	N	6.4	Y
B8-8	AOC-08B	7/15/1998	18 - 18.5	Not Excavated	12	N	5.9	Y
RW-102	AOC-01D	5/30/2012	7 - 7.5	Not Excavated	2.4	N	5.5	Y
MW-22	AOC-12	7/8/1998	17.5 - 18	Not Excavated	11	N	5.1	Y
B10-3	AOC-10	7/16/1998	9 - 9.5	Not Excavated	11	N	4.4	Y
B10-1	AOC-09	7/15/1998	13.5 - 14	Not Excavated	12	N	3.9	Y
PL11-02	AOC-01A	3/18/2004	3 - 3.5	Not Excavated	2	N	3.2	Y
B10-2	AOC-09	7/16/1998	11.5 - 12	Not Excavated	12	N	3.2	Y
PL11-01	AOC-01A	3/18/2004	3 - 3.5	Not Excavated	2	N	2.9	Y
B8-4	AOC-08B	7/14/1998	0 - 0.5	Not Excavated	11	N	0.72	Y
B8-5	AOC-08A	7/14/1998	15.5 - 16	Not Excavated	11	N	2.8	N
B7-3	AOC-07A	7/9/1998	14 - 14.5	Not Excavated	12	N	2.5	N
B7-2	AOC-07B	7/9/1998	12 - 12.5	Not Excavated	12	N	2.5	N
B10-7	AOC-10	7/16/1998	6.5 - 7	Not Excavated	12	N	2.5	N

Notes:
1. ~~Striketrough~~ indicates values removed as outliers



HALEY ALDRICH

REMEDIAL ACTION REPORT ADDENDUM
RACER TRUST - EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

TOTAL CHROMIUM VERSUS
HEXAVALENT CHROMIUM
LINEAR REGRESSION PLOT

APRIL 2017

FIGURE I-1

APPENDIX J

NJDEP Comments on Groundwater RIR and Soil RAR

Putz, Daniel

Subject: FW: Delphi Interior & Lighting Systems, PI 011336
Attachments: Delphi Ground Water Comments.doc; Delphi IGW issues.doc

---

From: Murphy, Amy
Sent: 18 August 2016 1:13 PM
To: Robert Hare (rhare@racertrust.org) <rhare@racertrust.org>; Hagen, David <DHagen@haleyaldrich.com>; Putz, Daniel <DPutz@haleyaldrich.com>; Quafisi, Dimitri <DQuafisi@haleyaldrich.com>
Subject: FW: Delphi Interior & Lighting Systems, PI 011336

From: Turner, Matthew [mailto:Matthew.Turner@dep.nj.gov]
Sent: Tuesday, August 16, 2016 3:33 PM
To: Murphy, Amy <AMurphy@haleyaldrich.com>
Cc: Monroe, Jill <Jill.Monroe@dep.nj.gov>; Schick, Kevin <Kevin.Schick@dep.nj.gov>
Subject: Delphi Interior & Lighting Systems, PI 011336

Amy

The NJDEP has completed an inspection and review of the RIR submitted for the above subject site. In the review of the ground water and the impact to ground water pathway, the NJDEP has identified the attached issues that should be addressed. Please review the issues and provide a response.

If you have any questions please feel free to contact me at 609-984-1742.

Thanks
Matt

Matthew Turner
Bureau of Inspection and Review
401 E. State Street
P.O. Box 420
Mail Code 401-05D
Trenton, NJ 08625-0420
609-984-1742

M E M O R A N D U M

TO: Matt Turner/Gerry Hahn, Technical Inspectors, BIR

FROM: Kevin Schick, Chief, BEERA

SUBJECT: Delphi Interior & Lighting Systems – PI#011336 – Groundwater Remedial Investigation Report – Component Reviews

DATE: July 15, 2016

A request for component reviews as indicated below has been received following the BIR inspection of the former Delphi Interior and Lighting facility (PI# 011336) in Ewing, NJ Groundwater RI report dated May 6, 2016. Note that BEERA has previously commented on multiple components from the Soil Remedial Investigation Report submitted by Haley & Aldrich, Inc. for this site dated June 19, 2014. BEERA's comments on the Soil RI are already documented in NJEMS. Each of the groundwater RI component reviews are addressed separately below.

Compliance option to evaluate IGW pathway	5/12/2016	Utilized arithmetic mean and 95% UCL to achieve compliance with IGW pathway (see "RIR report rcvd via download 5/24/16 Part -1" E-Pages 58, 59)
Ecological impact	5/12/2016	SW and sediment sampling of Gold Run Pond (see "RIR report rcvd via download 5/24/16 Part -1" E-Pages 11 thru 21, 35 thru 53 111 thru 116, 466, 471, 474, 517)

I. Compliance Option to Evaluate the Soil IGW Pathway

The LSRP has utilized a process whereby soil IGW is sequentially evaluated and AOCs screen out by compliance with the default soil IGWSRS values using; single point compliance, arithmetic mean (<10 samples), 95 percent UCL of the mean and spatially weighted averages . In addition, soil IGW for individual contaminants was screen out by the LSRP using professional judgement that included an evaluation of the existing soil data and whether migration to groundwater has occurred based a comparison historic and most recent groundwater data to GWQS. Regarding the soil IGW pathway the LSRP has recommended further evaluation of nine metals, three PAHs and ten VOC compounds.

BEERA accepts the compliance and attainment strategy utilized for the evaluation of the soil impact to groundwater pathway using the methods prescribed in the Technical Guidance for the Attainment of Remediation Standards and a site-specific evaluation utilizing the extensive groundwater data. It is far more difficult to comment on the professional judgement utilized to screen out contaminants for further consideration without having direct involvement with the numerous AOCs, past remedial activities and data that includes 1,000+ samples. It is also unclear how the October 2010 Settlement Agreement that includes a goal of achieving clean up to non-residential standards will handle remediation to IGWSRS when the site-specific values to be generated are below the non-residential SRS.

At this point BEERA agrees with the Groundwater RI in that at a minimum, the twenty-two constituents identified as requiring further evaluation of IGWSRS are required, however, several issues have been noted in Appendix P, Tables I-V that require follow up by the LSRP.

Appendix P – IGW Compliance Tables

Table I – Comparison of Soil Data to IGWSRS
Under the 2013 Default IGWSRS column values have not been included although they exist for (in mg/kg);
Aluminum – 6,000
Manganese - 65
Silver - 1
Zinc - 930
Hexavalent Chromium – a separate policy statement has assigned a value of 23 mg/kg for IGW.

Note that there may be reasons to screen out these metals upon further evaluation, but the IGWSRS values do exist and should be included in the table.

Table II – Comparison of Groundwater Data to GWQS
On page 1 of 7 a GWQS of 70 ug/l is provided for chromium, however no value is provided for hexavalent chromium. Note that the 70 ug/l GWQS is for total chromium that includes the sum of trivalent and hexavalent chromium.

On page 6 of 7 the GWQS for 1,4-Dioxane is listed as 10 ug/l. An interim GWQC of 0.4 ug/l with an effective date of November 11, 2015 has been issued for 1,4-Dioxane . This correction also needs to be made in Table III and elsewhere in the document if applicable. While this comment is based upon the listed standard relative to groundwater, it should not be an issue for IGWSRS since 1,4-Dioxane may not have been detected in soil.

Table IV – Identification of Constituents Requiring IGW Compliance Evaluation
Justification has not been provided for not listing and more importantly for not carrying through for further evaluation, chromium/hexavalent chromium and zinc. These contaminants are present in soil and groundwater at concentrations well above any

IGWSRS or GWQS. It is assumed that aluminum and manganese, which also exceed applicable IGWSRS and GWQS have been screened out since the IGWSRS were based upon secondary drinking water standards and application of professional judgement, but the elimination of chromium/hex. chromium and zinc from further IGWSRS evaluation must be justified.

Table V –Impact to Groundwater Compliance Evaluation - Lines of Evidence
As mentioned regarding Table IV, no justification is provided for screening out chromium/hex. chromium and zinc from further consideration and evaluation of the IGWSRS pathway.

II. Ecological Impact – Surface Water and Sediment Evaluation of Gold Run

The Delphi Interior & Lighting Systems Soil Remedial Investigation Report was previously submitted and BIR forward multiple component reviews in January 2015 including Ecological Impact to BEERA. At that time BEERA commented;

> ***NJDEP Comments:*** It was not possible to conduct a component review of the ecological assessments for Gold Run/Pond (AOC-11) and the Southern Drainage Swale (AOC-12) since no ecological assessments have been included in this RIR report. For both of these AOCs it is stated that "Contamination has been adequately delineated both horizontally and vertically with this AOC" and that "A portion of AOC was excavated in 2011; remedial activities will be reported in a future Remedial Action Report." So the present RIR does not include information from the 2011 remediation or any level of an environmental assessment. Also note that in these AOCs delineation appears to have been conducted to the NRDCSRS when the AOCs clearly include wetland and stream sediments and the sample matrix lists some sediment sample in Table II, pp. 72-75.
>
> It needs to be made clear to the LSRP relative to these pending RARs that ecological screening criteria (http://www.nj.gov/dep/srp/guidance/ecoscreening/) rather than NRDCSRS are applicable and that the Ecological Evaluation Technical Guidance document (http://www.nj.gov/dep/srp/guidance/srra/ecological_evaluation.pdf) must be followed where Environmentally Sensitive Natural Resources are involved.

The LSRP/RACER Trust response to these comments was;

> ***RACER Response:*** A Baseline Ecological Evaluation (BEE) was prepared for the Site in 2003 and revised to include additional data in 2007. As reported in the initial Receptor Evaluation submitted in 2011, impacted sediment had been identified in Gold Run Pond; however, population-level ecological effects from exposure to contaminants of potential ecological concern (COPECS) are unlikely due to both the limited on-site habitat resources and the presence of higher quality habitat nearby and that additional ecological investigations at the Site are not warranted.

The submission of both the soil and groundwater RI documents has failed to address the required ecological assessment. High levels of CVOCs detected in Gold Run sediments and surface water prompted a remediation that was completed without the submission of a

remedial action report (RAR) or equivalent document that supports the effective remediation of the highly contaminated sediments and continued contributions to observed surface water CVOCs. The RI cannot be considered complete without submission of this Gold Pond RAR and an ecological assessment.

With regard to the surface water data provided in this ground water RI, as the geologist has already commented, impacts to surface water need to be evaluated with respect to both the human health SWQS and the ecological based aquatic chronic SWQC. The groundwater RI currently only uses the much higher 47 ug/l chronic aquatic criteria and not the lower 1 ug/l human health SWQS for trichloroethylene when evaluating the Gold Run surface water data. Much of the surface water data exceeds the human health SWQS. The reasoning for this must be provided.

C. Jonathan Balog, LSRP Inspector, BIR

New Jersey Department of Environmental Protection
Division of Enforcement, Technical and Financial Support
Hazardous Site Science Element

M E M O R A N D U M

To: Matt Turner, Technical Inspector/BIR/DRM
From: Jill Monroe, Geologist/BGWPA/DETFS
Subject: DELPHI INTERIOR & LIGHTING SYSTEMS
PI Number: 011336
Document: Component Review Request - May 25, 2016 (LSRP RIR dated May 6, 2016)
- Contamination migrating onto the site

Job Number/Activity Code: 31870020/V6RC
Memorandum Date: July 28, 2016 (MODIFIES June 21, 2015 comments based on discussion with New Jersey Geological Survey and Water Supply - Greg Herman)

Summary: N.J.A.C. 7:26E-3.9 - determination of off-site source of contamination in soil or ground water, requirements were not fully satisfied. Additional comments are provided concerning ground water contamination delineation. The site is in a complex hydrogeologic environment. A New Jersey Geological Survey study of site/regional geology is ongoing based on RIR Appendix D.

Off Site Source: Documented solvent impacts to former Gold Run Pond from discharges to culverted Gold Run beneath Parkway Avenue have been attributed to the NAWC. N.J.A.C. 7:26E-3.9(a)2 states: "Collect and analyze a sufficient number of samples to demonstrate a contaminant migration pathway exists from the off-site source of contamination to the area of concern".

- Based on the Effective Porous Media (EPM) Conceptual Site Model (CSM) and bedrock ground water contour maps, dissolved VOC contamination identified at wells along Parkway Avenue does not extend through the whole site or to the TCE source area.
  - The RIR must identify the approximate on-site limit(s) and contaminant concentrations being attributed to off-site source(s) for consideration in establishing site and AOC remediation goals.
- Data from overburden/weathered bedrock MW-90 (20-30' bgs) and MW-39 (8.5-18.5' bgs) do not reflect TCE impacts in deeper paired wells MW-90A (78-88' bgs) and MW-39A (67.5-72.5' bgs).
  - Water quality data from any NAWC wells located north of Parkway Avenue and east of the railroad bed is requested, including the well location(s) and construction information.
- NAWC was not shown to be related to the ground water TCE hot spot beneath the former manufacturing building. RACER is responsible for delineation and remediation of on-site sources.
- A modification of the CSM could affect an off-site source evaluation.

Additional Comments:
Conceptual Site Model and Delineation of the On-Site Source Area/Plume: The RIR identified an on-site TCE source area (dissolved ground water concentrations exceeding 11 mg/L TCE). The conclusion in the RIR is that the bedrock aquifer system behaves as a macroscale porous media because bedrock is highly fractured, and that ground water flow to the southeast is consistent with regional ground water flow interpretations. Site geology, well construction and water quality data, Stockton Formation characteristics, and Leaky Multi-Unit Aquifer System and Equivalent Porous Medium CSMs were discussed with New Jersey Geological Survey (Greg Herman) on July 21, 2016. Please note the following:

The RIR reflects bedrock aquifer investigations conducted pursuant to two CSMs: the Leaky Multi-Unit Aquifer System (LMAS) CSM and the Equivalent Porous Medium (EPM) CSM. Application of the EPM CSM to the site needs to be confirmed for the TCE hotspot area beneath the former manufacturing building. The site information considered in this determination is summarized below:

2012 TCE contamination at MW-80 (24-34' bgs) was investigated based on the LMAS CSM. After similar shallow horizontal delineation monitor wells were installed, the 2013-2014 investigation included wells that were: 1) deeper and downdip (relative to MW-80 and MW-84) including MW-84A (73-83' bgs; 26-46 mg/L TCE), MW-85 (111-121' bgs; 0.340-5.1 mg/L TCE), and MW-86 (112-122' bgs; 12-15 mg/L TCE); and 2) along formation strike (relative to MW-84A) including MW-87 (91-101' bgs; 20-53 mg/L TCE) and MW-88 (76.5-86.5' bgs; 0.370-0.860 mg/L). MW-89A (91-101' bgs) and MW-17B (91-101' bgs) were installed along the western property line. Ground water elevation data at MW-89A and MW-17B (about 131' msl) compared to MW-87 and MW-86 (about 115' msl) differ by approximately 15', indicating different hydrogeologic environments. There are lower levels of TCE above GWQS at MW-89A (ND-0.056 mg/L), and detectable levels of TCE below GWQS at MW-17B (91-101' bgs; < 1 ug/L).

The CSM for the property appears to have been modified from the LMAS CSM to the EPM CSM after these well installations. TCE contaminant concentrations at the hot spot wells are consistent with a LMAS CSM, showing higher concentrations at depth and N to NW (from MW-80 and MW-84) and toward the western boundary (MW-87), but this may be due to an absence of well data that could delineate TCE S of the bedrock hotspot wells (MW-84A/MW-85, MW-86, MW-87).

- Additional wells are needed to confirm that the EPM CSM applies to the TCE source area and that wells in site perimeter areas satisfy on-site plume delineation. Monitor wells need to be located downgradient of hot spot bedrock wells and upgradient of UST-wells, such as locations paired with, or near, MW-44 and MW-82.
- The UST wells have a variety of completion intervals and are generally S to SE of the TCE source area. Provide historic VOC data and evaluate including some UST-wells in the sampling plan.
- If the data does not confirm that source area contaminant migration is consistent with the EPM CSM, then more than one CSM may apply to contaminant migration at this site. If this is the case, the TCE source/plume characterization is not considered complete based on the existing data set. The remedial investigation must consider effects of bedrock structure, fault zones, etc. to complete delineation and receptor evaluations. This conclusion could affect the off-site source evaluation based on the EPM CSM.

<u>Gold Run Discharge Boundary – Bedrock Zone</u>: Gold Run represents a "headwater" surface water body.

- A surface water/ground water elevation data summary including well clusters, observation points, surface water gauging, and monitoring point completion interval in and near Gold Run is requested to clarify: 1) vertical gradients and variations; and 2) the conclusion that Gold Run is a consistent discharge zone for all impacted ground water intervals across the site (north to south).
- MW-16C should be resampled based on the absence of an upward vertical gradient to Gold Run from MW-16C (115-125' bgs) and the 2012 TCE concentration (980 ug/L).

<u>New Jersey Surface Water Quality Standards</u>: Ground water impacts to a surface water body are evaluated based on in-stream NJ SWQS (human health and aquatic life), and existing in-stream surface water quality. Additional information sources are used to evaluate ecological receptors where there are no promulgated aquatic life criteria. The RIR states that Gold Run is in compliance with "NJ SWQS Chronic Freshwater" standards (Table V).

- Human health, in-stream surface water quality standards need to be reflected in the data discussion.
- The source(s) of the aquatic life criteria shown in Table V must be identified. The majority of the aquatic life criteria are not SWQS as indicated.
- SW-1 reflects off-site impacts to Gold Run where it daylights from the culverted portion beneath Parkway Avenue. SW-2 reflects historic impacts to the Gold Run Pond area after remedial action, as well as storm water system discharges upstream of SW-2. A separate sample from the storm water discharge area is recommended.

Attached: RIR Figure 2 is attached to reflect monitor well locations discussed in the review. Please call me at 3-1265 if you would like to discuss this review or have any questions.

C: Tracy Grabiak, BGWPA
Gerry Hahn, BIR

Murphy, Amy

From: Turner, Matthew <Matthew.Turner@dep.nj.gov>
Sent: Wednesday, November 23, 2016 11:24 AM
To: Murphy, Amy
Cc: Hamill, Nancy
Subject: Delphi Interior & Lighting System, PI 011336

Amy

The NJDEP has completed an inspection and review of the RAR submitted for the above subject site. In the review of the ecological aspects of the case, the NJDEP has identified the below listed issues that should be addressed. Please review the issues and provide a response within the next two weeks if possible.

1. (p. 42) 7.4. *Receptor Evaluation/Ecological* – this section states that the former Gold Run Pond and Southern Drainage Swale sediments that exceeded Non-Residential Direct Contact Soil Remediation Standards (NRDCSRS) were excavated. The NRDCSRS are human health-based, generally well above ecological screening criteria (ESC), and do not apply to soil or sediments in environmentally sensitive natural resources (ESNRs). Pursuant to N.J.A.C. 7:26E-1.16, data from ESNRs must be compared with ESC, available at http://www.nj.gov/dep/srp/guidance/ecoscreening. The LSRP should verify that contaminant data were not inappropriately culled based on comparison with the NRDCSRS (i.e., concentrations less than NRDCSRS may exceed ESC) and that any remaining contaminant concentrations within and/or outside of the remediated/restored areas in on-site wetlands, the present-day Gold Run Stream/Undeveloped Area, and the Southern Drainage Swale are at levels protective of ecological receptors. To support the conclusion (p.43) that "no significant ecological risk" exists at this site, sample concentration maps for both AOC 11 and 12 should be provided that present existing concentrations compared with the ESC.

2. (pp 29 – 39) 6.8 and 6.9 *AOC-11 Former Gold Run and Undeveloped Area* and *AOC-12 Southern Drainage Swale (West)* - these sections provide general descriptions of the excavations, which were based on elevated concentrations of TCE in the former Gold Run Pond and metals and PAHs in the Southern Drainage Swale. The "Findings" in both sections conclude that compliance for surface and subsurface soil with the NRDCSRS has been achieved. As stated in comment 1, this comparison is not appropriate for ESNRs. These sections should be revised (or addendum provided) to explain whether ESC or site-specific ecological risk-based goals were used to complete the delineation and to determine the extent of excavations in the former Gold Run Pond and Southern Drainage Swales.

If you have any questions please feel free to contact me at 609-984-1742.

Thanks
Matt

Matthew Turner
Bureau of Inspection and Review
401 E. State Street
P.O. Box 420
Mail Code 401-05D
Trenton, NJ 08625-0420
609-984-1742

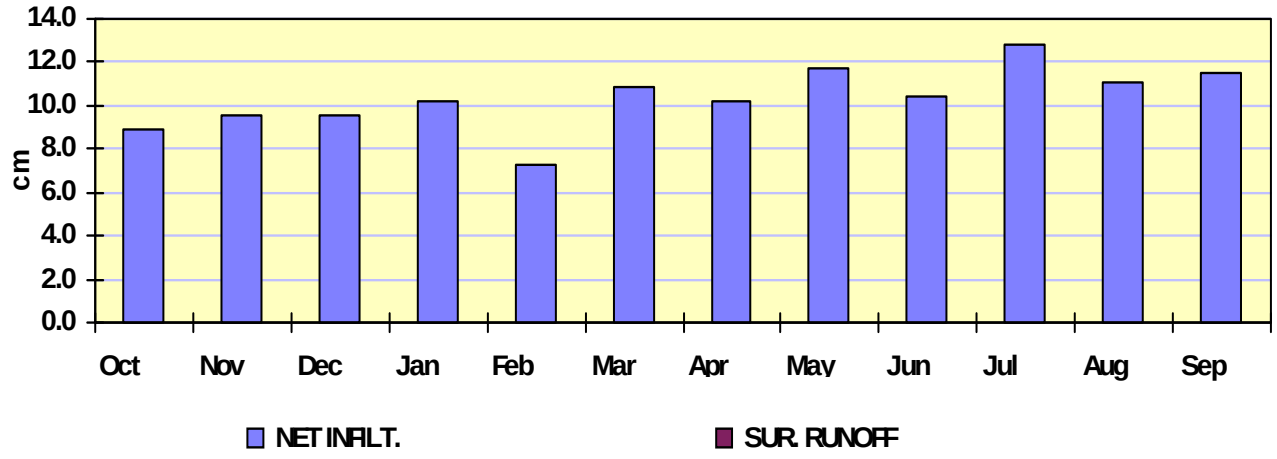
APPENDIX K

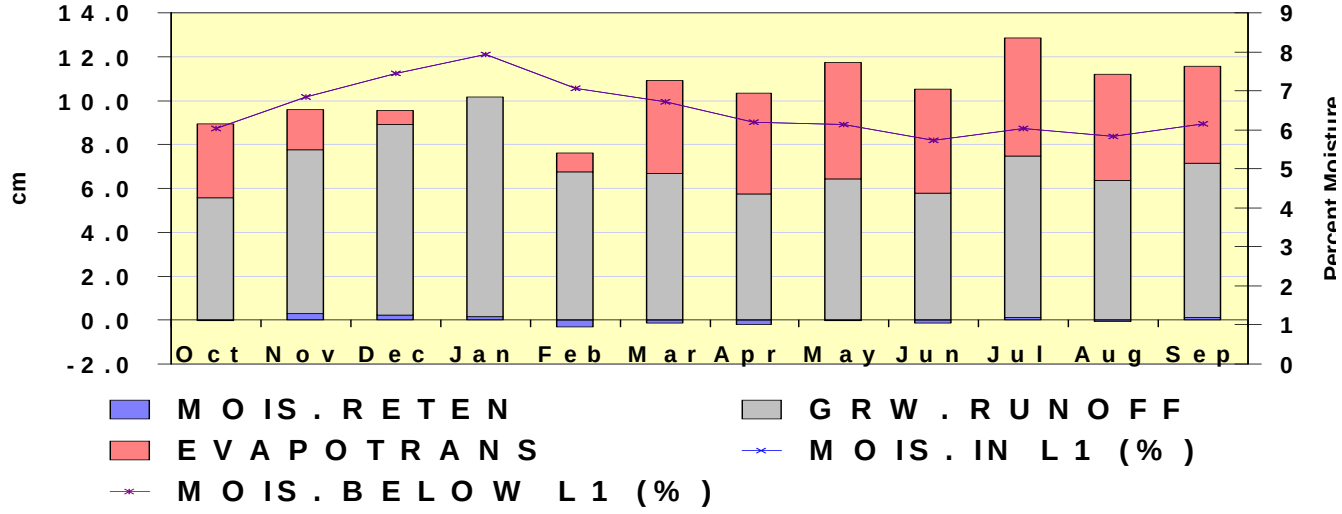
SESOIL Outputs

SESOIL Hydrologic Cycle Report

Scenario Description: AOC1C

SESOIL Output File: c:\SEV7 WIN7\S01.OUT





	Surface Water Runoff		Net Infiltration		Evapotranspiration		Soil Moisture Retention		Groundwater Runoff (Recharge)		Soil Moisture	
											Layer 1	Below Layer 1
Units	cm	Inches	cm	Inches	cm	Inches	cm	Inches	cm	Inches	Percent	Percent
October	0.00	0.00	8.91	3.51	3.39	1.33	-0.04	-0.02	5.57	2.19	6.04	6.04
November	0.00	0.00	9.58	3.77	1.82	0.72	0.29	0.11	7.48	2.94	6.85	6.85
December	0.00	0.00	9.55	3.76	0.64	0.25	0.21	0.08	8.70	3.43	7.45	7.45
January	0.00	0.00	10.17	4.00	0.03	0.01	0.17	0.07	9.97	3.93	7.93	7.93
February	0.00	0.00	7.31	2.88	0.87	0.34	-0.31	-0.12	6.75	2.66	7.06	7.06
March	0.00	0.00	10.81	4.26	4.24	1.67	-0.12	-0.05	6.68	2.63	6.73	6.73
April	0.00	0.00	10.16	4.00	4.59	1.81	-0.19	-0.07	5.76	2.27	6.19	6.19
May	0.00	0.00	11.72	4.61	5.31	2.09	-0.02	-0.01	6.43	2.53	6.13	6.13
June	0.00	0.00	10.38	4.09	4.74	1.87	-0.14	-0.06	5.78	2.28	5.74	5.74
July	0.00	0.00	12.85	5.06	5.37	2.11	0.11	0.04	7.37	2.90	6.04	6.04
August	0.00	0.00	11.12	4.38	4.82	1.90	-0.07	-0.03	6.37	2.51	5.83	5.83
September	0.00	0.00	11.55	4.55	4.40	1.73	0.12	0.05	7.03	2.77	6.16	6.16
Total	0.00	0.00	124.10	48.86	40.20	15.83	0.00	0.00	83.90	33.03	- -	- -

SESOIL Pollutant Cycle Report

Scenario Description: AOC1C

SESOIL Output File: c:\SEV7 WIN7\S01.OUT

SESOIL Process	Pollutant Mass (µg)	Percent of Total
Volatilized	4.344E+06	0.01
In Soil Air	8.320E+02	0.00
Sur. Runoff	0.000E+00	0.00
In Washld	0.000E+00	0.00
Ads On Soil	3.016E+10	99.57
Hydrol Soil	0.000E+00	0.00
Degrad Soil	0.000E+00	0.00
Pure Phase	0.000E+00	0.00
Complexed	0.000E+00	0.00
Immobile CEC	0.000E+00	0.00
Hydrol CEC	0.000E+00	0.00
In Soil Moi	1.555E+06	0.01
Hydrol Mois	0.000E+00	0.00
Degrad Mois	0.000E+00	0.00
Other Trans	0.000E+00	0.00
Other Sinks	0.000E+00	0.00
Gwr. Runoff	0.000E+00	0.00
Total Output	3.017E+10	99.58
Total Input	3.030E+10	
Input - Output	1.257E+08	

Maximum leachate concentration: 0.000E+00 **mg/l**

Climate File: EWING
c:\SEV7 WIN7\EWING.CLM

Chemical File: Benzo(a)anthracene, NJDEP
C:\SEV7 WIN7\BENZO(A)ANTHRACENE NJDEP.CHM

Soil File: Sand, Perm = 1.00E-3 cm/sec
c:\SEV7 WIN7\AOC9 SAND.SOI

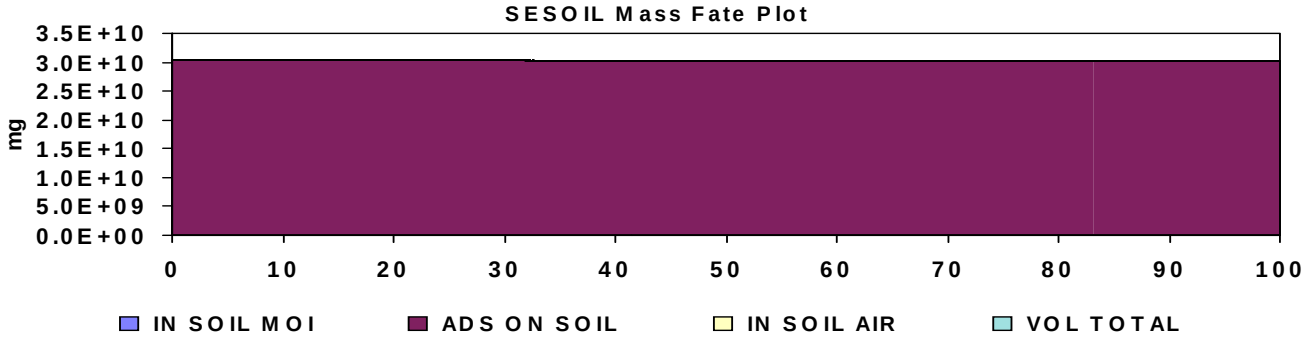
Application File: SEVIEW Default Application Parameters
C:\SEV7 WIN7\AOC1C-BENZOANTHRACENE.APL

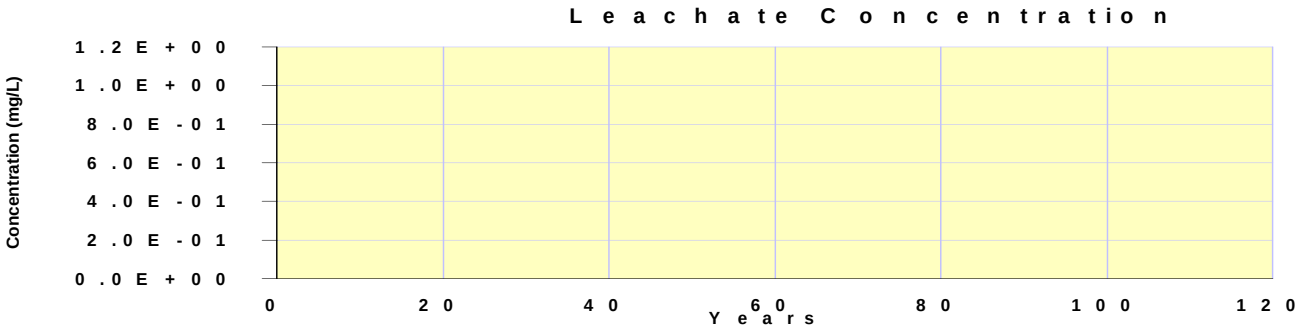
Time to Groundwater: 2147.83 **years**

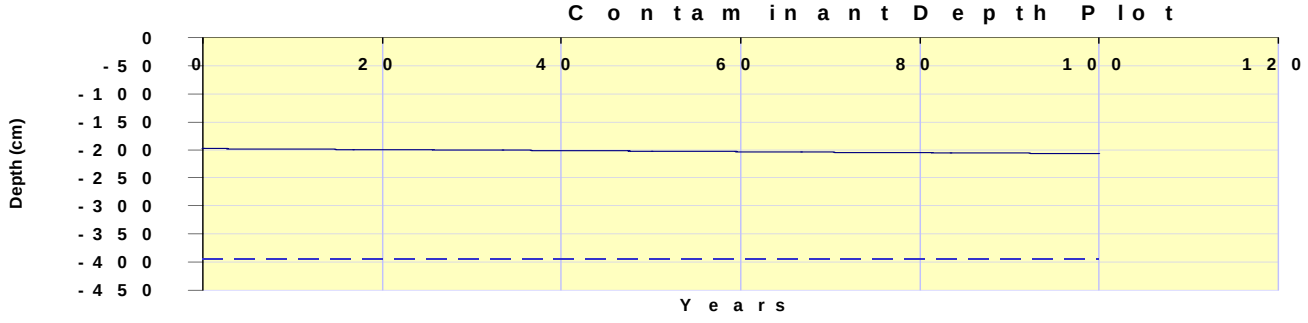
Starting Depth: 197.60 **cm**

Ending Depth: 206.80 **cm**

Total Depth: 395.20 **cm**







SESOIL Pollutant Cycle Report

Scenario Description: AOC1C

SESOIL Output File: c:\SEV7 WIN7\S01.OUT

SESOIL Process	Pollutant Mass (µg)	Percent of Total
Volatilized	4.780E+05	0.00
In Soil Air	5.566E+01	0.00
Sur. Runoff	0.000E+00	0.00
In Washld	0.000E+00	0.00
Ads On Soil	1.533E+10	99.44
Hydrol Soil	0.000E+00	0.00
Degrad Soil	0.000E+00	0.00
Pure Phase	0.000E+00	0.00
Complexed	0.000E+00	0.00
Immobile CEC	0.000E+00	0.00
Hydrol CEC	0.000E+00	0.00
In Soil Moi	3.086E+05	0.00
Hydrol Mois	0.000E+00	0.00
Degrad Mois	0.000E+00	0.00
Other Trans	0.000E+00	0.00
Other Sinks	0.000E+00	0.00
Gwr. Runoff	0.000E+00	0.00
Total Output	1.533E+10	99.45
Total Input	1.542E+10	
Input - Output	8.531E+07	

Maximum leachate concentration: 0.000E+00 **mg/l**

Climate File: EWING
c:\SEV7 WIN7\EWING.CLM

Chemical File: Benzo(a)pyrene, NJDEP
C:\SEV7 WIN7\BENZO(A)PYRENE NJDEP.CHM

Soil File: Sand, Perm = 1.00E-3 cm/sec
c:\SEV7 WIN7\AOC9 SAND.SOI

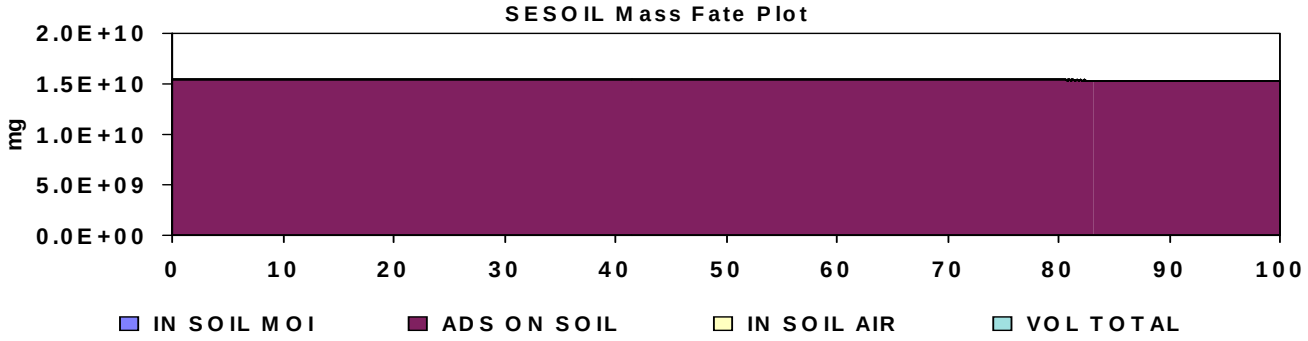
Application File: SEVIEW Default Application Parameters
C:\SEV7 WIN7\AOC1C-BENZOPYRENE.APL

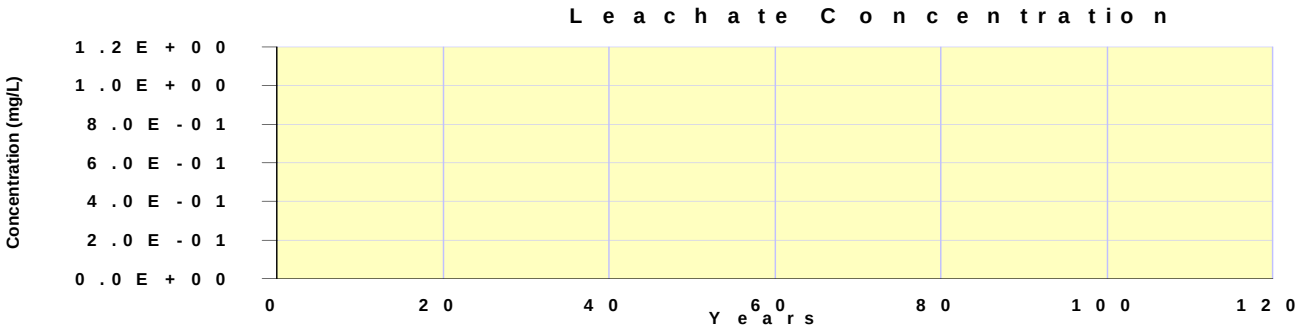
Time to Groundwater: 5488.89 **years**

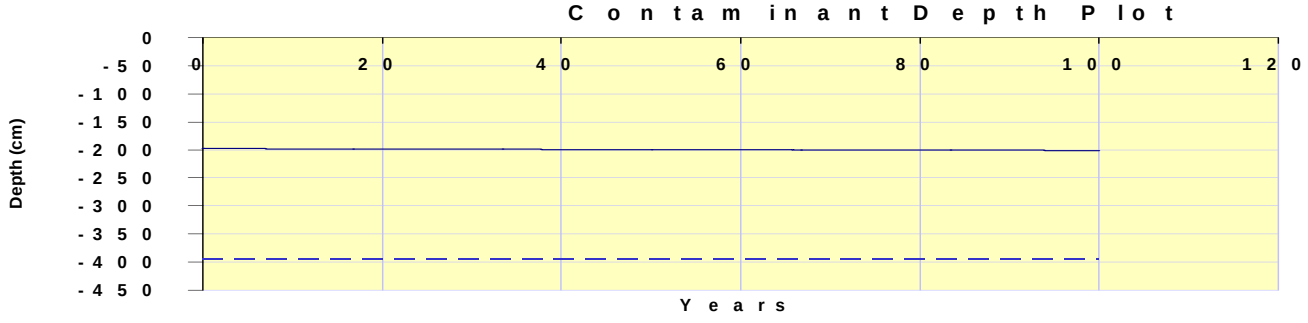
Starting Depth: 197.60 **cm**

Ending Depth: 201.20 **cm**

Total Depth: 395.20 **cm**







SESOIL Pollutant Cycle Report

Scenario Description: AOC1D

SESOIL Output File: c:\SEV7 WIN7\S01.OUT

SESOIL Process	Pollutant Mass (µg)	Percent of Total
Volatilized	0.000E+00	0.00
In Soil Air	0.000E+00	0.00
Sur. Runoff	0.000E+00	0.00
In Washld	0.000E+00	0.00
Ads On Soil	3.975E+12	99.59
Hydrol Soil	0.000E+00	0.00
Degrad Soil	0.000E+00	0.00
Pure Phase	0.000E+00	0.00
Complexed	0.000E+00	0.00
Immobile CEC	0.000E+00	0.00
Hydrol CEC	0.000E+00	0.00
In Soil Moi	2.061E+08	0.01
Hydrol Mois	0.000E+00	0.00
Degrad Mois	0.000E+00	0.00
Other Trans	0.000E+00	0.00
Other Sinks	0.000E+00	0.00
Gwr. Runoff	0.000E+00	0.00
Total Output	3.976E+12	99.60
Total Input	3.992E+12	
Input - Output	1.598E+10	

Maximum leachate concentration: 0.000E+00 **mg/l**

Climate File: EWING
c:\SEV7 WIN7\EWING.CLM

Chemical File: Lead And Compounds (Kd)
c:\SEV7 WIN7\LEAD AND COMPOUNDS (KD).CHM

Soil File: Sand, Perm = 1.00E-3 cm/sec
c:\SEV7 WIN7\AOC9 SAND.SOI

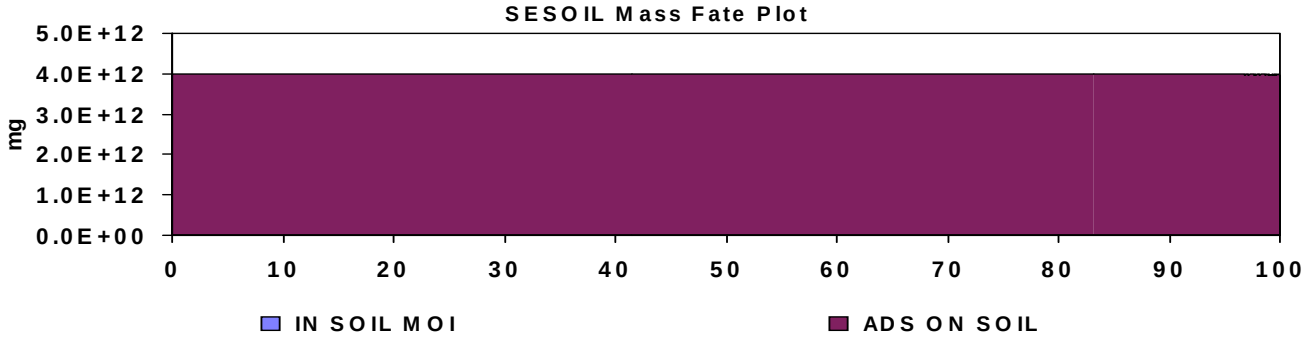
Application File: SEVIEW Default Application Parameters
c:\SEV7 WIN7\AOC3-LEAD.APL

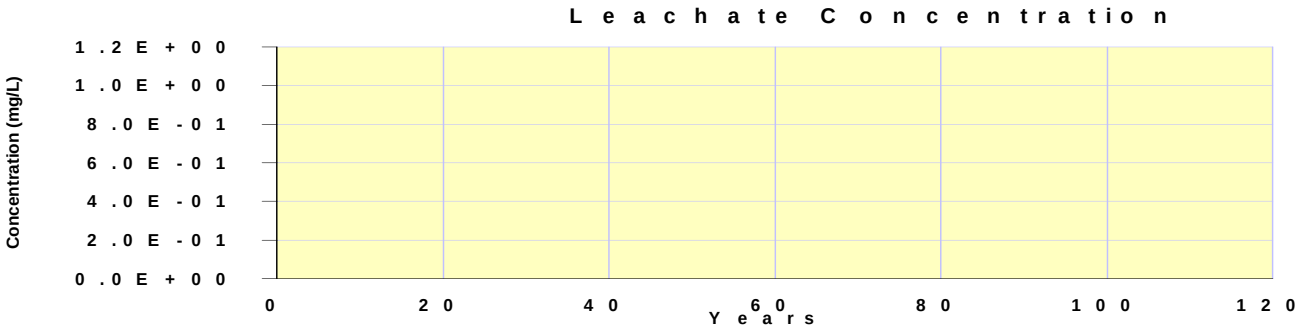
Time to Groundwater: 326.53 **years**

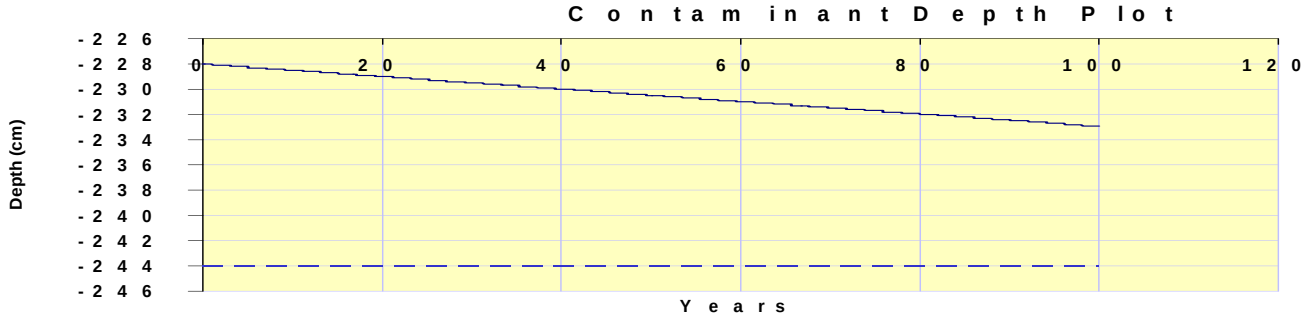
Starting Depth: 228.00 **cm**

Ending Depth: 232.90 **cm**

Total Depth: 244.00 **cm**







SESOIL Pollutant Cycle Report

Scenario Description: AOC2

SESOIL Output File: c:\SEV7 WIN7\S01.OUT

SESOIL Process	Pollutant Mass (µg)	Percent of Total
Volatilized	0.000E+00	0.00
In Soil Air	0.000E+00	0.00
Sur. Runoff	0.000E+00	0.00
In Washld	0.000E+00	0.00
Ads On Soil	2.506E+14	99.20
Hydrol Soil	0.000E+00	0.00
Degrad Soil	0.000E+00	0.00
Pure Phase	0.000E+00	0.00
Complexed	0.000E+00	0.00
Immobile CEC	0.000E+00	0.00
Hydrol CEC	0.000E+00	0.00
In Soil Moi	1.143E+10	0.00
Hydrol Mois	0.000E+00	0.00
Degrad Mois	0.000E+00	0.00
Other Trans	0.000E+00	0.00
Other Sinks	0.000E+00	0.00
Gwr. Runoff	0.000E+00	0.00
Total Output	2.506E+14	99.21
Total Input	2.527E+14	
Input - Output	2.001E+12	

Maximum leachate concentration: 0.000E+00 **mg/l**

Climate File: EWING
c:\SEV7 WIN7\EWING.CLM

Chemical File: Lead And Compounds (Kd)
c:\SEV7 WIN7\LEAD AND COMPOUNDS (KD).CHM

Soil File: Sand, Perm = 1.00E-3 cm/sec
c:\SEV7 WIN7\AOC9 SAND.SOI

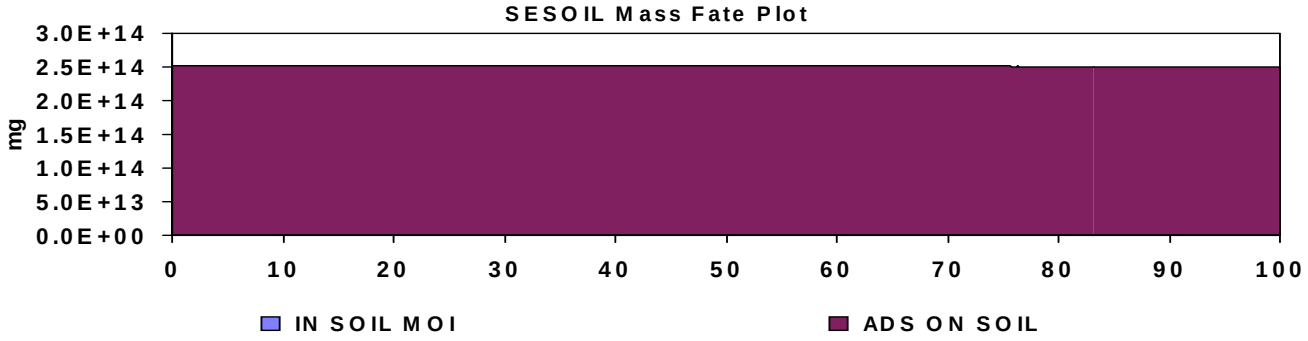
Application File: SEVIEW Default Application Parameters
c:\SEV7 WIN7\AOC3-LEAD.APL

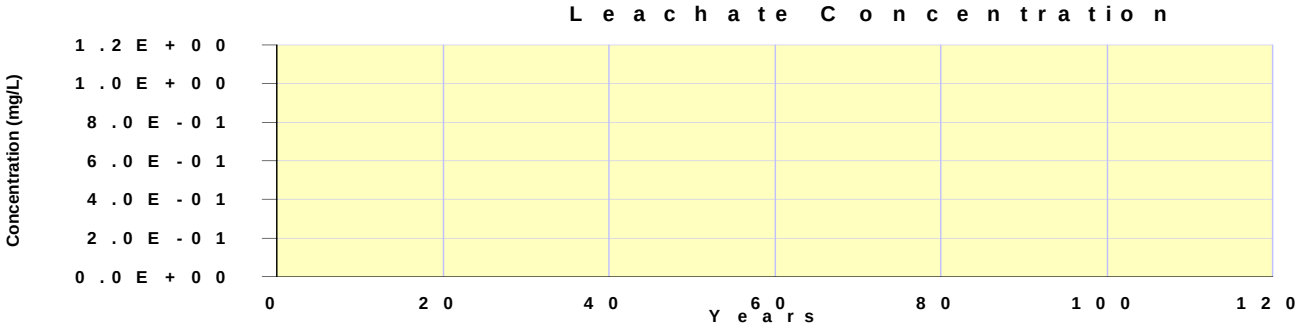
Time to Groundwater: 223.88 **years**

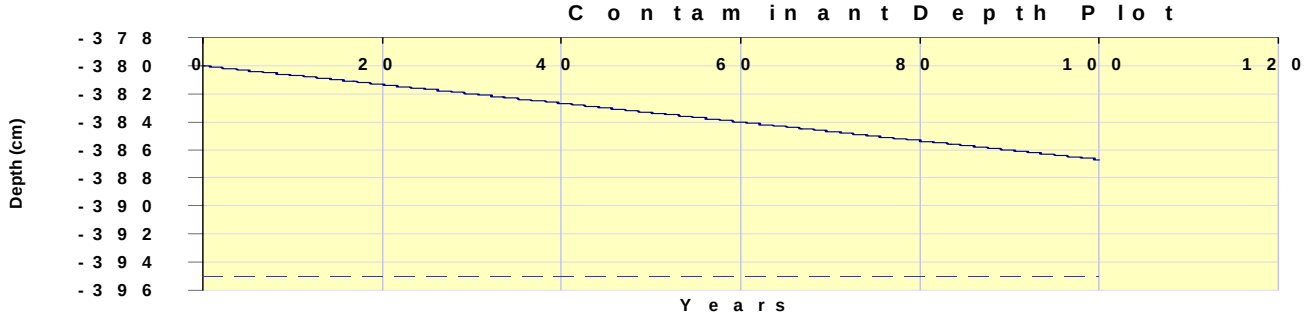
Starting Depth: 380.00 **cm**

Ending Depth: 386.70 **cm**

Total Depth: 395.00 **cm**







SESOIL Pollutant Cycle Report

Scenario Description: AOC3

SESOIL Output File: c:\SEV7 WIN7\S01.OUT

SESOIL Process	Pollutant Mass (µg)	Percent of Total
Volatilized	0.000E+00	0.00
In Soil Air	0.000E+00	0.00
Sur. Runoff	0.000E+00	0.00
In Washld	0.000E+00	0.00
Ads On Soil	2.858E+12	99.37
Hydrol Soil	0.000E+00	0.00
Degrad Soil	0.000E+00	0.00
Pure Phase	0.000E+00	0.00
Complexed	0.000E+00	0.00
Immobile CEC	0.000E+00	0.00
Hydrol CEC	0.000E+00	0.00
In Soil Moi	1.310E+08	0.00
Hydrol Mois	0.000E+00	0.00
Degrad Mois	0.000E+00	0.00
Other Trans	0.000E+00	0.00
Other Sinks	0.000E+00	0.00
Gwr. Runoff	0.000E+00	0.00
Total Output	2.858E+12	99.37
Total Input	2.877E+12	
Input - Output	1.803E+10	

Maximum leachate concentration: 0.000E+00 **mg/l**

Climate File: EWING

c:\SEV7 WIN7\EWING.CLM

Chemical File: Lead And Compounds (Kd)

c:\sev7 win7\LEAD AND COMPOUNDS (KD).CHM

Soil File: Sand, Perm = 1.00E-3 cm/sec

c:\SEV7 WIN7\AOC9 SAND.SOI

Application File: SEVIEW Default Application Parameters

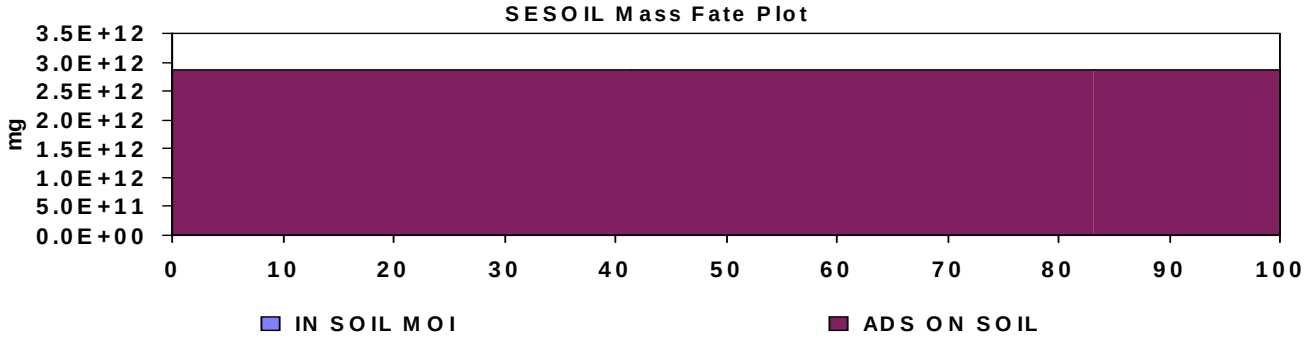
C:\SEV7 WIN7\AOC3-LEAD.APL

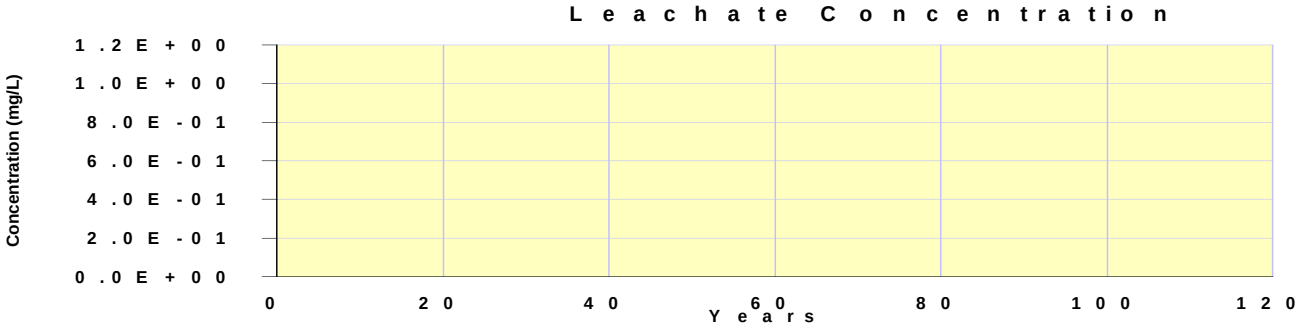
Time to Groundwater: 649.28 **years**

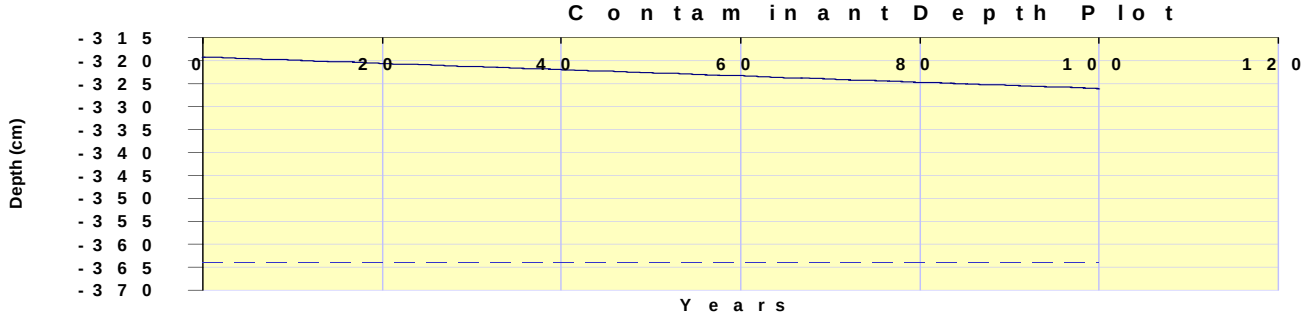
Starting Depth: 319.20 **cm**

Ending Depth: 326.10 **cm**

Total Depth: 364.00 **cm**







SESOIL Pollutant Cycle Report

Scenario Description: AOC04

SESOIL Output File: c:\SEV7 WIN7\S01.OUT

SESOIL Process	Pollutant Mass (µg)	Percent of Total
Volatilized	0.000E+00	0.00
In Soil Air	0.000E+00	0.00
Sur. Runoff	0.000E+00	0.00
In Washld	0.000E+00	0.00
Ads On Soil	1.633E+13	99.11
Hydrol Soil	0.000E+00	0.00
Degrad Soil	0.000E+00	0.00
Pure Phase	0.000E+00	0.00
Complexed	0.000E+00	0.00
Immobile CEC	0.000E+00	0.00
Hydrol CEC	0.000E+00	0.00
In Soil Moi	7.453E+08	0.00
Hydrol Mois	0.000E+00	0.00
Degrad Mois	0.000E+00	0.00
Other Trans	0.000E+00	0.00
Other Sinks	0.000E+00	0.00
Gwr. Runoff	0.000E+00	0.00
Total Output	1.633E+13	99.12
Total Input	1.648E+13	
Input - Output	1.453E+11	

Maximum leachate concentration: 0.000E+00 **mg/l**

Climate File: EWING
c:\SEV7 WIN7\EWING.CLM

Chemical File: Lead And Compounds (Kd)
C:\SEV7 WIN7\LEAD AND COMPOUNDS (KD).CHM

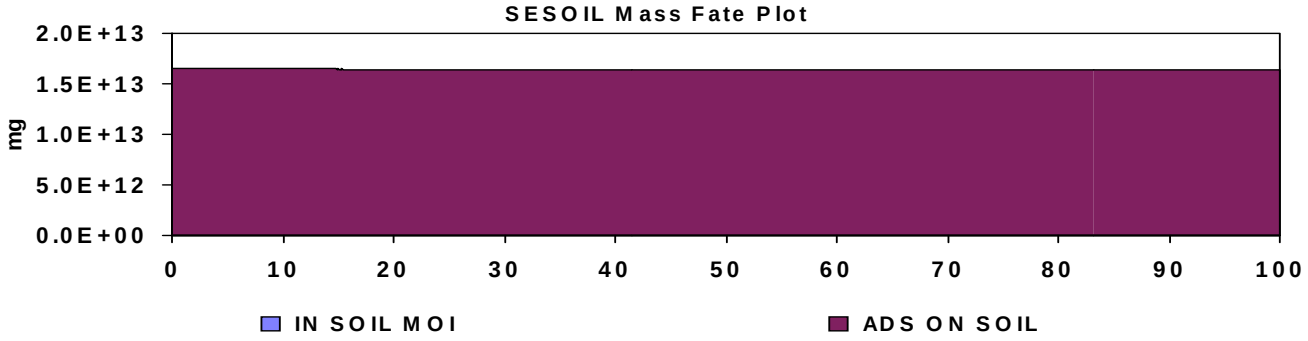
Soil File: Sand, Perm = 1.00E-3 cm/sec
c:\SEV7 WIN7\SAND.SOI

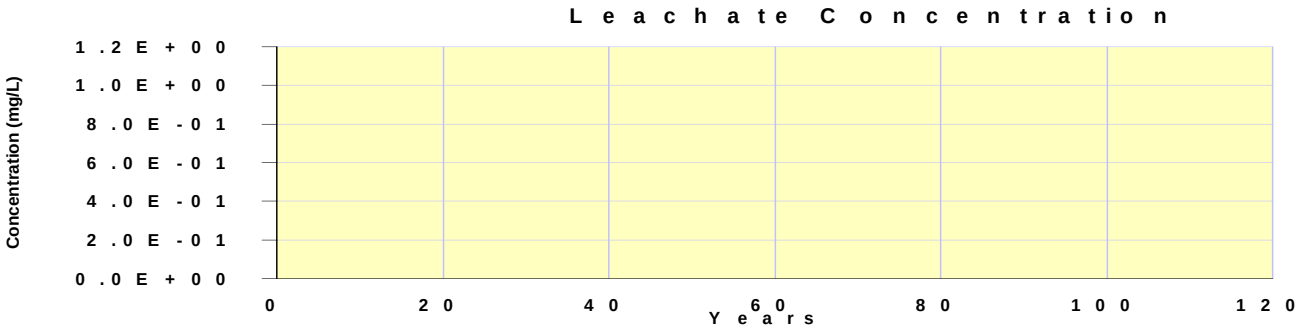
Application File: SEVIEW Default Application Parameters
c:\SEV7 WIN7\S01.APL

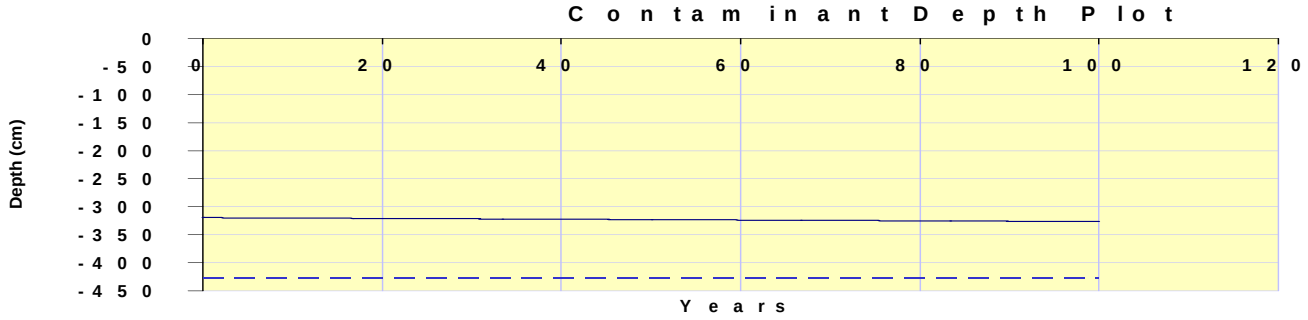
Starting Depth: 319.50 **cm**

Ending Depth: 326.50 **cm**

Total Depth: 426.00 **cm**







SESOIL Pollutant Cycle Report

Scenario Description: AOC6

SESOIL Output File: c:\SEV7 WIN7\S01.OUT

SESOIL Process	Pollutant Mass (µg)	Percent of Total
Volatilized	0.000E+00	0.00
In Soil Air	0.000E+00	0.00
Sur. Runoff	0.000E+00	0.00
In Washld	0.000E+00	0.00
Ads On Soil	7.590E+12	98.97
Hydrol Soil	0.000E+00	0.00
Degrad Soil	0.000E+00	0.00
Pure Phase	0.000E+00	0.00
Complexed	0.000E+00	0.00
Immobile CEC	0.000E+00	0.00
Hydrol CEC	0.000E+00	0.00
In Soil Moi	3.934E+08	0.01
Hydrol Mois	0.000E+00	0.00
Degrad Mois	0.000E+00	0.00
Other Trans	0.000E+00	0.00
Other Sinks	0.000E+00	0.00
Gwr. Runoff	0.000E+00	0.00
Total Output	7.590E+12	98.98
Total Input	7.669E+12	
Input - Output	7.846E+10	

Maximum leachate concentration: 0.000E+00 **mg/l**

Climate File: EWING
c:\SEV7 WIN7\EWING.CLM

Chemical File: Lead And Compounds (Kd)
c:\SEV7 WIN7\LEAD AND COMPOUNDS (KD).CHM

Soil File: Sand, Perm = 1.00E-3 cm/sec
c:\SEV7 WIN7\AOC9 SAND.SOI

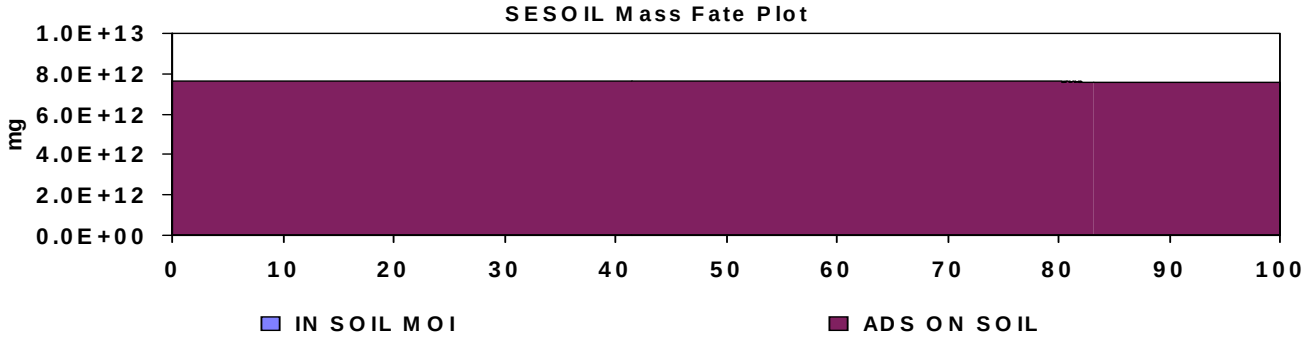
Application File: SEVIEW Default Application Parameters
c:\SEV7 WIN7\AOC3-LEAD.APL

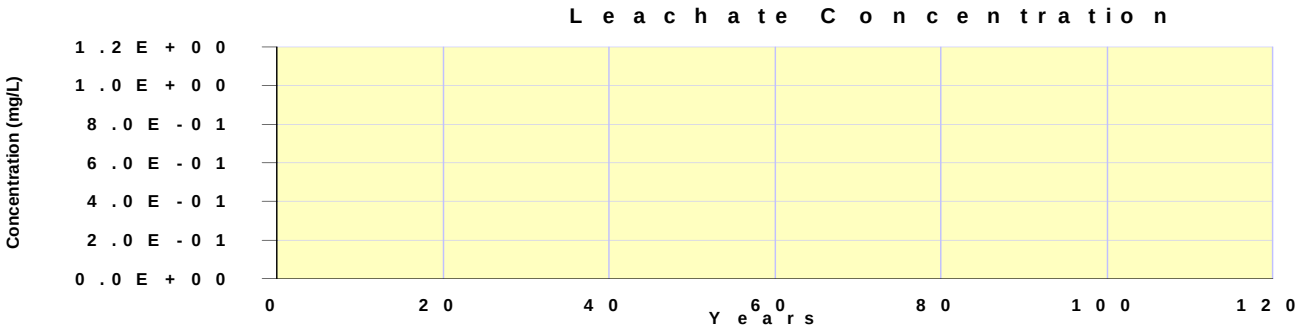
Time to Groundwater: 326.53 **years**

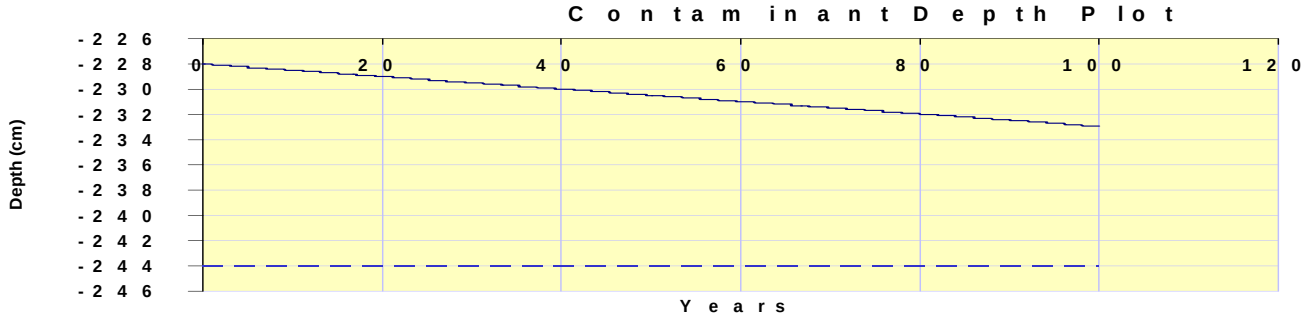
Starting Depth: 228.00 **cm**

Ending Depth: 232.90 **cm**

Total Depth: 244.00 **cm**







SESOIL Pollutant Cycle Report

Scenario Description: AOC7A

SESOIL Output File: c:\SEV7 WIN7\S01.OUT

SESOIL Process	Pollutant Mass (µg)	Percent of Total
Volatilized	0.000E+00	0.00
In Soil Air	0.000E+00	0.00
Sur. Runoff	0.000E+00	0.00
In Washld	0.000E+00	0.00
Ads On Soil	1.723E+13	99.54
Hydrol Soil	0.000E+00	0.00
Degrad Soil	0.000E+00	0.00
Pure Phase	0.000E+00	0.00
Complexed	0.000E+00	0.00
Immobile CEC	0.000E+00	0.00
Hydrol CEC	0.000E+00	0.00
In Soil Moi	7.862E+08	0.00
Hydrol Mois	0.000E+00	0.00
Degrad Mois	0.000E+00	0.00
Other Trans	0.000E+00	0.00
Other Sinks	0.000E+00	0.00
Gwr. Runoff	0.000E+00	0.00
Total Output	1.723E+13	99.55
Total Input	1.731E+13	
Input - Output	7.816E+10	

Maximum leachate concentration: 0.000E+00 **mg/l**

Climate File: EWING
c:\SEV7 WIN7\EWING.CLM

Chemical File: Lead And Compounds (Kd)
c:\SEV7 WIN7\LEAD AND COMPOUNDS (KD).CHM

Soil File: Sand, Perm = 1.00E-3 cm/sec
c:\SEV7 WIN7\AOC9 SAND.SOI

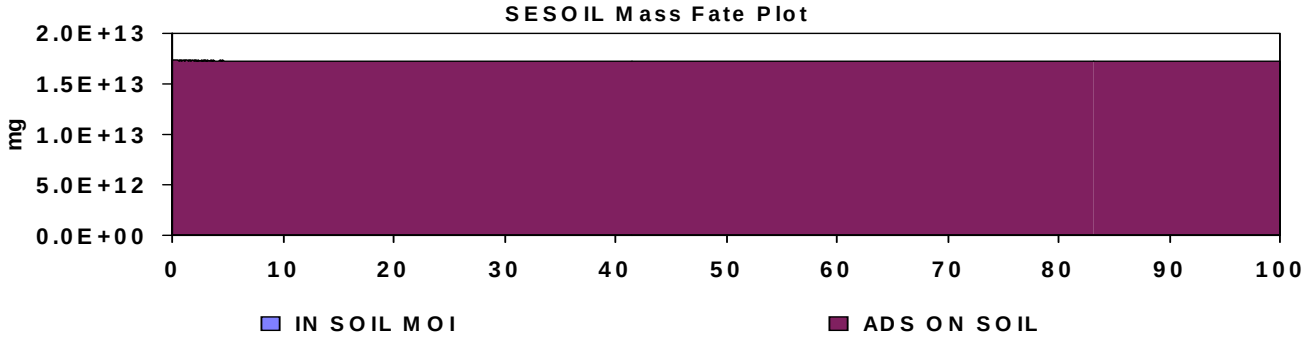
Application File: SEVIEW Default Application Parameters
C:\SEV7 WIN7\AOC7A-LEAD.APL

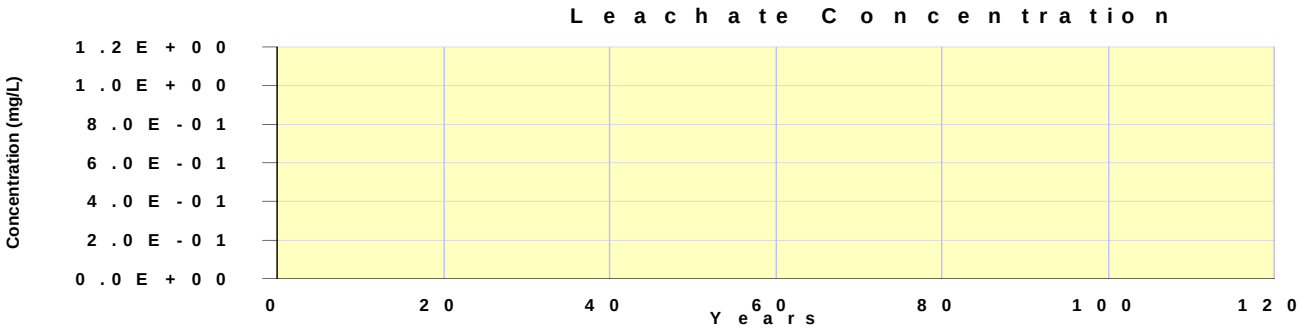
Time to Groundwater: 1588.06 **years**

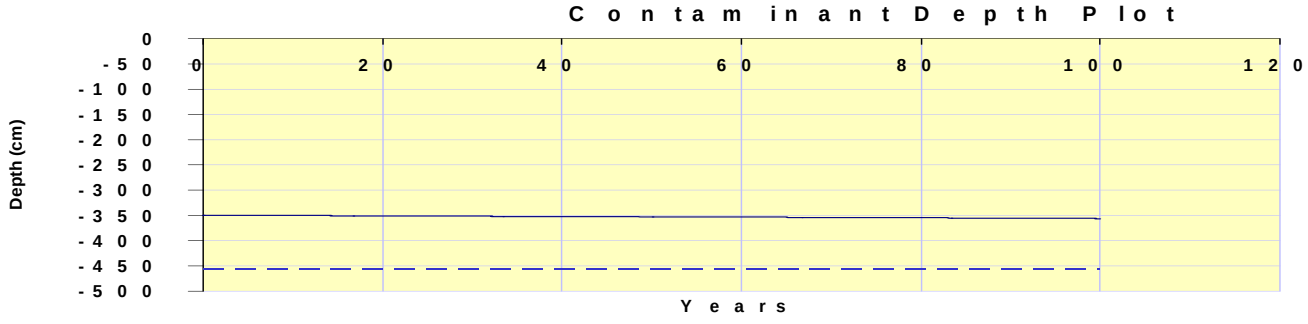
Starting Depth: 349.60 **cm**

Ending Depth: 356.30 **cm**

Total Depth: 456.00 **cm**







SESOIL Pollutant Cycle Report

Scenario Description: AOC7B

SESOIL Output File: c:\SEV7 WIN7\S01.OUT

SESOIL Process	Pollutant Mass (µg)	Percent of Total
Volatilized	0.000E+00	0.00
In Soil Air	0.000E+00	0.00
Sur. Runoff	0.000E+00	0.00
In Washld	0.000E+00	0.00
Ads On Soil	2.889E+12	99.63
Hydrol Soil	0.000E+00	0.00
Degrad Soil	0.000E+00	0.00
Pure Phase	0.000E+00	0.00
Complexed	0.000E+00	0.00
Immobile CEC	0.000E+00	0.00
Hydrol CEC	0.000E+00	0.00
In Soil Moi	1.318E+08	0.00
Hydrol Mois	0.000E+00	0.00
Degrad Mois	0.000E+00	0.00
Other Trans	0.000E+00	0.00
Other Sinks	0.000E+00	0.00
Gwr. Runoff	0.000E+00	0.00
Total Output	2.889E+12	99.63
Total Input	2.900E+12	
Input - Output	1.069E+10	

Maximum leachate concentration: 0.000E+00 **mg/l**

Climate File: EWING

c:\SEV7 WIN7\EWING.CLM

Chemical File: Lead And Compounds (Kd)

c:\sev7 win7\LEAD AND COMPOUNDS (KD).CHM

Soil File: Sand, Perm = 1.00E-3 cm/sec

c:\SEV7 WIN7\AOC9 SAND.SOI

Application File: SEVIEW Default Application Parameters

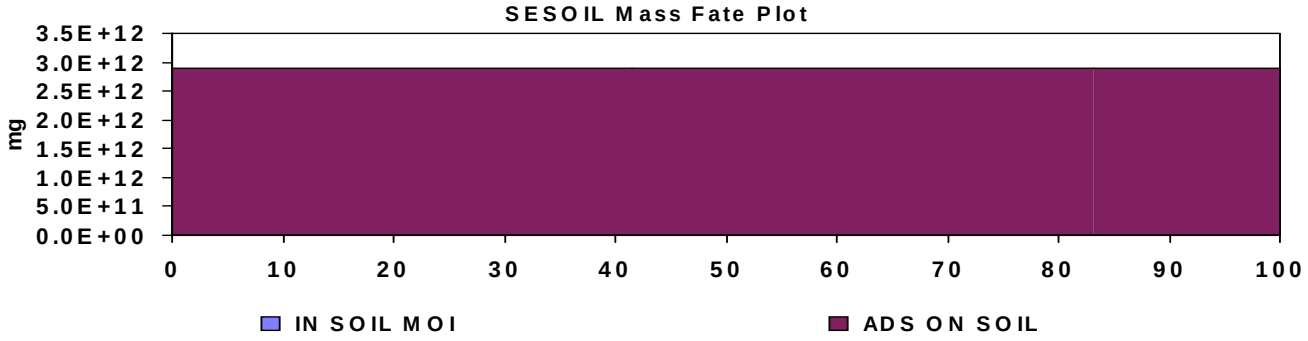
C:\SEV7 WIN7\AOC7B-LEAD.APL

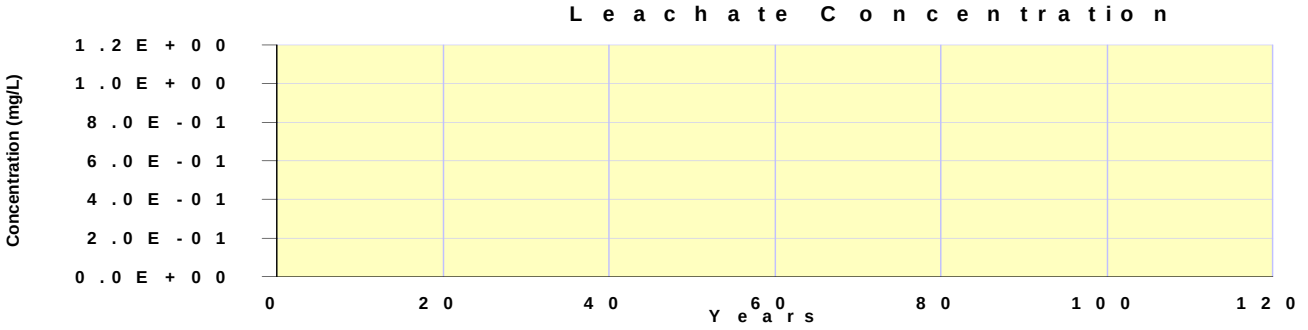
Time to Groundwater: 1521.43 **years**

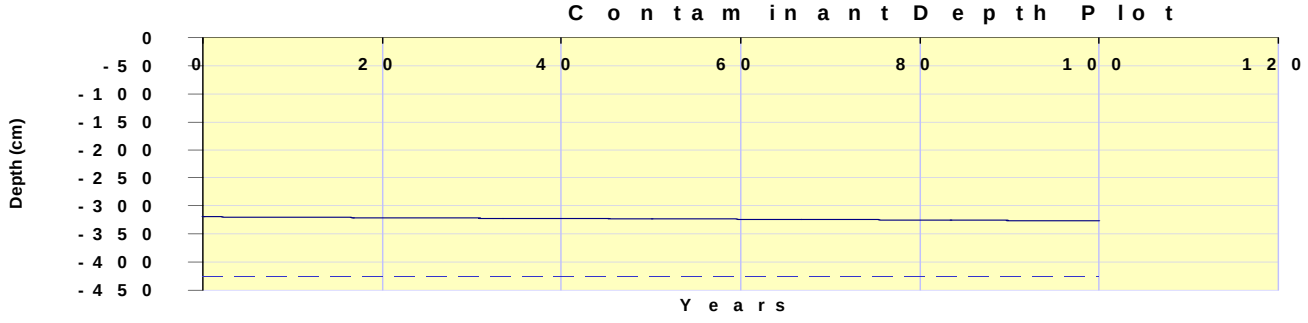
Starting Depth: 319.50 **cm**

Ending Depth: 326.50 **cm**

Total Depth: 426.00 **cm**







SESOIL Pollutant Cycle Report

Scenario Description: AOC8A

SESOIL Output File: c:\SEV7 WIN7\S01.OUT

SESOIL Process	Pollutant Mass (µg)	Percent of Total
Volatilized	0.000E+00	0.00
In Soil Air	0.000E+00	0.00
Sur. Runoff	0.000E+00	0.00
In Washld	0.000E+00	0.00
Ads On Soil	1.241E+12	99.12
Hydrol Soil	0.000E+00	0.00
Degrad Soil	0.000E+00	0.00
Pure Phase	0.000E+00	0.00
Complexed	0.000E+00	0.00
Immobile CEC	0.000E+00	0.00
Hydrol CEC	0.000E+00	0.00
In Soil Moi	5.666E+07	0.00
Hydrol Mois	0.000E+00	0.00
Degrad Mois	0.000E+00	0.00
Other Trans	0.000E+00	0.00
Other Sinks	0.000E+00	0.00
Gwr. Runoff	0.000E+00	0.00
Total Output	1.242E+12	99.12
Total Input	1.253E+12	
Input - Output	1.099E+10	

Maximum leachate concentration: 0.000E+00 **mg/l**

Climate File: EWING
c:\SEV7 WIN7\EWING.CLM

Chemical File: Lead And Compounds (Kd)
c:\sev7 win7\LEAD AND COMPOUNDS (KD).CHM

Soil File: Sand, Perm = 1.00E-3 cm/sec
c:\SEV7 WIN7\AOC9 SAND.SOI

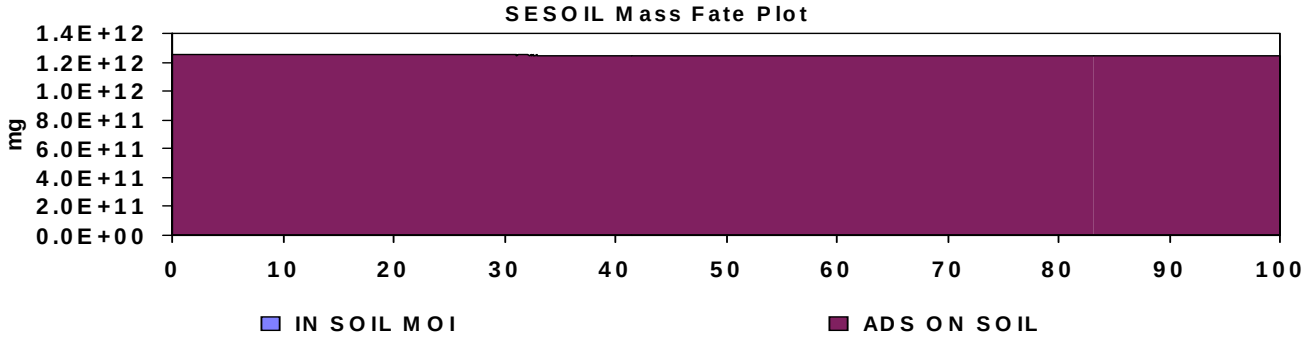
Application File: SEVIEW Default Application Parameters
C:\SEV7 WIN7\AOC8A-LEAD.APL

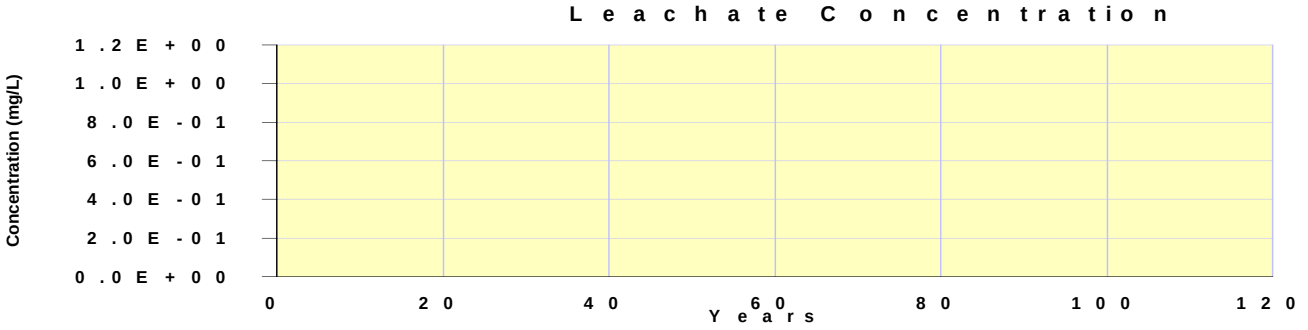
Time to Groundwater: 220.29 **years**

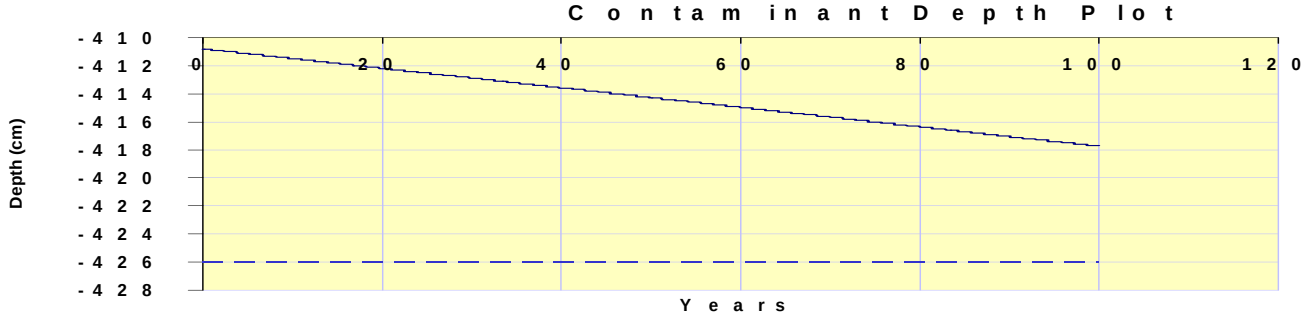
Starting Depth: 410.80 **cm**

Ending Depth: 417.70 **cm**

Total Depth: 426.00 **cm**







SESOIL Pollutant Cycle Report

Scenario Description: AOC09

SESOIL Output File: c:\SEV7 WIN7\S01.OUT

SESOIL Process	Pollutant Mass (µg)	Percent of Total
Volatilized	0.000E+00	0.00
In Soil Air	0.000E+00	0.00
Sur. Runoff	0.000E+00	0.00
In Washld	0.000E+00	0.00
Ads On Soil	2.947E+13	99.37
Hydrol Soil	0.000E+00	0.00
Degrad Soil	0.000E+00	0.00
Pure Phase	0.000E+00	0.00
Complexed	0.000E+00	0.00
Immobile CEC	0.000E+00	0.00
Hydrol CEC	0.000E+00	0.00
In Soil Moi	1.344E+09	0.00
Hydrol Mois	0.000E+00	0.00
Degrad Mois	0.000E+00	0.00
Other Trans	0.000E+00	0.00
Other Sinks	0.000E+00	0.00
Gwr. Runoff	0.000E+00	0.00
Total Output	2.947E+13	99.37
Total Input	2.966E+13	
Input - Output	1.856E+11	

Maximum leachate concentration: 0.000E+00 **mg/l**

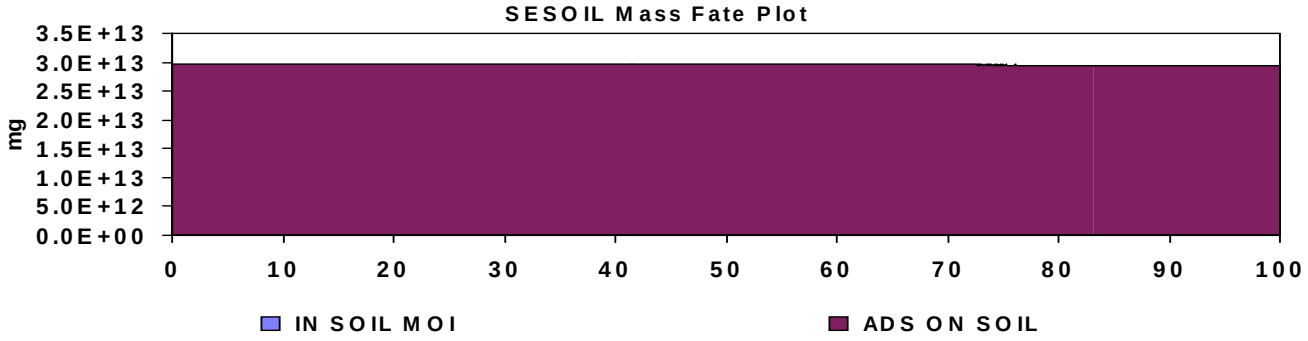
Climate File: EWING
c:\SEV7 WIN7\EWING.CLM

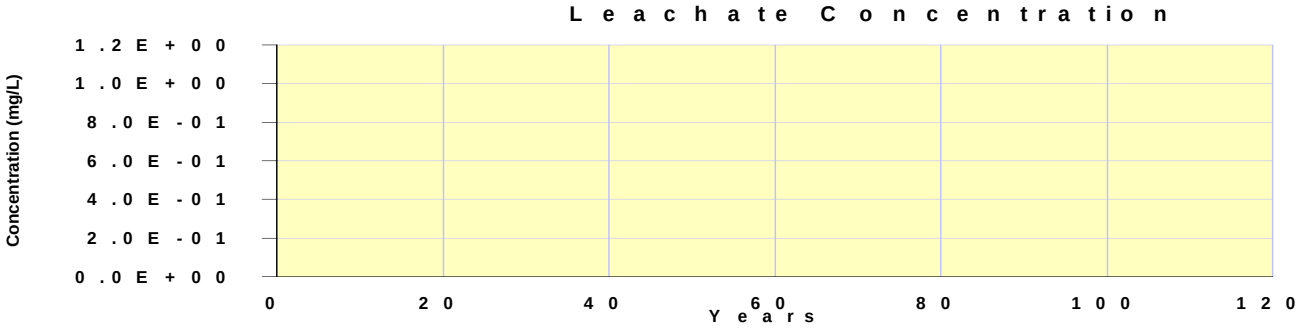
Chemical File: Lead And Compounds (Kd)
C:\SEV7 WIN7\LEAD AND COMPOUNDS (KD).CHM

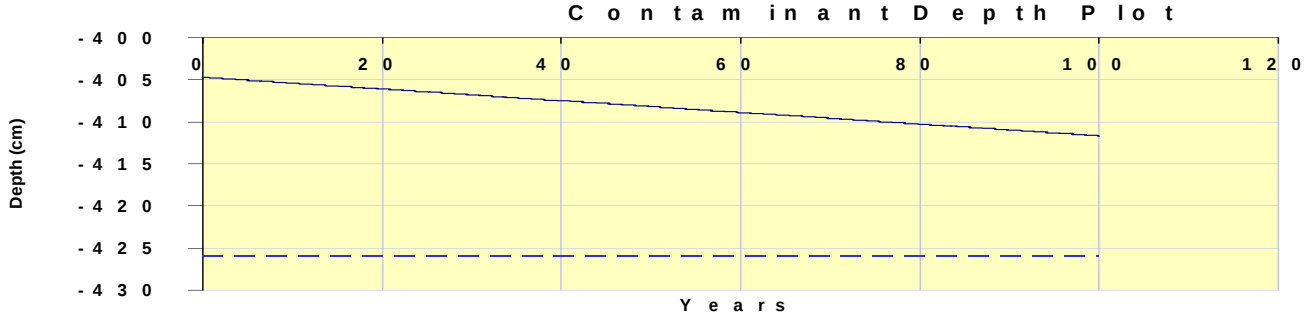
Soil File: Sand, Perm = 1.00E-3 cm/sec
C:\SEV7 WIN7\AOC9 SAND.SOI

Application File: SEVIEW Default Application Parameters
C:\SEV7 WIN7\AOC9-LEAD.APL

Time to Groundwater: 304.29 **years**
Starting Depth: 404.70 **cm**
Ending Depth: 411.70 **cm**
Total Depth: 426.00 **cm**







SESOIL Pollutant Cycle Report

Scenario Description: AOC12

SESOIL Output File: c:\SEV7 WIN7\S01.OUT

SESOIL Process	Pollutant Mass (µg)	Percent of Total
Volatilized	0.000E+00	0.00
In Soil Air	0.000E+00	0.00
Sur. Runoff	0.000E+00	0.00
In Washld	0.000E+00	0.00
Ads On Soil	1.596E+12	99.23
Hydrol Soil	0.000E+00	0.00
Degrad Soil	0.000E+00	0.00
Pure Phase	0.000E+00	0.00
Complexed	0.000E+00	0.00
Immobile CEC	0.000E+00	0.00
Hydrol CEC	0.000E+00	0.00
In Soil Moi	7.284E+07	0.00
Hydrol Mois	0.000E+00	0.00
Degrad Mois	0.000E+00	0.00
Other Trans	0.000E+00	0.00
Other Sinks	0.000E+00	0.00
Gwr. Runoff	0.000E+00	0.00
Total Output	1.596E+12	99.24
Total Input	1.609E+12	
Input - Output	1.228E+10	

Maximum leachate concentration: 0.000E+00 **mg/l**

Climate File: EWING
c:\SEV7 WIN7\EWING.CLM

Chemical File: Lead And Compounds (Kd)
c:\sev7 win7\LEAD AND COMPOUNDS (KD).CHM

Soil File: Sand, Perm = 1.00E-3 cm/sec
c:\SEV7 WIN7\AOC9 SAND.SOI

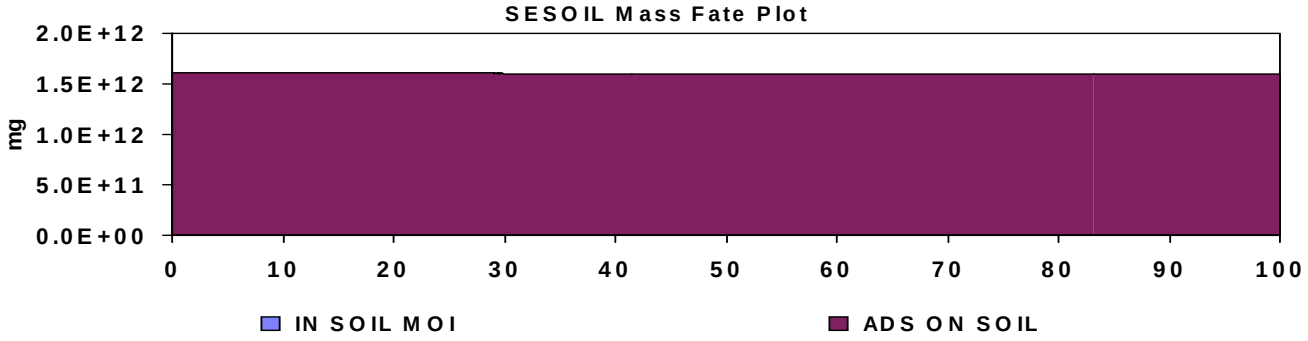
Application File: SEVIEW Default Application Parameters
C:\SEV7 WIN7\AOC12-LEAD.APL

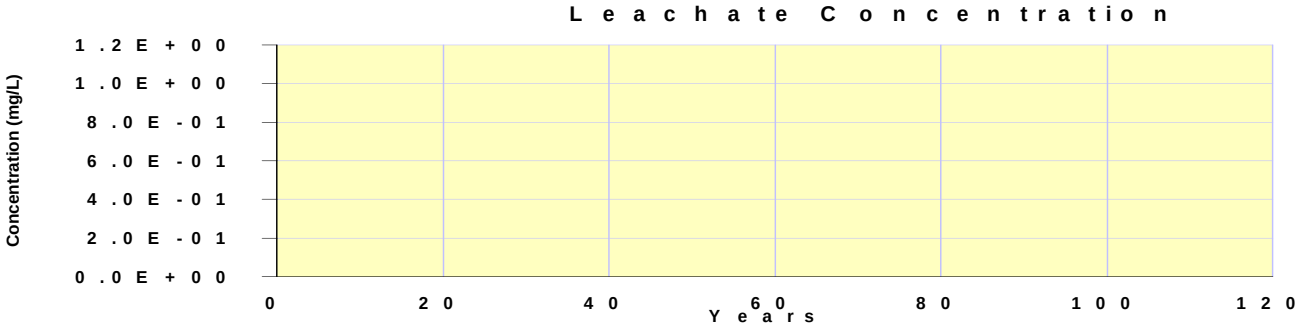
Time to Groundwater: 1111.76 **years**

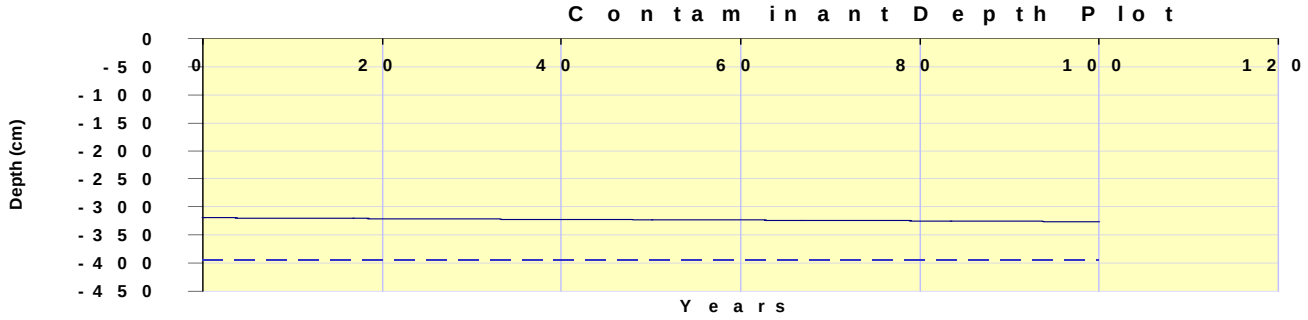
Starting Depth: 319.40 **cm**

Ending Depth: 326.20 **cm**

Total Depth: 395.00 **cm**







APPENDIX L

Spatially-Weighted Averaging

TABLE L-1
ARSENIC CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW03							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**AS MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**AS WEIGHTED CONCENTRATION**
1	B10-3	1	406526.65	520111.54	25	33459.43	836485.78
2	WSO13	1	406840.36	520327.17	15	6232.86	93492.94
3	MW-62	2	406571.65	520125.22	11.8	5124.82	60472.88
4	WSO12	1	406759.87	520198.43	10.9	2271.36	24757.84
5	MW-64	2	406775.67	520187.06	10.2	490.11	4999.17
6	SB-AOC10-2013-109	2	406707.19	520202.86	8	3416.50	27331.96
7	SB-AOC10-2013-102	1	406691.73	520156.14	6.7	3245.03	21741.68
8	SB-AOC10-2013-100	1	406622.54	520142.47	6.5	1912.06	12428.39
9	SB-10-SO-11	2	406646.65	520124.54	6.3	2832.20	17842.86
10	WSO7	1	406778.38	520199.47	6.2	4762.84	29529.61
11	SB-AOC10-2013-108	3	406713.65	520248.94	4.9	3461.39	16960.81
12	SB-10-SO-10	3	406625.65	520173.54	4.1	3143.22	12887.21
13	SB-10-SO-8	2	406898.65	520318.54	2.4	69478.18	166747.63
SUM						**139830.00**	**1325678.76**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**9.48**
SITE-SPECIFIC IGWSRS (MG/KG)							**19**

TABLE L-1
ARSENIC CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW05							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**AS MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**AS WEIGHTED CONCENTRATION**
1	B9-16-102	3	406650.91	520377.82	51.5	543.93	28012.21
2	B9-15-A	1	406726.16	520446.62	50.1	1558.72	78091.63
3	B9-16-100	3	406655.62	520380.44	48.9	29.55	1444.77
4	B9-16-101	3	406659.64	520376.77	47.5	1014.87	48206.19
5	SB-9-SO-2-A	1	406685.41	520455.74	44.7	1378.22	61606.65
6	B9-13-A	1	406707.04	520484.77	25.9	937.65	24285.17
7	HSO13-A	1	406747.21	520498.42	18.4	2192.53	40342.62
8	B9-17	1	406640.08	520343.35	16	915.14	14642.19
9	B8-8	2	406341.67	520187.92	13	424.45	5517.86
10	B10-1	1	406637.43	520408.54	12	3638.86	43666.37
11	B10-8	2	406976.45	520636.8	12	46259.51564	555114.19
12	SB-AOC8B-2013-105	2	406450.08	520243.59	11.1	3791.67	42087.48
13	B8-6	1	406408.23	520267.55	11	2619.00	28809.03
14	B8-3	2	406591.48	520327.19	11	4789.90	52688.92
15	SB-10-SO-6-A	1	406693.07	520419.39	10.6	1892.22	20057.52
16	B9-16-103	3	406658.41	520384.58	10.1	668.07	6747.48
17	SB-10-SO-5-100	2	406852.7	520540.59	9.2	49.42383397	454.70
18	SB-AOC10-2013-116	2	406752.99	520429.64	9.1	2555.70	23256.83
19	B9-16-200	2	406651.75	520384.51	8.8	331.38	2916.11
20	SB-AOC8B-2013-108	2	406529.66	520298.41	8.3	6262.51	51978.84
21	SB-AOC8B-2013-100	3	406329.61	520147.93	8	1037.14	8297.15
22	SB-10-SO-5A-100	1	406859.7	520524.59	7.5	109.2913465	819.69
23	WSO6	1	406896.308	520519.466	6.3	1583.36	9975.15
24	SB-10-SO-5-103	2	406848.87	520537.39	6	1335.331368	8011.99
25	SB-10-SO-5-101	2	406850.39	520544.844	5.7	1332.472842	7595.10
26	SB-AOC8B-2013-103	2	406436.51	520208.36	5.4	1277.28	6897.33
27	SB-AOC10-2013-122	2	406893.64	520585.73	5.3	3978.66	21086.90
28	SB-AOC8B-2013-104	2	406374.67	520269.99	5.2	1143.63	5946.86
29	B8-8-1	3	406334.29	520181.06	5.2	1290.51	6710.65
30	SB-9-SO-1	1	406621.95	520351.00	5.2	2338.20	12158.64
31	SB-AOC8B-2013-107	2	406461.79	520327.38	5.1	3582.77	18272.13
32	JSO23	2	406317.16	520152.14	5.1	16580.20	84559.01
33	SB-AOC10-2013-118	2	406836.13	520467.12	4.8	2265.67	10875.23
34	HSO12	1	406719.91	520384.39	4.8	1355.99	6508.73
35	B9-14	1	406696.76	520455.78	90	682.96	61466.37
36	B8-8-2	2	406336.69	520203.90	4.4	2312.53	10175.15
37	SB-10-SO-5-102	2	406857.76	520542.801	4.4	164.3989592	723.36
38	B8-8-4	2	406387.24	520180.31	4.2	1377.13	5783.93
39	WSO14	1	406899.051	520539.906	4	3231.276561	12925.11
40	SB-10-SO-5A-101	1	406855.73	520521.422	3.9	1423.131862	5550.21
41	SB-AOC8B-2013-109	2	406393.92	520215.20	3.7	1847.61	6836.17
42	B8-8-3	1	406352.66	520231.29	3.4	1863.74	6336.70
43	SB-AOC10-2013-117	2	406788.88	520485.71	3.4	3744.94	12732.79
44	SB-10-SO-5A-102	1	406864.62	520526.833	3.2	478.7731389	1532.07
45	SB-8-SO-14	1	406352.65	520196.54	3.1	812.39	2518.41
46	SB-AOC10-2013-120	1	406870.099	520549.0508	2.7	1021.746023	2758.71
SUM						**140024.42**	**1466980.29**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**10.48**
SITE-SPECIFIC IGWSRS (MG/KG)							**19**

TABLE L-1
ARSENIC CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW06							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**AS MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**AS WEIGHTED CONCENTRATION**
1	SB-9-SO-3-A	3	406745.21	520613.80	133	1365.47	181607.53
2	B9-12-101	2	406715.18	520553.57	55	1584.23	87132.52
3	B9-12-103	2	406721.11	520544.61	42	1409.00	59178.17
4	HSO14-A	1	406785.73	520608.36	38.2	2222.48	84898.82
5	B9-12-100	2	406716.99	520548.64	31.4	52.43	1646.39
6	B9-12-102	2	406712.38	520545.66	23.9	600.91	14361.68
7	SB-9-SO-11-A	2	406652.62	520550.87	20.2	4266.43	86181.87
8	SB-10-SO-1	1	406977.65	520786.54	20	4024.560415	80491.21
9	B9-11	1	406747.04	520581.55	16	1988.88	31822.10
10	SB-8-SO-11-101	2	406388.00	520292.67	15.5	203.93	3160.86
11	SB-10-SO-3	3	406814.65	520639.54	15	2690.44	40356.56
12	SB-AOC10-2013-127	2	406917.01	520735.20	14.6	1225.87	17897.75
13	SB-AOC10-2013-119	2	406812.02	520564.00	14.3	1721.61	24618.96
14	SB-AOC10-2013-128	2	406903.45	520689.99	13.7	3102.56	42505.04
15	B9-10	1	406739.86	520600.82	13	1392.88	18107.48
16	B8-1	2	406451.19	520410.86	12	11750.63	141007.60
17	B10-2	1	406708.86	520523.83	12	3207.20	38486.45
18	JSO7	1	406244.55	520278.43	11.8	2527.80	29828.05
19	SB-9-SO-10	1	406597.62	520494.87	11	12666.56	139332.12
20	SB-8-SO-11-102	3	406385.90	520300.92	10.9	830.17	9048.87
21	SB-8-SO-16-A	1	406238.65	520260.54	8.2	8256.72	67705.10
22	SB-8-SO-11-103	3	406394.04	520299.93	8.1	919.21	7445.57
23	JSO11	1	406358.48	520284.98	7.2	2404.22	17310.40
24	SB-AOC8B-2013-106	2	406401.68	520353.45	6.8	6818.48	46365.68
25	B8-5	1	406298.36	520322.61	30	4842.01	145260.23
26	SB-AOC10-2013-124	2	406881.99	520635.22	6.1	2006.16	12237.58
27	SB-8-SO-11-100	3	406389.65	520297.54	6	35.21	211.24
28	SB-8-SO-15-A	1	406228.65	520268.54	5.9	9820.60	57941.53
29	SB-10-SO-2	3	406939.65	520727.54	5.5	1220.24	6711.29
30	JSO12	1	406361.48	520293.37	5.4	1631.04	8807.62
31	BF-S21	1	407143.36	520890.55	5	9018.54	45092.68
32	WSO15	1	406962.46	520659.06	4.9	1992.27	9762.13
33	SB-AOC10-2013-129	2	406954.52	520718.01	4.6	3720.45	17114.07
34	SB-AOC10-2013-125	2	406853.93	520660.55	4.6	2909.62	13384.27
35	SB-AOC10-2013-121	2	406840.91	520601.89	4.1	2102.42	8619.92
36	BF-S22	1	407178.67	520891.31	4.1	14109.69537	57849.75
37	SB-AOC10-2013-123	2	406920.73	520640.18	4	1410.51	5642.02
38	JSO8	1	406234.66	520274.94	3.9	508.86	1984.56
39	WSO9	1	406977.648	520771.098	3	7522.25469	22566.76
SUM						**140082.54**	**1683682.40**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**12.02**
SITE-SPECIFIC IGWSRS (MG/KG)							**19**

TABLE L-1
ARSENIC CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW07							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**AS MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**AS WEIGHTED CONCENTRATION**
1	SB-9-SO-4-A	1	406781.74	520720.14	241	5522.48	1330918.38
2	B9-8	1	406800.65	520765.77	19	6144.68	116748.99
3	B10-6	2	406792.04	520679.76	17	2338.90	39761.26
4	TP9-1	1	406514.60	520524.31	13	29377.04	381901.54
5	ISO13	1	406113.66	520317.46	12.3	10234.63	125885.91
6	GRB9-1	1	406741.64	520644.34	12	4651.71	55820.49
7	B10-4	1	406713.79	520616.71	12	3185.94	38231.23
8	ISO38	1	405956.83	520245.86	11.9	49627.80	590570.78
9	HSO9	1	406620.29	520638.24	6.9	12301.91	84883.17
10	MOA-B-S11	1	406083.08	520327.54	4.3	4042.02	17380.70
11	SB-AOC10-2013-126	3	406875.67	520724.02	3.9	77501.74	302256.80
12	MOA-B-BS1	1	406116.14	520341.79	3.4	17803.97	60533.50
13	MOA-B-S20	1	406102.01	520336.01	2.8	209.60	586.88
14	JSO19	1	406112.19	520327.30	2.7	307.31	829.74
SUM						**223249.73**	**3146309.37**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**14.09**
SITE-SPECIFIC IGWSRS (MG/KG)							**19**

TABLE L-1
ARSENIC CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW08							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**AS MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**AS WEIGHTED CONCENTRATION**
1	MW-22	2	405962.35	520326.62	91	5260.10	478669.10
2	SB9-SO-5-A	1	406832.48	520850.34	19.6	1862.19	36498.92
3	ISO37	2	405951.17	520297.79	18.7	3446.51	64449.76
4	TP9-2-303	3	406648.03	520756.29	16.4	11466.66	188053.22
5	MOA-B-S13	1	406049.53	520383.18	15.6	1991.34	31064.88
6	WSO8	1	407024.21	520973.51	15.1	57142.90	862857.72
7	MOA-B-S22	1	406101.15	520370.65	12.6	566.79	7141.51
8	ISO40	1	405886.75	520270.20	12.1	39706.11	480443.98
9	B9-7	1	406816.15	520814.34	12	3242.59	38911.13
10	B9-6-A	1	406847.16	520894.44	11.4	3920.90	44698.27
11	MOA-B-S14-A	1	406037.36	520409.96	11.2	953.06	10674.28
12	JSO18	1	406037.11	520411.30	10.2	192.93	1967.87
13	HSO15	1	406916.74	520940.99	9.6	9038.83	86772.77
14	TP9-2-301	3	406672.72	520821.61	9.5	3223.01	30618.55
15	TP10-1-A	1	406874.93	520863.18	9.3	3059.92	28457.23
16	JSO21	1	406118.43	520414.74	9.1	18714.01	170297.49
17	HSO10	1	406497.37	520606.06	8.7	30833.36	268250.25
18	JSO14	1	406137.82	520369.74	8.4	2783.65	23382.62
19	JSO10	1	406088.91	520417.90	8.2	1012.30	8300.86
20	TP9-2-302	3	406671.18	520786.55	8.1	2459.23	19919.79
21	ISO36	1	405921.22	520295.29	7.9	2010.12	15879.91
22	ISO35	1	405925.12	520297.95	7.9	1168.60	9231.91
23	SB-9-SO-12	1	406690.57	520745.00	7.3	2133.90	15577.48
24	MOA-B-BS3-A	1	406109.26	520358.98	6.6	610.42	4028.77
25	MOA-B-BS2-A	1	406122.53	520356.04	6.6	209.80	1384.65
26	MOA-B-S18	1	406082.47	520398.17	6.1	728.65	4444.74
27	JSO20-A	1	406097.24	520401.94	5.6	422.87	2368.07
28	HSO7	1	406797.02	520864.61	4.8	5163.97	24787.07
29	MOA-B-S12	1	406063.05	520353.33	4.7	3842.98	18062.01
30	JSO9	1	406118.22	520394.86	3.9	801.23	3124.81
31	MOA-B-S17	1	406070.05	520425.07	3.3	771.59	2546.25
32	MOA-B-S23	1	406105.94	520372.87	2.9	341.29	989.73
33	MOA-B-S7	1	406050.27	520400.38	2.2	530.67	1167.46
34	HSO8	1	406722.82	520748.26	1.4	3158.61	4422.05
SUM						**222771.07**	**2989445.12**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**13.42**
SITE-SPECIFIC IGWSRS (MG/KG)							**19**

TABLE L-1
ARSENIC CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW09							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**AS MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**AS WEIGHTED CONCENTRATION**
1	SB-AOC09-2013-104-EX1A	2	406971.71	521114.21	220	2333.50	513370.60
2	B7-2	3	405868.66	520350.08	180	302.26	54407.12
3	CE-1-102	4	406020.669	520431.253	163	104.62	17053.12
4	SB-AOC09-2013-104	1	406997.56	521110.93	135	812.04	109625.24
5	B9-5	1	406915.75	521068.36	96	3674.83	352783.49
6	MOA-C-B2-A	2	406148.3295	520575.1239	5.5	9487.81	52182.95
7	SB-AOC09-2013-104-EX1C	2	407031.7147	521118.6535	60	1838.78	110327.02
8	TP9-2-202	2	406622.89	520799.50	43.4	1110.00	48174.16
9	CE-1	2	406018.009	520435.508	36.8	35.17	1294.38
10	TP9-3-305	3	406523.64	520814.62	34.9	6549.63	228582.05
11	TP9-2-300	3	406672.80	520849.35	29.3	4543.61	133127.69
12	B7-2-EX1B	2	405854.09	520347.13	28	875.30	24508.50
13	SB-9-SO-6A	1	406874.54	520966.61	17.4	11513.26	200330.73
14	MOA-C-B8-100	3	406101.8385	520509.096	26.8	36.76	985.07
15	SB-7-SO-6	4	405828.35	520387.70	25	941.48	23537.09
16	TP9-3-203	2	406597.4551	520874.403	23.4	2405.77	56295.07
17	MOA-C-B10-A	1	406123.53	520511.34	3.9	1202.47	4689.64
18	CE-1-101	4	406020.92	520439.51	22.5	656.77	14777.35
19	SB-AOC09-2013-104-EX1E	2	407069.47	521127.27	21	34888.76	732663.97
20	ISO11	2	405932.805	520465.898	20.2	1664.30	33618.85
21	B7-2-EX1C	2	405871.18	520334.77	20	1069.03	21380.68
22	MOA-C-B8-103	3	406098.88	520513.28	19.8	371.10	7347.69
23	B7-2-EX1A	2	405882.7626	520354.4274	19	1003.18	19060.46
24	MOA-C-B15	3	406096.7145	520538.0505	17.1	1216.83	20807.81
25	ISO16	1	405844.11	520294.14	16.8	630.06	10585.04
26	SB-AOC09-2013-104-EX1B	2	407002.27	521138.10	16	1452.40	23238.35
27	TP9-2	2	406603.86	520814.04	16	3185.45	50967.15
28	JSO17	1	406032.25	520429.63	15.5	313.98	4866.62
29	JSO5	1	405991.14	520498.86	14.6	1147.76	16757.34
30	CE-1-103	4	406012.96	520434.42	14	1103.21	15444.99
31	TP9-3	2	406572.39	520874.38	14	1057.69	14807.67
32	TP9-2-304	3	406543.37	520758.75	13.7	6847.18	93806.39
33	SB-AOC09-2013-103	1	407004.36	521086.11	13.7	3827.66	52438.88
34	MOA-C-B14	3	406121.50	520572.68	13.2	1298.29	17137.48
35	MOA-C-B7	3	406075.34	520534.67	12.2	1007.81	12295.30
36	TP10-2	1	406916.07	521042.17	12	6208.28	74499.38
37	B8-9	2	406002.67	520497.83	12	329.70	3956.43
38	B7-6	2	405965.06	520416.27	12	3355.54	40266.54
39	SB-AOC09-2013-104-EX1D	2	407050.6034	521146.9868	12	7616.70	91400.40
40	ISO17	1	405761.39	520323.42	11.8	31135.71	367401.37
41	MOA-C-B8-102	3	406098.412	520504.42	11.7	828.59	9694.47
42	ISO32	1	405812.95	520354.55	11	1476.24	16238.64
43	MOA-C-B2A	1	406141.16	520584.15	10.8	2193.10	23685.47
44	JSO6	1	406006.95	520496.61	10.5	1629.78	17112.72
45	ZSO6	5	406066.22	520516.66	9.8	1676.14	16426.16
46	HSO5	1	406538.18	520856.58	9.4	1317.25	12382.17
47	ISO42	1	405832.005	520290.475	9.3	1981.56	18428.54
48	MOA-C-B8-101	3	406106.72	520508.52	9.2	289.15	2660.15
49	SB-7-SO-7	5	405908.28	520375.18	8.9	2728.09	24279.99
50	TP9-2-311	3	406650	520901	8.4	2894.47	24313.53
51	SB-7-SO-4	5	405917.72	520420.99	8.2	2762.75	22654.54
52	HSO3	1	406353.39	520701.02	8.1	21719.85	175930.78
53	ISO34	1	405817.03	520331.61	7.9	1554.43	12280.01
54	ISO33	1	405821.62	520348.256	7.6	550.01	4180.07
55	MOA-B-S15	1	406028.52	520429.37	7.2	130.14	936.99
56	CE-1-102-EX1A	2	406015.0631	520414.1697	6.9	915.02	6313.61
57	ZSO5	3	406158.516	520507.612	6.3	3038.40	19141.94
58	CE-2	2	406057.063	520463.789	6.3	866.96	5461.85
59	TP7-4	2	405848.1057	520395.3115	6	1339.33	8035.97
60	HSO6	1	406679.419	520933.969	5.6	9714.14	54399.16
61	MOA-B-S16	1	406049.65	520453.33	5.5	616.55	3391.00
62	MOA-C-B9	3	406123.0261	520478.1428	4.7	1073.84	5047.07
63	SB-7-SO-5	4	405866.65	520375.54	4.4	1174.31	5166.94
64	JSO16	1	406055.854	520472.69	2.5	1352.09	3380.23
65	MOA-B-S10	1	406041.92	520444.72	1.6	533.73	853.97
SUM						**223510.60**	**4163195.97**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**18.63**
SITE-SPECIFIC IGWSRS (MG/KG)							**19**

TABLE L-1
ARSENIC CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW10							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**AS MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**AS WEIGHTED CONCENTRATION**
1	B9-2-103	2	406863.425	521142.907	407	122.88	50012.09
2	B9-2-100	2	406865.66	521138.45	365	34.37	12543.92
3	B9-2-101	2	406870.372	521138.567	356	159.55	56798.69
4	SB-AOC09-2013-102	1	406878.9916	521155.1735	325	695.22	225945.25
5	ISO7-103	2	405732.05	520433.54	44.5	793.21	35297.66
6	B9-3-A	1	406925	521161.8	33.8	4770.59	161245.97
7	SB-9-SO-7	1	406909.79	521104.87	31	1011.65	31361.23
8	B7-5-A	1	405925.66	520489.91	29.6	4549.80	134674.08
9	B9-2-102	2	406861.838	521134.779	26.3	752.49	19790.51
10	SB-AOC09-2013-101	2	406857.69	521151.39	25.7	2384.19	61273.71
11	MOA-C-B13	3	406087.44	520575.16	24.8	979.13	24282.44
12	SB-7-SO-3	5	405852.72	520440.99	22	3193.19	70250.24
13	B7-1	1	405835.34	520416.27	22	829.12	18240.65
14	ISO7-101	2	405739.00	520429.20	19.3	303.36	5854.81
15	ISO7-102	2	405730.46	520425.41	18.7	577.92	10807.12
16	MOA-C-B3	3	406073.52	520647.18	18.1	5373.15	97254.09
17	MOA-C-B11	3	406054.26	520592.05	17.3	1003.71	17364.20
18	MOA-C-B1	3	406106.66	520614.79	14.9	10966.09	163394.74
19	TP9-3-302	3	406547.45	520949.37	14	3949.43	55291.99
20	B7-3	3	405778.17	520450.87	13	2658.33	34558.32
21	MW-77	2	405729.26	520411.58	12.9	2890.18	37283.31
22	ISO7-100	2	405734.04	520428.85	11.6	35.05	406.56
23	TP7-1	2	405839.82	520515.38	11.2	2114.95	23687.49
24	ZSO1	1	406047.54	520649.11	11.2	950.38	10644.21
25	SB-9-SO-9	1	406583.21	520890.16	11	2335.55	25691.01
26	ISO18	1	405690.41	520345.97	10.6	21119.64	223868.16
27	TP7-2-A	2	405756.36	520433.91	9.7	1405.28	13631.17
28	TP9-3-304	3	406502.91	520897.25	8.8	11434.15	100620.48
29	MOA-C-B4-A	1	406046.85	520621.20	8.8	1325.81	11667.14
30	SB-AOC09-2013-100	1	406878.6374	521129.0375	8.8	571.67	5030.72
31	TP9-3-301	3	406614.60	520946.33	8.7	16709.21	145370.08
32	MOA-C-B12	3	406076.05	520614.85	8.6	994.07	8548.96
33	TP9-3-303	3	406508.92	520931.23	7.9	2391.75	18894.80
34	TP7-5	1	405803.25	520389.41	7.4	1836.43	13589.58
35	B9-1-A	1	406901.63	521128.86	7.2	1075.16	7741.12
36	HSO2	1	406319.58	520821.96	6.6	23782.61	156965.25
37	SB-8-SO-17	1	405975.05	520505.69	6.5	3628.22	23583.40
38	MOA-C-B6	3	406047.16	520561.92	6.1	1990.19	12140.18
39	MOA-C-B5	3	406018.19	520590.54	5.4	5196.99	28063.75
40	HSO23	1	406859.589	521109.416	5.3	13787.21	73072.23
41	SB-8-SO-18	1	405981.05	520502.69	4.3	840.52	3614.23
42	ISO31	1	405674.34	520386.57	4.3	8164.52	35107.44
43	HSO20	1	406886.439	521177.42	4.1	1526.99	6260.65
44	TP7-3	2	405806.94	520426.09	4	1707.48	6829.91
45	MW-78	2	405862.98	520516.72	2.6	3933.67	10227.54
46	HSO19	1	406925.072	521206.732	2.6	46489.64	120873.07
SUM						**223344.67**	**2409654.14**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**10.79**
SITE-SPECIFIC IGWSRS (MG/KG)							**19**

TABLE L-1
ARSENIC CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW11							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**AS MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**AS WEIGHTED CONCENTRATION**
1	SB-9-SO-8-A-EX1C	2	406741.25	521179.65	250	1528.70	382174.27
2	SB-9-SO-8-A	1	406757.93	521173.01	224	389.76	87307.06
3	FSO5-A	1	406279.13	520913.87	109	5153.81	561764.81
4	ISO6-103	4	405721.71	520480.90	71.2	1718.73	122373.49
5	ISO6-102	4	405715.64	520476.76	62.8	8218.48	516120.52
6	ISO6-100	4	405720.36	520476.32	34.7	31.75	1101.56
7	SB-9-SO-8-A-EX1A	2	406771.53	521182.43	34	1676.15	56989.05
8	ISO5-101	2	405737.54	520476.73	33.7	506.17	17058.06
9	ISO5-102	2	405729.98	520481.20	28.5	90.56	2580.88
10	ISO6-101	4	405723.20	520472.29	18	583.78	10508.02
11	FSO25	1	406009.90	520736.49	15.3	2251.73	34451.44
12	ISO5-103	2	405736.05	520485.34	15.2	3993.33	60698.55
13	FSO6	1	406248.83	520900.06	15	15089.04	226335.60
14	ISO5-100	2	405734.69	520480.68	14.7	31.95	469.72
15	FSO24	1	406002.14	520716.96	14.6	11145.22	162720.27
16	ISO19	1	405578.84	520381.85	13.7	10365.02	142000.81
17	B3-29	2	406013.46	520746.90	12	11532.81	138393.70
18	TP10-3	1	406836.77	521182.90	12	24068.72	288824.70
19	B7-4	2	405826.69	520520.48	11	4191.33	46104.67
20	ISO20	1	405511.68	520414.55	10.4	15502.81	161229.23
21	SB-9-SO-8-A-EX1G	2	406689.17	521170.07	9.1	19020.02	173082.23
22	SB-9-SO-8-A-EX1B	2	406757.64	521155.77	8.6	1863.26	16024.01
23	SB-11-SO-201	2	407241.96	521472.51	8.5	31804.58	270338.96
24	HSO21	1	406834.75	521181.03	8.1	1395.97	11307.34
25	SB-9-SO-8-A-EX1D	2	406762.09	521208.68	7	3960.67	27724.69
26	SB-9-SO-8-A-EX1E	1	406724.87	521148.82	4.5	5199.57	23398.08
27	HSO1	1	406329.14	520945.52	4.3	24149.96	103844.82
28	MH5-1	1	405883.35	520593.15	3.3	13897.49	45861.70
29	ISO4	1	405806.46	520508.46	3.3	3938.75	12997.89
SUM						**223300.13**	**3703786.14**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**16.59**
SITE-SPECIFIC IGWSRS (MG/KG)							**19**

TABLE L-1
ARSENIC CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW12							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**AS MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**AS WEIGHTED CONCENTRATION**
1	B6-201	2	405993.32	520788.94	76.2	2801.55	213478.28
2	B3-16-A	1	406250.94	520913.65	37.4	623.78	23329.50
3	FSO27-A	2	406032.44	520794.04	31	918.67	28478.75
4	FSO29	1	406045.39	520824.94	30.6	1221.12	37366.40
5	ASO9	1	405433.94	520439.47	24.3	12755.95	309969.70
6	FSO3	1	406275.73	520994.12	20.1	3949.32	79381.40
7	SB-3-SO-11	1	406249.65	520945.54	17	422.50	7182.51
8	FSO4	1	406290.23	520984.52	13.6	4949.62	67314.84
9	B3-27	2	406049.28	520841.65	13	10037.02	130481.27
10	B3-17	2	406274.42	520951.82	13	1078.24	14017.07
11	SB-3-SO-12	1	406273.65	520935.54	12	509.37	6112.40
12	B3-14	2	406245.50	520937.34	12	481.29	5775.45
13	B7-8	2	405720.82	520579.33	11	20897.78	229875.56
14	B3-15	1	406244.81	520974.07	14	1727.54	24185.56
15	FSO2	1	406236.45	520964.45	7.3	1981.86	14467.60
16	MW-71	1	406755.81	521280.12	7	28062.70	196438.90
17	MW-66	1	406881.97	521330.19	6.9	22703.50	156654.18
18	FSO26	1	406004.78	520765.89	6.1	1693.24	10328.74
19	FSO1	1	406218.60	520930.32	6	9709.29	58255.72
20	B3-4-200	1	406021.22	520816.49	6	2459.99	14759.91
21	MW-76	3	405592.60	520491.22	5.6	11899.36	66636.42
22	CSO1	1	407118.49	521575.18	4.5	28207.80	126935.10
23	FSO28-A	1	406040.68	520815.54	3.7	684.94	2534.28
24	B3-28	1	406032.19	520799.48	12	321.74	3860.92
25	HSO4	1	406413.89	521042.11	3.5	27223.08	95280.79
26	ISO30	1	405505.75	520449.80	2.3	7711.64	17736.76
27	SB-5-SO-3	1	405921.65	520759.54	2	15013.33	30026.65
28	SB-5-SO-2	1	405922.65	520794.54	2	3253.90	6507.80
SUM						**223300.13**	**1977372.48**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**8.86**
SITE-SPECIFIC IGWSRS (MG/KG)							**19**

TABLE L-1
ARSENIC CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW15							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**AS MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**AS WEIGHTED CONCENTRATION**
1	GRB2-1	1	406203.25	521248.03	31	797.90	24735.05
2	B6-3-A	2	405531.02	520923.49	28.2	5984.90	168774.29
3	B6-12	1	405267.40	520654.27	18	3964.02	71352.41
4	B6-2	2	405550.65	520828.24	12	15736.75	188840.98
5	DI-3-A	1	405729.35	521008.16	10.9	5374.86	58585.92
6	263-1	2	405738.81	521030.84	6.6	1426.86	9417.25
7	DI-2	1	405705.38	521029.69	6.3	2837.89	17878.71
8	GSO4	1	406193.68	521239.17	6	2027.53	12165.16
9	GSO5	1	406213.79	521261.89	5.8	7307.23	42381.96
10	PL07-04	2	405831.35	521114.72	4.9	14848.07	72755.54
11	305-2	2	405639.80	520894.43	4.5	3828.57	17228.57
12	305-1	2	405629.29	520898.45	3.9	6887.37	26860.74
13	L8-1	1	405802.60	521004.12	3.5	3458.26	12103.92
14	L6-1	1	406085.14	521255.43	3.4	13161.57	44749.33
15	ASO5	1	405260.48	520717.36	2.7	14499.59	39148.90
16	MC6-1	1	406119.19	521232.72	2.7	7832.68	21148.24
17	MW-70	2	406296.33	521345.64	2.6	99380.41	258389.07
18	DI-4	1	405751.13	521019.66	2.1	1810.09	3801.19
19	ASO6	1	405247.90	520675.37	1.3	3651.27	4746.65
20	ASO4	1	405238.79	520713.24	1.3	2338.73	3040.35
21	CP-1	1	405807.47	521051.98	0.77	6145.56	4732.08
SUM						**223300.13**	**1102836.32**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**4.94**
SITE-SPECIFIC IGWSRS (MG/KG)							**19**

TABLE L-1
ARSENIC CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW17							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**AS MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**AS WEIGHTED CONCENTRATION**
1	MC3-1	2	406245.86	521579.97	14.9	38508.76	573780.55
2	GSO26BD	1	406719.93	521850.89	22.7	7234.21	164216.55
3	PL12-111B	2	405645.14	521215.95	10.1	508.31	5133.96
4	PL12-112	2	405634.75	521222.18	9.9	1320.38	13071.74
5	PL12-110B	3	405655.28	521211.66	8.3	513.70	4263.69
6	PL12-107B	3	405713.48	521191.30	7.7	2825.12	21753.40
7	109-1	1	406036.27	521403.26	7.6	19816.93	150608.63
8	PL06-103	3	405916.01	521352.65	6.9	7923.71	54673.58
9	PL12-108	2	405683.36	521215.36	6.2	755.05	4681.32
10	PL12-109	2	405673.97	521218.78	6	527.33	3163.98
11	MW-80	3	405782.74	521253.32	5.9	4101.36	24198.04
12	PL12-105	3	405726.97	521264.48	5.8	2726.15	15811.70
13	PKWY-09	2	406779.34	521907.16	5.5	26293.89	144616.37
14	PKWY-11	1	406688.34	521808.76	5.2	26296.70	136742.83
15	PL12-106	3	405741.92	521227.42	3.4	2511.84	8540.27
16	DC-10	1	405630.67	521138.82	3.2	3816.65	12213.28
17	110-1	1	405857.13	521338.78	3.2	1998.93	6396.59
18	PL12-07	1	405681.31	521221.20	2.8	54.27	151.96
19	PL06-105	1	405882.94	521347.44	2.6	495.48	1288.25
20	PL06-104	1	405891.45	521344.24	2.5	1086.62	2716.56
21	239-1	1	405869.52	521321.75	2.2	4452.88	9796.35
22	PL06-106	1	405872.65	521351.30	2.1	866.07	1818.74
23	PL12-08	1	405683.95	521224.44	1.7	1357.60	2307.92
24	DC-09	1	405649.22	521184.03	1.7	2889.72	4912.52
25	L7-1	1	405788.10	521242.56	1.3	2925.45	3803.09
26	DC-11	1	405600.22	521110.64	1.2	60487.30	72584.76
27	PL06-107	1	405848.43	521360.10	1.1	1005.70	1106.27
SUM						**223300.13**	**1444352.92**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**6.47**
SITE-SPECIFIC IGWSRS (MG/KG)							**19**

TABLE L-1
ARSENIC CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW18							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**AS MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**AS WEIGHTED CONCENTRATION**
1	PKWY-08-A	1	406603.90	521911.53	58.3	54813.10	3195603.59
2	PL05-03	1	405734.80	521409.23	16.3	114.23	1861.99
3	PL06-101	3	405864.09	521429.73	12.5	3116.86	38960.72
4	PL06-102	3	405903.77	521408.57	10.2	6130.67	62532.87
5	PL05-102	3	405813.59	521411.72	9.9	2038.96	20185.73
6	PL05-200	2	405729.78	521398.66	9.8	2664.83	26115.35
7	PL05-201	2	405746.61	521406.82	9.3	504.15	4688.61
8	PL05-103	3	405811.26	521389.40	9	566.87	5101.79
9	PL05-04	1	405772.81	521404.72	8.1	880.06	7128.48
10	PL05-101	3	405764.29	521428.04	6.7	775.29	5194.41
11	PL12-103	2	405640.17	521296.19	6.7	4561.29	30560.66
12	PL12-06	1	405646.57	521237.39	6.6	1104.63	7290.53
13	PL12-114	2	405573.23	521252.98	6.3	60079.96	378503.73
14	PL12-113	2	405608.59	521239.11	5.8	2198.20	12749.57
15	PL05-05	1	405795.69	521385.73	5.6	1678.19	9397.87
16	PL12-104	2	405682.74	521279.09	4.7	4547.06	21371.20
17	MC2-1	1	406297.23	521715.66	3.9	33375.78	130165.54
18	PL06-100	3	405829.95	521384.47	3	2062.14	6186.41
19	111-1	1	405758.01	521375.73	2.4	4539.50	10894.80
20	L4-1	1	406070.59	521518.00	1.5	24339.30	36508.95
21	108-1	1	405845.27	521474.08	1.4	5589.31	7825.04
22	PL12-05	1	405603.77	521275.21	1.2	1220.16	1464.20
23	PL12-01	1	405565.57	521270.49	1.2	4798.79	5758.55
24	PL12-04	1	405589.04	521289.88	0.87	1600.79	1392.69
SUM						**223300.13**	**4027443.27**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**18.04**
SITE-SPECIFIC IGWSRS (MG/KG)							**19**

TABLE L-1
ARSENIC CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW22							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**AS MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**AS WEIGHTED CONCENTRATION**
1	XSO2-A	1	406240.16	522102.81	43.8	15793.60	691759.81
2	PKWY-04	1	406181.58	522133.46	17.2	17421.81	299655.13
3	RW-102	1	405459.38	521643.27	4.5	55781.53	251016.90
4	107-3	1	405867.45	521876.46	4.4	1610.78	7087.45
5	221-1	1	405857.44	521927.15	1.4	7347.91	10287.07
6	107-4	1	405862.88	521874.97	1.2	2060.60	2472.72
7	107-2	1	405864.22	521881.73	1.1	901.47	991.62
8	107-1	1	405858.09	521880.66	1	19610.59	19610.59
9	L1-2	1	405966.23	521979.73	0.87	19301.70	16792.48
SUM						**139830.00**	**1299673.77**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**9.29**
SITE-SPECIFIC IGWSRS (MG/KG)							**19**

TABLE L-1
ARSENIC CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW23							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**AS MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**AS WEIGHTED CONCENTRATION**
1	PL10-15	1	405511.65	521821.94	30.8	222.73	6859.99
2	PL10-01	1	405487.94	521776.54	10	1734.20	17342.04
3	PL10-104	2	405502.76	521815.45	7.8	634.83	4951.69
4	PL10-105	2	405506.93	521823.58	7.5	162.46	1218.42
5	PL10-02	1	405498.75	521805.03	7.5	912.86	6846.46
6	PKWY-06	1	406218.15	522211.58	6.2	30833.31	191166.50
7	PL10-103	2	405492.42	521781.97	5.9	285.71	1685.71
8	PL10-04	1	405519.32	521856.75	5.9	656.07	3870.83
9	PL10-11	1	405523.58	521762.41	5.1	55.09	280.96
10	PL10-08	2	405549.91	521831.91	4.7	1825.94	8581.92
11	PL10-101	2	405528.23	521760.57	4.4	157.95	695.00
12	103-1	1	405900.66	522007.01	3	7598.22	22794.65
13	RW-100	1	405453.53	521782.71	2.7	40395.70	109068.38
14	PL10-100	2	405525.45	521767.05	2.7	203.69	549.96
15	213-2	1	405868.64	522075.90	1.6	12105.18	19368.29
16	PL10-14	1	405511.15	521772.64	1.5	494.09	741.13
17	PL10-03	2	405508.61	521830.62	1.5	788.96	1183.44
18	L1-1	1	405855.46	522019.87	1.3	16652.09	21647.71
19	PL10-18	1	405540.57	521844.99	1.2	552.43	662.92
20	PL10-17	2	405539.66	521875.73	1.2	540.78	648.94
21	ZB-2	1	405567.36	521899.14	1.1	12526.58	13779.24
22	PL10-16	1	405530.09	521815.05	1.1	508.77	559.65
23	PL10-13	1	405497.16	521780.38	1.1	258.43	284.28
24	PL10-10	1	405532.72	521785.49	1.1	1065.13	1171.64
25	PL10-09	1	405542.58	521811.13	1.1	1386.66	1525.33
26	PL10-07	1	405560.28	521858.57	1.1	4684.92	5153.42
27	213-1	1	405865.33	522069.08	0.87	2024.11	1760.97
28	PL10-102	1	405521.76	521757.75	0.8	563.11	450.49
SUM						**139830.00**	**444849.94**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**3.18**
SITE-SPECIFIC IGWSRS (MG/KG)							**19**

TABLE L-1
ARSENIC CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW24							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**AS MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**AS WEIGHTED CONCENTRATION**
1	PKWY-02-A	1	405967.88	522180.43	55.3	14205.13	785543.68
2	XSO1	1	406012.69	522223.57	14.1	27531.04	388187.61
3	XSO3-A	1	406012.69	522223.57	13.5	1759.76	23756.83
4	PL10-108	2	405530.79	521888.16	11.4	238.68	2721.00
5	PL10-106	2	405527.33	521878.78	10.7	22075.87	236211.82
6	PL10-107	2	405524.37	521885.20	9.9	29793.08	294951.54
7	XSO4-A	1	405965.28	522249.34	6.7	5864.07	39289.29
8	ZB-1-100	2	405540.50	521895.83	4.7	815.26	3831.72
9	ZB-1-101	2	405542.11	521890.31	3.2	62.81	201.00
10	PL10-05	1	405529.06	521883.47	2.2	50.43	110.95
11	ZB-1	1	405545.21	521894.21	2.1	412.16	865.54
12	206-1	1	405692.22	522090.55	1.5	20458.33	30687.50
13	279-1	1	405581.97	522013.56	1.4	6833.58	9567.02
14	ZB-4	1	405571.89	521961.76	1.3	5577.96	7251.34
15	PL10-06	1	405546.49	521887.86	1.1	28.71	31.59
16	ZB-3	1	405558.74	521933.86	0.81	4123.11	3339.72
SUM						**139830.00**	**1826548.13**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**13.06**
SITE-SPECIFIC IGWSRS (MG/KG)							**19**

TABLE L-2
ARSENIC CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW05							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**AS MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**AS WEIGHTED CONCENTRATION**
1	SB-AOC8B-2013-105	1	406450.08	520243.59	37.40	3791.67	141808.28
2	B8-8	1	406341.67	520187.92	16.00	16997.64	271962.17
3	B8-6	2	406408.23	520267.55	15.00	2619.00	39285.05
4	B10-7	1	406870.65	520478.54	12.00	1855.53	22266.33
5	SB-AOC8B-2013-104	1	406374.67	520269.99	7.80	1143.63	8920.29
6	B8-8-4	1	406387.24	520180.31	5.50	1534.79	8441.37
7	SB-AOC10-2013-120	1	406870.10	520549.05	5.30	2157.69	11435.75
8	B8-8-3	1	406352.66	520231.29	5.20	1946.52	10121.92
9	SB-10-SO-6	1	406693.07	520419.39	5.10	16056.97	81890.57
10	SB-AOC10-2013-117	1	406788.88	520485.71	5.00	9144.62	45723.10
11	SB-10-SO-5-100	1	406852.70	520540.59	4.60	49.42	227.35
12	SB-AOC8B-2013-109	1	406393.92	520215.20	4.50	1908.22	8586.99
13	SB-10-SO-5-103	1	406848.87	520537.39	4.00	1335.33	5341.33
14	SB-AOC8B-2013-108	1	406529.66	520298.41	3.80	12676.57	48170.96
15	SB-10-SO-5A-102	1	406864.62	520526.83	3.60	1535.68	5528.45
16	SB-10-SO-5-102	1	406857.76	520542.80	3.30	164.40	542.52
17	SB-10-SO-5-101	1	406850.39	520544.84	3.20	1332.47	4263.91
18	SB-10-SO-5A-100	1	406859.70	520524.59	2.90	109.29	316.94
19	SB-AOC10-2013-122	1	406893.64	520585.73	2.80	52370.17	146636.47
20	SB-10-SO-5A-101	1	406855.73	520521.42	2.70	1276.22	3445.79
21	B8-8-2	1	406336.69	520203.90	2.40	5158.53	12380.47
22	SB-AOC8B-2013-107	1	406461.79	520327.38	1.80	3582.77	6448.99
23	SB-AOC8B-2013-103	1	406436.51	520208.36	1.10	1277.28	1405.01
SUM						**140024.42**	**885150.02**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**6.32**
SITE-SPECIFIC IGWSRS (MG/KG)							**19**

TABLE L-2
ARSENIC CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW06							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**AS MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**AS WEIGHTED CONCENTRATION**
1	SB-8-SO-11	1	406389.65	520297.54	24.00	3909.03	93816.82
2	B8-5	1	406298.36	520322.61	13.00	27772.33	361040.27
3	SB-10-SO-2	2	406939.65	520727.54	7.80	1355.23	10570.82
4	WSO15	1	406962.46	520659.06	7.70	1992.27	15340.49
5	SB-10-SO-1	2	406977.65	520786.54	6.30	33486.43	210964.49
6	SB-AOC10-2013-121	1	406840.91	520601.89	5.50	10708.54	58896.99
7	SB-AOC10-2013-124	1	406881.99	520635.22	4.80	2006.16	9629.57
8	SB-10-SO-3	1	406814.65	520639.54	4.20	17068.11	71686.06
9	SB-AOC10-2013-125	1	406853.93	520660.55	3.20	2909.62	9310.80
10	SB-AOC10-2013-128	1	406903.45	520689.99	2.90	3102.56	8997.42
11	SB-AOC8B-2013-106	1	406401.68	520353.45	2.50	28361.80	70904.49
12	SB-AOC10-2013-127	1	406917.01	520735.20	2.30	1225.87	2819.51
13	SB-AOC10-2013-123	1	406920.73	520640.18	1.80	1410.51	2538.91
14	SB-AOC10-2013-129	1	406954.52	520718.01	1.40	4774.07	6683.70
SUM						**140082.54**	**933200.35**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**6.66**
SITE-SPECIFIC IGWSRS (MG/KG)							**19**

TABLE L-2
ARSENIC CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW09							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**AS MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**AS WEIGHTED CONCENTRATION**
1	HSO17-A	1	407009.47	521100.19	122.00	6239.25	761188.27
2	SB-AOC09-2013-105	1	407021.93	521108.79	61.10	45905.84	2804846.60
3	TP10-2	1	406916.07	521042.17	8.00	51920.58	415364.63
4	MOA-B-S9	1	406038.47	520426.18	2.80	59574.27	166807.96
5	MOA-B-S8	1	406058.01	520435.02	2.60	2363.67	6145.54
6	ZSO6-8	1	406066.22	520516.66	2.20	8525.86	18756.90
7	ZSO5	1	406158.52	520507.61	1.30	48981.14	63675.48
SUM						**223510.60**	**4236785.36**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**18.96**
SITE-SPECIFIC IGWSRS (MG/KG)							**19**

TABLE L-2
ARSENIC CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW10							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**AS MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**AS WEIGHTED CONCENTRATION**
1	B7-1	1	405835.34	520416.27	22.00	102824.06	2262129.38
2	SB-AOC09-2013-102	1	406878.99	521155.17	16.40	54167.77	888351.36
3	HSO22	1	406869.29	521128.87	8.70	1475.58	12837.51
4	SB-AOC09-2013-100	1	406878.64	521129.04	8.30	2795.92	23206.11
5	HSO23	1	406859.59	521109.42	3.40	62081.35	211076.59
SUM						**223344.67**	**3397600.95**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**15.21**
SITE-SPECIFIC IGWSRS (MG/KG)							**19**

TABLE L-3
CHROMIUM CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW04							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**CR MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**CR WEIGHTED CONCENTRATION**
1	SB-AOC10-2013-115	2	406806.80	520386.89	10800	14292.00	154353616.78
2	SB-10-SO-7-103	4	406782.34	520378.79	4500	222.09	999404.02
3	SB-AOC10-2013-106	2	406617.39	520307.06	3590	1369.81	4917619.07
4	SB-10-SO-9	4	406691.65	520260.54	1400	1622.17	2271035.53
5	SB-AOC10-2013-113	2	406729.55	520376.71	1170	1644.45	1924003.74
6	SB-AOC10-2013-101	2	406591.44	520185.91	916	1593.66	1459796.40
7	B9-19	1	406628.27	520319.05	700	618.09	432664.01
8	SB-AOC10-2013-111	2	406777.77	520312.12	530	2355.32	1248319.98
9	B8-2	2	406554.28	520160.57	500	2155.24	1077621.60
10	SB-AOC10-2013-103	2	406578.51	520232.41	453	2943.93	1333600.36
11	B9-18	1	406662.55	520332.12	260	1687.80	438828.38
12	SB-10-SO-7-101	3	406783.57	520370.99	114	693.81	79094.86
13	SB-AOC10-2013-110	2	406722.79	520328.68	112	3314.96	371275.43
14	SB-AOC8B-2013-101	3	406475.43	520136.97	102	2535.84	258655.84
15	SB-AOC8B-2013-102	2	406493.88	520187.05	96.60	3739.46	361232.16
16	SB-AOC10-2013-107	2	406672.56	520290.94	83.20	2038.33	169589.38
17	SB-AOC10-2013-105	2	406615.65	520258.68	69.20	2788.69	192977.27
18	SB-AOC10-2013-104	2	406646.43	520215.69	66.30	1430.47	94839.83
19	SB-10-SO-7-100	3	406779.65	520374.54	59.00	42.96	2534.72
20	SB-AOC10-2013-114	2	406774.34	520389.32	55.00	1301.64	71590.37
21	B8-7	2	406435.59	520173.60	43.00	3641.40	156580.05
22	SB-10-SO-7-102	3	406774.84	520372.04	37.20	429.89	15992.02
1540	SB-AOC10-2013-112	2	406773.14	520352.95	35.80	1595.61	57122.66
24	JSO24	2	406423.64	520091.05	24.50	1859.03	45546.23
25	SB-10-SO-4	2	407011.65	520554.54	24.00	31041.14	744987.32
26	JSO26	2	406311.82	520029.58	21.50	14356.20	308658.23
27	CSO2	2	407337.06	520726.64	19.90	25012.22	497743.23
28	JSO25	2	406388.57	520101.04	19.00	7385.21	140319.08
29	JSO22	1	406455.20	520111.31	13.40	1700.33	22784.39
30	MW-75	1	406675.30	520260.88	13.40	1394.80	18690.36
31	B8-4	1	406531.72	520234.75	0.72	3083.53	2220.14
SUM						**139890.10**	**174068943.46**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**1244.33**
SITE-SPECIFIC IGWSRS (MG/KG)							**1540**

TABLE L-3
CHROMIUM CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW05							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**CR MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**CR WEIGHTED CONCENTRATION**
1	SB-10-SO-5-102	2	406857.76	520542.80	8520	164.40	1400679.13
2	SB-10-SO-5-100	2	406852.70	520540.59	3320	49.42	164087.13
3	SB-10-SO-5-101	2	406850.39	520544.84	2820	1332.47	3757573.42
4	SB-10-SO-5A-100	1	406859.70	520524.59	2740	109.29	299458.29
5	SB-AOC10-2013-122	2	406893.64	520585.73	2040	3978.66	8116466.62
6	SB-10-SO-5A-101	1	406855.73	520521.42	1510	1423.13	2148929.11
7	SB-10-SO-5-103	2	406848.87	520537.39	1050	1335.33	1402097.94
8	HSO13	1	406747.21	520498.42	977	2192.53	2142105.60
9	SB-AOC10-2013-116	2	406752.99	520429.64	800	2555.70	2044556.80
10	B8-8-1	3	406334.29	520181.06	792	1262.93	1000242.90
11	SB-AOC10-2013-118	2	406836.13	520467.12	690	2265.67	1563314.09
12	B8-8	2	406341.67	520187.92	650	424.45	275892.86
13	B8-3	2	406591.48	520327.19	640	4789.90	3065537.06
14	B9-15	1	406726.16	520446.62	630	1558.72	981990.56
15	SB-AOC10-2013-117	2	406788.88	520485.71	617	3744.94	2310627.41
16	SB-8-SO-14	1	406352.65	520196.54	460	812.39	373699.30
17	HSO12	1	406719.91	520384.39	344	1413.65	486294.00
18	WSO14	1	406899.05	520539.91	207	3231.28	668874.25
19	B9-13	1	406707.04	520484.77	160	937.65	150024.21
20	SB-10-SO-5A-102	1	406864.62	520526.83	140	478.77	67028.24
21	SB-9-SO-2	1	406685.41	520455.74	130	1378.22	179169.22
22	SB-9-SO-1	1	406621.95	520351.00	110	2380.69	261875.65
1540	SB-AOC10-2013-120	1	406870.10	520549.05	100	1021.75	102174.60
24	SB-AOC8B-2013-107	2	406461.79	520327.38	98.20	3582.77	351828.04
25	B9-17	1	406640.08	520343.35	90.00	1003.47	90312.28
26	B9-16	1	406655.62	520380.44	84.00	1469.29	123420.21
27	SB-AOC8B-2013-105	2	406450.08	520243.59	74.50	3791.67	282479.06
28	B8-8-2	2	406336.69	520203.90	68.70	2167.69	148920.34
29	SB-AOC8B-2013-104	2	406374.67	520269.99	60.80	1143.63	69532.52
30	SB-10-SO-6	4	406693.07	520419.39	53.00	1961.74	103972.20
31	SB-AOC8B-2013-100	3	406329.61	520147.93	51.20	1037.14	53101.75
32	B8-6	1	406408.23	520267.55	32.00	2619.00	83808.10
33	WSO6	1	406896.31	520519.47	29.80	1583.36	47184.02
34	B8-8-4	2	406387.24	520180.31	25.60	1377.13	35254.44
35	JSO23	2	406317.16	520152.14	25.30	2835.79	71745.57
36	B8-8-3	1	406352.66	520231.29	24.40	1863.74	45475.17
37	JSO27	2	406244.68	520154.19	23.70	13916.83	329828.77
38	B10-1	1	406637.43	520408.54	22.00	3657.22	80458.80
39	SB-AOC8B-2013-103	2	406436.51	520208.36	21.00	1277.28	26822.96
40	SB-AOC8B-2013-108	2	406529.66	520298.41	20.80	6262.51	130260.21
41	SB-AOC8B-2013-109	2	406393.92	520215.20	20.30	1847.61	37506.58
42	B10-8	2	406976.45	520636.80	20.00	46259.52	925190.31
43	B9-16-200	2	406651.75	520384.51	19.50	842.14	16421.70
44	B9-14	1	406696.76	520455.78	15.00	682.96	10244.40
SUM						**140024.42**	**36026465.78**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**257.29**
SITE-SPECIFIC IGWSRS (MG/KG)							**1540**

TABLE L-3
CHROMIUM CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW06							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**CR MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**CR WEIGHTED CONCENTRATION**
1	SB-AOC10-2013-119	2	406812.02	520564.00	4500	1727.66	7774453.39
2	SB-AOC10-2013-124	2	406881.99	520635.22	2850	2006.16	5717558.26
3	SB-AOC10-2013-121	2	406840.91	520601.89	1470	2102.42	3090556.38
4	SB-AOC10-2013-127	2	406917.01	520735.20	1340	1225.87	1642669.88
5	SB-10-SO-3	3	406814.65	520639.54	890	2690.44	2394489.04
6	SB-10-SO-2	3	406939.65	520727.54	540	1220.24	658927.02
7	SB-AOC10-2013-128	2	406903.45	520689.99	449	3102.56	1393048.46
8	WSO15	1	406962.46	520659.06	281	1992.27	559828.17
9	SB-AOC10-2013-125	2	406853.93	520660.55	276	2909.62	803056.21
10	SB-AOC10-2013-123	2	406920.73	520640.18	203	1410.51	286332.65
11	B8-5	1	406298.36	520322.61	140	4842.01	677881.05
12	SB-AOC10-2013-129	2	406954.52	520718.01	111	3720.45	412969.91
13	HSO14	1	406785.73	520608.36	94.40	2222.48	209802.31
14	B10-2	1	406708.86	520523.83	67.00	3538.66	237090.41
15	SB-9-SO-10	1	406597.62	520494.87	62.00	12666.56	785326.50
16	B9-10	1	406739.86	520600.82	54.00	1528.58	82543.23
17	SB-8-SO-16	1	406238.65	520260.54	47.00	4541.78	213463.59
18	B9-12	1	406716.99	520548.64	47.00	2852.38	134061.94
19	JSO7	1	406244.55	520278.43	43.40	2527.80	109706.55
20	SB-9-SO-3	1	406745.21	520613.80	43.00	1365.47	58715.22
21	B8-1	2	406451.19	520410.86	39.00	11750.63	458274.70
22	B9-11	1	406747.04	520581.55	38.00	2166.53	82328.02
1540	JSO28	2	406173.17	520183.58	37.30	10905.51	406775.35
24	SB-10-SO-1	1	406977.65	520786.54	33.00	4024.56	132810.49
25	SB-9-SO-11	1	406652.62	520550.87	29.00	4409.77	127883.29
26	JSO8	1	406234.66	520274.94	27.90	508.86	14197.24
27	JSO11	1	406358.48	520284.98	27.10	2417.79	65522.02
28	SB-AOC8B-2013-106	2	406401.68	520353.45	25.80	7637.75	197054.07
29	JSO12	1	406361.48	520293.37	24.50	2786.71	68274.50
30	SB-8-SO-15	1	406228.65	520268.54	23.00	2630.03	60490.76
31	BF-S22	1	407178.67	520891.31	16.50	14109.70	232809.97
32	BF-S21	1	407143.36	520890.55	15.60	9018.54	140689.17
33	WSO9	1	406977.65	520771.10	15.40	7522.25	115842.72
SUM						**140082.54**	**29345432.46**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**209.49**
SITE-SPECIFIC IGWSRS (MG/KG)							**1540**

TABLE L-3
CHROMIUM CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW09							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**CR MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**CR WEIGHTED CONCENTRATION**
1	SB-7-SO-7	5	405908.28	520375.18	8100	3084.11	24981255.86
2	SB-7-SO-4	5	405917.72	520420.99	6600	2762.75	18234139.64
3	SB-7-SO-6	4	405828.35	520387.70	2700	2336.31	6308047.22
4	MOA-C-B7	3	406075.34	520534.67	2200	777.26	1709964.32
5	MOA-C-B15	3	406096.71	520538.05	1850	447.16	827254.83
6	MOA-C-B8-103	3	406098.88	520513.28	1550	370.87	574847.00
7	TP9-3-203	2	406597.46	520874.40	1540	2405.77	3704889.13
8	B7-2	3	405868.66	520350.08	1300	2745.63	3569320.48
9	MOA-C-B8-100	3	406101.84	520509.10	782	36.76	28743.34
10	SB-7-SO-5	4	405866.65	520375.54	640	1322.44	846362.41
11	TP9-3-305	3	406523.64	520814.62	546	6549.63	3576097.35
12	B-4E	1	406079.03	520561.46	533	355.05	189241.35
13	TP7-4	2	405848.11	520395.31	485	1339.33	649574.50
14	ZSO5	3	406158.52	520507.61	288	2750.74	792211.95
15	MOA-C-B8-101	3	406106.72	520508.52	225	217.07	48841.34
16	B-4C	1	406094.08	520546.81	209	296.19	61904.42
17	B-3B	1	406133.21	520537.86	182	875.08	159265.37
18	MOA-C-B8-102	3	406098.41	520504.42	181	828.42	149943.68
19	TP9-2-304	3	406543.37	520758.75	177	6847.18	1211951.14
20	JSO6	1	406006.95	520496.61	120	1667.93	200152.00
21	ISO11	2	405932.81	520465.90	112	1664.30	186401.52
22	MOA-C-B10	1	406123.53	520511.34	111	473.95	52608.31
1540	MOA-B-S10	1	406041.92	520444.72	109	641.74	69949.16
24	TP9-2-202	2	406622.89	520799.50	108	1110.00	119880.41
25	JSO5	1	405991.14	520498.86	103	1176.54	121183.75
26	TP9-3	2	406572.39	520874.38	91	1057.69	96249.88
27	MOA-B-S16	1	406049.65	520453.33	87.90	618.36	54353.76
28	MOA-C-B14	3	406121.50	520572.68	86.20	583.39	50288.03
29	B-4D	1	406128.28	520535.53	86.00	455.61	39182.37
30	JSO17	1	406032.25	520429.63	84.90	318.15	27010.75
31	CE-1	2	406018.01	520435.51	83.50	1897.42	158434.65
32	TP9-2	2	406603.86	520814.04	75.00	3185.45	238908.51
33	B9-5	1	406915.75	521068.36	57.00	55496.39	3163294.35
34	ISO16	1	405844.11	520294.14	55.90	3162.25	176769.60
35	MOA-C-B2A	1	406141.16	520584.15	53.20	1916.59	101962.78
36	B-3A	1	406120.71	520505.04	50.60	400.23	20251.73
37	B-4B	1	406107.36	520559.00	48.30	604.67	29205.70
38	TP9-2-311	3	406650.00	520901.00	48.20	2894.47	139513.33
39	MOA-C-B2	2	406148.33	520575.12	45.20	8392.52	379342.07
40	MOA-C-B9	3	406123.03	520478.14	44.60	1004.37	44794.90
41	MOA-B-S15	1	406028.52	520429.37	43.70	479.20	20941.16
42	B-3C	1	406145.79	520570.61	43.30	932.60	40381.65
43	CE-2	2	406057.06	520463.79	42.60	866.96	36932.49
44	TP9-2-300	3	406672.80	520849.35	40.50	4543.61	184016.09
45	JSO16	1	406055.85	520472.69	31.20	1352.09	42185.24
46	TP10-2	1	406916.07	521042.17	28.00	7156.56	200383.58
47	B-3D	1	406132.33	520590.37	24.00	325.61	7814.56
48	ZSO6	1	406066.22	520516.66	27.00	1676.14	45255.75
49	SB-9-SO-6	1	406874.54	520966.61	22.00	11513.26	253291.73
50	HSO3	1	406353.39	520701.02	21.70	21719.85	471320.76
51	HSO5	1	406538.18	520856.58	21.60	1317.25	28452.65
52	HSO6	1	406679.42	520933.97	21.00	9714.14	203996.84
53	ISO17	1	405761.39	520323.42	18.10	32770.94	593153.95
54	B8-9	2	406002.67	520497.83	16.00	331.39	5302.21
55	B7-6	2	405965.06	520416.27	15.00	3741.24	56118.67
SUM						**223510.60**	**75283140.20**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**336.82**
SITE-SPECIFIC IGWSRS (MG/KG)							**1540**

TABLE L-3
CHROMIUM CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW10							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**CR MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**CR WEIGHTED CONCENTRATION**
1	MOA-C-B11	3	406054.26	520592.05	1700	993.45	1688870.38
2	MOA-C-B13	3	406087.44	520575.16	1650	608.92	1004723.98
3	TP9-3-304	3	406502.91	520897.25	1200	11434.15	13720974.16
4	TP7-3	2	405806.94	520426.09	977	1707.48	1668204.57
5	SB-7-SO-3	5	405852.72	520440.99	900	3298.29	2968460.94
6	ISO7	2	405734.04	520428.85	457	4173.68	1907371.70
7	TP7-5	1	405803.25	520389.41	327	2097.42	685855.08
8	B7-3	3	405778.17	520450.87	300	2658.33	797499.64
9	B9-2	1	406865.66	521138.45	280	3024.11	846750.95
10	TP7-1	2	405839.82	520515.38	207	4536.05	938962.73
11	SB-9-SO-7	1	406909.79	521104.87	130	1025.03	133254.02
12	SB-9-SO-9	1	406583.21	520890.16	100	2335.55	233554.60
13	TP7-2	2	405756.36	520433.91	94.30	1735.94	163699.42
14	MOA-C-B3	3	406073.52	520647.18	90.70	2429.21	220329.68
15	B-3F	1	406077.71	520643.23	75.60	3877.57	293144.21
16	B-4A	1	406101.44	520578.72	65.10	328.19	21365.47
17	B9-1	1	406901.63	521128.86	65.00	1412.99	91844.65
18	MOA-C-B1	3	406106.66	520614.79	64.60	2910.61	188025.28
19	MOA-C-B4	3	406046.85	520621.20	56.70	1866.63	105837.79
20	TP9-3-302	3	406547.45	520949.37	51.40	3949.43	203000.59
21	MOA-C-B12	3	406076.05	520614.85	50.20	673.47	33807.99
22	TP9-3-301	3	406614.60	520946.33	48.90	16709.21	817080.15
1540	B7-5	3	405925.66	520489.91	47.00	5948.14	279562.47
24	TP9-3-303	3	406508.92	520931.23	42.50	2391.75	101649.24
25	B7-1	1	405835.34	520416.27	37.00	829.12	30677.46
26	B9-3	1	406925.00	521161.80	37.00	4780.33	176872.38
27	B-3E	1	406110.75	520611.26	33.80	7390.33	249793.21
28	SB-8-SO-18	1	405981.05	520502.69	28.00	840.52	23534.55
29	MOA-C-B5	3	406018.19	520590.54	27.20	5196.99	141358.15
30	B-4F	1	406088.37	520604.01	24.30	562.43	13667.17
31	SB-8-SO-17	1	405975.05	520505.69	24.00	3637.35	87296.45
32	MOA-C-B6	3	406047.16	520561.92	21.10	1990.19	41993.08
33	ISO18	1	405690.41	520345.97	20.50	29118.54	596929.98
34	HSO19	1	406925.07	521206.73	19.00	46489.64	883303.21
35	HSO23	1	406859.59	521109.42	18.90	14558.64	275158.28
36	HSO2	1	406319.58	520821.96	18.80	23734.13	446201.62
37	HSO20	1	406886.44	521177.42	16.10	2090.86	33662.78
SUM						**223344.67**	**32114278.03**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**143.79**
SITE-SPECIFIC IGWSRS (MG/KG)							**1540**

TABLE L-3
CHROMIUM CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW14							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**CR MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**CR WEIGHTED CONCENTRATION**
1	SR-1	1	405895.30	520976.52	5900	15595.17	92011485.06
2	268-2	3	405915.48	520960.40	135	3031.03	409188.86
3	268-1	3	405938.33	520951.29	133	3682.56	489780.10
4	GS08-200	2	406072.39	521140.84	31.20	2694.91	84081.07
5	MW-16C	1	406908.09	521625.62	28.00	48603.03	1360884.89
6	MW-69	2	406536.63	521388.59	21.70	36493.45	791907.96
7	ASO8	1	405326.78	520561.57	20.80	22679.62	471736.03
8	ASO15	2	405286.20	520554.07	19.20	5751.52	110429.26
9	MW-73	2	406314.15	521207.70	17.80	25837.84	459913.59
10	305-4	1	405654.28	520877.87	15.20	19877.73	302141.44
11	275-1	1	406007.12	521097.57	14.70	10203.41	149990.12
12	MC7-1	1	406080.86	521128.90	13.50	13905.25	187720.88
13	305-3	1	405649.21	520880.16	11.60	14944.61	173357.50
SUM						**223300.13**	**97002616.75**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**434.40**
SITE-SPECIFIC IGWSRS (MG/KG)							**1540**

TABLE L-3
CHROMIUM CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW16							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**CR MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**CR WEIGHTED CONCENTRATION**
1	PL07-02	1	405789.17	521151.70	5080	250.87	1274408.82
2	PL07-102	3	405789.20	521151.70	926	943.78	873937.57
3	262-1	1	405714.23	521056.74	741	1174.35	870191.33
4	255-1	1	405866.63	521218.26	682	6842.57	4666630.52
5	PL07-107	3	405753.84	521137.64	327	2109.80	689904.36
6	PL07-100	3	405758.94	521156.16	112	1122.20	125686.57
7	PL07-01	2	405778.16	521131.87	75.90	987.19	74928.08
8	PL07-104	3	405832.28	521139.64	59.50	1747.14	103954.79
9	113-1	1	405874.77	521207.85	38.60	12184.14	470307.92
10	PL07-03	3	405824.80	521120.08	34.80	816.39	28410.23
11	MC5-1	1	406164.38	521351.47	32.40	20640.40	668749.02
12	DI-1	1	405688.98	521059.71	32.10	28874.78	926880.53
13	PL07-106	2	405782.43	521095.78	26.60	1392.84	37049.54
14	PL07-103	3	405832.89	521178.08	25.20	3346.74	84337.84
15	PL07-101	3	405771.13	521162.31	22.60	1487.76	33623.28
16	MW-81	2	405730.22	521092.76	21.50	3773.65	81133.44
17	ASO1	2	405209.30	520800.66	19.80	36456.84	721845.32
18	MC4-1	1	406203.98	521460.59	19.5	99148.70	1933399.63
SUM						**223300.13**	**13665378.78**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**61.20**
SITE-SPECIFIC IGWSRS (MG/KG)							**1540**

TABLE L-3
CHROMIUM CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW17							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**CR MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**CR WEIGHTED CONCENTRATION**
1	109-1	1	406036.27	521403.26	3840	19816.93	76096992.85
2	MC3-1	2	406245.86	521579.97	1540	40889.89	62970432.39
3	PL12-08	1	405683.95	521224.44	840	1357.60	1140383.69
4	PL12-110B	3	405655.28	521211.66	488	513.70	250684.59
5	PL12-112	2	405634.75	521222.18	400	1320.38	528151.25
6	PL06-106	1	405872.65	521351.30	292	866.07	252891.18
7	PL12-111B	2	405645.14	521215.95	231	508.31	117420.24
8	PL06-107	1	405848.43	521360.10	143	1005.70	143815.26
9	PL06-104	1	405891.45	521344.24	139	1086.62	151040.71
10	PL06-105	1	405882.94	521347.44	134	495.48	66394.57
11	110-1	1	405857.13	521338.78	75.90	1998.93	151719.03
12	L7-1	1	405788.10	521242.56	74.10	2925.45	216776.14
13	PL06-103	3	405916.01	521352.65	61.60	7923.71	488100.32
14	MW-80	3	405782.74	521253.32	40.10	4101.36	164464.66
15	PL12-108	2	405683.36	521215.36	38.20	755.05	28842.98
16	PL12-07	1	405681.31	521221.20	37.50	54.27	2035.21
17	DC-11	1	405600.22	521110.64	33.00	60487.30	1996081.02
18	PL12-105	3	405726.97	521264.48	32.70	2726.15	89145.27
19	PL12-109	2	405673.97	521218.78	26.40	527.33	13921.50
20	PL12-106	3	405741.92	521227.42	26.10	2511.84	65559.16
21	239-1	1	405869.52	521321.75	24.30	4452.88	108205.09
22	PL12-107B	3	405713.48	521191.30	21.60	2825.12	61022.53
1540	GSO26BD	2	406719.93	521850.89	21.50	57443.66	1235038.79
24	DC-10	1	405630.67	521138.82	20.40	3816.65	77859.67
25	DC-09	1	405649.22	521184.03	17.30	2889.72	49992.11
SUM						**223300.13**	**146466970.20**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**655.92**
SITE-SPECIFIC IGWSRS (MG/KG)							**1540**

TABLE L-3
CHROMIUM CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW20							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**CR MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**CR WEIGHTED CONCENTRATION**
1	PL09-01	1	405897.79	521731.99	3620	2615.94	9469706.46
2	PL09-02	1	405907.39	521753.71	545	607.98	331350.91
3	PL09-06	2	405952.86	521736.08	190	60206.22	11439181.14
4	PL09-03	1	405920.70	521724.33	92.60	1341.20	124195.54
5	PL11-03	1	405868.33	521645.33	35.70	4120.25	147092.79
6	118-1	1	405753.89	521634.54	32.00	58138.92	1860445.58
7	PL09-04	1	405927.12	521742.58	23.20	1119.18	25965.06
8	PL09-05	1	405946.99	521707.87	20.90	3355.73	70134.73
9	L4-2	1	405824.54	521606.23	18.50	3749.47	69365.22
10	PL11-01	2	405809.98	521671.15	5.40	2047.92	11058.75
11	PL11-02	1	405820.77	521666.83	3.20	2565.57	8209.81
SUM						**139868.38**	**23556706.00**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**168.42**
SITE-SPECIFIC IGWSRS (MG/KG)							**1540**

TABLE L-4
CHROMIUM CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW03							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**CR MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**CR WEIGHTED CONCENTRATION**
1	SB-10-SO-209	1	406649.49	520210.81	2260	1718.94	3884812.73
2	SB-10-SO-10	1	406625.65	520173.54	1800	2370.41	4266737.91
3	SB-10-SO-11	2	406646.65	520124.54	690	3188.10	2199787.52
4	SB-AOC10-2013-100	1	406622.54	520142.47	575	3788.58	2178432.18
5	SB-AOC10-2013-109	1	406707.19	520202.86	518	89234.46	46223452.57
6	SB-AOC10-2013-102	1	406691.73	520156.14	16.40	3269.54	53620.46
7	B10-3	1	406526.65	520111.54	4.40	36259.97	159543.88
SUM						**139830.00**	**58966387.25**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**421.70**
SITE-SPECIFIC IGWSRS (MG/KG)							**1540**

TABLE L-4
CHROMIUM CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW06							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**CR MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**CR WEIGHTED CONCENTRATION**
1	SB-10-SO-2	2	406939.65	520727.54	2600	1355.23	3523607.86
2	SB-8-SO-11	1	406389.65	520297.54	1400	3909.03	5472648.12
3	B8-5	1	406298.36	520322.61	52	27772.33	1444161.07
4	SB-10-SO-1	2	406977.65	520786.54	25	33486.43	837160.66
5	SB-10-SO-3	1	406814.65	520639.54	24	17068.11	409634.65
6	WSO15	1	406962.46	520659.06	22.70	1992.27	45224.56
7	SB-AOC10-2013-125	1	406853.93	520660.55	22.10	2909.62	64302.69
8	SB-AOC10-2013-124	1	406881.99	520635.22	22.00	2006.16	44135.54
9	SB-AOC10-2013-121	1	406840.91	520601.89	20.20	10708.54	216312.60
10	SB-AOC10-2013-127	1	406917.01	520735.20	19.00	1225.87	23291.59
11	SB-AOC10-2013-128	1	406903.45	520689.99	17.70	3102.56	54915.28
12	SB-AOC10-2013-129	1	406954.52	520718.01	16.70	4774.07	79727.00
13	SB-AOC8B-2013-106	1	406401.68	520353.45	16.30	28361.80	462297.28
14	SB-AOC10-2013-123	1	406920.73	520640.18	15.90	1410.51	22427.04
SUM						**140082.54**	**12699845.92**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**90.66**
SITE-SPECIFIC IGWSRS (MG/KG)							**1540**

TABLE L-5
NICKEL CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW04							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**NI MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**NI WEIGHTED CONCENTRATION**
1	SB-AOC10-2013-115	2	406806.80	520386.89	24800.00	14292.00	354441638.54
2	SB-AOC10-2013-106	2	406617.39	520307.06	12200.00	1369.81	16711685.99
3	SB-10-SO-7-103	4	406782.34	520378.79	11300.00	222.09	2509614.53
4	SB-AOC10-2013-113	2	406729.55	520376.71	2300.00	1644.45	3782229.58
5	SB-AOC10-2013-101	2	406591.44	520185.91	1960.00	1593.66	3123581.82
6	B9-19	1	406628.27	520319.05	1800.00	618.09	1112564.60
7	SB-AOC10-2013-103	2	406578.51	520232.41	1770.00	2943.93	5210756.36
8	SB-AOC10-2013-111	2	406777.77	520312.12	920.00	2355.32	2166895.05
9	B9-18	1	406662.55	520332.12	650.00	1687.80	1097070.96
10	B8-2	2	406554.28	520160.57	550.00	2155.24	1185383.76
11	SB-10-SO-9	4	406691.65	520260.54	440.00	1622.17	713754.02
12	SB-AOC8B-2013-101	3	406475.43	520136.97	282.00	2535.84	715107.32
13	SB-AOC10-2013-110	2	406722.79	520328.68	208.00	3314.96	689511.51
14	SB-AOC10-2013-107	2	406672.56	520290.94	190.00	2038.33	387283.46
15	SB-10-SO-7-100	3	406779.65	520374.54	126.00	42.96	5413.13
16	SB-AOC10-2013-104	2	406646.43	520215.69	89.90	1430.47	128598.81
17	SB-10-SO-7-102	3	406774.84	520372.04	89.20	429.89	38346.46
18	B8-4	1	406531.72	520234.75	74.00	3083.53	228181.07
19	SB-AOC10-2013-105	2	406615.65	520258.68	66.20	2788.69	184611.21
20	B8-7	2	406435.59	520173.60	63.00	3641.40	229407.98
21	SB-10-SO-7-101	3	406783.57	520370.99	43.90	693.81	30458.46
22	SB-AOC8B-2013-102	2	406493.88	520187.05	42.80	3739.46	160049.03
23	SB-AOC10-2013-112	2	406773.14	520352.95	18.90	1595.61	30156.94
24	SB-10-SO-4	2	407011.65	520554.54	18.00	31041.14	558740.49
25	JSO24	2	406423.64	520091.05	17.00	1859.03	31603.51
26	JSO26	2	406311.82	520029.58	14.80	14356.20	212471.71
27	CSO2	2	407337.06	520726.64	14.50	25012.22	362677.23
28	JSO25	2	406388.57	520101.04	14.30	7385.21	105608.57
29	SB-AOC10-2013-114	2	406774.34	520389.32	13.00	1301.64	16921.36
30	MW-75	1	406675.30	520260.88	12.60	1394.80	17574.52
31	JSO22	1	406455.20	520111.31	10.20	1700.33	17343.34
SUM						**139890.10**	**396205241.33**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**2832.26**
SITE-SPECIFIC IGWSRS (MG/KG)							**9200**

TABLE L-5
NICKEL CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW05							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**NI MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**NI WEIGHTED CONCENTRATION**
1	SB-10-SO-5-102	2	406857.76	520542.80	20300.00	164.40	3337298.87
2	SB-10-SO-5-100	2	406852.70	520540.59	10600.00	49.42	523892.64
3	SB-10-SO-5A-100	1	406859.70	520524.59	7470.00	109.29	816406.36
4	SB-10-SO-5-101	2	406850.39	520544.84	6360.00	1332.47	8474527.28
5	SB-AOC10-2013-122	2	406893.64	520585.73	5260.00	3978.66	20927752.16
6	B8-8-1	3	406334.29	520181.06	2820.00	1262.93	3561470.94
7	B8-8	2	406341.67	520187.92	2800.00	424.45	1188461.55
8	SB-10-SO-5-103	2	406848.87	520537.39	2770.00	1335.33	3698867.89
9	HSO13	1	406747.21	520498.42	2250.00	2192.53	4933201.23
10	SB-AOC10-2013-116	2	406752.99	520429.64	1930.00	2555.70	4932493.28
11	B8-3	2	406591.48	520327.19	1600.00	4789.90	7663842.64
12	B9-15	1	406726.16	520446.62	1400.00	1558.72	2182201.24
13	SB-AOC10-2013-118	2	406836.13	520467.12	1300.00	2265.67	2945374.38
14	SB-8-SO-14	1	406352.65	520196.54	1100.00	812.39	893628.76
15	SB-AOC10-2013-117	2	406788.88	520485.71	668.00	3744.94	2501619.30
16	HSO12	1	406719.91	520384.39	523.00	1413.65	739336.51
17	SB-10-SO-5A-101	1	406855.73	520521.42	305.00	1423.13	434055.22
18	B9-13	1	406707.04	520484.77	290.00	937.65	271918.88
19	B9-17	1	406640.08	520343.35	260.00	1003.47	260902.14
20	SB-9-SO-1	1	406621.95	520351.00	250.00	2380.69	595171.94
21	WSO14	1	406899.05	520539.91	235.00	3231.28	759349.99
22	SB-9-SO-2	1	406685.41	520455.74	220.00	1378.22	303209.44
23	B9-16	1	406655.62	520380.44	190.00	1469.29	279164.75
24	SB-AOC10-2013-120	1	406870.10	520549.05	171.00	1021.75	174718.57
25	SB-AOC8B-2013-107	2	406461.79	520327.38	139.00	3582.77	498005.08
26	SB-10-SO-5A-102	1	406864.62	520526.83	112.00	478.77	53622.59
27	SB-10-SO-6	4	406693.07	520419.39	89.00	1961.74	174594.82
28	SB-AOC8B-2013-105	2	406450.08	520243.59	74.80	3791.67	283616.57
29	B8-8-2	2	406336.69	520203.90	53.00	2167.69	114887.60
30	WSO6	1	406896.31	520519.47	37.10	1583.36	58742.52
31	SB-AOC8B-2013-100	3	406329.61	520147.93	33.90	1037.14	35159.17
32	B8-6	1	406408.23	520267.55	33.00	2619.00	86427.10
33	SB-AOC8B-2013-108	2	406529.66	520298.41	30.70	6262.51	192259.08
34	B9-14	1	406696.76	520455.78	23.00	682.96	15708.07
35	JSO23	2	406317.16	520152.14	22.50	2835.79	63805.35
36	B10-8	2	406976.45	520636.80	22.00	46259.52	1017709.34
37	SB-AOC8B-2013-104	2	406374.67	520269.99	22.00	1143.63	25159.79
38	B8-8-4	2	406387.24	520180.31	19.20	1377.13	26440.83
39	B10-1	1	406637.43	520408.54	17.00	3657.22	62172.71
40	SB-AOC8B-2013-103	2	406436.51	520208.36	15.50	1277.28	19797.90
41	B8-8-3	1	406352.66	520231.29	14.50	1863.74	27024.18
42	JSO27	2	406244.68	520154.19	14.50	13916.83	201793.97
43	SB-AOC8B-2013-109	2	406393.92	520215.20	13.10	1847.61	24203.75
44	B9-16-200	2	406651.75	520384.51	11.10	842.14	9347.74
SUM						**140024.42**	**75389344.13**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**538.40**
SITE-SPECIFIC IGWSRS (MG/KG)							**9200**

TABLE L-5
NICKEL CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW06							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**NI MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**NI WEIGHTED CONCENTRATION**
1	SB-AOC10-2013-119	2	406812.02	520564.00	13800.00	1727.66	23841657.07
2	SB-AOC10-2013-124	2	406881.99	520635.22	7230.00	2006.16	14504542.54
3	SB-10-SO-3	3	406814.65	520639.54	2700.00	2690.44	7264180.22
4	SB-AOC10-2013-121	2	406840.91	520601.89	1500.00	2102.42	3153628.95
5	SB-AOC10-2013-128	2	406903.45	520689.99	1100.00	3102.56	3412813.60
6	SB-AOC10-2013-125	2	406853.93	520660.55	750.00	2909.62	2182217.97
7	B10-2	1	406708.86	520523.83	570.00	3538.66	2017037.78
8	SB-10-SO-2	3	406939.65	520727.54	480.00	1220.24	585712.91
9	SB-AOC10-2013-123	2	406920.73	520640.18	421.00	1410.51	593822.88
10	SB-AOC10-2013-127	2	406917.01	520735.20	341.00	1225.87	418022.71
11	HSO14	1	406785.73	520608.36	212.00	2222.48	471166.21
12	WSO15	1	406962.46	520659.06	181.00	1992.27	360601.06
13	B8-5	1	406298.36	520322.61	180.00	4842.01	871561.35
14	SB-AOC10-2013-129	2	406954.52	520718.01	179.00	3720.45	665960.48
15	B9-12	1	406716.99	520548.64	140.00	2852.38	399333.43
16	SB-10-SO-1	1	406977.65	520786.54	75.00	4024.56	301842.03
17	B9-11	1	406747.04	520581.55	64.00	2166.53	138657.72
18	SB-8-SO-16	1	406238.65	520260.54	51.00	4541.78	231630.70
19	SB-9-SO-10	1	406597.62	520494.87	45.00	12666.56	569995.04
20	JSO8	1	406234.66	520274.94	43.70	508.86	22237.25
21	SB-9-SO-3	1	406745.21	520613.80	41.00	1365.47	55984.28
22	SB-9-SO-11	1	406652.62	520550.87	41.00	4409.77	180800.52
23	B9-10	1	406739.86	520600.82	40.00	1528.58	61143.14
24	JSO7	1	406244.55	520278.43	34.50	2527.80	87209.12
25	B8-1	2	406451.19	520410.86	33.00	11750.63	387770.90
26	SB-AOC8B-2013-106	2	406401.68	520353.45	25.80	7637.75	197054.07
27	SB-8-SO-15	1	406228.65	520268.54	23.00	2630.03	60490.76
28	JSO11	1	406358.48	520284.98	21.90	2417.79	52949.53
29	JSO28	2	406173.17	520183.58	21.10	10905.51	230106.17
30	JSO12	1	406361.48	520293.37	16.70	2786.71	46538.13
31	BF-S22	1	407178.67	520891.31	11.10	14109.70	156617.62
32	BF-S21	1	407143.36	520890.55	8.90	9018.54	80264.97
33	WSO9	1	406977.65	520771.10	8.20	7522.25	61682.49
SUM						**140082.54**	**63665233.60**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**454.48**
SITE-SPECIFIC IGWSRS (MG/KG)							**9200**

TABLE L-5
NICKEL CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW09							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**NI MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**NI WEIGHTED CONCENTRATION**
1	SB-7-SO-5	4	405866.65	520375.54	11000.00	1322.44	14546853.98
2	SB-7-SO-7	5	405908.28	520375.18	4500.00	3084.11	13878475.48
3	TP9-3-305	3	406523.64	520814.62	3830.00	6549.63	25085078.47
4	SB-7-SO-4	5	405917.72	520420.99	3100.00	2762.75	8564520.13
5	B-4E	1	406079.03	520561.46	2970.00	355.05	1054496.82
6	TP9-2	2	406603.86	520814.04	880.00	3185.45	2803193.19
7	CE-1	2	406018.01	520435.51	817.00	1897.42	1550192.93
8	B7-2	3	405868.66	520350.08	740.00	2745.63	2031767.05
9	TP9-2-304	3	406543.37	520758.75	727.00	6847.18	4977901.01
10	MOA-C-B15	3	406096.71	520538.05	685.00	447.16	306307.87
11	B-4C	1	406094.08	520546.81	601.00	296.19	178012.24
12	TP7-4	2	405848.11	520395.31	573.00	1339.33	767435.44
13	TP9-3-203	2	406597.46	520874.40	546.00	2405.77	1313551.60
14	ZSO5	3	406158.52	520507.61	510.00	2750.74	1402875.32
15	MOA-B-S16	1	406049.65	520453.33	367.00	618.36	226937.74
16	SB-7-SO-6	4	405828.35	520387.70	330.00	2336.31	770983.55
17	MOA-C-B8-103	3	406098.88	520513.28	274.00	370.87	101618.11
18	TP9-3	2	406572.39	520874.38	250.00	1057.69	264422.75
19	MOA-C-B10	1	406123.53	520511.34	238.00	473.95	112799.80
20	MOA-C-B8-100	3	406101.84	520509.10	225.00	36.76	8270.14
21	TP9-2-202	2	406622.89	520799.50	203.00	1110.00	225330.77
22	MOA-C-B2	2	406148.33	520575.12	187.00	8392.52	1569401.90
23	MOA-C-B8-102	3	406098.41	520504.42	158.00	828.42	130890.07
24	MOA-C-B8-101	3	406106.72	520508.52	157.00	217.07	34080.40
25	JSO6	1	406006.95	520496.61	153.00	1667.93	255193.80
26	ISO16	1	405844.11	520294.14	144.00	3162.25	455363.52
27	JSO5	1	405991.14	520498.86	126.00	1176.54	148244.20
28	B-3B	1	406133.21	520537.86	116.00	875.08	101509.80
29	MOA-C-B9	3	406123.03	520478.14	114.00	1004.37	114498.19
30	MOA-C-B7	3	406075.34	520534.67	113.00	777.26	87829.99
31	B-3C	1	406145.79	520570.61	104.00	932.60	96990.56
32	B-4D	1	406128.28	520535.53	97.20	455.61	44285.18
33	B-3A	1	406120.71	520505.04	95.90	400.23	38382.24
34	JSO17	1	406032.25	520429.63	87.50	318.15	27837.93
35	B8-9	2	406002.67	520497.83	87.00	331.39	28830.79
36	MOA-C-B14	3	406121.50	520572.68	74.50	583.39	43462.39
37	MOA-C-B2A	1	406141.16	520584.15	59.80	1916.59	114612.30
38	CE-2	2	406057.06	520463.79	55.70	866.96	48289.67
39	ISO11	2	405932.81	520465.90	51.80	1664.30	86210.70
40	B9-5	1	406915.75	521068.36	41.00	55496.39	2275352.08
41	TP9-2-311	3	406650.00	520901.00	37.00	2894.47	107095.29
42	B-4B	1	406107.36	520559.00	35.30	604.67	21344.95
43	MOA-B-S15	1	406028.52	520429.37	33.40	479.20	16005.37
44	TP9-2-300	3	406672.80	520849.35	33.00	4543.61	149939.04
45	SB-9-SO-6	1	406874.54	520966.61	33.00	11513.26	379937.59
46	B-3D	1	406132.33	520590.37	28.80	325.61	9377.47
47	TP10-2	1	406916.07	521042.17	17.00	7156.56	121661.46
48	ISO17	1	405761.39	520323.42	16.80	32770.94	550551.69
49	JSO16	1	406055.85	520472.69	15.10	1352.09	20416.58
50	ZSO6	1	406066.22	520516.66	14.80	1676.14	24806.85
51	HSO6	1	406679.42	520933.97	13.10	9714.14	127255.17
52	HSO5	1	406538.18	520856.58	12.50	1317.25	16465.65
53	HSO3	1	406353.39	520701.02	12.40	21719.85	269326.13
54	B7-6	2	405965.06	520416.27	12.00	3741.24	44894.93
55	MOA-B-S10	1	406041.92	520444.72	9.90	641.74	6353.18
SUM						**223510.60**	**87737721.45**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**392.54**
SITE-SPECIFIC IGWSRS (MG/KG)							**9200**

TABLE L-5
NICKEL CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW14							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**NI MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**NI WEIGHTED CONCENTRATION**
1	268-1	3	405938.33	520951.29	9940.00	3682.56	36604617.82
2	268-2	3	405915.48	520960.40	6660.00	3031.03	20186650.27
3	SR-1	1	405895.30	520976.52	111.00	15595.17	1731063.53
4	MC7-1	1	406080.86	521128.90	48.50	13905.25	674404.66
5	ASO30	1	405339.03	520571.00	24.40	22425.55	547183.36
6	ASO8	1	405326.78	520561.57	21.10	1010.44	21320.28
7	ASO15	2	405286.20	520554.07	17.80	5675.08	101016.41
8	MW-16C	1	406908.09	521625.62	17.50	48603.03	850553.06
9	GS08-200	2	406072.39	521140.84	16.50	2694.91	44465.95
10	ASO29	1	405326.78	520561.57	15.80	105.84	1672.35
11	MW-73	2	406314.15	521207.70	15.30	25837.84	395319.00
12	MW-69	2	406536.63	521388.59	11.60	36493.45	423324.07
13	305-4	1	405654.28	520877.87	11.00	19877.73	218654.99
14	305-3	1	405649.21	520880.16	9.20	14158.84	130261.33
15	275-1	1	406007.12	521097.57	9.20	10203.41	93871.37
SUM						**223300.13**	**62024378.46**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**277.76**
SITE-SPECIFIC IGWSRS (MG/KG)							**9200**

TABLE L-5
NICKEL CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW16							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**NI MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**NI WEIGHTED CONCENTRATION**
1	PL07-107	3	405753.84	521137.64	31100.00	2109.80	65614757.02
2	PL07-01	2	405778.16	521131.87	11100.00	987.19	10957861.34
3	PL07-100	3	405758.94	521156.16	1240.00	1122.20	1391529.89
4	PL07-101	3	405771.13	521162.31	978.00	1487.76	1455025.14
5	262-1	1	405714.23	521056.74	383.00	1174.35	449775.01
6	DI-1	1	405688.98	521059.71	326.00	28874.78	9413179.65
7	PL07-02	1	405789.17	521151.70	108.00	250.87	27093.73
8	PL07-102	3	405789.20	521151.70	106.00	943.78	100040.37
9	PL07-03	3	405824.80	521120.08	45.40	816.39	37063.92
10	113-1	1	405874.77	521207.85	33.60	12184.14	409387.20
11	PL07-104	3	405832.28	521139.64	23.20	1747.14	40533.63
12	ASO1	2	405209.30	520800.66	23.10	36456.84	842152.92
13	255-1	1	405866.63	521218.26	23.10	6842.57	158063.29
14	MW-81	2	405730.22	521092.76	17.70	3773.65	66793.58
15	MC4-1	1	406203.98	521460.59	14.70	99148.70	1457485.86
16	PL07-105	2	405782.43	521095.78	20.70	1392.84	28831.78
17	PL07-103	3	405832.89	521178.08	11.30	3346.74	37818.16
18	MC5-1	1	406164.38	521351.47	6.60	20640.40	136226.64
SUM						**223300.13**	**92623619.14**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**414.79**
SITE-SPECIFIC IGWSRS (MG/KG)							**9200**

TABLE L-5
NICKEL CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW19							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**NI MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**NI WEIGHTED CONCENTRATION**
1	PL05-02	1	405717.05	521439.60	12500.00	35590.68	444883468.06
2	PL05-01	1	405683.59	521453.31	1030.00	3213.32	3309717.86
3	PL05-106	3	405685.66	521419.38	184.00	2490.64	458278.44
4	PL05-105	3	405710.77	521414.91	80.00	678.20	54255.74
5	PL05-104	3	405722.29	521412.26	61.40	655.45	40244.78
6	PL05-107	2	405647.68	521433.03	18.60	5653.41	105153.39
7	MC1-1	1	406344.25	521839.20	14.00	59102.42	827433.93
8	PL12-115	2	405572.69	521319.95	12.30	39.11	481.00
9	PL12-102	2	405571.65	521315.07	12.30	15563.61	191432.45
10	PL05-100	2	405645.35	521457.01	11.40	1468.98	16746.38
11	PL12-100	2	405570.30	521324.32	8.60	13240.16	113865.41
12	PL12-101	2	405577.39	521318.17	7.60	1500.65	11404.94
SUM						**139196.63**	**450012482.40**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**3232.93**
SITE-SPECIFIC IGWSRS (MG/KG)							**9200**

TABLE L-6
NICKEL CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW05							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**NI MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**NI WEIGHTED CONCENTRATION**
1	SB-AOC8B-2013-104	1	406374.67	520269.99	33900.00	1143.63	38768953.53
2	SB-AOC8B-2013-105	1	406450.08	520243.59	5420.00	3791.67	20550825.26
3	SB-10-SO-5-100	1	406852.70	520540.59	3510.00	49.42	173477.66
4	SB-AOC10-2013-120	1	406870.10	520549.05	3280.00	2157.69	7077216.58
5	SB-10-SO-5-103	1	406848.87	520537.39	1790.00	1335.33	2390243.16
6	SB-10-SO-5-101	1	406850.39	520544.84	585.00	1332.47	779496.62
7	B8-8	1	406341.67	520187.92	210.00	16997.64	3569503.47
8	SB-10-SO-5A-101	1	406855.73	520521.42	173.00	1276.22	220785.97
9	SB-10-SO-5-102	1	406857.76	520542.80	173.00	164.40	28441.02
10	SB-10-SO-5A-100	1	406859.70	520524.59	157.00	109.29	17158.74
11	SB-10-SO-5A-102	1	406864.62	520526.83	147.00	1535.68	225745.24
12	B8-6	2	406408.23	520267.55	100.00	2619.00	261900.31
13	SB-AOC10-2013-122	1	406893.64	520585.73	69.60	52370.17	3644963.76
14	SB-AOC8B-2013-107	1	406461.79	520327.38	64.20	3582.77	230013.85
15	B10-7	1	406870.65	520478.54	33.00	1855.53	61232.40
16	B8-8-2	1	406336.69	520203.90	32.50	5158.53	167652.23
17	B8-8-3	1	406352.66	520231.29	26.20	1946.52	50998.91
18	B8-8-4	1	406387.24	520180.31	24.50	1534.79	37602.47
19	SB-AOC8B-2013-109	1	406393.92	520215.20	15.30	1908.22	29195.76
20	SB-AOC10-2013-117	1	406788.88	520485.71	15.30	9144.62	139912.69
21	SB-AOC8B-2013-108	1	406529.66	520298.41	14.60	12676.57	185077.92
22	SB-10-SO-6	1	406693.07	520419.39	7.30	16056.97	117215.92
23	SB-AOC8B-2013-103	1	406436.51	520208.36	7.30	1277.28	9324.17
SUM						**140024.42**	**78736937.66**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**562.31**
SITE-SPECIFIC IGWSRS (MG/KG)							**9200**

TABLE L-7
ZINC CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW03							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**ZN MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**ZN WEIGHTED CONCENTRATION**
1	SB-AOC10-2013-108	3	406713.65	520248.94	17700	3461.39	61266599.29
2	SB-AOC10-2013-102	1	406691.73	520156.14	13900	3245.03	45105865.42
3	WSO12	1	406759.87	520198.43	12900	2544.91	32829379.76
4	SB-10-SO-11	2	406646.65	520124.54	6700	2979.84	19964950.04
5	WSO13	1	406840.36	520327.17	6330	6232.86	39454019.92
6	SB-10-SO-10	3	406625.65	520173.54	6200	3235.09	20057546.47
7	SB-AOC10-2013-100	1	406622.54	520142.47	3560	3686.05	13122322.53
8	B10-3	1	406526.65	520111.54	2400	8859.61	21263075.43
9	WSO7	1	406778.38	520199.47	1430	4979.40	7120546.22
10	SB-AOC10-2013-109	2	406707.19	520202.86	1020	3416.50	3484825.33
11	WSO11	2	406546.56	520049.21	83.20	27711.14	2305567.02
12	SB-10-SO-8	2	406898.65	520318.54	37	69478.18	2570692.66
SUM						**139830.00**	**268545390.09**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**1920.51**
SITE-SPECIFIC IGWSRS (MG/KG)							**14200**

TABLE L-7
ZINC CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW04							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**ZN MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**ZN WEIGHTED CONCENTRATION**
1	SB-AOC10-2013-115	2	406806.80	520386.89	40700	14292.00	581684463.17
2	SB-AOC10-2013-103	2	406578.51	520232.41	24700	2943.93	72715074.59
3	SB-10-SO-7-103	4	406782.34	520378.79	11400	222.09	2531823.51
4	SB-10-SO-7-102	3	406774.84	520372.04	9520	429.89	4092582.17
5	SB-AOC10-2013-101	2	406591.44	520185.91	9340	1593.66	14884823.59
6	SB-AOC10-2013-112	2	406773.14	520352.95	8180	1595.61	13052050.15
7	B8-2	2	406554.28	520160.57	7900	2155.24	17026421.29
8	SB-AOC10-2013-106	2	406617.39	520307.06	6790	1369.81	9301012.12
9	SB-10-SO-7-100	3	406779.65	520374.54	6600	42.96	283545.14
10	SB-10-SO-7-101	3	406783.57	520370.99	4170	693.81	2893206.58
11	SB-AOC10-2013-111	2	406777.77	520312.12	2900	2353.48	6825106.16
12	SB-AOC10-2013-113	2	406729.55	520376.71	2540	1644.45	4176897.02
13	B9-19	1	406628.27	520319.05	2400	618.09	1483419.46
14	B9-18	1	406662.55	520332.12	2300	1565.26	3600097.93
15	SB-AOC8B-2013-101	3	406475.43	520136.97	2280	2535.84	5781718.78
16	SB-AOC10-2013-105	2	406615.65	520258.68	2230	2788.69	6218776.59
17	WSO1	1	406693.96	520301.71	1830	1751.93	3206040.17
18	SB-10-SO-9	4	406691.65	520260.54	1500	1283.62	1925424.59
19	SB-AOC10-2013-110	2	406722.79	520328.68	1030	2676.89	2757198.87
20	B8-7	2	406435.59	520173.60	990	3641.40	3604982.50
21	SB-AOC8B-2013-102	2	406493.88	520187.05	649	3739.46	2426911.76
22	B8-4	1	406531.72	520234.75	370	3083.53	1140905.33
23	SB-AOC10-2013-104	2	406646.43	520215.69	310	1430.47	443444.15
24	SB-AOC10-2013-114	2	406774.34	520389.32	286	1301.64	372269.92
25	JSO25	2	406388.57	520101.04	210	7385.21	1550895.13
26	SB-AOC10-2013-107	2	406672.56	520290.94	176	1387.40	244181.66
27	JSO26	2	406311.82	520029.58	129	14356.20	1851949.37
28	JSO24	2	406423.64	520091.05	91.40	1859.03	169915.34
29	CSO2	2	407337.06	520726.64	56.20	25012.22	1405686.95
30	SB-10-SO-4	2	407011.65	520554.54	55.00	31041.14	1707262.60
31	JSO22	1	406455.20	520111.31	37.40	1700.33	63592.25
32	MW-75	1	406675.30	520260.88	33.30	1394.80	46446.94
SUM						**139890.10**	**769468125.78**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**5500.52**
SITE-SPECIFIC IGWSRS (MG/KG)							**14200**

TABLE L-7
ZINC CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW05							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**ZN MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**ZN WEIGHTED CONCENTRATION**
1	SB-AOC10-2013-116	2	406752.99	520429.64	60700	2555.70	155130747.25
2	SB-10-SO-5-102	2	406857.76	520542.80	29100	164.40	4784009.71
3	HSO12	1	406719.91	520384.39	28100	1413.65	39723433.99
4	SB-8-SO-14	1	406352.65	520196.54	28000	812.39	22746914.01
5	B8-8-1	3	406334.29	520181.06	16800	1262.93	21217273.70
6	B8-8	2	406341.67	520187.92	14000	424.45	5942307.74
7	SB-AOC10-2013-117	2	406788.88	520485.71	10900	3744.94	40819835.94
8	SB-10-SO-5A-100	1	406859.70	520524.59	9430	109.29	1030617.40
9	SB-10-SO-5-101	2	406850.39	520544.84	7940	1332.47	10579834.37
10	SB-10-SO-5-100	2	406852.70	520540.59	7550	49.42	373149.95
11	SB-AOC10-2013-122	2	406893.64	520585.73	5880	3978.66	23394521.43
12	HSO13	1	406747.21	520498.42	5530	2192.53	12124712.35
13	SB-10-SO-5-103	2	406848.87	520537.39	5350	1335.33	7144022.82
14	WSO14	1	406899.05	520539.91	5060	3231.28	16350259.40
15	SB-AOC10-2013-118	2	406836.13	520467.12	3560	2265.67	8065794.46
16	B9-15	1	406726.16	520446.62	2400	1558.72	3740916.41
17	B8-3	2	406591.48	520327.19	2100	4789.90	10058793.47
18	SB-AOC8B-2013-104	2	406374.67	520269.99	1850	1143.63	2115709.86
19	B8-8-2	2	406336.69	520203.90	1280	2167.69	2774643.97
20	SB-9-SO-1	1	406621.95	520351.00	1200	2380.69	2856825.30
21	B9-14	1	406696.76	520455.78	960	682.96	655641.32
22	B9-13	1	406707.04	520484.77	920	937.65	862639.19
23	SB-10-SO-6	4	406693.07	520419.39	830	1961.74	1628243.83
24	B9-17	1	406640.08	520343.35	680	1003.47	682359.44
25	SB-10-SO-5A-101	1	406855.73	520521.42	649	1423.13	923612.58
26	SB-AOC8B-2013-105	2	406450.08	520243.59	643	3791.67	2438040.71
27	SB-AOC8B-2013-103	2	406436.51	520208.36	576	1277.28	735715.40
28	B9-16	1	406655.62	520380.44	550	1469.29	808108.50
29	SB-AOC8B-2013-107	2	406461.79	520327.38	457	3582.77	1637326.04
30	SB-AOC10-2013-120	1	406870.10	520549.05	444	1021.75	453655.23
31	SB-AOC8B-2013-100	3	406329.61	520147.93	354	1037.14	367148.81
32	B8-8-4	2	406387.24	520180.31	343	1377.13	472354.44
33	B8-8-3	1	406352.66	520231.29	292	1863.74	544211.01
34	SB-9-SO-2	1	406685.41	520455.74	260	1378.22	358338.43
35	SB-AOC8B-2013-109	2	406393.92	520215.20	258	1847.61	476684.62
36	SB-10-SO-5A-102	1	406864.62	520526.83	218	478.77	104372.54
37	JSO23	2	406317.16	520152.14	198	2835.79	561487.06
38	SB-AOC8B-2013-108	2	406529.66	520298.41	196	6262.51	1227452.06
39	B8-6	1	406408.23	520267.55	190	2619.00	497610.59
40	B10-1	1	406637.43	520408.54	170	3657.22	621727.06
41	WSO6	1	406896.31	520519.47	159	1583.36	251753.67
42	JSO27	2	406244.68	520154.19	83.10	13916.83	1156488.16
43	B10-8	2	406976.45	520636.80	59	46259.52	2729311.42
44	B9-16-200	2	406651.75	520384.51	35.5	842.14	29895.92
SUM						**140024.42**	**411198501.57**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**2936.62**
SITE-SPECIFIC IGWSRS (MG/KG)							**14200**

TABLE L-7
ZINC CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW06							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**ZN MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**ZN WEIGHTED CONCENTRATION**
1	SB-9-SO-3	1	406745.21	520613.80	44000	1365.47	60080686.60
2	SB-AOC10-2013-119	2	406812.02	520564.00	20700	1727.66	35762485.61
3	SB-AOC10-2013-124	2	406881.99	520635.22	8050	2006.16	16149594.40
4	SB-AOC10-2013-127	2	406917.01	520735.20	6890	1225.87	8446265.29
5	SB-10-SO-2	3	406939.65	520727.54	5800	1220.24	7077364.30
6	B10-2	1	406708.86	520523.83	5200	3538.66	18401046.45
7	SB-10-SO-3	3	406814.65	520639.54	2100	2690.44	5649917.95
8	SB-AOC10-2013-121	2	406840.91	520601.89	2090	2102.42	4394056.34
9	SB-AOC10-2013-128	2	406903.45	520689.99	1960	3102.56	6081013.33
10	B8-5	1	406298.36	520322.61	1700	4842.01	8231412.78
11	SB-AOC10-2013-125	2	406853.93	520660.55	1510	2909.62	4393532.18
12	B9-12	1	406716.99	520548.64	1000	2852.38	2852381.64
13	SB-10-SO-1	1	406977.65	520786.54	960	4024.56	3863578.00
14	SB-AOC10-2013-129	2	406954.52	520718.01	739	3720.45	2749412.26
15	SB-AOC10-2013-123	2	406920.73	520640.18	556	1410.51	784241.14
16	HSO14	1	406785.73	520608.36	544	2222.48	1209030.27
17	SB-9-SO-11	1	406652.62	520550.87	390	4409.77	1719809.81
18	JSO8	1	406234.66	520274.94	354	508.86	180137.02
19	B9-11	1	406747.04	520581.55	340	2166.53	736619.11
20	SB-8-SO-16	1	406238.65	520260.54	310	4541.78	1407951.33
21	WSO15	1	406962.46	520659.06	297	1992.27	591704.51
22	JSO11	1	406358.48	520284.98	292	2417.79	705993.68
23	SB-9-SO-10	1	406597.62	520494.87	280	12666.56	3546635.80
24	SB-AOC8B-2013-106	2	406401.68	520353.45	251	7637.75	1917076.47
25	JSO12	1	406361.48	520293.37	197	2786.71	548982.69
26	JSO7	1	406244.55	520278.43	195	2527.80	492921.10
27	JSO28	2	406173.17	520183.58	150	10905.51	1635825.82
28	SB-8-SO-15	1	406228.65	520268.54	140	2630.03	368204.65
29	B8-1	2	406451.19	520410.86	120	11750.63	1410075.98
30	B9-10	1	406739.86	520600.82	83	1528.58	126872.01
31	BF-S22	1	407178.67	520891.31	51.30	14109.70	723827.36
32	BF-S21	1	407143.36	520890.55	45.60	9018.54	411245.24
33	WSO9	1	406977.65	520771.10	28.80	7522.25	216640.93
SUM						**140082.54**	**202866542.05**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**1448.19**
SITE-SPECIFIC IGWSRS (MG/KG)							**14200**

TABLE L-7
ZINC CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW09							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**ZN MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**ZN WEIGHTED CONCENTRATION**
1	TP9-2-304	3	406543.37	520758.75	34200	6847.18	234173609.95
2	TP9-3	2	406572.39	520874.38	32000	1057.69	33846112.11
3	MOA-C-B8-100	3	406101.84	520509.10	28600	36.76	1051226.98
4	TP9-3-305	3	406523.64	520814.62	15900	6549.63	104139098.62
5	TP9-2-202	2	406622.89	520799.50	14200	1110.00	15762053.65
6	SB-7-SO-4	5	405917.72	520420.99	11000	2762.75	30390232.73
7	MOA-C-B15	3	406096.71	520538.05	10600	1216.83	12898408.52
8	TP9-3-203	2	406597.46	520874.40	10500	2405.77	25260607.70
9	MOA-C-B7	3	406075.34	520534.67	10300	1007.81	10380457.01
10	TP9-2	2	406603.86	520814.04	10000	3185.45	31854468.10
11	MOA-C-B8-103	3	406098.88	520513.28	7540	371.10	2798058.37
12	TP7-4	2	405848.11	520395.31	3230	1339.33	4326032.21
13	JSO6	1	406006.95	520496.61	2780	1664.77	4628061.16
14	SB-7-SO-7	5	405908.28	520375.18	2600	3084.11	8018674.72
15	MOA-C-B8-101	3	406106.72	520508.52	1720	289.15	497332.26
16	MOA-C-B10	1	406123.53	520511.34	1650	1202.47	1984076.93
17	ISO34	1	405817.03	520331.61	1620	1626.55	2635003.33
18	SB-7-SO-5	4	405866.65	520375.54	1600	1314.35	2102956.39
19	ISO16	1	405844.11	520294.14	1600	825.04	1320056.79
20	MOA-C-B8-102	3	406098.41	520504.42	1500	828.59	1242880.85
21	SB-7-SO-6	4	405828.35	520387.70	1200	948.97	1138760.05
22	ZSO5	3	406158.52	520507.61	1070	3038.40	3251090.99
23	ISO11	2	405932.81	520465.90	917	962.96	883035.57
24	ISO33	1	405821.62	520348.26	895	771.98	690918.39
25	B7-2	3	405868.66	520350.08	880	2257.18	1986322.52
26	JSO5	1	405991.14	520498.86	588	576.95	339244.91
27	MOA-C-B2	2	406148.33	520575.12	519	9487.81	4924172.66
28	CE-2	2	406057.06	520463.79	409	866.96	354586.61
29	CE-1	2	406018.01	520435.51	348	1766.47	614731.11
30	MOA-C-B14	3	406121.50	520572.68	322	1298.29	418050.54
31	MOA-C-B9	3	406123.03	520478.14	266	1073.84	285642.48
32	JSO17	1	406032.25	520429.63	266	318.15	84627.32
33	MOA-B-S16	1	406049.65	520453.33	243	618.36	150261.23
34	B9-5	1	406915.75	521068.36	170	55496.39	9434386.67
35	MOA-C-B2A	1	406141.16	520584.15	131	2193.10	287295.93
36	ISO17	1	405761.39	520323.42	112	31135.71	3487199.43
37	TP9-2-300	3	406672.80	520849.35	103	4543.61	467991.54
38	ISO42	1	405832.01	520290.48	100	1981.56	198156.35
39	SB-9-SO-6	1	406874.54	520966.61	100	11513.26	1151326.02
40	TP9-2-311	3	406650.00	520901.00	91.60	2894.47	265133.20
41	ISO32	1	405812.95	520354.55	79.80	1476.24	117803.96
42	ISO28	1	405963.39	520470.31	74.50	1714.01	127693.53
43	TP10-2	1	406916.07	521042.17	60.00	7156.56	429393.40
44	HSO5	1	406538.18	520856.58	38.70	1317.25	50977.66
45	JSO16	1	406055.85	520472.69	37.80	1352.09	51109.04
46	B8-9	2	406002.67	520497.83	34.00	324.58	11035.69
47	HSO3	1	406353.39	520701.02	33.80	21719.85	734130.91
48	ZSO6	1	406066.22	520516.66	58.50	1676.14	98054.12
49	HSO6	1	406679.42	520933.97	31.60	9714.14	306966.68
50	MOA-B-S15	1	406028.52	520429.37	30.40	479.20	14567.76
51	B7-6	2	405965.06	520416.27	26.00	3469.09	90196.45
52	MOA-B-S10	1	406041.92	520444.72	13.00	641.74	8342.56
SUM						**223510.60**	**561762613.66**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**2513.36**
SITE-SPECIFIC IGWSRS (MG/KG)							**14200**

TABLE L-7
ZINC CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW12							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**ZN MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**ZN WEIGHTED CONCENTRATION**
1	SB-3-SO-11	1	406249.65	520945.54	29000	560.43	16252425.74
2	FSO33	1	406018.15	520761.83	1540	357.83	551052.03
3	B7-8	2	405720.82	520579.33	620	9202.72	5705685.40
4	ISO26	2	405718.95	520627.24	514	16881.03	8676850.82
5	B3-28	2	406032.19	520799.48	490	1727.94	846691.37
6	SB-3-SO-12	1	406273.65	520935.54	270	509.37	137529.03
7	B3-15	2	406244.81	520974.07	270	7800.28	2106076.94
8	B3-16	2	406250.94	520913.65	220	3739.52	822695.42
9	ISO23	2	405485.31	520508.99	197	10958.92	2158906.93
10	B3-27	2	406049.28	520841.65	170	12397.19	2107521.82
11	B6-201	2	405993.32	520788.94	142	2809.70	398977.61
12	B3-14	2	406245.50	520937.34	130	4949.83	643477.41
13	FSO26	1	406004.78	520765.89	119	1471.18	175070.33
14	ASO9	1	405433.94	520439.47	105	11855.74	1244853.15
15	MW-66	1	406881.97	521330.19	90.90	22703.50	2063748.60
16	ISO30	1	405505.75	520449.80	81.30	5911.77	480626.96
17	MW-71	1	406755.81	521280.12	62.40	28062.70	1751112.51
18	HSO4	1	406413.89	521042.11	39.00	28976.31	1130076.06
19	CSO1	1	407118.49	521575.18	33.20	28207.80	936498.98
20	B3-4-200	1	406021.22	520816.49	32.80	2621.90	85998.35
21	SB-5-SO-3	1	405921.65	520759.54	32.00	13467.87	430971.92
22	SB-5-SO-2	1	405922.65	520794.54	28	3253.90	91109.23
23	B3-17	2	406274.42	520951.82	9	4872.69	43854.18
SUM						**223300.13**	**48841810.80**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**218.73**
SITE-SPECIFIC IGWSRS (MG/KG)							**14200**

TABLE L-7
ZINC CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW14							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**ZN MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**ZN WEIGHTED CONCENTRATION**
1	268-2	3	405915.48	520960.40	37800	3031.03	114572879.92
2	268-1	3	405938.33	520951.29	7740	3682.56	28502992.15
3	ASO30	1	405339.03	520571.00	479	22425.55	10741837.42
4	SR-1	1	405895.30	520976.52	312	15595.17	4865692.09
5	ASO29	1	405326.78	520561.57	167	105.84	17676.06
6	ASO15	2	405286.20	520554.07	139	5675.08	788836.08
7	ASO8	1	405326.78	520561.57	86.10	1010.44	86998.87
8	GS08-200	2	406072.39	521140.84	85.40	2694.91	230144.99
9	MW-16C	1	406908.09	521625.62	79.70	48603.03	3873661.50
10	MW-73	2	406314.15	521207.70	66.70	25837.84	1723384.05
11	305-4	1	405654.28	520877.87	47.40	19877.73	942204.28
12	MC7-1	1	406080.86	521128.90	37.20	13905.25	517275.33
13	MW-69	2	406536.63	521388.59	34.60	36493.45	1262673.42
14	305-3	1	405649.21	520880.16	31.60	14158.84	447419.36
15	275-1	1	406007.12	521097.57	27.10	10203.41	276512.40
SUM						**223300.13**	**168850187.92**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**756.16**
SITE-SPECIFIC IGWSRS (MG/KG)							**14200**

TABLE L-8
ZINC CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW03							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**ZN MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**ZN WEIGHTED CONCENTRATION**
1	SB-AOC10-2013-109	1	406707.19	520202.86	40300	89234.46	3596148916.22
2	SB-10-SO-209	1	406649.49	520210.81	20900	1718.94	35925923.05
3	SB-10-SO-10	1	406625.65	520173.54	15000	2370.41	35556149.29
4	SB-AOC10-2013-100	1	406622.54	520142.47	7740	3788.58	29323591.39
5	SB-10-SO-11	2	406646.65	520124.54	3800	3188.10	12114771.86
6	SB-AOC10-2013-102	1	406691.73	520156.14	17.60	3269.54	57543.91
7	B10-3	1	406526.65	520111.54	2.5	36259.97	90649.93
SUM						**139830.00**	**3709217545.65**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**26526.62**
SITE-SPECIFIC IGWSRS (MG/KG)							**14200**

TABLE L-8
ZINC CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW04							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**ZN MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**ZN WEIGHTED CONCENTRATION**
1	B8-4	1	406531.72	520234.75	22000	2381.10	52384252.26
2	SB-10-SO-7	1	406779.65	520374.54	12000	3140.08	37680957.27
3	SB-AOC10-2013-103	1	406578.51	520232.41	6730	4802.72	32322336.41
4	SB-10-SO-7-102	1	406774.84	520372.04	1700	5204.57	8847777.31
5	SB-10-SO-208	1	406535.14	520199.52	1550	2896.94	4490254.91
6	SB-AOC10-2013-107	1	406672.56	520290.94	1540	7956.92	12253656.76
7	SB-10-SO-210	1	406642.27	520212.80	717	2322.03	1664893.91
8	SB-10-SO-7-101	1	406783.57	520370.99	584	70910.99	41412016.78
9	SB-AOC8B-2013-102	1	406493.88	520187.05	310	35082.66	10875624.92
10	SB-10-SO-9	1	406691.65	520260.54	36	3438.08	123770.80
11	SB-AOC10-2013-101	1	406591.44	520185.91	34.20	1754.00	59986.85
SUM						**139890.10**	**202115528.17**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**1444.82**
SITE-SPECIFIC IGWSRS (MG/KG)							**14200**

TABLE L-8
ZINC CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW05							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**ZN MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**ZN WEIGHTED CONCENTRATION**
1	SB-AOC8B-2013-104	1	406374.67	520269.99	20100	1143.63	22986901.65
2	B8-8	1	406341.67	520187.92	8300	16997.64	141080375.36
3	B8-6	2	406408.23	520267.55	6400	2619.00	16761619.98
4	SB-AOC8B-2013-105	1	406450.08	520243.59	4280	3791.67	16228326.96
5	SB-10-SO-5-103	1	406848.87	520537.39	2270	1335.33	3031202.22
6	SB-10-SO-5-100	1	406852.70	520540.59	1440	49.42	71170.32
7	SB-10-SO-5-101	1	406850.39	520544.84	1420	1332.47	1892111.46
8	B8-8-2	1	406336.69	520203.90	851	5158.53	4389909.26
9	SB-AOC10-2013-120	1	406870.10	520549.05	615	2157.69	1326978.11
10	SB-AOC8B-2013-107	1	406461.79	520327.38	365	3582.77	1307711.18
11	B8-8-4	1	406387.24	520180.31	358	1534.79	549456.57
12	B8-8-3	1	406352.66	520231.29	236	1946.52	459379.48
13	SB-AOC10-2013-122	1	406893.64	520585.73	173	52370.17	9060039.44
14	SB-10-SO-5A-102	1	406864.62	520526.83	142	1535.68	218066.83
15	SB-AOC8B-2013-109	1	406393.92	520215.20	133	1908.22	253793.24
16	SB-10-SO-5-102	1	406857.76	520542.80	94.90	164.40	15601.46
17	SB-AOC8B-2013-108	1	406529.66	520298.41	83.70	12676.57	1061028.86
18	SB-AOC8B-2013-103	1	406436.51	520208.36	71.60	1277.28	91453.51
19	B10-7	1	406870.65	520478.54	69.00	1855.53	128031.38
20	SB-10-SO-5A-100	1	406859.70	520524.59	61.70	109.29	6743.28
21	SB-10-SO-5A-101	1	406855.73	520521.42	55.00	1276.22	70192.07
22	SB-10-SO-6	1	406693.07	520419.39	33.00	16056.97	529880.17
23	SB-AOC10-2013-117	1	406788.88	520485.71	28.40	9144.62	259707.21
SUM						**140024.42**	**221779679.98**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**1583.86**
SITE-SPECIFIC IGWSRS (MG/KG)							**14200**

TABLE L-9
BENZENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW03							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**BZ MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**BZ WEIGHTED CONCENTRATION**
1	SB-AOC10-2013-108	3	406713.65	520248.94	2.10	4118.62	8649.11
2	SB-10-SO-10-101	3	406628.40	520177.72	0.840	1626.41	1366.19
3	SB-10-SO-10-103	3	406621.16	520171.23	0.51	1110.35	566.28
4	SB-AOC10-2013-109	2	406707.19	520202.86	0.46	3739.48	1720.16
5	SB-AOC10-2013-102	1	406691.73	520156.14	0.19	3197.63	607.55
6	WSO7	1	406778.38	520199.47	0.14	6770.94	947.93
7	B10-3	1	406526.65	520111.54	0.022	33459.43	736.11
8	SB-10-SO-11	2	406646.65	520124.54	0.0080	2804.91	22.44
9	SB-10-SO-8	2	406898.65	520318.54	0.0070	74129.55	518.91
10	SB-AOC10-2013-100	1	406622.54	520142.47	0.0017	1708.04	2.90
11	SB-10-SO-10-102	4	406629.35	520170.33	0.0016	801.43	1.28
12	MW-64	2	406775.67	520187.06	0.0015	1244.85	1.87
13	MW-62	2	406571.65	520125.22	0.0015	5078.15	7.62
14	SB-10-SO-10-100	3	406625.65	520173.54	0.0013	40.19	0.05
SUM						**139830.00**	**15148.40**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.11**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.2**

TABLE L-9
BENZENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW04							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**BZ MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**BZ WEIGHTED CONCENTRATION**
1	SB-AOC10-2013-103	2	406578.51	520232.41	0.22	1869.40	411.27
2	B8-4-100	2	406545.18	520223.83	0.11	922.29	101.45
3	SB-AOC10-2013-115	2	406806.80	520386.89	0.085	14292.00	1214.82
4	SB-8-SO-12-100	3	406534.06	520221.99	0.04	306.42	12.26
5	SB-10-SO-9	4	406691.65	520260.54	0.012	1622.17	19.47
6	SB-10-SO-4	2	407011.65	520554.54	0.009	56053.36	504.48
7	B8-2	2	406554.28	520160.57	0.007	1913.30	13.39
8	B8-4	1	406531.72	520234.75	0.006	267.30	1.60
9	B8-7	2	406435.59	520173.60	0.006	24027.85	144.17
10	B8-4-102	2	406551.36	520246.07	0.004	1237.38	4.95
11	SB-8-SO-12-103	2	406506.58	520228.65	0.0023	852.40	1.96
12	SB-10-SO-7-103	4	406782.34	520378.79	0.0023	222.09	0.51
13	SB-AOC10-2013-112	2	406773.14	520352.95	0.0021	1595.61	3.35
14	SB-10-SO-7-100	3	406779.65	520374.54	0.0018	42.96	0.08
15	SB-AOC10-2013-111	2	406777.77	520312.12	0.0015	2355.32	3.53
16	SB-AOC10-2013-113	2	406729.55	520376.71	0.0014	1667.45	2.33
17	SB-AOC10-2013-101	2	406591.44	520185.91	0.0014	1535.88	2.15
18	SB-AOC8B-2013-102	2	406493.88	520187.05	0.0013	2793.08	3.63
19	SB-8-SO-12-101	2	406521.28	520211.50	0.0012	1075.78	1.29
20	SB-AOC10-2013-104	2	406646.43	520215.69	0.0012	1430.47	1.72
21	SB-AOC10-2013-110	2	406722.79	520328.68	0.0012	3870.57	4.64
22	SB-8-SO-12-102	2	406514.94	520235.49	0.0011	349.37	0.38
23	SB-AOC10-2013-107	2	406672.56	520290.94	0.0011	3044.26	3.35
24	SB-10-SO-7-102	3	406774.84	520372.04	0.0011	429.89	0.47
25	SB-10-SO-7-101	3	406783.57	520370.99	0.0011	693.81	0.76
26	SB-AOC10-2013-106	2	406617.39	520307.06	0.001	2079.47	2.08
27	SB-AOC10-2013-114	2	406774.34	520389.32	0.00098	1301.64	1.28
28	SB-AOC10-2013-105	2	406615.65	520258.68	0.00097	2731.66	2.65
29	B8-4-103	2	406537.24	520249.32	0.00095	461.95	0.44
30	SB-AOC8B-2013-101	3	406475.43	520136.97	0.00094	7450.16	7.00
31	MW-75	1	406675.30	520260.88	0.00091	1394.80	1.27
SUM						**139890.10**	**2472.74**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.02**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.2**

TABLE L-9
BENZENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW05							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**BZ MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**BZ WEIGHTED CONCENTRATION**
1	B8-8	2	406341.67	520187.92	16.00	217.10	3473.53
2	B8-6-103	3	406403.54	520264.95	2.9	678.36	1967.23
3	B8-8-2-100	4	406336.69	520203.90	1.6	90.71	145.14
4	B8-8-1	4	406334.29	520181.06	1.6000	41.98	67.17
5	SB-8-SO-14-100	4	406352.65	520196.54	1.2	365.87	439.05
6	SB-8-SO-14-101	3	406353.72	520201.35	0.87	486.64	423.38
7	B8-6-100	3	406408.23	520267.55	0.84	46.36	38.94
8	B8-6-101	3	406411.05	520271.71	0.69	1510.75	1042.42
9	B8-8-2-101	4	406332.18	520200.92	0.60	1713.89	1028.33
10	SB-AOC10-2013-117	2	406788.88	520485.71	0.54	6074.80	3280.39
11	B8-8-2-102	4	406337.76	520208.72	0.43	805.55	346.39
12	B8-8-4-102	4	406386.12	520175.44	0.27	553.46	149.43
13	B8-8-1-102	4	406329.67	520178.08	0.17	3231.72	549.39
14	WSO6	1	406896.31	520519.47	0.15	4021.51	603.23
15	B8-8-1-101	4	406338.41	520177.03	0.13	597.79	77.71
16	B8-8-1-103	3	406331.51	520185.78	0.10	391.48	39.15
17	SB-10-SO-6	4	406693.07	520419.39	0.031	5645.12	175.00
18	B8-6-102	3	406412.28	520263.90	0.02	810.17	18.63
19	SB-10-SO-5	3	406852.70	520540.59	0.009	3563.01	32.07
20	B8-3	2	406591.48	520327.19	0.006	6487.60	38.93
21	B10-1	1	406637.43	520408.54	0.006	4267.81	25.61
22	B10-8	2	406976.45	520636.80	0.006	46377.97	278.27
23	B8-8-4-100	3	406387.24	520180.31	0.0017	57.97	0.10
24	SB-AOC8B-2013-100	3	406329.61	520147.93	0.0016	14679.26	23.49
25	SB-AOC10-2013-118	2	406836.13	520467.12	0.0015	2660.11	3.99
26	SB-AOC10-2013-116	2	406752.99	520429.64	0.0012	4532.98	5.44
27	SB-AOC8B-2013-109	2	406393.92	520215.20	0.0012	1654.63	1.99
28	SB-AOC8B-2013-103	2	406436.51	520208.36	0.0012	1256.10	1.51
29	SB-AOC8B-2013-108	2	406529.66	520298.41	0.0012	6262.51	7.52
30	B9-16-200	3	406651.75	520384.51	0.0012	3706.62	4.45
31	SB-AOC8B-2013-104	2	406374.67	520269.99	0.0011	1034.05	1.14
32	B8-8-4-101	3	406392.23	520178.95	0.0011	378.52	0.42
33	SB-AOC10-2013-122	2	406893.64	520585.73	0.0011	4849.24	5.33
34	SB-AOC8B-2013-107	2	406461.79	520327.38	0.001	3497.23	3.50
35	SB-AOC8B-2013-105	2	406450.08	520243.59	0.001	3629.90	3.63
36	B8-8-4-103	3	406386.20	520186.41	0.001	559.18	0.56
37	SB-AOC10-2013-120	1	406870.10	520549.05	0.001	1615.11	1.62
38	B8-8-3	1	406352.66	520231.29	0.0006	1671.37	1.00
SUM						**140024.42**	**14305.05**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.10**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.2**

TABLE L-9
BENZENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW06							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**BZ MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**BZ WEIGHTED CONCENTRATION**
1	JSO11-101	3	406363.10	520283.01	0.77	217.78	167.69
2	SB-8-SO-11-100	3	406389.65	520297.54	0.42	35.21	14.79
3	SB-8-SO-11-102	3	406385.90	520300.92	0.38	830.17	315.47
4	SB-8-SO-11-103	3	406394.04	520299.93	0.23	919.21	211.42
5	WSO9	1	406977.65	520771.10	0.19	8155.46	1549.54
6	JSO7	1	406244.55	520278.43	0.15	4470.72	670.61
7	JSO12	1	406361.48	520293.37	0.13	1313.98	170.82
8	JSO8	1	406234.66	520274.94	0.12	16547.42	1985.69
9	JSO11-102	2	406356.45	520280.32	0.097	1362.82	132.19
10	B10-2	1	406708.86	520523.83	0.022	19901.04	437.82
11	SB-10-SO-2	3	406939.65	520727.54	0.007	1220.24	8.54
12	SB-10-SO-1	1	406977.65	520786.54	0.0060	26519.59	159.12
13	B8-5	1	406298.36	520322.61	0.006	4691.72	28.15
14	B8-1	2	406451.19	520410.86	0.006	17350.80	104.10
15	JSO11-100	3	406358.48	520284.97	0.0051	35.66	0.18
16	SB-AOC10-2013-119	2	406812.02	520564.00	0.0033	3821.96	12.61
17	JSO11-103	3	406353.73	520286.51	0.0031	1370.83	4.25
18	SB-10-SO-3-103	2	406810.03	520636.56	0.0024	3964.26	9.51
19	SB-10-SO-3-101	2	406815.62	520644.36	0.0016	1264.92	2.02
20	SB-AOC10-2013-124	2	406881.99	520635.22	0.0015	2006.16	3.01
21	SB-AOC10-2013-127	2	406917.01	520735.20	0.0013	1225.87	1.59
22	SB-AOC10-2013-129	2	406954.52	520718.01	0.0012	4986.86	5.98
23	SB-AOC10-2013-128	2	406903.45	520689.99	0.0012	3175.42	3.81
24	SB-AOC10-2013-121	2	406840.91	520601.89	0.0012	2054.44	2.47
25	SB-AOC8B-2013-106	2	406401.68	520353.45	0.0011	6818.48	7.50
26	SB-AOC10-2013-125	2	406853.93	520660.55	0.0011	2750.15	3.03
27	SB-10-SO-3-100	2	406814.65	520639.54	0.0011	39.05	0.04
28	SB-10-SO-3-102	2	406818.77	520635.51	0.0010	784.58	0.78
29	SB-8-SO-11-101	2	406388.00	520292.67	0.0010	184.25	0.18
30	SB-AOC10-2013-123	2	406920.73	520640.18	0.0010	2063.51	2.06
SUM						**140082.54**	**6014.99**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.04**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.2**

TABLE L-9
BENZENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW08							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**BZ MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**BZ WEIGHTED CONCENTRATION**
1	TP9-2-301R	3	406672.72	520821.61	0.36	3223.01	1160.28
2	WSO8	1	407024.21	520973.51	0.18	64270.66	11568.72
3	MOA-B-S23	1	406105.94	520372.87	0.16	352.24	56.36
4	MOA-B-S18	1	406082.47	520398.17	0.16	728.65	116.58
5	MOA-B-BS2	1	406122.53	520356.04	0.16	575.37	92.06
6	JSO21	1	406118.43	520414.74	0.15	20035.31	3005.30
7	HSO10	1	406497.37	520606.06	0.15	32732.08	4909.81
8	MOA-B-S7	1	406050.27	520400.38	0.15	531.80	79.77
9	MOA-B-S22	1	406101.15	520370.65	0.15	566.79	85.02
10	MOA-B-S17	1	406070.05	520425.07	0.15	774.22	116.13
11	MOA-B-S14	1	406037.36	520409.96	0.15	1142.23	171.33
12	MOA-B-S12	1	406063.05	520353.33	0.15	3842.98	576.45
13	MOA-B-BS3	1	406109.26	520358.98	0.15	610.42	91.56
14	HSO7	1	406797.02	520864.61	0.14	18627.91	2607.91
15	MOA-B-S13	1	406049.53	520383.18	0.14	1991.34	278.79
16	JSO9	1	406118.22	520394.86	0.14	1887.05	264.19
17	HSO8	1	406722.82	520748.26	0.14	5394.54	755.24
18	JSO20	1	406097.24	520401.94	0.13	422.87	54.97
19	JSO10	1	406088.91	520417.90	0.13	1012.30	131.60
20	TP9-2-303R	3	406671.18	520786.55	0.01	12457.88	124.58
21	MW-22	2	405962.35	520326.62	0.0060	51591.44	309.55
SUM						**222771.07**	**26556.19**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.119**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.2**

TABLE L-9
BENZENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW09							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**BZ MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**BZ WEIGHTED CONCENTRATION**
1	TP9-3-305	3	406523.64	520814.62	1.2	5953.29	7143.95
2	SB-7-SO-7	5	405908.28	520375.18	0.75	3084.11	2313.08
3	TP9-2-300R	3	406672.80	520849.35	0.74	4555.23	3370.87
4	TP9-2-202	3	406622.89	520799.50	0.72	437.36	314.90
5	TP9-2-204	3	406572.59	520799.32	0.48	1444.19	693.21
6	TP9-3-203	3	406597.46	520874.40	0.32	1896.04	606.73
7	TP9-3-205	3	406572.44	520849.42	0.17	530.88	90.25
8	HSO6	1	406679.42	520933.97	0.15	85177.63	12776.65
9	MOA-B-S16	1	406049.65	520453.33	0.15	662.89	99.43
10	MOA-B-S15	1	406028.52	520429.37	0.15	744.19	111.63
11	MOA-B-S10	1	406041.92	520444.72	0.15	694.89	104.23
12	HSO3	1	406353.39	520701.02	0.14	21918.51	3068.59
13	JSO5	1	405991.14	520498.86	0.14	1606.53	224.91
14	CE-2	2	406057.06	520463.79	0.14	2888.57	404.40
15	CE-1	1	406018.01	520435.51	0.14	1897.42	265.64
16	TP9-3-101	2	406577.25	520873.76	0.14	339.24	47.49
17	JSO6	1	406006.95	520496.61	0.13	2278.62	296.22
18	TP9-3-204	3	406597.39	520849.32	0.13	583.08	75.80
19	TP9-2-304	3	406543.37	520758.75	0.12	6267.45	752.09
20	HSO5	1	406538.18	520856.58	0.12	423.19	50.78
21	TP9-2	2	406603.86	520814.04	0.018	537.20	9.67
22	TP9-3	2	406572.39	520874.38	0.01	290.67	2.91
23	SB-7-SO-6	4	405828.35	520387.70	0.01	32071.87	320.72
24	SB-7-SO-4	5	405917.72	520420.99	0.007	3541.07	24.79
25	SB-7-SO-5	4	405866.65	520375.54	0.007	1322.44	9.26
26	B-3A	1	406120.71	520505.04	0.006	3194.77	19.17
27	B-3D	1	406132.33	520590.37	0.006	2418.07	14.51
28	B8-9	2	406002.67	520497.83	0.006	331.39	1.99
29	B7-6	3	405965.06	520416.27	0.006	4197.24	25.18
30	B7-2	3	405868.66	520350.08	0.006	8943.26	53.66
31	B-4E	1	406079.03	520561.46	0.006	999.94	6.00
32	B-4D	1	406128.28	520535.53	0.006	617.92	3.71
33	B-4C	1	406094.08	520546.81	0.006	1669.96	10.02
34	B-4B	1	406107.36	520559.00	0.006	895.75	5.37
35	B-3C	1	406145.79	520570.61	0.006	10161.36	60.97
36	B-3B	1	406133.21	520537.86	0.006	2239.13	13.43
37	TP9-2-203	3	406597.50	520799.33	0.0018	724.99	1.30
38	TP9-2-200	3	406622.72	520849.35	0.0018	1647.61	2.97
39	TP9-3-206	3	406547.42	520849.34	0.0014	727.97	1.02
40	TP7-4	2	405848.11	520395.31	0.0011	1339.33	1.47
41	TP9-2-206	1	406584.94	520837.14	0.0011	417.58	0.46
42	TP9-2-205	1	406572.37	520824.49	0.0011	801.37	0.88
43	TP9-2-201	1	406622.80	520824.37	0.00062	1036.42	0.64
SUM						**223510.61**	**33400.96**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.15**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.2**

TABLE L-9
BENZENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW14							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**BZ MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**BZ WEIGHTED CONCENTRATION**
1	B2-2	1	406103.80	521113.79	15.00	253.95	3809.24
2	B2-1-200	3	406107.54	521130.06	2.10	341.32	716.78
3	B2-1	1	406119.17	521123.48	1.50	326.79	490.19
4	MC7-1	1	406080.86	521128.90	1.40	263.91	369.47
5	B2-2-200	3	406088.12	521114.11	1.10	283.23	311.55
6	GSO7	2	406093.31	521098.97	0.85	1742.35	1481.00
7	GSO8	2	406086.77	521137.76	0.74	267.24	197.76
8	GSO11	2	406141.95	521128.65	0.58	302.51	175.46
9	SR-2	1	405900.87	520953.19	0.16	21307.12	3409.14
10	GSO3	1	406135.45	521092.97	0.16	1036.75	165.88
11	GSO1	2	406140.47	521161.67	0.16	5070.40	811.26
12	305-3	1	405649.21	520880.16	0.15	7839.49	1175.92
13	305-4	1	405654.28	520877.87	0.14	19528.91	2734.05
14	GSO9	2	406115.79	521150.09	0.14	368.42	51.58
15	275-1	1	406007.12	521097.57	0.13	9329.90	1212.89
16	GSO35	1	406150.61	521115.63	0.12	863.78	103.65
17	SB-3-SO-33	2	406066.18	521105.52	0.006	510.29	3.06
18	SB-3-SO-32	2	406068.65	521102.54	0.006	222.69	1.34
19	SB-3-SO-31	2	406070.65	521111.54	0.0060	372.53	2.24
20	SB-3-SO-30	2	406069.65	521106.54	0.0060	67.32	0.40
21	SB-3-SO-29	2	406065.65	521101.54	0.0060	2803.04	16.82
22	GS09-200	3	406098.38	521153.16	0.0014	307.29	0.43
23	GS08-201	3	406084.63	521156.14	0.0014	221.17	0.31
24	MW-73	2	406314.15	521207.70	0.0012	22107.90	26.53
25	GS08-200	3	406072.39	521140.84	0.0012	618.59	0.74
26	GS011-200	2	406157.30	521131.58	0.0012	4355.22	5.23
27	B2-2-201	3	406112.90	521102.90	0.0012	575.06	0.69
28	GS09-201	3	406110.19	521164.06	0.0011	562.32	0.62
29	MW-16C	1	406908.09	521625.62	0.0011	48603.03	53.46
30	MW-79	1	405449.70	520636.53	0.0011	35602.50	39.16
31	GS011-201	3	406134.69	521144.24	0.0010	411.18	0.41
32	B2-1-201	2	406131.46	521111.85	0.0010	340.48	0.34
33	MW-69	2	406536.63	521388.59	0.00098	36493.45	35.76
SUM						**223300.13**	**17403.36**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.08**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.2**

TABLE L-9
BENZENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW18							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**BZ MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**BZ WEIGHTED CONCENTRATION**
1	SB-6-SO-4	1	405206.08	521010.94	0.75	2541.99	1906.50
2	108-1	1	405845.27	521474.08	0.17	516.40	87.79
3	L4-1	1	406070.59	521518.00	0.15	21106.36	3165.95
4	MC2-1	1	406297.23	521715.66	0.12	88188.88	10582.67
5	111-1	1	405758.01	521375.73	0.12	563.87	67.66
6	SB-6-SO-3	1	405198.65	520981.54	0.006	17176.65	103.06
7	B6-4	1	405215.23	521020.85	0.006	3518.66	21.11
8	B6-5	1	405242.83	521010.90	0.005	20019.66	100.10
9	B6-8	1	405231.33	520975.69	0.005	633.59	3.17
10	B6-7	1	405207.75	520983.04	0.005	489.96	2.45
11	B6-6	1	405222.53	520997.12	0.005	503.29	2.52
12	PL05-102	3	405813.59	521411.72	0.0021	544.35	1.14
13	SB-H5	1	405796.62	521361.23	0.0013	1083.31	1.41
14	SB-H4	1	405786.43	521379.90	0.0013	891.33	1.16
15	PL05-101	3	405764.29	521428.04	0.0013	451.01	0.59
16	SB-A8	1	405605.37	521236.25	0.0012	24543.13	29.45
17	SB-M3G	1	405899.47	521453.23	0.0012	732.00	0.88
18	PL06-102	3	405903.77	521408.57	0.0012	856.35	1.03
19	PL06-101	3	405864.09	521429.73	0.0012	951.19	1.14
20	PL06-100	3	405829.95	521384.47	0.0012	1166.59	1.40
21	PL05-103	3	405811.26	521389.40	0.0012	525.89	0.63
22	MW-88	1	405949.90	521449.90	0.0012	5024.48	6.03
23	SB-G5	3	405767.07	521356.04	0.0012	1145.74	1.37
24	SB-F5	1	405737.53	521350.85	0.0012	763.58	0.92
25	PL05-200	2	405729.78	521398.66	0.0012	481.47	0.58
26	SB-D5	1	405678.43	521340.47	0.0011	3847.39	4.23
27	SB-F4	1	405732.34	521380.40	0.0011	323.85	0.36
28	SB-AOC1C-2013-109	2	405659.44	521268.49	0.0011	4592.91	5.05
29	PL05-201	2	405746.61	521406.82	0.0011	714.29	0.79
30	MW-84A	2	405721.93	521372.24	0.0011	1010.70	1.11
31	MW-84	2	405746.47	521373.78	0.0011	369.51	0.41
32	SB-M4	2	405909.62	521411.55	0.0010	482.79	0.48
33	SB-M3B	1	405919.35	521452.94	0.0010	1285.14	1.29
34	SB-M3	2	405904.43	521441.09	0.0010	585.64	0.59
35	SB-K2	1	405840.14	521460.26	0.0010	938.34	0.94
36	SB-J5	1	405826.17	521366.42	0.0010	730.76	0.73
37	SB-H3	1	405786.04	521427.05	0.0010	1046.89	1.05
38	SB-F6	1	405742.72	521321.30	0.0010	1339.14	1.34
39	SB-E7	2	405718.36	521286.56	0.0010	1067.23	1.07
40	SB-L2	1	405869.69	521465.45	0.00099	1044.72	1.03
41	SB-J3	1	405815.79	521425.52	0.00098	934.85	0.92
42	SB-E6	2	405713.17	521316.11	0.00096	1304.79	1.25
43	SB-L3	2	405874.88	521435.90	0.00095	676.14	0.64
44	SB-K3	1	405845.33	521430.71	0.00093	906.35	0.84
45	SB-E5	1	405707.98	521345.66	0.00093	1018.80	0.95
46	SB-M1	1	405894.04	521500.19	0.00090	4253.34	3.83
47	SB-J4	1	405820.98	521395.97	0.00090	406.83	0.37
SUM						**223300.13**	**16119.95**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.07**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.2**

TABLE L-10
BENZENE CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW03							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**BZ MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**BZ WEIGHTED CONCENTRATION**
1	SB-10-SO-10-101	1	406628.40	520177.72	0.670	1128.32	755.98
2	SB-10-SO-209	1	406649.49	520210.81	0.360	1607.43	578.68
3	SB-10-SO-10-100	1	406625.65	520173.54	0.340	303.54	103.20
4	SB-AOC10-2013-109	1	406707.19	520202.86	0.170	89234.46	15169.86
5	SB-10-SO-10-103	1	406621.16	520171.23	0.076	1400.47	106.44
6	SB-AOC10-2013-100	1	406622.54	520142.47	0.035	3462.69	121.19
7	SB-10-SO-11	2	406646.65	520124.54	0.034	3187.96	108.39
8	B10-3	1	406526.65	520111.54	0.02	36252.91	725.06
9	SB-AOC10-2013-102	1	406691.73	520156.14	0.001	3252.22	3.25
SUM						**139830.01**	**17672.04**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.1264**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.2**

TABLE L-10
BENZENE CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW04							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**BZ MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**BZ WEIGHTED CONCENTRATION**
1	B8-4	1	406531.72	520234.75	1.800	312.63	562.74
2	B8-4-102	1	406551.36	520246.07	1.000	1460.80	1460.80
3	SB-10-SO-7	1	406779.65	520374.54	0.850	3140.08	2669.07
4	B8-4-100	1	406545.18	520223.83	0.210	756.05	158.77
5	B8-4-101	1	406525.31	520242.60	0.180	584.80	105.26
6	SB-8-SO-12-101	1	406521.28	520211.50	0.037	1106.25	40.93
7	B8-4-103	1	406537.24	520249.32	0.032	386.35	12.36
8	SB-10-SO-210	1	406642.27	520212.80	0.013	2322.03	30.19
9	SB-10-SO-9	1	406691.65	520260.54	0.007	3438.08	24.07
10	SB-AOC10-2013-101	1	406591.44	520185.91	0.0042	1751.62	7.36
11	SB-10-SO-208	1	406535.14	520199.52	0.002	2267.57	4.54
12	SB-10-SO-7-101	1	406783.57	520370.99	0.0014	70910.99	99.28
13	SB-AOC8B-2013-102	1	406493.88	520187.05	0.0013	34739.46	45.16
14	SB-AOC10-2013-103	1	406578.51	520232.41	0.0012	3551.90	4.26
15	SB-AOC10-2013-107	1	406672.56	520290.94	0.0012	7956.92	9.55
16	SB-10-SO-7-102	1	406774.84	520372.04	0.0012	5204.57	6.25
SUM						**139890.10**	
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0000**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.2**

TABLE L-10
BENZENE CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW05							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**BZ MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**BZ WEIGHTED CONCENTRATION**
1	SB-AOC8B-2013-104	1	406374.67	520269.99	1.300	1143.63	1486.71
2	SB-8-SO-14-101	1	406353.72	520201.35	1.100	752.21	827.43
3	B8-6-100	1	406408.23	520267.55	0.310	2619.00	811.89
4	SB-AOC8B-2013-105	1	406450.08	520243.59	0.081	3791.67	307.12
5	B8-8	1	406341.67	520187.92	0.0611	3205.00	195.83
6	B8-8-2	1	406336.69	520203.90	0.059	4959.43	292.61
7	SB-10-SO-5A	2	406859.70	520524.59	0.034	2190.57	74.48
8	B10-7	1	406870.65	520478.54	0.021	2094.96	43.99
9	SB-AOC10-2013-117	1	406788.88	520485.71	0.014	9316.97	130.44
10	SB-10-SO-6	1	406693.07	520419.39	0.006	16056.97	96.34
11	SB-10-SO-5	1	406852.70	520540.59	0.006	2507.77	15.05
12	SB-AOC8B-2013-107	1	406461.79	520327.38	0.0017	3582.77	6.09
13	B8-8-3	1	406352.66	520231.29	0.0016	1807.89	2.89
14	SB-AOC10-2013-122	1	406893.64	520585.73	0.0013	52370.17	68.08
15	SB-AOC8B-2013-109	1	406393.92	520215.20	0.0012	1727.17	2.07
16	B8-8-4	1	406387.24	520180.31	0.0011	856.63	0.94
17	SB-AOC10-2013-120	1	406870.10	520549.05	0.00094	2850.38	
18	B8-8-4-103	1	406386.20	520186.41	0.00088	719.76	0.63
19	SB-AOC8B-2013-108	1	406529.66	520298.41	0.00035	12676.57	4.44
20	SB-AOC8B-2013-103	1	406436.51	520208.36	0.00024	1274.93	0.31
SUM						**126504.46**	**4367.35**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0345**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.2**

TABLE L-10
BENZENE CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW06							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**BZ MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**BZ WEIGHTED CONCENTRATION**
1	SB-8-SO-11	1	406389.65	520297.54	1.4	1931.46	2704.05
2	JSO11-101	1	406363.10	520283.01	0.066	3788.72	250.06
3	SB-10-SO-2	2	406939.65	520727.54	0.008	1355.23	10.84
4	SB-10-SO-1	2	406977.65	520786.54	0.007	33486.43	234.40
5	B8-5	1	406298.36	520322.61	0.006	25961.39	155.77
6	SB-10-SO-3	1	406814.65	520639.54	0.006	17068.11	102.41
7	SB-AOC10-2013-123	1	406920.73	520640.18	0.0011	2063.51	2.27
8	SB-AOC10-2013-124	1	406881.99	520635.22	0.001	2006.16	2.01
9	SB-AOC10-2013-121	1	406840.91	520601.89	0.00099	10708.54	10.60
10	SB-AOC10-2013-127	1	406917.01	520735.20	0.00096	1225.87	1.18
11	SB-AOC10-2013-129	1	406954.52	520718.01	0.00096	6040.49	5.80
12	SB-AOC10-2013-125	1	406853.93	520660.55	0.00094	2909.62	2.74
13	SB-AOC10-2013-128	1	406903.45	520689.99	0.00091	3175.42	2.89
14	SB-AOC8B-2013-106	1	406401.68	520353.45	0.00023	28361.59	6.52
SUM						**140082.54**	**3491.53**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0249**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.2**

TABLE L-10
BENZENE CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW12							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**BZ MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**BZ WEIGHTED CONCENTRATION**
1	B3-5	1	406012.77	520808.40	1.5	429.92	644.88
2	B3-1	2	406012.66	520823.22	0.78	3580.24	2792.58
3	FSO8	1	406040.98	520803.44	0.14	38724.16	5421.38
4	FSO7	1	406020.26	520783.73	0.14	1128.94	158.05
5	SB-3-SO-24	1	405992.05	520813.77	0.03	2460.53	78.74
6	SB-3-SO-22	1	406003.17	520819.59	0.023	123.00	2.83
7	SB-3-SO-23	1	405998.25	520821.68	0.007	1156.99	8.10
8	SB-3-SO-27	1	405983.43	520773.13	0.006	28316.96	169.90
9	B3-4-200	1	406021.22	520816.49	0.0012	1820.58	2.18
10	MW-71	1	406755.81	521280.12	0.001	101066.17	101.07
11	ISO23-3	1	405485.31	520498.99	0.001	44492.65	44.49
SUM						**223300.13**	**9424.21**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0422**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.2**

TABLE L-10
BENZENE CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW14							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**BZ MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**BZ WEIGHTED CONCENTRATION**
1	GSO9	1	406115.79	521150.09	0.30	3648.95	1094.69
2	GSO11	1	406141.95	521128.65	0.13	689.88	89.69
3	GSO7	1	406093.31	521098.97	0.01	101126.20	1011.26
4	B2-1-201	1	406131.46	521111.85	0.0012	1904.47	2.29
5	GS011-200	1	406157.30	521131.58	0.0012	115930.62	139.12
SUM						**223300.13**	**2337.04**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0105**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.2**

TABLE L-11
CHLOROBENZENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW09							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**CB MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**CB WEIGHTED CONCENTRATION**
1	TP9-3-203	3	406597.4551	520874.403	130	1896.04	246485.58
2	TP9-2-300R	3	406672.7987	520849.3539	2.20	4555.23	10021.50
3	TP9-3-305	3	406523.6363	520814.619	1.90	5953.29	11311.25
4	TP9-3	2	406572.39	520874.38	1.70	290.67	494.14
5	SB-7-SO-6	4	405828.35	520387.7	0.85	32071.87	27261.09
6	SB-7-SO-7	5	405908.28	520375.18	0.75	3084.11	2313.08
7	HSO6	1	406679.419	520933.969	0.74	85177.63	63031.45
8	CE-1	1	406018.009	520435.508	0.73	1897.42	1385.12
9	HSO3	1	406353.393	520701.016	0.72	21918.51	15781.33
10	CE-2	2	406057.063	520463.789	0.72	2888.57	2079.77
11	JSO5	1	405991.141	520498.857	0.69	1606.53	1108.50
12	JSO6	1	406006.952	520496.608	0.65	2278.62	1481.10
13	HSO5	1	406538.179	520856.579	0.58	423.19	245.45
14	TP9-2-202	3	406622.8867	520799.5047	0.37	437.36	161.82
15	TP9-3-205	3	406572.441	520849.4209	0.36	530.88	191.12
16	TP9-2-204	3	406572.5883	520799.323	0.33	1444.19	476.58
17	TP9-2-304	3	406543.3684	520758.7496	0.17	6267.45	1065.47
18	MOA-B-S16	1	406049.65	520453.33	0.15	662.89	99.43
19	MOA-B-S15	1	406028.52	520429.37	0.15	744.19	111.63
20	MOA-B-S10	1	406041.92	520444.72	0.15	694.89	104.23
21	TP9-3-101	2	406577.25	520873.755	0.14	339.24	47.49
22	TP9-3-204	3	406597.3914	520849.323	0.088	583.08	51.31
23	TP9-2	2	406603.86	520814.04	0.008	537.20	4.30
24	SB-7-SO-4	5	405917.72	520420.99	0.007	3541.07	24.79
25	SB-7-SO-5	4	405866.65	520375.54	0.007	1322.44	9.26
26	B-3A	1	406120.7083	520505.0352	0.006	3194.77	19.17
27	B-3D	1	406132.3327	520590.3695	0.006	2418.07	14.51
28	B8-9	2	406002.67	520497.83	0.006	331.39	1.99
29	B7-6	3	405965.06	520416.27	0.006	4197.24	25.18
30	B7-2	3	405868.66	520350.08	0.006	8943.26	53.66
31	B-4E	1	406079.0315	520561.4604	0.006	999.94	6.00
32	B-4D	1	406128.2816	520535.5327	0.006	617.92	3.71
33	B-4C	1	406094.0777	520546.8108	0.006	1669.96	10.02
34	B-4B	1	406107.3637	520558.9975	0.006	895.75	5.37
35	B-3C	1	406145.7904	520570.6148	0.006	10161.36	60.97
36	B-3B	1	406133.2053	520537.8639	0.006	2239.13	13.43
37	TP7-4	2	405848.1057	520395.3115	0.0056	1339.33	7.50
38	TP9-2-203	3	406597.4996	520799.3252	0.0016	724.99	1.16
39	TP9-3-206	3	406547.4245	520849.3424	0.0014	727.97	1.02
40	TP9-2-201	1	406622.7987	520824.3686	0.0012	1036.42	1.24
41	TP9-2-206	1	406584.9389	520837.142	0.0011	417.58	0.46
42	TP9-2-205	1	406572.3699	520824.4856	0.0011	801.37	0.88
43	TP9-2-200	3	406622.7234	520849.3539	0.0011	1647.61	1.81
SUM						**223510.61**	**385574.87**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**1.73**
SITE-SPECIFIC IGWSRS (MG/KG)							**83**

TABLE L-12
CHLOROBENZENE CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW05							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**CB MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**CB WEIGHTED CONCENTRATION**
1	SB-AOC8B-2013-104	1	406374.667	520269.9895	87	1143.63	99495.54
2	B8-8	1	406341.67	520187.92	4	16724.96	66899.86
3	B8-6-100	1	406408.23	520267.55	1.5	2619.00	3928.50
4	SB-8-SO-14-101	1	406353.72	520201.354	0.82	752.21	616.81
5	B8-8-2	1	406336.685	520203.902	0.56	4959.43	2777.28
6	SB-10-SO-5A	2	406859.7	520524.59	0.071	2190.57	155.53
7	SB-AOC10-2013-117	1	406788.8779	520485.7086	0.039	9316.97	363.36
8	SB-AOC8B-2013-105	1	406450.077	520243.585	0.028	3791.67	106.17
9	B10-7	1	406870.65	520478.54	0.027	2094.96	56.56
10	SB-10-SO-6	1	406693.07	520419.39	0.006	16056.97	96.34
11	SB-10-SO-5	1	406852.7	520540.59	0.006	2507.77	15.05
12	B8-8-3	1	406352.656	520231.287	0.0059	1807.89	10.67
13	B8-8-4	1	406387.235	520180.305	0.0057	856.63	4.88
14	B8-8-4-103	1	406386.1986	520186.4086	0.0026	719.76	1.87
15	SB-AOC8B-2013-103	1	406436.513	520208.3594	0.0017	1274.93	2.17
16	SB-AOC8B-2013-107	1	406461.7919	520327.379	0.0014	3582.77	5.02
17	SB-AOC8B-2013-109	1	406393.9214	520215.2028	0.0012	1727.17	2.07
18	SB-AOC10-2013-122	1	406893.643	520585.7332	0.00055	52370.17	28.80
19	SB-AOC8B-2013-108	1	406529.661	520298.4095	0.00041	12676.57	5.20
20	SB-AOC10-2013-120	1	406870.099	520549.0508	0.00037	2850.38	1.05
SUM						**140024.42**	**174572.74**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**1.25**
SITE-SPECIFIC IGWSRS (MG/KG)							**83**

TABLE L-13
TRICHLOROETHENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW03							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	SB-AOC10-2013-108	3	406713.65	520248.94	2.10	4118.62	8649.11
2	SB-10-SO-10-101	3	406628.40	520177.72	0.84	1626.41	1366.19
3	SB-10-SO-10-103	3	406621.16	520171.23	0.51	1110.35	566.28
4	SB-AOC10-2013-109	2	406707.19	520202.86	0.46	3739.48	1720.16
5	WSO7	1	406778.38	520199.47	0.14	6770.94	947.93
6	SB-AOC10-2013-102	1	406691.73	520156.14	0.13	3197.63	415.69
7	B10-3	1	406526.65	520111.54	0.024	33459.43	803.03
8	SB-10-SO-11	2	406646.65	520124.54	0.008	2804.91	22.44
9	SB-10-SO-8	2	406898.65	520318.54	0.007	74129.55	518.91
10	SB-AOC10-2013-100	1	406622.54	520142.47	0.0017	1708.04	2.90
11	SB-10-SO-10-102	4	406629.35	520170.33	0.0016	801.43	1.28
12	MW-64	2	406775.67	520187.06	0.0015	1244.85	1.87
13	MW-62	2	406571.65	520125.22	0.0015	5078.15	7.62
14	SB-10-SO-10-100	3	406625.65	520173.54	0.0013	40.19	0.05
SUM						**139830.00**	**15023.46**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.1074**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-13
TRICHLOROETHENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW04							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	SB-AOC10-2013-115	2	406806.80	520386.89	0.600	14292.00	8575.20
2	B8-4-100	2	406545.18	520223.83	0.440	922.29	405.81
3	SB-AOC10-2013-103	2	406578.51	520232.41	0.220	1869.40	411.27
4	SB-8-SO-12-100	3	406534.06	520221.99	0.096	306.42	29.42
5	SB-10-SO-9	4	406691.65	520260.54	0.012	1622.17	19.47
6	SB-10-SO-4	2	407011.65	520554.54	0.009	56053.36	504.48
7	B8-4	1	406531.72	520234.75	0.006	267.30	1.60
8	B8-7	2	406435.59	520173.60	0.006	24027.85	144.17
9	B8-2	2	406554.28	520160.57	0.006	1913.30	11.48
10	SB-AOC8B-2013-102	2	406493.88	520187.05	0.0047	2793.08	13.13
11	B8-4-102	2	406551.36	520246.07	0.004	1237.38	4.95
12	SB-8-SO-12-101	2	406521.28	520211.50	0.0035	1075.78	3.77
13	SB-8-SO-12-103	2	406506.58	520228.65	0.0023	852.40	1.96
14	SB-10-SO-7-103	4	406782.34	520378.79	0.0023	222.09	0.51
15	SB-8-SO-12-102	2	406514.94	520235.49	0.0022	349.37	0.77
16	SB-10-SO-7-100	3	406779.65	520374.54	0.0018	42.96	0.08
17	SB-AOC10-2013-111	2	406777.77	520312.12	0.0015	2355.32	3.53
18	SB-AOC10-2013-113	2	406729.55	520376.71	0.0014	1667.45	2.33
19	SB-AOC10-2013-101	2	406591.44	520185.91	0.0014	1535.88	2.15
20	SB-AOC10-2013-104	2	406646.43	520215.69	0.0012	1430.47	1.72
21	SB-AOC10-2013-110	2	406722.79	520328.68	0.0012	3870.57	4.64
22	SB-AOC8B-2013-101	3	406475.43	520136.97	0.0011	7450.16	8.20
23	SB-AOC10-2013-105	2	406615.65	520258.68	0.0011	2731.66	3.00
24	SB-AOC10-2013-107	2	406672.56	520290.94	0.0011	3044.26	3.35
25	SB-AOC10-2013-112	2	406773.14	520352.95	0.0011	1595.61	1.76
26	SB-10-SO-7-102	3	406774.84	520372.04	0.0011	429.89	0.47
27	SB-10-SO-7-101	3	406783.57	520370.99	0.0011	693.81	0.76
28	SB-AOC10-2013-106	2	406617.39	520307.06	0.001	2079.47	2.08
29	SB-AOC10-2013-114	2	406774.34	520389.32	0.00098	1301.64	1.28
30	B8-4-103	2	406537.24	520249.32	0.00095	461.95	0.44
31	MW-75	1	406675.30	520260.88	0.00091	1394.80	1.27
SUM						**139890.10**	**10165.03**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0727**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-13
TRICHLOROETHENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW05							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	B8-8-2-102	4	406337.76	520208.72	13	805.55	10472.12
2	B8-8-1	4	406334.29	520181.06	1.6	41.98	67.17
3	SB-8-SO-14-100	4	406352.65	520196.54	0.870	365.87	318.31
4	SB-8-SO-14-101	3	406353.72	520201.35	0.820	486.64	399.05
5	B8-6-100	3	406408.23	520267.55	0.740	46.36	34.31
6	B8-6-101	3	406411.05	520271.71	0.600	1510.75	906.45
7	B8-8-2-101	4	406332.18	520200.92	0.580	1713.89	994.06
8	B8-8-4-102	4	406386.12	520175.44	0.310	553.46	171.57
9	SB-AOC10-2013-117	2	406788.88	520485.71	0.260	6074.80	1579.45
10	B8-8-1-102	4	406329.67	520178.08	0.220	3231.72	710.98
11	SB-10-SO-6	4	406693.07	520419.39	0.160	5645.12	903.22
12	WSO6	1	406896.31	520519.47	0.150	4021.51	603.23
13	B8-8-1-101	4	406338.41	520177.03	0.140	597.79	83.69
14	B8-8-1-103	3	406331.51	520185.78	0.100	391.48	39.15
15	B8-6-103	3	406403.54	520264.95	0.0816	678.36	55.35
16	B8-8-2-100	4	406336.69	520203.90	0.0816	90.71	7.40
17	B8-6-102	3	406412.28	520263.90	0.057	810.17	46.18
18	B8-3	2	406591.48	520327.19	0.014	6487.60	90.83
19	SB-10-SO-5	3	406852.70	520540.59	0.009	3563.01	32.07
20	B8-8	2	406341.67	520187.92	0.008	217.10	1.74
21	B10-1	1	406637.43	520408.54	0.006	4267.81	25.61
22	B10-8	2	406976.45	520636.80	0.006	46377.97	278.27
23	SB-AOC8B-2013-100	3	406329.61	520147.93	0.0016	14679.26	23.49
24	SB-AOC10-2013-118	2	406836.13	520467.12	0.0015	2660.11	3.99
25	SB-AOC8B-2013-105	2	406450.08	520243.59	0.0014	3629.90	5.08
26	SB-AOC10-2013-116	2	406752.99	520429.64	0.0012	4532.98	5.44
27	SB-AOC8B-2013-109	2	406393.92	520215.20	0.0012	1654.63	1.99
28	SB-AOC8B-2013-103	2	406436.51	520208.36	0.0012	1256.10	1.51
29	SB-AOC8B-2013-108	2	406529.66	520298.41	0.0012	6262.51	7.52
30	B9-16-200	3	406651.75	520384.51	0.0012	3706.62	4.45
31	B8-8-4	3	406387.24	520180.31	0.0011	57.97	0.06
32	SB-AOC10-2013-122	2	406893.64	520585.73	0.0011	4849.24	5.33
33	SB-AOC8B-2013-107	2	406461.79	520327.38	0.001	3497.23	3.50
34	SB-AOC8B-2013-104	2	406374.67	520269.99	0.001	1034.05	1.03
35	B8-8-4-103	3	406386.20	520186.41	0.001	559.18	0.56
36	B8-8-3	1	406352.66	520231.29	0.001	1671.37	1.67
37	SB-AOC10-2013-120	1	406870.10	520549.05	0.001	1615.11	1.62
38	B8-8-4-101	3	406392.23	520178.95	0.00099	378.52	0.37
SUM						**140024.42**	**17887.78**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.1277**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-13
TRICHLOROETHENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW06							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	SB-8-SO-11-100	3	406389.65	520297.54	1.30	35.21	45.77
2	JSO11-101	3	406363.10	520283.01	0.77	217.78	167.69
3	SB-8-SO-11-102	3	406385.90	520300.92	0.27	830.17	224.15
4	SB-8-SO-11-103	3	406394.04	520299.93	0.23	919.21	211.42
5	WSO9	1	406977.65	520771.10	0.19	8155.46	1549.54
6	JSO7	1	406244.55	520278.43	0.15	4470.72	670.61
7	JSO12	1	406361.48	520293.37	0.13	1313.98	170.82
8	JSO8	1	406234.66	520274.94	0.12	16547.42	1985.69
9	SB-AOC10-2013-129	2	406954.52	520718.01	0.077	4986.86	383.99
10	SB-AOC10-2013-123	2	406920.73	520640.18	0.031	2063.51	63.97
11	B10-2	1	406708.86	520523.83	0.024	19901.04	477.63
12	JSO11-102	2	406356.45	520280.32	0.022	1362.82	29.98
13	SB-10-SO-3-101	2	406815.62	520644.36	0.01	1264.92	12.65
14	SB-AOC10-2013-121	2	406840.91	520601.89	0.0072	2054.44	14.79
15	SB-10-SO-1	1	406977.65	520786.54	0.006	26519.59	159.12
16	B8-5	1	406298.36	520322.61	0.006	4691.72	28.15
17	B8-1	2	406451.19	520410.86	0.006	17350.80	104.10
18	SB-10-SO-2	3	406939.65	520727.54	0.006	1220.24	7.32
19	SB-AOC10-2013-128	2	406903.45	520689.99	0.0044	3175.42	13.97
20	SB-AOC8B-2013-106	2	406401.68	520353.45	0.0034	6818.48	23.18
21	SB-AOC10-2013-119	2	406812.02	520564.00	0.0033	3821.96	12.61
22	JSO11-100	3	406358.48	520284.97	0.0021	35.66	0.07
23	SB-10-SO-3-103	2	406810.03	520636.56	0.0018	3964.26	7.14
24	SB-AOC10-2013-127	2	406917.01	520735.20	0.0015	1225.87	1.84
25	SB-AOC10-2013-124	2	406881.99	520635.22	0.0015	2006.16	3.01
26	JSO11-103	3	406353.73	520286.51	0.0014	1370.83	1.92
27	SB-AOC10-2013-125	2	406853.93	520660.55	0.0011	2750.15	3.03
28	SB-10-SO-3-100	2	406814.65	520639.54	0.0011	39.05	0.04
29	SB-10-SO-3-102	2	406818.77	520635.51	0.001	784.58	0.78
30	SB-8-SO-11-101	2	406388.00	520292.67	0.001	184.25	0.18
SUM						**140082.54**	**6375.16**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0455**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-13
TRICHLOROETHENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW07							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	JSO19	1	406112.19	520327.30	4.60	128.28	590.07
2	JSO29	1	406098.02	520332.37	1.5	176.32	264.49
3	JSO33	1	406104.47	520308.18	0.92	14720.20	13542.59
4	JSO32	1	406126.39	520334.59	0.70	16876.18	11813.33
5	JSO30	1	406112.19	520327.30	0.25	123.88	30.97
6	JSO31	1	406126.86	520319.65	0.19	6197.81	1177.58
7	TP9-1	1	406514.60	520524.31	0.033	29041.95	958.38
8	B10-4	1	406713.79	520616.71	0.024	6265.01	150.36
9	B10-6	2	406792.04	520679.76	0.022	10558.51	232.29
10	HSO9	1	406620.29	520638.24	0.01	12483.22	99.87
11	MOA-B-S20	1	406102.01	520336.01	0.01	100.31	0.80
12	MOA-B-S11	1	406083.08	520327.54	0.01	43924.15	351.39
13	MOA-B-BS1	1	406116.14	520341.79	0.01	313.28	2.51
14	SB-AOC10-2013-126	3	406875.67	520724.02	0.0015	82340.62	123.51
SUM						**223249.73**	**29338.14**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.1300**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-13
TRICHLOROETHENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW08							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	MOA-B-S13	1	406049.53	520383.18	0.21	1321.43	277.50
2	JSO20	1	406097.24	520401.94	0.21	422.87	88.80
3	WSO8	1	407024.21	520973.51	0.18	64270.66	11568.72
4	MOA-B-S14	1	406037.36	520409.96	0.17	764.99	130.05
5	MOA-B-S23	1	406105.94	520372.87	0.16	352.24	56.36
6	MOA-B-S18	1	406082.47	520398.17	0.16	728.65	116.58
7	MOA-B-BS2	1	406122.53	520356.04	0.16	575.37	92.06
8	JSO21	1	406118.43	520414.74	0.15	20035.31	3005.30
9	HSO10	1	406497.37	520606.06	0.15	32732.08	4909.81
10	MOA-B-S7	1	406050.27	520400.38	0.15	531.80	79.77
11	MOA-B-S22	1	406101.15	520370.65	0.15	566.79	85.02
12	MOA-B-S17	1	406070.05	520425.07	0.15	774.22	116.13
13	MOA-B-BS3	1	406109.26	520358.98	0.15	610.42	91.56
14	HSO7	1	406797.02	520864.61	0.14	18627.91	2607.91
15	JSO9	1	406118.22	520394.86	0.14	1887.05	264.19
16	HSO8	1	406722.82	520748.26	0.14	5394.54	755.24
17	JSO10	1	406088.91	520417.90	0.13	1012.30	131.60
18	ISO29	2	405991.09	520366.71	0.12	2986.97	358.44
19	MOA-B-S12	1	406063.05	520353.33	0.085	3574.22	303.81
20	TP9-2-303R	3	406671.18	520786.55	0.008	12457.88	99.66
21	TP9-2-301R	3	406672.72	520821.61	0.008	3223.01	25.78
22	MW-22	2	405962.35	520326.62	0.006	49920.36	299.52
SUM						**222771.07**	**25463.81**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.1143**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-13
TRICHLOROETHENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW09							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	SB-7-SO-6	4	405828.35	520387.70	1.600	5455.00	8728.00
2	TP9-2-204	3	406572.59	520799.32	1.300	1444.19	1877.45
3	CE-1	1	406018.01	520435.51	0.900	1766.47	1589.82
4	TP9-3-205	3	406572.44	520849.42	0.670	530.88	355.69
5	TP9-2-202	3	406622.89	520799.50	0.370	437.36	161.82
6	JSO5	1	405991.14	520498.86	0.330	576.95	190.39
7	MOA-B-S16	1	406049.65	520453.33	0.220	662.89	145.84
8	JSO6	1	406006.95	520496.61	0.220	2275.46	500.60
9	ISO28	1	405963.39	520470.31	0.150	2249.88	337.48
10	MOA-B-S15	1	406028.52	520429.37	0.150	744.19	111.63
11	MOA-B-S10	1	406041.92	520444.72	0.150	694.89	104.23
12	CE-2	2	406057.06	520463.79	0.140	2888.57	404.40
13	TP9-3-101	2	406577.25	520873.76	0.140	339.24	47.49
14	HSO5	1	406538.18	520856.58	0.120	423.19	50.78
15	B-3B	1	406133.21	520537.86	0.094	2239.13	210.48
16	TP9-3-204	3	406597.39	520849.32	0.066	583.08	38.48
17	B-3A	1	406120.71	520505.04	0.017	3194.77	54.31
18	TP9-2	2	406603.86	520814.04	0.008	537.20	4.30
19	TP9-2-300R	3	406672.80	520849.35	0.008	4555.23	36.44
20	TP9-3-305	3	406523.64	520814.62	0.008	5953.29	47.63
21	TP9-3	2	406572.39	520874.38	0.008	290.67	2.33
22	HSO6	1	406679.42	520933.97	0.008	85177.63	681.42
23	HSO3	1	406353.39	520701.02	0.008	21918.51	175.35
24	SB-7-SO-5	4	405866.65	520375.54	0.007	1322.44	9.26
25	SB-7-SO-4	5	405917.72	520420.99	0.007	3169.02	22.18
26	B-3D	1	406132.33	520590.37	0.006	2418.07	14.51
27	B8-9	2	406002.67	520497.83	0.006	324.58	1.95
28	B7-6	3	405965.06	520416.27	0.006	3489.91	20.94
29	B7-2	3	405868.66	520350.08	0.006	8943.26	53.66
30	B-4E	1	406079.03	520561.46	0.006	999.94	6.00
31	B-4D	1	406128.28	520535.53	0.006	617.92	3.71
32	B-4C	1	406094.08	520546.81	0.006	1669.96	10.02
33	TP9-3-206	3	406547.42	520849.34	0.0042	727.97	3.06
34	SB-7-SO-7	5	405908.28	520375.18	0.003	3084.11	9.25
35	TP7-4	2	405848.11	520395.31	0.0027	1339.33	3.62
36	B-4B	1	406107.36	520559.00	0.002	895.75	1.79
37	B-3C	1	406145.79	520570.61	0.002	10161.36	20.32
38	TP9-2-203	3	406597.50	520799.33	0.0016	724.99	1.16
39	TP9-3-203	3	406597.46	520874.40	0.0014	1896.04	2.65
40	TP9-2-201	1	406622.80	520824.37	0.0012	1036.42	1.24
41	TP9-2-206	1	406584.94	520837.14	0.0011	417.58	0.46
42	TP9-2-205	1	406572.37	520824.49	0.0011	801.37	0.88
43	TP9-2-200	3	406622.72	520849.35	0.0011	1647.61	1.81
44	TP9-2-304	3	406543.37	520758.75	0.00027	6267.45	1.69
SUM						**196893.74**	**16046.53**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0815**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-13
TRICHLOROETHENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW10							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	TP9-3-304	3	406502.91	520897.25	0.960	10087.55	9684.05
2	B7-3	3	405778.17	520450.87	0.82	31.95	26.20
3	B7-5	3	405925.66	520489.91	0.280	10788.95	3020.91
4	ISO7	2	405734.04	520428.85	0.190	1263.74	240.11
5	HSO2	1	406319.58	520821.96	0.140	23735.60	3322.98
6	TP9-3-202	3	406597.29	520899.24	0.043	808.60	34.77
7	MW-77	2	405729.26	520411.58	0.040	32460.32	1298.41
8	TP9-3-303	3	406508.92	520931.23	0.029	2244.76	65.10
9	TP7-1	2	405839.82	520515.38	0.011	1958.73	21.55
10	B7-3-101	3	405780.93	520446.87	0.007	633.99	4.44
11	B-4A	1	406101.44	520578.72	0.006	2193.60	13.16
12	B-4F	1	406088.37	520604.01	0.006	5114.71	30.69
13	B-3F	1	406077.71	520643.23	0.006	9762.85	58.58
14	B-3E	1	406110.75	520611.26	0.006	9920.74	59.52
15	B7-3-103	3	405779.44	520455.49	0.0052	1741.65	9.06
16	TP7-3	2	405806.94	520426.09	0.005	1528.19	7.64
17	B7-1	1	405835.34	520416.27	0.005	742.59	3.71
18	SB-7-SO-3-100	4	405852.72	520440.99	0.0047	33.39	0.16
19	SB-7-SO-3-102	4	405848.78	520437.90	0.0039	542.77	2.12
20	SB-7-SO-3-103	4	405852.80	520446.04	0.0023	2017.90	4.64
21	B7-3-102	3	405773.37	520451.35	0.0023	626.45	1.44
22	TP9-3-201	3	406572.35	520899.34	0.002	1149.95	2.30
23	MW-78	2	405862.98	520516.72	0.0016	3873.76	6.20
24	TP9-3-302	3	406547.45	520949.37	0.0014	3536.05	4.95
25	TP9-3-301	3	406614.60	520946.33	0.0011	89797.41	98.78
26	TP7-5	1	405803.25	520389.41	0.0011	1837.32	2.02
27	TP7-2	2	405756.36	520433.91	0.0011	1391.44	1.53
28	SB-7-SO-3-101	4	405856.94	520438.30	0.0011	942.35	1.04
29	TP9-3-207	1	406547.45	520874.52	0.0011	1342.77	1.48
30	TP9-3-200	1	406547.32	520899.37	0.001	1234.58	1.23
SUM						**223344.67**	**18028.76**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0807**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-13
TRICHLOROETHENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW11							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	ISO27	2	405848.83	520593.03	0.15	34.88	5.23
2	HSO1	1	406329.14	520945.52	0.140	140252.92	19635.41
3	ISO4	1	405806.46	520508.46	0.140	3573.51	500.29
4	MH5-1	1	405883.35	520593.15	0.130	28711.41	3732.48
5	ISO5-101	4	405737.54	520476.73	0.023	506.17	11.64
6	ISO6-101	4	405723.20	520472.29	0.016	583.78	9.34
7	ISO6-103	4	405721.71	520480.90	0.011	1718.73	18.91
8	ISO5-102	4	405729.98	520481.20	0.01	90.56	0.91
9	ISO27-101	2	405848.63	520587.98	0.0065	1972.66	12.82
10	B7-4	2	405826.69	520520.48	0.006	2032.55	12.20
11	ISO5-100	4	405734.69	520480.68	0.0055	31.95	0.18
12	ISO27-102	2	405844.80	520596.20	0.0054	4094.70	22.11
13	ISO5-103	4	405736.05	520485.34	0.004	3993.33	15.97
14	ISO6-102	4	405715.64	520476.76	0.0036	34086.31	122.71
15	ISO6-100	4	405720.36	520476.32	0.0029	31.75	0.09
16	ISO27-103	1	405852.78	520596.20	0.00097	1584.91	1.54
SUM						**223300.13**	**24101.83**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.1079**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-13
TRICHLOROETHENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW12							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	ISO23	1	405485.31	520508.99	1.6	100.00	160.00
2	HSO4	1	406413.89	521042.11	0.15	43267.21	6490.08
3	ISO26	4	405718.95	520627.24	0.12	36.90	4.43
4	SB-3-SO-25	1	405992.41	520818.85	0.033	244.11	8.06
5	SB-3-SO-27	1	405983.43	520773.13	0.032	9075.24	290.41
6	FSO26-200	3	406004.78	520765.89	0.015	1021.86	15.33
7	SB-3-SO-20	2	405999.52	520818.34	0.007	46.23	0.32
8	SB-3-SO-26	1	405953.38	520826.79	0.006	5168.56	31.01
9	SB-3-SO-21	2	405998.13	520813.53	0.006	114.10	0.68
10	SB-3-SO-19	1	406001.72	520822.88	0.006	85.83	0.51
11	SB-3-SO-18	1	406002.93	520827.93	0.006	2290.54	13.74
12	B3-8	1	405973.60	520802.55	0.006	1544.51	9.27
13	B3-7	1	405979.17	520833.70	0.006	961.42	5.77
14	B3-6	1	406006.81	520810.84	0.006	109.11	0.65
15	B3-3	1	406008.83	520805.90	0.006	175.10	1.05
16	B3-2	1	406006.60	520796.96	0.006	696.55	4.18
17	MW-76	3	405592.60	520491.22	0.0051	10683.22	54.48
18	B6-201	3	405993.32	520788.94	0.0045	324.42	1.46
19	B6-200	3	405986.82	520800.14	0.0044	259.52	1.14
20	ISO26-102	4	405714.78	520630.37	0.0042	6589.05	27.67
21	ISO26-101	4	405720.49	520622.87	0.0036	4959.47	17.85
22	ISO26-103	4	405723.38	520629.39	0.0033	13428.31	44.31
23	MW-66	1	406881.97	521330.19	0.0013	50911.30	66.18
24	MW-71	1	406755.81	521280.12	0.0012	28062.70	33.68
25	B3-4-200	2	406021.22	520816.49	0.0011	20948.43	23.04
26	ISO23-4	2	405475.31	520508.99	0.001	6811.70	6.81
27	ISO23-3	1	405485.31	520498.99	0.001	10364.95	10.36
28	ISO23-2	2	405495.31	520508.99	0.001	3732.42	3.73
29	ISO23-1	2	405485.31	520518.99	0.001	1287.36	1.29
SUM						**223300.13**	**7327.53**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0328**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-13
TRICHLOROETHENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW13							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	ISO9	2	405572.36	520660.91	0.5	438.65	219.33
2	ISO24	2	405506.79	520573.32	0.40	25666.19	10266.48
3	304-1	1	405856.04	520879.29	0.15	11781.64	1767.25
4	304-2	1	405862.52	520868.96	0.15	43695.38	6554.31
5	ISO25	2	405626.12	520662.10	0.14	16334.46	2286.82
6	ISO8	4	405562.43	520667.59	0.14	35.32	4.95
7	ISO10	2	405560.89	520648.24	0.13	3876.48	503.94
8	ISO8-102	4	405560.23	520663.08	0.11	592.58	65.18
9	B7-7	2	405595.48	520652.10	0.006	2108.78	12.65
10	ISO8-101	4	405566.34	520670.51	0.0025	1704.79	4.26
11	MW-68	2	406733.85	521429.79	0.0012	19370.22	23.24
12	ISO8-103	4	405559.00	520670.87	0.0012	1566.46	1.88
13	MW-72	2	406569.28	521244.80	0.001	51469.51	51.47
14	MW-67	1	406874.94	521482.85	0.00098	44659.68	43.77
SUM						**223300.12**	**21805.52**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0977**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-13
TRICHLOROETHENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW14							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	B2-2	1	406103.80	521113.79	15	253.95	3809.24
2	B2-1	1	406119.17	521123.48	2.5	326.79	816.98
3	B2-1-200	3	406107.54	521130.06	2.10	341.32	716.78
4	MC7-1	1	406080.86	521128.90	1.40	263.91	369.47
5	B2-2-200	3	406088.12	521114.11	1.10	283.23	311.55
6	GSO7	2	406093.31	521098.97	0.85	1742.35	1481.00
7	GSO8	2	406086.77	521137.76	0.74	267.24	197.76
8	GSO11	2	406141.95	521128.65	0.58	302.51	175.46
9	SR-2	1	405900.87	520953.19	0.16	21307.12	3409.14
10	GSO3	1	406135.45	521092.97	0.16	1036.75	165.88
11	GSO1	2	406140.47	521161.67	0.16	5070.40	811.26
12	305-3	1	405649.21	520880.16	0.15	7839.49	1175.92
13	305-4	1	405654.28	520877.87	0.14	19528.91	2734.05
14	GSO9	2	406115.79	521150.09	0.14	368.42	51.58
15	GSO35	1	406150.61	521115.63	0.12	863.78	103.65
16	275-1	1	406007.12	521097.57	0.072	9329.90	671.75
17	SB-3-SO-33	2	406066.18	521105.52	0.006	510.29	3.06
18	SB-3-SO-32	2	406068.65	521102.54	0.006	222.69	1.34
19	SB-3-SO-31	2	406070.65	521111.54	0.006	372.53	2.24
20	SB-3-SO-30	2	406069.65	521106.54	0.006	67.32	0.40
21	SB-3-SO-29	2	406065.65	521101.54	0.006	2803.04	16.82
22	GS09-200	3	406098.38	521153.16	0.0014	307.29	0.43
23	GS08-201	3	406084.63	521156.14	0.0014	221.17	0.31
24	MW-73	2	406314.15	521207.70	0.0012	22107.90	26.53
25	GS08-200	3	406072.39	521140.84	0.0012	618.59	0.74
26	B2-2-201	3	406112.90	521102.90	0.0012	575.06	0.69
27	GS09-201	3	406110.19	521164.06	0.0011	562.32	0.62
28	MW-16C	1	406908.09	521625.62	0.0011	48603.03	53.46
29	MW-79	1	405449.70	520636.53	0.0011	35602.50	39.16
30	GS011-200	2	406157.30	521131.58	0.0011	4355.22	4.79
31	GS011-201	3	406134.69	521144.24	0.001	411.18	0.41
32	B2-1-201	2	406131.46	521111.85	0.001	340.48	0.34
33	MW-69	2	406536.63	521388.59	0.00098	36493.45	35.76
SUM						**223300.13**	**17188.58**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0770**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-13
TRICHLOROETHENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW15							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	PL07-04	1	405831.35	521114.72	0.380	15553.43	5910.31
2	DI-4	1	405751.13	521019.66	0.170	1810.09	307.72
3	CP-1	1	405807.47	521051.98	0.150	6145.56	921.83
4	305-2	2	405639.80	520894.43	0.150	3828.57	574.29
5	MC6-1	1	406119.19	521232.72	0.140	26163.86	3662.94
6	L8-1	1	405802.60	521004.12	0.140	3458.26	484.16
7	305-1	1	405629.29	520898.45	0.140	53062.64	7428.77
8	DI-2	1	405705.38	521029.69	0.130	2837.89	368.93
9	DI-3	1	405729.35	521008.16	0.100	5374.86	537.49
10	263-1	1	405738.81	521030.84	0.096	1426.86	136.98
11	MW-70	2	406296.33	521345.64	0.001	103638.10	103.64
SUM						**223300.12**	**20437.04**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0915**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-13
TRICHLOROETHENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW16							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	262-1	1	405714.23	521056.74	0.860	1174.35	1009.94
2	PL07-02	1	405789.17	521151.70	0.140	3487.46	488.24
3	PL07-01	1	405778.16	521131.87	0.140	3429.29	480.10
4	MW-81	2	405730.22	521092.76	0.140	5317.10	744.39
5	255-1	1	405866.63	521218.26	0.140	361.60	50.62
6	113-1	1	405874.77	521207.85	0.140	3165.57	443.18
7	PL07-03	1	405824.80	521120.08	0.130	2595.22	337.38
8	DI-1	1	405688.98	521059.71	0.130	65331.62	8493.11
9	MC5-1	1	406164.38	521351.47	0.130	12646.47	1644.04
10	MW-83	2	406000.53	521305.30	0.011	12046.12	132.51
11	MC4-1	1	406203.98	521460.59	0.010	99148.70	991.49
12	SB-L10	1	405911.22	521229.07	0.0078	1820.74	14.20
13	SB-J10	1	405852.13	521218.69	0.0049	1192.99	5.85
14	SB-M10	2	405940.77	521234.26	0.0028	798.23	2.24
15	SB-M10A	1	405942.26	521231.00	0.0012	2959.69	3.55
16	SB-AOC1C-2013-102	3	405895.64	521262.28	0.0012	1012.40	1.21
17	SB-K9	1	405876.48	521253.43	0.0011	765.18	0.84
18	SB-K10	1	405881.67	521223.88	0.0011	659.50	0.73
19	SB-H10	1	405822.58	521213.49	0.0011	2480.67	2.73
20	SB-M9	1	405935.58	521263.81	0.00092	2907.23	2.67
SUM						**223300.13**	**14849.03**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0665**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-13
TRICHLOROETHENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW17							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	SB-F10	1	405763.49	521203.11	31	317.37	9838.49
2	SB-AOC1C-2013-107	2	405732.84	521241.47	7.90	501.87	3964.73
3	SB-C8	1	405664.46	521246.63	0.28	81.43	22.80
4	MW-82	2	405622.39	521218.13	0.13	65569.53	8524.04
5	SB-AOC1C-2013-110	2	405680.99	521222.54	0.098	1143.32	112.05
6	SB-F10-EX1B	2	405780.70	521214.32	0.084	741.18	62.26
7	SB-F9	2	405758.29	521232.66	0.032	715.23	22.89
8	SB-AOC1C-2013-105	3	405819.80	521231.35	0.025	935.85	23.40
9	MW-80	3	405782.74	521253.32	0.016	1075.10	17.20
10	SB-C8-EX1B	2	405676.05	521247.27	0.015	311.80	4.68
11	SB-AOC1C-2013-111	2	405698.26	521182.85	0.013	5256.49	68.33
12	109-1	1	406036.27	521403.26	0.01	19816.93	198.17
13	110-1	1	405857.13	521338.78	0.01	683.46	6.83
14	MC3-1	1	406245.86	521579.97	0.01	98333.56	983.34
15	239-1	1	405869.52	521321.75	0.01	681.76	6.82
16	SB-AOC1C-2013-103	2	405786.53	521306.19	0.0091	712.96	6.49
17	SB-AOC1C-2013-108	3	405754.73	521192.28	0.008	641.72	5.13
18	SB-AOC1C-2013-101	2	405881.31	521296.45	0.0071	2224.34	15.79
19	PL06-107	1	405848.43	521360.10	0.0064	781.52	5.00
20	SB-J7	2	405836.55	521307.33	0.0061	1300.19	7.93
21	SB-J8	2	405841.74	521277.78	0.0055	1705.83	9.38
22	SB-F10-EX1A	1	405749.62	521211.37	0.0054	630.23	3.40
23	SB-C8-EX1A	2	405660.35	521236.47	0.0045	700.37	3.15
24	SB-C8-EX1C	2	405702.92	521232.90	0.0038	419.34	1.59
25	SB-D9	2	405699.20	521222.28	0.0029	582.31	1.69
26	SB-H7	1	405807.01	521302.14	0.0018	1194.05	2.15
27	SB-AOC1C-2013-100	2	405868.41	521330.48	0.0017	275.03	0.47
28	SB-D8	1	405694.01	521251.82	0.0015	598.33	0.90
29	PL06-103	3	405916.01	521352.65	0.0013	7778.57	10.11
30	PL06-106	1	405872.65	521351.30	0.0011	850.30	0.94
31	PL06-105	1	405882.94	521347.44	0.0011	467.02	0.51
32	PL06-104	1	405891.45	521344.24	0.001	872.47	0.87
33	SB-F7	1	405747.91	521291.75	0.00099	582.82	0.58
34	SB-G7	1	405777.46	521296.95	0.00098	845.85	0.83
35	SB-F8	1	405753.10	521262.21	0.00093	883.92	0.82
36	SB-AOC1C-2013-106	3	405732.45	521290.15	0.00092	376.21	0.35
37	SB-AOC1C-2013-104	3	405806.15	521268.20	0.00059	1143.97	0.67
38	SB-E8	1	405723.55	521257.01	0.00041	814.00	0.33
39	SB-F10-EX1C	2	405724.80	521225.60	0.00014	753.91	0.11
SUM						**223300.13**	**23935.23**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.1072**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-13
TRICHLOROETHENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW18							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	108-1	1	405845.27	521474.08	0.170	516.40	87.79
2	L4-1	1	406070.59	521518.00	0.150	21106.36	3165.95
3	MC2-1	1	406297.23	521715.66	0.120	88188.88	10582.67
4	111-1	1	405758.01	521375.73	0.120	563.87	67.66
5	SB-G5	3	405767.07	521356.04	0.0078	1145.74	8.94
6	SB-A8	1	405605.37	521236.25	0.0071	69426.94	492.93
7	SB-L2	1	405869.69	521465.45	0.0057	1044.72	5.95
8	MW-84	2	405746.47	521373.78	0.0039	369.51	1.44
9	SB-E7	2	405718.36	521286.56	0.0028	1067.23	2.99
10	SB-M1	1	405894.04	521500.19	0.0026	4253.34	11.06
11	PL05-201	2	405746.61	521406.82	0.0024	714.29	1.71
12	PL05-102	3	405813.59	521411.72	0.0021	544.35	1.14
13	MW-88	1	405949.90	521449.90	0.0017	5024.48	8.54
14	MW-84A	2	405721.93	521372.24	0.0014	1010.70	1.41
15	SB-H4	1	405786.43	521379.90	0.0013	891.33	1.16
16	PL05-101	3	405764.29	521428.04	0.0013	451.01	0.59
17	PL06-102	3	405903.77	521408.57	0.0012	856.35	1.03
18	PL05-200	2	405729.78	521398.66	0.0012	481.47	0.58
19	PL06-101	3	405864.09	521429.73	0.0012	951.19	1.14
20	PL06-100	3	405829.95	521384.47	0.0012	1166.59	1.40
21	PL05-103	3	405811.26	521389.40	0.0012	525.89	0.63
22	SB-M3G	1	405899.47	521453.23	0.0012	732.00	0.88
23	SB-F4	1	405732.34	521380.40	0.0011	323.85	0.36
24	SB-D5	1	405678.43	521340.47	0.0011	3847.39	4.23
25	SB-AOC1C-2013-109	2	405659.44	521268.49	0.0011	4592.91	5.05
26	SB-H3	1	405786.04	521427.05	0.001	1046.89	1.05
27	SB-M4	2	405909.62	521411.55	0.001	482.79	0.48
28	SB-M3B	1	405919.35	521452.94	0.001	1285.14	1.29
29	SB-M3	2	405904.43	521441.09	0.001	585.64	0.59
30	SB-K2	1	405840.14	521460.26	0.001	938.34	0.94
31	SB-J3	1	405815.79	521425.52	0.00098	934.85	0.92
32	SB-L3	2	405874.88	521435.90	0.00095	676.14	0.64
33	SB-E6	2	405713.17	521316.11	0.00093	1304.79	1.21
34	SB-K3	1	405845.33	521430.71	0.00093	906.35	0.84
35	SB-J4	1	405820.98	521395.97	0.0009	406.83	0.37
36	SB-F6	1	405742.72	521321.30	0.00064	1339.14	0.86
37	SB-J5	1	405826.17	521366.42	0.00038	730.76	0.28
38	SB-F5	1	405737.53	521350.85	0.00036	763.58	0.27
39	SB-H5	1	405796.62	521361.23	0.00035	1083.31	0.38
40	SB-E5	1	405707.98	521345.66	0.00025	1018.80	0.25
SUM						**223300.13**	**14467.60**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0648**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-13
TRICHLOROETHENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW19							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	MC1-1	1	406344.25	521839.20	0.14	52941.42	7411.80
2	SB-K1	2	405834.95	521489.80	0.0061	35348.53	215.63
3	SB-E3	1	405707.90	521398.15	0.0043	723.79	3.11
4	PL05-106	3	405685.66	521419.38	0.0032	2091.30	6.69
5	PL05-105	3	405710.77	521414.91	0.0014	437.70	0.61
6	SB-F2	1	405721.95	521439.49	0.0012	2381.12	2.86
7	SB-B2	1	405603.76	521418.72	0.0012	2233.05	2.68
8	PL05-100	2	405645.35	521457.01	0.0012	1512.24	1.81
9	PL05-104	3	405722.29	521412.26	0.0011	474.64	0.52
10	SB-C2	1	405633.31	521423.92	0.001	1257.29	1.26
11	SB-B3	1	405608.95	521389.18	0.001	3027.92	3.03
12	SB-A4	1	405584.60	521354.44	0.001	28845.23	28.85
13	PL05-107	2	405647.68	521433.03	0.001	954.95	0.95
14	SB-F1	1	405716.76	521469.04	0.00092	6346.16	5.84
15	SB-C1	1	405628.12	521453.46	0.00012	621.31	0.07
SUM						**139196.63**	**7685.71**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0552**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-13
TRICHLOROETHENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW21							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	106-1	1	405998.95	521826.75	0.770	3413.40	2628.32
2	106-2	1	405997.08	521829.89	0.200	72992.84	14598.57
3	L5-1-103	1	405576.42	521573.99	0.008	36.46	0.29
4	L5-1-102	1	405576.42	521568.99	0.008	21766.66	174.13
5	L5-1-100	1	405572.88	521577.53	0.008	21311.14	170.49
6	L5-1-101	1	405581.42	521573.99	0.008	20389.33	163.11
SUM						**139909.84**	**17734.92**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.1268**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-13
TRICHLOROETHENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW22							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	L1-2	1	405966.23	521979.73	0.16	52517.12	8402.74
2	107-1	1	405858.09	521880.66	0.16	19610.59	3137.69
3	107-3	1	405867.45	521876.46	0.15	1610.78	241.62
4	107-4	1	405862.88	521874.97	0.15	2060.60	309.09
5	221-1	1	405857.44	521927.15	0.14	7347.91	1028.71
6	107-2	1	405864.22	521881.73	0.13	901.47	117.19
7	RW-102	1	405459.38	521643.27	0.001	55781.53	55.78
SUM						**139830.00**	**13292.82**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0951**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-13
TRICHLOROETHENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW23							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	213-2	1	405868.64	522075.90	0.170	41135.37	6993.01
2	213-1	1	405865.33	522069.08	0.150	2024.11	303.62
3	103-1	1	405900.66	522007.01	0.130	9401.33	1222.17
4	L1-1	1	405855.46	522019.87	0.130	20708.99	2692.17
5	PL10-15	1	405511.65	521821.94	0.097	17441.66	1691.84
6	PL10-102	1	405521.76	521757.75	0.0038	992.61	3.77
7	PL10-101	2	405528.23	521760.57	0.0014	228.70	0.32
8	PL10-100	2	405525.45	521767.05	0.0014	2519.70	3.53
9	PL10-104	2	405502.76	521815.45	0.0013	1338.80	1.74
10	RW-100	1	405453.53	521782.71	0.0011	40920.85	45.01
11	PL10-103	2	405492.42	521781.97	0.0011	1918.62	2.11
12	PL10-105	2	405506.93	521823.58	0.001	1199.26	1.20
SUM						**139830.00**	**12960.49**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0927**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-13
TRICHLOROETHENE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW24							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	279-1	1	405581.97	522013.56	0.15	11903.82	1785.57
2	206-1	1	405692.22	522090.55	0.15	21163.96	3174.59
3	ZB-1-100	2	405540.50	521895.83	0.0028	5581.24	15.63
4	PL10-106	2	405527.33	521878.78	0.0013	22095.85	28.72
5	PL10-108	2	405530.79	521888.16	0.0012	262.70	0.32
6	MW-90	1	405979.62	522188.06	0.0011	20284.59	22.31
7	PL10-107	2	405524.37	521885.20	0.0011	30010.44	33.01
8	ZB-1-101	2	405542.11	521890.31	0.001	157.60	0.16
9	MW-90A	1	405990.19	522183.85	0.00099	28369.79	28.09
SUM						**139830.00**	**5088.40**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0364**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-14
TRICHLOROETHENE CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW03							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	SB-10-SO-209	1	406649.49	520210.81	0.350	1607.43	562.60
2	SB-10-SO-10-103	1	406621.16	520171.23	0.240	1400.47	336.11
3	SB-10-SO-10-100	1	406625.65	520173.54	0.210	303.54	63.74
4	SB-AOC10-2013-100	1	406622.54	520142.47	0.079	3462.69	273.55
5	SB-10-SO-11	2	406646.65	520124.54	0.034	3187.96	108.39
6	B10-3	1	406526.65	520111.54	0.022	36252.91	797.56
7	SB-10-SO-10-101	1	406628.40	520177.72	0.010	1128.32	11.28
8	SB-AOC10-2013-109	1	406707.19	520202.86	0.010	89234.46	892.34
9	SB-AOC10-2013-102	1	406691.73	520156.14	0.001	3252.22	3.25
SUM						**139830.01**	**3048.84**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0218**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-14
TRICHLOROETHENE CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW04							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	B8-4	1	406531.72	520234.75	1.800	312.63	562.74
2	SB-10-SO-7	1	406779.65	520374.54	0.850	3140.08	2669.07
3	B8-4-102	1	406551.36	520246.07	0.440	1460.80	642.75
4	B8-4-100	1	406545.18	520223.83	0.170	756.05	128.53
5	B8-4-101	1	406525.31	520242.60	0.150	584.80	87.72
6	SB-10-SO-210	1	406642.27	520212.80	0.150	2322.03	348.30
7	B8-4-103	1	406537.24	520249.32	0.120	386.35	46.36
8	SB-8-SO-12-101	1	406521.28	520211.50	0.044	1106.25	48.68
9	SB-10-SO-9	1	406691.65	520260.54	0.007	3438.08	24.07
10	SB-10-SO-208	1	406535.14	520199.52	0.0015	2267.57	3.40
11	SB-10-SO-7-101	1	406783.57	520370.99	0.0014	70910.99	99.28
12	SB-AOC8B-2013-102	1	406493.88	520187.05	0.0013	34739.46	45.16
13	SB-AOC10-2013-103	1	406578.51	520232.41	0.0012	3551.90	4.26
14	SB-AOC10-2013-101	1	406591.44	520185.91	0.0011	1751.62	1.93
15	SB-10-SO-7-102	1	406774.84	520372.04	0.001	5204.57	5.20
16	SB-AOC10-2013-107	1	406672.56	520290.94	0.00038	7956.92	3.02
SUM						**139890.10**	**4720.47**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0337**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-14
TRICHLOROETHENE CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW05							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	SB-8-SO-14-101	1	406353.72	520201.35	0.840	752.21	631.85
2	SB-AOC8B-2013-105	1	406450.08	520243.59	0.790	3791.67	2995.42
3	B8-6-100	1	406408.23	520267.55	0.280	2619.00	733.32
4	B8-8-2	1	406336.69	520203.90	0.130	4959.43	644.73
5	SB-10-SO-5A	2	406859.70	520524.59	0.034	2190.57	74.48
6	B10-7	1	406870.65	520478.54	0.022	2094.96	46.09
7	SB-AOC8B-2013-104	1	406374.67	520269.99	0.010	1143.63	11.44
8	B8-8	1	406341.67	520187.92	0.010	16724.96	167.25
9	SB-AOC10-2013-120	1	406870.10	520549.05	0.0074	2850.38	21.09
10	SB-10-SO-6	1	406693.07	520419.39	0.006	16056.97	96.34
11	SB-10-SO-5	1	406852.70	520540.59	0.006	2507.77	15.05
12	SB-AOC8B-2013-107	1	406461.79	520327.38	0.0019	3582.77	6.81
13	SB-AOC10-2013-122	1	406893.64	520585.73	0.0013	52370.17	68.08
14	SB-AOC8B-2013-109	1	406393.92	520215.20	0.0012	1727.17	2.07
15	SB-AOC8B-2013-108	1	406529.66	520298.41	0.0011	12676.57	13.94
16	B8-8-4	1	406387.24	520180.31	0.0011	856.63	0.94
17	B8-8-3	1	406352.66	520231.29	0.0011	1807.89	1.99
18	SB-AOC8B-2013-103	1	406436.51	520208.36	0.001	1274.93	1.27
19	SB-AOC10-2013-117	1	406788.88	520485.71	0.001	9316.97	9.32
20	B8-8-4-103	1	406386.20	520186.41	0.00088	719.76	0.63
SUM						**140024.42**	**5542.11**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0396**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-14
TRICHLOROETHENE CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW06							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	SB-8-SO-11	1	406389.65	520297.54	0.950	1931.46	1834.89
2	JSO11-101	1	406363.10	520283.01	0.130	3788.72	492.53
3	SB-10-SO-2	2	406939.65	520727.54	0.039	1355.23	52.85
4	SB-10-SO-1	2	406977.65	520786.54	0.007	33486.43	234.40
5	B8-5	1	406298.36	520322.61	0.006	25961.39	155.77
6	SB-10-SO-3	1	406814.65	520639.54	0.006	17068.11	102.41
7	SB-AOC8B-2013-106	1	406401.68	520353.45	0.0014	28361.59	39.71
8	SB-AOC10-2013-123	1	406920.73	520640.18	0.0011	2063.51	2.27
9	SB-AOC10-2013-124	1	406881.99	520635.22	0.001	2006.16	2.01
10	SB-AOC10-2013-121	1	406840.91	520601.89	0.00099	10708.54	10.60
11	SB-AOC10-2013-127	1	406917.01	520735.20	0.00096	1225.87	1.18
12	SB-AOC10-2013-125	1	406853.93	520660.55	0.00094	2909.62	2.74
13	SB-AOC10-2013-128	1	406903.45	520689.99	0.00091	3175.42	2.89
14	SB-AOC10-2013-129	1	406954.52	520718.01	0.00075	6040.49	4.53
SUM						**140082.54**	**2938.78**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0210**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-14
TRICHLOROETHENE CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW08							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	MOA-B-BS4	1	406113.07	520348.17	0.180	95.22	17.14
2	MOA-B-S3	1	406075.83	520343.63	0.160	2580.89	412.94
3	MOA-B-S1	1	406090.82	520335.64	0.160	320.26	51.24
4	MOA-B-S4	1	406081.85	520380.36	0.150	1993.55	299.03
5	MOA-B-BS5	1	406111.10	520353.70	0.130	139925.63	18190.33
6	MOA-B-S6	1	406068.70	520409.23	0.110	22494.49	2474.39
7	MOA-B-S5	1	406063.05	520371.64	0.081	3323.36	269.19
8	MW-22	1	405962.35	520326.62	0.01	52037.67	364.26
SUM						**222771.07**	**22078.54**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0991**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-14
TRICHLOROETHENE CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW09							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	MOA-B-S9	1	406038.47	520426.18	0.15	3954.02	593.10
2	ISO28	1	405963.39	520470.31	0.13	57184.60	7434.00
3	MOA-B-S8	1	406058.01	520435.02	0.01	162371.99	1623.72
SUM						**223510.61**	**9650.82**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0432**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-14
TRICHLOROETHENE CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW12							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	B3-5	1	406012.77	520808.40	1.5	1266.27	1899.41
2	B3-1	2	406012.66	520823.22	0.78	3580.24	2792.58
3	SB-3-SO-24	1	405992.05	520813.77	0.03	2460.53	78.74
4	SB-3-SO-23	1	405998.25	520821.68	0.007	1156.99	8.10
5	SB-3-SO-22	1	406003.17	520819.59	0.007	123.00	0.86
6	SB-3-SO-27	1	405983.43	520773.13	0.006	28704.83	172.23
7	B3-4-200	1	406021.22	520816.49	0.0012	40012.58	48.02
8	MW-71	1	406755.81	521280.12	0.001	101503.04	101.50
9	ISO23-3	1	405485.31	520498.99	0.001	44492.65	44.49
SUM						**223300.13**	**5145.93**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0230**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-14
TRICHLOROETHENE CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW13							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	BF-S13	1	407016.53	521599.43	0.14	79609.99	11145.40
2	MC8-1	1	406005.84	520925.88	0.01	143690.13	1436.90
SUM						**223300.12**	**12582.30**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0563**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-14
TRICHLOROETHENE CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW14							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	GSO9	1	406115.79	521150.09	0.30	3648.95	1094.69
2	GSO11	1	406141.95	521128.65	0.13	689.88	89.69
3	GSO7	1	406093.31	521098.97	0.01	101126.20	1011.26
4	B2-1-201	1	406131.46	521111.85	0.0012	1904.47	2.29
5	GS011-200	1	406157.30	521131.58	0.0012	115930.62	139.12
SUM						**223300.13**	**2337.04**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0105**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-14
TRICHLOROETHENE CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW19							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	250-1	1	405381.10	521245.79	0.18	16452.96	2961.53
2	PL05-100	1	405645.35	521457.01	0.0033	920.04	3.04
3	SB-D3	1	405668.05	521399.56	0.0012	1613.61	1.94
4	SB-C1	1	405628.12	521453.46	0.0012	1291.03	1.55
5	SB-A3	1	405579.41	521383.98	0.0011	12268.41	13.50
6	TK6-PE-2	1	406346.44	521841.11	0.0011	31930.11	35.12
7	SB-B4	1	405614.15	521359.63	0.0011	3026.22	3.33
8	TK6-PE-1	1	406347.45	521843.90	0.0011	23506.39	25.86
9	SB-F1	1	405716.76	521469.04	0.001	3184.22	3.18
10	SB-E3	1	405707.90	521398.15	0.001	1472.81	1.47
11	SB-C4	1	405643.69	521364.82	0.001	869.46	0.87
12	SB-C3	1	405638.50	521394.37	0.001	1657.44	1.66
13	SB-H1	1	405775.86	521479.42	0.001	34653.99	34.65
14	SB-E1	1	405687.21	521463.85	0.00098	2290.63	2.24
15	PL05-107	1	405647.68	521433.03	0.00098	1408.36	1.38
16	SB-H2	1	405781.05	521449.87	0.00092	831.97	0.77
17	SB-G3	1	405766.56	521437.16	0.00092	281.52	0.26
18	SB-G2	1	405751.50	521444.68	0.00088	1537.46	1.35
SUM						**139196.63**	**3093.70**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0222**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-14
TRICHLOROETHENE CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW20							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**TCE MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**TCE WEIGHTED CONCENTRATION**
1	118-1	1	405753.89	521634.54	0.15	87525.74	13128.86
2	SB-D1	1	405534.75	521445.48	0.00097	15860.71	15.38
3	MW-86	1	405693.78	521552.27	0.00091	14668.74	13.35
4	SB-D2	1	405536.90	521407.85	0.00086	21813.19	18.76
SUM						**139868.38**	**13176.35**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0942**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.13**

TABLE L-15
VINYL CHLORIDE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW04							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**VC MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**VC WEIGHTED CONCENTRATION**
1	B8-4-100	2	406545.18	520223.83	0.110	922.29	101.45
2	SB-8-SO-12-100	3	406534.06	520221.99	0.095	306.42	29.11
3	SB-10-SO-9	4	406691.65	520260.54	0.024	1622.17	38.93
4	SB-10-SO-4	2	407011.65	520554.54	0.017	56053.36	952.91
5	B8-4	1	406531.72	520234.75	0.012	267.30	3.21
6	B8-7	2	406435.59	520173.60	0.012	24027.85	288.33
7	B8-2	2	406554.28	520160.57	0.012	1913.30	22.96
8	B8-4-102	2	406551.36	520246.07	0.004	1237.38	4.95
9	SB-8-SO-12-103	2	406506.58	520228.65	0.0023	852.40	1.96
10	SB-10-SO-7-103	4	406782.34	520378.79	0.0023	222.09	0.51
11	SB-AOC10-2013-106	2	406617.39	520307.06	0.0018	2079.47	3.74
12	SB-10-SO-7-100	3	406779.65	520374.54	0.0018	42.96	0.08
13	SB-AOC10-2013-111	2	406777.77	520312.12	0.0015	2355.32	3.53
14	SB-AOC10-2013-113	2	406729.55	520376.71	0.0014	1667.45	2.33
15	SB-AOC10-2013-101	2	406591.44	520185.91	0.0014	1535.88	2.15
16	SB-AOC8B-2013-102	2	406493.88	520187.05	0.0013	2793.08	3.63
17	SB-8-SO-12-102	2	406514.94	520235.49	0.0013	349.37	0.45
18	SB-AOC10-2013-115	2	406806.80	520386.89	0.0013	14292.00	18.58
19	SB-AOC10-2013-103	2	406578.51	520232.41	0.0013	1869.40	2.43
20	SB-8-SO-12-101	2	406521.28	520211.50	0.0012	1075.78	1.29
21	SB-AOC10-2013-104	2	406646.43	520215.69	0.0012	1430.47	1.72
22	SB-AOC10-2013-110	2	406722.79	520328.68	0.0012	3870.57	4.64
23	SB-AOC8B-2013-101	3	406475.43	520136.97	0.0011	7450.16	8.20
24	SB-AOC10-2013-105	2	406615.65	520258.68	0.0011	2731.66	3.00
25	SB-AOC10-2013-107	2	406672.56	520290.94	0.0011	3044.26	3.35
26	SB-AOC10-2013-112	2	406773.14	520352.95	0.0011	1595.61	1.76
27	SB-10-SO-7-102	3	406774.84	520372.04	0.0011	429.89	0.47
28	SB-10-SO-7-101	3	406783.57	520370.99	0.0011	693.81	0.76
29	SB-AOC10-2013-114	2	406774.34	520389.32	0.00098	1301.64	1.28
30	B8-4-103	2	406537.24	520249.32	0.00095	461.95	0.44
31	MW-75	1	406675.30	520260.88	0.00091	1394.80	1.27
SUM						**139890.10**	**1509.43**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.011**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.06**

TABLE L-15
VINYL CHLORIDE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW05							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**VC MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**VC WEIGHTED CONCENTRATION**
1	B8-8-1	4	406334.29	520181.06	8	41.98	335.83
2	B8-6-100	3	406408.23	520267.55	0.740	46.36	34.31
3	B8-6-101	3	406411.05	520271.71	0.600	1510.75	906.45
4	B8-8-2-101	4	406332.18	520200.92	0.580	1713.89	994.06
5	B8-8-4-102	4	406386.12	520175.44	0.310	553.46	171.57
6	SB-AOC10-2013-117	2	406788.88	520485.71	0.260	6074.80	1579.45
7	B8-8-1-102	4	406329.67	520178.08	0.220	3231.72	710.98
8	B8-8	2	406341.67	520187.92	0.148	217.10	32.13
9	B8-6-103	3	406403.54	520264.95	0.148	678.36	100.40
10	B8-8-2-100	4	406336.69	520203.90	0.148	90.71	13.43
11	SB-8-SO-14-100	4	406352.65	520196.54	0.148	365.87	54.15
12	SB-8-SO-14-101	3	406353.72	520201.35	0.148	486.64	72.02
13	WSO6	1	406896.31	520519.47	0.148	4021.51	595.18
14	B8-8-2-102	4	406337.76	520208.72	0.148	805.55	119.22
15	B8-8-1-101	4	406338.41	520177.03	0.140	597.79	83.69
16	B8-6-102	3	406412.28	520263.90	0.120	810.17	97.22
17	B8-8-1-103	3	406331.51	520185.78	0.100	391.48	39.15
18	SB-10-SO-6	4	406693.07	520419.39	0.061	5645.12	344.35
19	SB-10-SO-5	3	406852.70	520540.59	0.017	3563.01	60.57
20	B8-3	2	406591.48	520327.19	0.012	6487.60	77.85
21	B10-1	1	406637.43	520408.54	0.012	4267.81	51.21
22	B10-8	2	406976.45	520636.80	0.012	46377.97	556.54
23	B8-8-4	3	406387.24	520180.31	0.0057	57.97	0.33
24	B8-8-3	1	406352.66	520231.29	0.0053	1671.37	8.86
25	SB-AOC8B-2013-100	3	406329.61	520147.93	0.0016	14679.26	23.49
26	SB-AOC10-2013-118	2	406836.13	520467.12	0.0015	2660.11	3.99
27	SB-AOC10-2013-116	2	406752.99	520429.64	0.0012	4532.98	5.44
28	SB-AOC8B-2013-109	2	406393.92	520215.20	0.0012	1654.63	1.99
29	SB-AOC8B-2013-105	2	406450.08	520243.59	0.0012	3629.90	4.36
30	SB-AOC8B-2013-103	2	406436.51	520208.36	0.0012	1256.10	1.51
31	SB-AOC8B-2013-108	2	406529.66	520298.41	0.0012	6262.51	7.52
32	B9-16-200	3	406651.75	520384.51	0.0012	3706.62	4.45
33	SB-AOC8B-2013-104	2	406374.67	520269.99	0.0011	1034.05	1.14
34	SB-AOC10-2013-122	2	406893.64	520585.73	0.0011	4849.24	5.33
35	SB-AOC8B-2013-107	2	406461.79	520327.38	0.001	3497.23	3.50
36	B8-8-4-103	3	406386.20	520186.41	0.001	559.18	0.56
37	SB-AOC10-2013-120	1	406870.10	520549.05	0.001	1615.11	1.62
38	B8-8-4-101	3	406392.23	520178.95	0.00099	378.52	0.37
SUM						**140024.42**	**7104.19**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.051**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.06**

TABLE L-15
VINYL CHLORIDE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW06							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**VC MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**VC WEIGHTED CONCENTRATION**
1	JSO11-102	2	406356.45	520280.32	0.097	1362.82	132.19
2	SB-10-SO-2	3	406939.65	520727.54	0.013	1220.24	15.86
3	SB-10-SO-1	1	406977.65	520786.54	0.012	26519.59	318.24
4	B8-5	1	406298.36	520322.61	0.012	4691.72	56.30
5	B8-1	2	406451.19	520410.86	0.012	17350.80	208.21
6	SB-AOC10-2013-119	2	406812.02	520564.00	0.0033	3821.96	12.61
7	SB-10-SO-3-103	2	406810.03	520636.56	0.0024	3964.26	9.51
8	JSO11-100	3	406358.48	520284.97	0.0021	35.66	0.07
9	SB-10-SO-3-101	2	406815.62	520644.36	0.0016	1264.92	2.02
10	SB-AOC10-2013-124	2	406881.99	520635.22	0.0015	2006.16	3.01
11	JSO11-103	3	406353.73	520286.51	0.0014	1370.83	1.92
12	SB-AOC10-2013-127	2	406917.01	520735.20	0.0013	1225.87	1.59
13	SB-8-SO-11-100	3	406389.65	520297.54	0.0013	35.21	0.05
14	WSO9	1	406977.65	520771.10	0.0013	8155.46	10.60
15	JSO11-101	3	406363.10	520283.01	0.0013	217.78	0.28
16	JSO7	1	406244.55	520278.43	0.0013	4470.72	5.81
17	JSO12	1	406361.48	520293.37	0.0013	1313.98	1.71
18	JSO8	1	406234.66	520274.94	0.0013	16547.42	21.51
19	B10-2	1	406708.86	520523.83	0.0013	19901.04	25.87
20	SB-8-SO-11-102	3	406385.90	520300.92	0.0013	830.17	1.08
21	SB-8-SO-11-103	3	406394.04	520299.93	0.0013	919.21	1.19
22	SB-AOC10-2013-129	2	406954.52	520718.01	0.0012	4986.86	5.98
23	SB-AOC10-2013-128	2	406903.45	520689.99	0.0012	3175.42	3.81
24	SB-AOC10-2013-121	2	406840.91	520601.89	0.0012	2054.44	2.47
25	SB-AOC8B-2013-106	2	406401.68	520353.45	0.0011	6818.48	7.50
26	SB-8-SO-11-101	2	406388.00	520292.67	0.0011	184.25	0.20
27	SB-AOC10-2013-125	2	406853.93	520660.55	0.0011	2750.15	3.03
28	SB-10-SO-3-100	2	406814.65	520639.54	0.0011	39.05	0.04
29	SB-10-SO-3-102	2	406818.77	520635.51	0.001	784.58	0.78
30	SB-AOC10-2013-123	2	406920.73	520640.18	0.001	2063.51	2.06
SUM						**140082.54**	**855.54**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.006**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.06**

TABLE L-15
VINYL CHLORIDE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW07							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**VC MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**VC WEIGHTED CONCENTRATION**
1	JSO29	1	406098.02	520332.37	0.55	176.32	96.98
2	TP9-1	1	406514.60	520524.31	0.066	29041.95	1916.77
3	SB-AOC10-2013-126	3	406875.67	520724.02	0.0015	82340.62	123.51
4	HSO9	1	406620.29	520638.24	0.0013	12483.22	16.23
5	JSO33	1	406104.47	520308.18	0.0013	14720.20	19.14
6	JSO19	1	406112.19	520327.30	0.0013	128.28	0.17
7	JSO30	1	406112.19	520327.30	0.0013	123.88	0.16
8	JSO32	1	406126.39	520334.59	0.0013	16876.18	21.94
9	JSO31	1	406126.86	520319.65	0.0013	6197.81	8.06
10	MOA-B-S20	1	406102.01	520336.01	0.0013	100.31	0.13
11	MOA-B-BS1	1	406116.14	520341.79	0.0013	313.28	0.41
12	B10-4	1	406713.79	520616.71	0.0013	6265.01	8.14
13	MOA-B-S11	1	406083.08	520327.54	0.0013	43924.15	57.10
14	B10-6	2	406792.04	520679.76	0.0013	10558.51	13.73
SUM						**223249.73**	**2282.46**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.010**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.06**

TABLE L-15
VINYL CHLORIDE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW09							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**VC MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**VC WEIGHTED CONCENTRATION**
1	TP9-2-204	3	406572.59	520799.32	2.40	1444.19	3466.05
2	TP9-3-101	2	406577.25	520873.76	0.170	339.24	57.67
3	TP9-2	2	406603.86	520814.04	0.017	537.20	9.13
4	SB-7-SO-4	5	405917.72	520420.99	0.013	3541.07	46.03
5	SB-7-SO-5	4	405866.65	520375.54	0.013	1322.44	17.19
6	B8-9	2	406002.67	520497.83	0.013	331.39	4.31
7	B7-2	3	405868.66	520350.00	0.013	8943.26	116.26
8	B-3A	1	406120.71	520505.04	0.012	3194.77	38.34
9	B-3D	1	406132.33	520590.37	0.012	2418.07	29.02
10	B7-6	3	405965.06	520416.27	0.012	4197.24	50.37
11	B-4E	1	406079.03	520561.46	0.012	999.94	12.00
12	B-4D	1	406128.28	520535.53	0.012	617.92	7.42
13	B-4C	1	406094.08	520546.81	0.012	1669.96	20.04
14	B-4B	1	406107.36	520559.00	0.012	895.75	10.75
15	B-3C	1	406145.79	520570.61	0.012	10161.36	121.94
16	B-3B	1	406133.21	520537.86	0.012	2239.13	26.87
17	TP7-4	2	405848.11	520395.31	0.0053	1339.33	7.10
18	TP9-2-203	3	406597.50	520799.33	0.0016	724.99	1.16
19	TP9-2-200	3	406622.72	520849.35	0.0016	1647.61	2.64
20	TP9-3-206	3	406547.42	520849.34	0.0014	727.97	1.02
21	TP9-3	2	406572.39	520874.38	0.0013	290.67	0.38
22	TP9-2-300R	3	406672.80	520849.35	0.0013	4555.23	5.92
23	TP9-3-305	3	406523.64	520814.62	0.0013	5953.29	7.74
24	SB-7-SO-6	4	405828.35	520387.70	0.0013	32071.87	41.69
25	SB-7-SO-7	5	405908.28	520375.18	0.0013	3084.11	4.01
26	TP9-3-203	3	406597.46	520874.40	0.0013	1896.04	2.46
27	HSO6	1	406679.42	520933.97	0.0013	85177.63	110.73
28	CE-1	1	406018.01	520435.51	0.0013	1897.42	2.47
29	HSO3	1	406353.39	520701.02	0.0013	21918.51	28.49
30	CE-2	2	406057.06	520463.79	0.0013	2888.57	3.76
31	JSO5	1	405991.14	520498.86	0.0013	1606.53	2.09
32	JSO6	1	406006.95	520496.61	0.0013	2278.62	2.96
33	HSO5	1	406538.18	520856.58	0.0013	423.19	0.55
34	TP9-3-204	3	406597.39	520849.32	0.0013	583.08	0.76
35	TP9-2-202	3	406622.89	520799.50	0.0013	437.36	0.57
36	TP9-3-205	3	406572.44	520849.42	0.0013	530.88	0.69
37	MOA-B-S15	1	406028.52	520429.37	0.0013	744.19	0.97
38	MOA-B-S16	1	406049.65	520453.33	0.0013	662.89	0.86
39	MOA-B-S10	1	406041.92	520444.72	0.0013	694.89	0.90
40	TP9-2-304	3	406543.37	520758.75	0.0013	6267.45	8.15
41	TP9-2-201	1	406622.80	520824.37	0.0012	1036.42	1.24
42	TP9-2-206	1	406584.94	520837.14	0.0011	417.58	0.46
43	TP9-2-205	1	406572.37	520824.49	0.0011	801.37	0.88
SUM						**223510.61**	**4274.03**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.019**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.06**

TABLE L-15
VINYL CHLORIDE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW10							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**VC MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**VC WEIGHTED CONCENTRATION**
1	B7-3	3	405778.17	520450.87	12	31.95	383.42
2	TP9-3-202	3	406597.29	520899.24	0.160	808.60	129.38
3	TP9-3-304	3	406502.91	520897.25	0.160	10087.55	1614.01
4	TP9-3-303	3	406508.92	520931.23	0.095	2244.76	213.25
5	SB-7-SO-3-101	4	405856.94	520438.30	0.023	942.35	21.67
6	MW-77	2	405729.26	520411.58	0.014	32460.32	454.44
7	B7-5	3	405925.66	520489.91	0.013	10788.95	140.26
8	B-4A	1	406101.44	520578.72	0.012	2193.60	26.32
9	B-4F	1	406088.37	520604.01	0.012	5114.71	61.38
10	B-3F	1	406077.71	520643.23	0.012	9762.85	117.15
11	B-3E	1	406110.75	520611.26	0.012	9920.74	119.05
12	B7-1	1	405835.34	520416.27	0.01	742.59	7.43
13	TP9-3-302	3	406547.45	520949.37	0.0097	3536.05	34.30
14	TP7-3	2	405806.94	520426.09	0.0067	1528.19	10.24
15	TP7-1	2	405839.82	520515.38	0.0062	1958.73	12.14
16	TP7-5	1	405803.25	520389.41	0.0055	1837.32	10.11
17	TP7-2	2	405756.36	520433.91	0.0055	1391.44	7.65
18	SB-7-SO-3-100	4	405852.72	520440.99	0.0047	33.39	0.16
19	SB-7-SO-3-102	4	405848.78	520437.90	0.0039	542.77	2.12
20	B7-3-101	3	405780.93	520446.87	0.0026	633.99	1.65
21	SB-7-SO-3-103	4	405852.80	520446.04	0.0023	2017.90	4.64
22	B7-3-102	3	405773.37	520451.35	0.0023	626.45	1.44
23	B7-3-103	3	405779.44	520455.49	0.002	1741.65	3.48
24	TP9-3-201	3	406572.35	520899.34	0.002	1149.95	2.30
25	ISO7	2	405734.04	520428.85	0.0013	1263.74	1.64
26	HSO2	1	406319.58	520821.96	0.0013	23735.60	30.86
27	MW-78	2	405862.98	520516.72	0.0012	3873.76	4.65
28	TP9-3-301	3	406614.60	520946.33	0.0011	89797.41	98.78
29	TP9-3-207	1	406547.45	520874.52	0.0011	1342.77	1.48
30	TP9-3-200	1	406547.32	520899.37	0.001	1234.58	1.23
SUM						**223344.67**	**3516.62**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.016**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.06**

TABLE L-15
VINYL CHLORIDE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW11							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**VC MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**VC WEIGHTED CONCENTRATION**
1	ISO5-103	4	405736.05	520485.34	0.120	3993.33	479.20
2	ISO6-101	4	405723.20	520472.29	0.066	583.78	38.53
3	ISO6-102	4	405715.64	520476.76	0.047	34086.31	1602.06
4	ISO6-100	4	405720.36	520476.32	0.038	31.75	1.21
5	ISO5-102	4	405729.98	520481.20	0.021	90.56	1.90
6	ISO5-100	4	405734.69	520480.68	0.012	31.95	0.38
7	B7-4	2	405826.69	520520.48	0.011	2032.55	22.36
8	ISO6-103	4	405721.71	520480.90	0.0085	1718.73	14.61
9	ISO5-101	4	405737.54	520476.73	0.0077	506.17	3.90
10	ISO27-100	2	405848.83	520593.03	0.0019	34.88	0.07
11	ISO27-101	2	405848.63	520587.98	0.0013	1972.66	2.56
12	ISO4	1	405806.46	520508.46	0.0013	3573.51	4.65
13	HSO1	1	406329.14	520945.52	0.0013	140252.92	182.33
14	MH5-1	1	405883.35	520593.15	0.0013	28711.41	37.32
15	ISO27-102	2	405844.80	520596.20	0.0012	4094.70	4.91
16	ISO27-103	1	405852.78	520596.20	0.00097	1584.91	1.54
SUM						**223300.13**	**2397.52**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.0107**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.06**

TABLE L-15
VINYL CHLORIDE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW12							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**VC MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**VC WEIGHTED CONCENTRATION**
1	SB-3-SO-25	1	405992.41	520818.85	0.065	244.11	15.87
2	SB-3-SO-27	1	405983.43	520773.13	0.064	9075.24	580.82
3	SB-3-SO-20	2	405999.52	520818.34	0.013	46.23	0.60
4	SB-3-SO-26	1	405953.38	520826.79	0.012	5168.56	62.02
5	SB-3-SO-21	2	405998.13	520813.53	0.012	114.10	1.37
6	SB-3-SO-19	1	406001.72	520822.88	0.012	85.83	1.03
7	SB-3-SO-18	1	406002.93	520827.93	0.012	2290.54	27.49
8	B3-8	1	405973.60	520802.55	0.012	1544.51	18.53
9	B3-7	1	405979.17	520833.70	0.012	961.42	11.54
10	B3-6	1	406006.81	520810.84	0.012	109.11	1.31
11	B3-3	1	406008.83	520805.90	0.012	175.10	2.10
12	B3-2	1	406006.60	520796.96	0.012	696.55	8.36
13	B6-200	3	405986.82	520800.14	0.011	259.52	2.85
14	ISO23R	1	405485.31	520508.99	0.0057	100.00	0.57
15	ISO23-4	2	405475.31	520508.99	0.0052	6811.70	35.42
16	ISO23-2	2	405495.31	520508.99	0.0048	3732.42	17.92
17	ISO23-1	2	405485.31	520518.99	0.0048	1287.36	6.18
18	ISO26-102	4	405714.78	520630.37	0.0032	6589.05	21.08
19	ISO26-100	4	405718.95	520627.24	0.003	36.90	0.11
20	ISO23-3	1	405485.31	520498.99	0.0014	10364.95	14.51
21	MW-66	1	406881.97	521330.19	0.0013	50911.30	66.18
22	MW-76	3	405592.60	520491.22	0.0013	10683.22	13.89
23	HSO4	1	406413.89	521042.11	0.0013	43267.21	56.25
24	ISO26-101	4	405720.49	520622.87	0.0012	4959.47	5.95
25	B6-201	3	405993.32	520788.94	0.0012	324.42	0.39
26	MW-71	1	406755.81	521280.12	0.0012	28062.70	33.68
27	ISO26-103	4	405723.38	520629.39	0.0011	13428.31	14.77
28	B3-4-200	2	406021.22	520816.49	0.0011	20948.43	23.04
29	FSO26-200	3	406004.78	520765.89	0.001	1021.86	1.02
SUM						**223300.13**	**1044.85**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.00**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.06**

TABLE L-15
VINYL CHLORIDE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW13							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**VC MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**VC WEIGHTED CONCENTRATION**
1	ISO8	4	405562.43	520667.59	0.68	35.32	24.02
2	B7-7	2	405595.48	520652.10	0.012	16235.02	194.82
3	ISO9	2	405572.36	520660.91	0.0013	438.65	0.57
4	304-1	1	405856.04	520879.29	0.0013	12018.86	15.62
5	304-2	1	405862.52	520868.96	0.0013	44976.31	58.47
6	ISO10	2	405560.89	520648.24	0.0013	29542.67	38.41
7	ISO8-102	4	405560.23	520663.08	0.0013	592.58	0.77
8	MW-68	2	406733.85	521429.79	0.0012	19370.22	23.24
9	ISO8-103	4	405559.00	520670.87	0.0012	1566.46	1.88
10	ISO8-101	4	405566.34	520670.51	0.0011	2394.84	2.63
11	MW-72	2	406569.28	521244.80	0.001	51469.51	51.47
12	MW-67	1	406874.94	521482.85	0.00098	44659.68	43.77
SUM						**223300.12**	**455.68**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.00**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.06**

TABLE L-15
VINYL CHLORIDE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW17							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**VC MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**VC WEIGHTED CONCENTRATION**
1	SB-AOC1C-2013-107	2	405732.84	521241.47	0.092	933.07	85.84
2	PL06-107	1	405848.43	521360.10	0.0064	781.52	5.00
3	MW-80	3	405782.74	521253.32	0.0017	1181.58	2.01
4	MW-82	2	405622.39	521218.13	0.0014	65697.68	91.98
5	SB-AOC1C-2013-101	2	405881.31	521296.45	0.0013	2224.34	2.89
6	SB-H7	1	405807.01	521302.14	0.0013	1194.05	1.55
7	SB-AOC1C-2013-105	3	405819.80	521231.35	0.0013	1078.21	1.40
8	PL06-103	3	405916.01	521352.65	0.0013	7778.57	10.11
9	109-1	1	406036.27	521403.26	0.0013	19816.93	25.76
10	110-1	1	405857.13	521338.78	0.0013	683.46	0.89
11	MC3-1	1	406245.86	521579.97	0.0013	98333.56	127.83
12	239-1	1	405869.52	521321.75	0.0013	681.76	0.89
13	SB-F10	1	405763.49	521203.11	0.0013	838.93	1.09
14	SB-J8	2	405841.74	521277.78	0.0012	1705.83	2.05
15	SB-AOC1C-2013-100	2	405868.41	521330.48	0.0012	275.03	0.33
16	SB-AOC1C-2013-106	3	405732.45	521290.15	0.0011	376.21	0.41
17	SB-F9	2	405758.29	521232.66	0.0011	1017.62	1.12
18	SB-AOC1C-2013-111	2	405698.26	521182.85	0.0011	5285.31	5.81
19	SB-AOC1C-2013-110	2	405680.99	521222.54	0.0011	1397.21	1.54
20	SB-AOC1C-2013-108	3	405754.73	521192.28	0.0011	962.44	1.06
21	SB-AOC1C-2013-104	3	405806.15	521268.20	0.0011	1143.97	1.26
22	SB-AOC1C-2013-103	2	405786.53	521306.19	0.0011	712.96	0.78
23	SB-J7	2	405836.55	521307.33	0.0011	1300.19	1.43
24	PL06-106	1	405872.65	521351.30	0.0011	850.30	0.94
25	PL06-105	1	405882.94	521347.44	0.0011	467.02	0.51
26	SB-D8	1	405694.01	521251.82	0.001	830.19	0.83
27	PL06-104	1	405891.45	521344.24	0.001	872.47	0.87
28	SB-G7	1	405777.46	521296.95	0.00098	845.85	0.83
29	SB-C8	1	405664.46	521246.63	0.00097	603.13	0.59
30	SB-D9	2	405699.20	521222.28	0.00096	1126.53	1.08
31	SB-F8	1	405753.10	521262.21	0.00091	883.92	0.80
32	SB-F7	1	405747.91	521291.75	0.00088	582.82	0.51
33	SB-E8	1	405723.55	521257.01	0.00084	837.48	0.70
SUM						**223300.13**	**380.71**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.002**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.06**

TABLE L-15
VINYL CHLORIDE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW21							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**VC MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**VC WEIGHTED CONCENTRATION**
1	L5-1-103	1	405576.42	521573.99	0.160	36.46	5.83
2	L5-1-102	1	405576.42	521568.99	0.100	21766.66	2176.67
3	L5-1-100	1	405572.88	521577.53	0.100	21311.14	2131.11
4	L5-1-101	1	405581.42	521573.99	0.095	20389.33	1936.99
5	106-2	1	405997.08	521829.89	0.0013	72992.84	94.89
6	106-1	1	405998.95	521826.75	0.0013	3413.40	4.44
SUM						**139909.84**	**6349.93**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.05**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.06**

TABLE L-15
VINYL CHLORIDE CONCENTRATIONS IN THE SURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW22							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**VC MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**VC WEIGHTED CONCENTRATION**
1	107-4	1	405862.88	521874.97	0.760	2060.60	1566.06
2	221-1	1	405857.44	521927.15	0.680	7347.91	4996.58
3	107-2	1	405864.22	521881.73	0.670	901.47	603.99
4	L1-2	1	405966.23	521979.73	0.0013	52517.12	68.27
5	107-1	1	405858.09	521880.66	0.0013	19610.59	25.49
6	107-3	1	405867.45	521876.46	0.0013	1610.78	2.09
7	RW-102	1	405459.38	521643.27	0.001	55781.53	55.78
SUM						**139830.00**	**7318.26**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.05**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.06**

TABLE L-16
VINYL CHLORIDE CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW03							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**VC MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**VC WEIGHTED CONCENTRATION**
1	SB-AOC10-2013-100	1	406622.54	520142.47	0.110	3462.69	380.90
2	SB-10-SO-10-101	1	406628.40	520177.72	0.0013	1128.32	1.47
3	SB-AOC10-2013-109	1	406707.19	520202.86	0.0013	89234.46	116.00
4	SB-10-SO-209	1	406649.49	520210.81	0.0013	1607.43	2.09
5	SB-10-SO-10-100	1	406625.65	520173.54	0.0013	303.54	0.39
6	B10-3	1	406526.65	520111.54	0.0013	36252.91	47.13
7	SB-10-SO-10-103	1	406621.16	520171.23	0.0013	1400.47	1.82
8	SB-10-SO-11	2	406646.65	520124.54	0.001	3187.96	4.14
9	SB-AOC10-2013-102	1	406691.73	520156.14	0.001	3252.22	3.25
SUM						**139830.01**	**557.20**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.004**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.06**

TABLE L-16
VINYL CHLORIDE CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW04							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**VC MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**VC WEIGHTED CONCENTRATION**
1	SB-10-SO-7	1	406779.65	520374.54	1.700	3140.08	5338.14
2	B8-4-102	1	406551.36	520246.07	0.440	1460.80	642.75
3	B8-4-100	1	406545.18	520223.83	0.170	756.05	128.53
4	B8-4-101	1	406525.31	520242.60	0.150	584.80	87.72
5	SB-10-SO-210	1	406642.27	520212.80	0.150	2322.03	348.30
6	SB-8-SO-12-101	1	406521.28	520211.50	0.140	1106.25	154.88
7	B8-4-103	1	406537.24	520249.32	0.120	386.35	46.36
8	SB-10-SO-9	1	406691.65	520260.54	0.013	3438.08	44.70
9	SB-10-SO-208	1	406535.14	520199.52	0.0015	2267.57	3.40
10	SB-10-SO-7-101	1	406783.57	520370.99	0.0014	70910.99	99.28
11	SB-AOC8B-2013-102	1	406493.88	520187.05	0.0013	34739.46	45.16
12	B8-4	1	406531.72	520234.75	0.0013	312.63	0.41
13	SB-AOC10-2013-103	1	406578.51	520232.41	0.0012	3551.90	4.26
14	SB-AOC10-2013-107	1	406672.56	520290.94	0.0012	7956.92	9.55
15	SB-AOC10-2013-101	1	406591.44	520185.91	0.0011	1751.62	1.93
16	SB-10-SO-7-102	1	406774.84	520372.04	0.001	5204.57	5.20
SUM						**139890.10**	**6960.56**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.050**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.06**

TABLE L-16
VINYL CHLORIDE CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW05							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**VC MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**VC WEIGHTED CONCENTRATION**
1	SB-8-SO-14-101	1	406353.72	520201.35	0.840	752.21	631.85
2	B8-8-2	1	406336.69	520203.90	0.640	4959.43	3174.04
3	B8-6-100	1	406408.23	520267.55	0.280	2619.00	733.32
4	B10-7	1	406870.65	520478.54	0.280	2094.96	586.59
5	SB-AOC8B-2013-105	1	406450.08	520243.59	0.120	3791.67	455.00
6	SB-10-SO-5A	2	406859.70	520524.59	0.068	2190.57	148.96
7	SB-10-SO-6	1	406693.07	520419.39	0.012	16056.97	192.68
8	SB-10-SO-5	1	406852.70	520540.59	0.012	2507.77	30.09
9	B8-8-4	1	406387.24	520180.31	0.0057	856.63	4.88
10	B8-8-3	1	406352.66	520231.29	0.0056	1807.89	10.12
11	SB-AOC10-2013-122	1	406893.64	520585.73	0.0013	52370.17	68.08
12	B8-8	1	406341.67	520187.92	0.0013	16724.96	21.74
13	SB-AOC8B-2013-104	1	406374.67	520269.99	0.0013	1143.63	1.49
14	SB-AOC8B-2013-109	1	406393.92	520215.20	0.0012	1727.17	2.07
15	SB-AOC8B-2013-108	1	406529.66	520298.41	0.0011	12676.57	13.94
16	SB-AOC8B-2013-103	1	406436.51	520208.36	0.001	1274.93	1.27
17	SB-AOC10-2013-117	1	406788.88	520485.71	0.001	9316.97	9.32
18	SB-AOC10-2013-120	1	406870.10	520549.05	0.00094	2850.38	2.68
19	B8-8-4-103	1	406386.20	520186.41	0.00088	719.76	0.63
20	SB-AOC8B-2013-107	1	406461.79	520327.38	0.00063	3582.77	2.26
SUM						**140024.42**	**6091.03**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.043**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.06**

TABLE L-16
VINYL CHLORIDE CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW06							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**VC MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**VC WEIGHTED CONCENTRATION**
1	SB-8-SO-11	1	406389.65	520297.54	1.90	1931.46	3669.78
2	JSO11-101	1	406363.10	520283.01	0.13	3788.72	492.53
3	SB-10-SO-2	2	406939.65	520727.54	0.016	1355.23	21.68
4	SB-10-SO-1	2	406977.65	520786.54	0.013	33486.43	435.32
5	SB-10-SO-3	1	406814.65	520639.54	0.012	17068.11	204.82
6	SB-AOC8B-2013-106	1	406401.68	520353.45	0.0014	28361.59	39.71
7	B8-5	1	406298.36	520322.61	0.0013	25961.39	33.75
8	SB-AOC10-2013-123	1	406920.73	520640.18	0.0011	2063.51	2.27
9	SB-AOC10-2013-124	1	406881.99	520635.22	0.001	2006.16	2.01
10	SB-AOC10-2013-121	1	406840.91	520601.89	0.00099	10708.54	10.60
11	SB-AOC10-2013-127	1	406917.01	520735.20	0.00096	1225.87	1.18
12	SB-AOC10-2013-129	1	406954.52	520718.01	0.00096	6040.49	5.80
13	SB-AOC10-2013-125	1	406853.93	520660.55	0.00094	2909.62	2.74
14	SB-AOC10-2013-128	1	406903.45	520689.99	0.00091	3175.42	2.89
SUM						**140082.54**	**4925.07**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.035**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.06**

TABLE L-16
VINYL CHLORIDE CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW12							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**VC MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**VC WEIGHTED CONCENTRATION**
1	B3-5	1	406012.77	520808.40	3	1266.27	3798.82
2	B3-1	2	406012.66	520823.22	1.600	3580.24	5728.38
3	SB-3-SO-24	1	405992.05	520813.77	0.064	2460.53	157.47
4	SB-3-SO-23	1	405998.25	520821.68	0.013	1156.99	15.04
5	SB-3-SO-22	1	406003.17	520819.59	0.013	123.00	1.60
6	SB-3-SO-27	1	405983.43	520773.13	0.011	28704.83	315.75
7	ISO23-3	1	405485.31	520498.99	0.005	44492.65	222.46
8	B3-4-200	1	406021.22	520816.49	0.0012	40012.58	48.02
9	MW-71	1	406755.81	521280.12	0.001	101503.04	101.50
SUM						**223300.13**	**10389.05**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.047**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.06**

TABLE L-16
VINYL CHLORIDE CONCENTRATIONS IN THE SUBSURFACE ZONE
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

FUNCTIONAL AREA: IGW14							
RANK	**LOCATION**	**SAMPLE COUNT**	**X-COORDINATE**	**Y-COORDINATE**	**VC MAXIMUM CONCENTRATION (MG/KG)**	**POLYGON AREA (SQ. FT)**	**VC WEIGHTED CONCENTRATION**
1	GSO11	1	406141.95	521128.65	0.660	689.88	455.32
2	GSO7	1	406093.31	521098.97	0.0013	101126.20	131.46
3	GSO9	1	406115.79	521150.09	0.0013	3648.95	4.74
4	B2-1-201	1	406131.46	521111.85	0.0012	1904.47	2.29
5	GS011-200	1	406157.30	521131.58	0.0012	115930.62	139.12
SUM						**223300.13**	**732.93**
AREA WEIGHTED MEAN CONCENTRATION (MG/KG)							**0.003**
SITE-SPECIFIC IGWSRS (MG/KG)							**0.06**

GIS FILE PATH: G:\70613\Global\GIS\Impact to Groundwater Area Weighted Averaging\Maps\70613_816_0000_IGWCA_AS-SURF.mxd — USER: dquafisi — LAST SAVED: 5/10/2017 4:10:03 PM

LEGEND

ARSENIC CONCENTRATION, SURFACE ZONE

- EXCEEDS SITE-SPECIFIC IGWSRS (19 MG/KG)
- NO EXCEEDANCE
- THIESSEN POLYGON BOUNDARY
- SITE BOUNDARY

NOTES

1. SURFACE ZONE: SURFACE TO 2 FEET ABOVE THE WATER TABLE

2. DUE TO THE DENSITY OF SAMPLING LOCATIONS IN SOME AREAS, NOT ALL SAMPLING LOCATION LABELS ARE SHOWN ON THIS FIGURE.

3. EACH SOIL BORING CONSISTED OF ONE OR MORE SAMPLES AT VARIOUS DEPTHS IN THE SOIL. REFER TO THE TEXT FOR DETAILED METHODOLOGY USED TO DETERMINE WHICH SAMPLE IS DEPICTED FOR COMPARISON.

4. REFER TO TABLES FOR DETAILED RESULTS.

N

0 220 440

SCALE IN FEET

HALEY ALDRICH

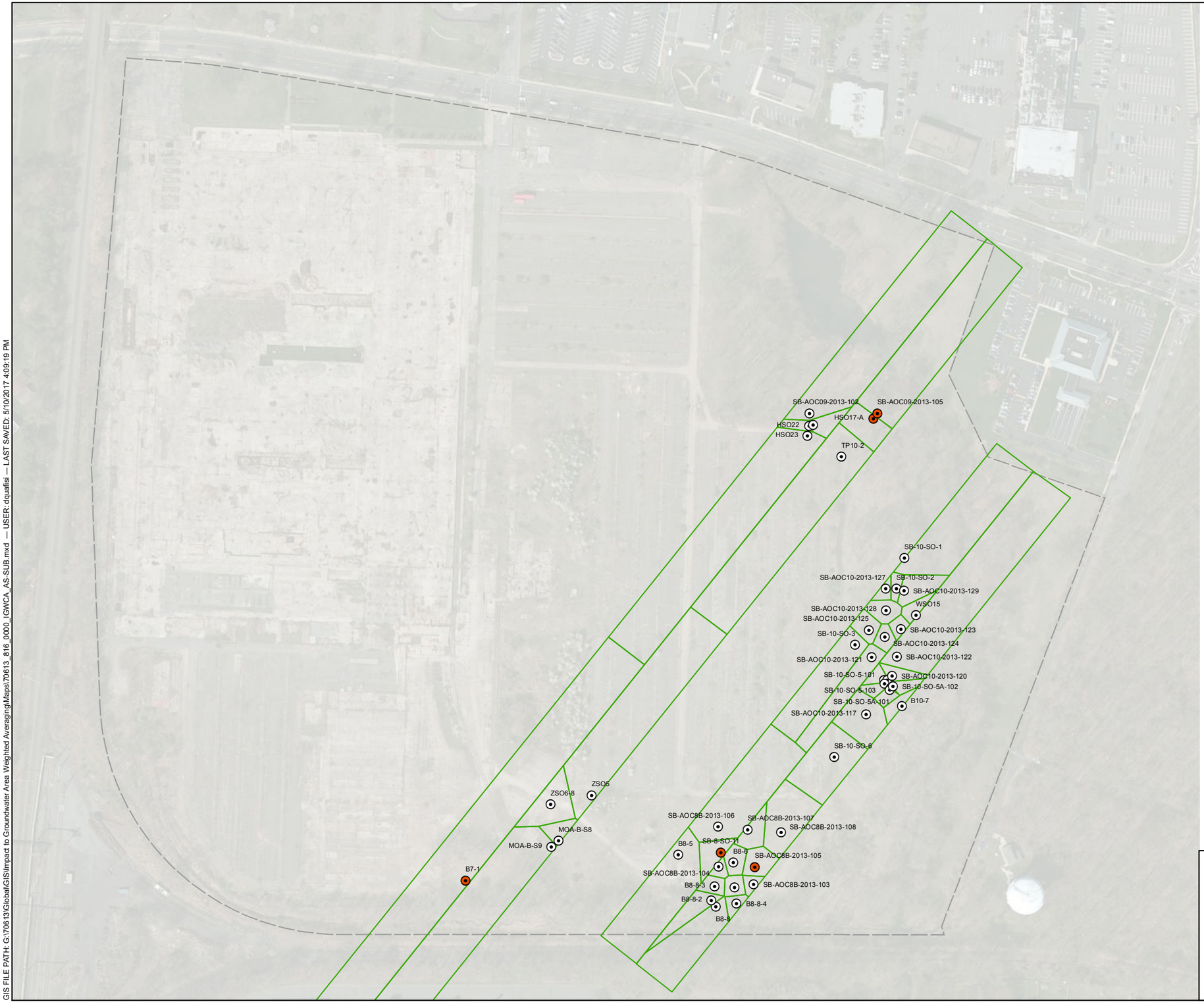
RACER TRUST
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

IMPACT TO GROUNDWATER EVALUATION ARSENIC - SURFACE

MAY 2017

FIGURE L-1

GIS FILE PATH: G:\70613\Global\GIS\Impact to Groundwater Area Weighted Averaging\Maps\70613_816_0000_IGWCA_AS-SUB.mxd — USER: dquafisi — LAST SAVED: 5/10/2017 4:09:19 PM



LEGEND

ARSENIC CONCENTRATION, SUBSURFACE ZONE

- EXCEEDS SITE-SPECIFIC IGWSRS (19 MG/KG)
- NO EXCEEDANCE
- THIESSEN POLYGON BOUNDARY
- SITE BOUNDARY

NOTES

1. SUBSURFACE ZONE: 2 FEET ABOVE WATER TABLE TO WATER TABLE

2. DUE TO THE DENSITY OF SAMPLING LOCATIONS IN SOME AREAS, NOT ALL SAMPLING LOCATION LABELS ARE SHOWN ON THIS FIGURE.

3. EACH SOIL BORING CONSISTED OF ONE OR MORE SAMPLES AT VARIOUS DEPTHS IN THE SOIL. REFER TO THE TEXT FOR DETAILED METHODOLOGY USED TO DETERMINE WHICH SAMPLE IS DEPICTED FOR COMPARISON.

4. REFER TO TABLES FOR DETAILED RESULTS.

0 220 440

SCALE IN FEET

HALEY ALDRICH

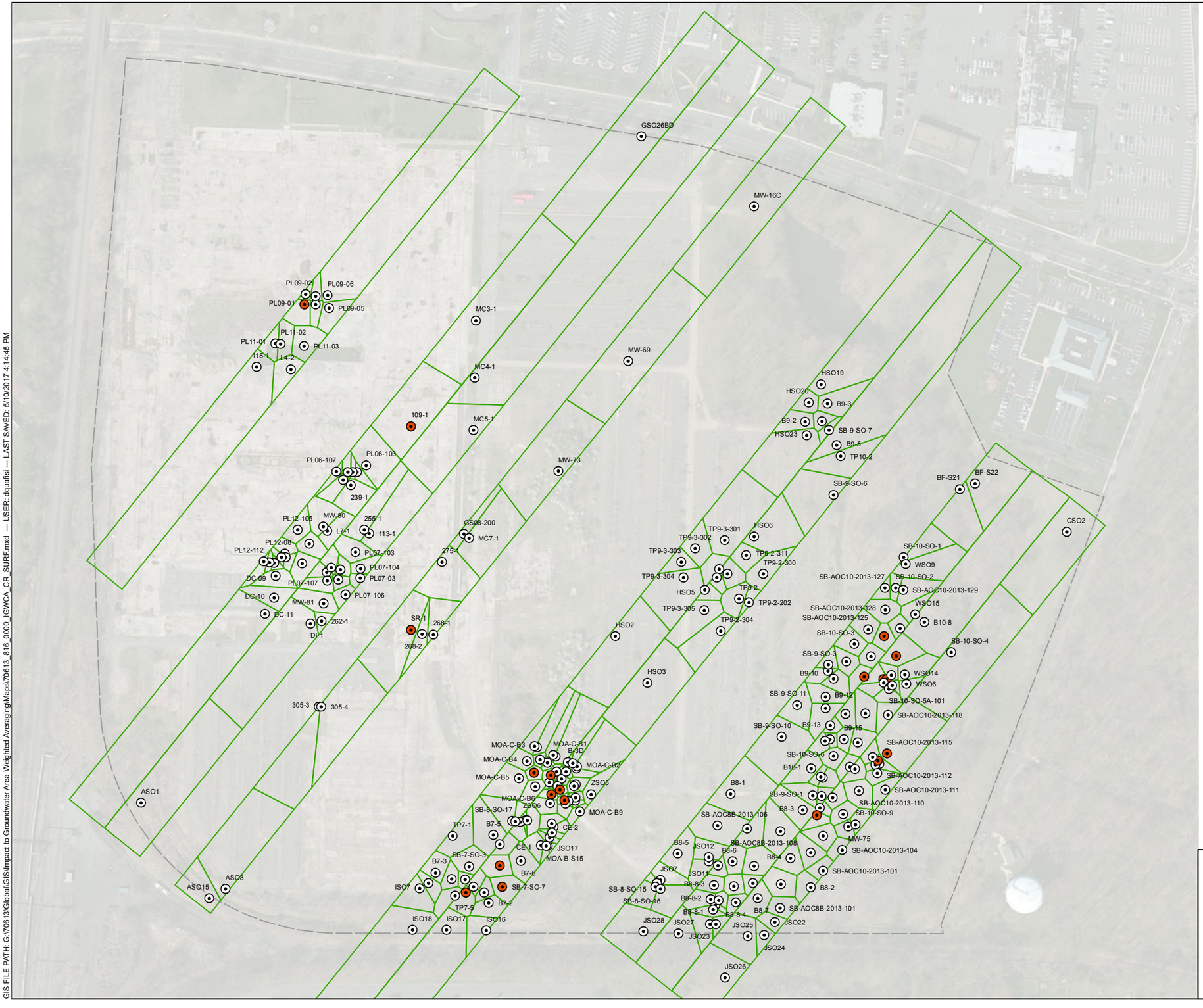
RACER TRUST
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

IMPACT TO GROUNDWATER EVALUATION ARSENIC - SUBSURFACE

MAY 2017

FIGURE L-2

GIS FILE PATH: G:\70613\Global\GIS\Impact to Groundwater Area Weighted Averaging\Maps\70613_816_0000_IGWCA_CR_SURF.mxd — USER: dquafisi — LAST SAVED: 5/10/2017 4:14:45 PM



LEGEND

CHROMIUM CONCENTRATION, SURFACE ZONE

- EXCEEDS SITE-SPECIFIC IGWSRS (1540 MG/KG)
- NO EXCEEDANCE
- THIESSEN POLYGON BOUNDARY
- SITE BOUNDARY

NOTES

1. SURFACE ZONE: SURFACE TO 2 FEET ABOVE THE WATER TABLE

2. DUE TO THE DENSITY OF SAMPLING LOCATIONS IN SOME AREAS, NOT ALL SAMPLING LOCATION LABELS ARE SHOWN ON THIS FIGURE.

3. EACH SOIL BORING CONSISTED OF ONE OR MORE SAMPLES AT VARIOUS DEPTHS IN THE SOIL. REFER TO THE TEXT FOR DETAILED METHODOLOGY USED TO DETERMINE WHICH SAMPLE IS DEPICTED FOR COMPARISON.

4. REFER TO TABLES FOR DETAILED RESULTS.

N

0 220 440

SCALE IN FEET

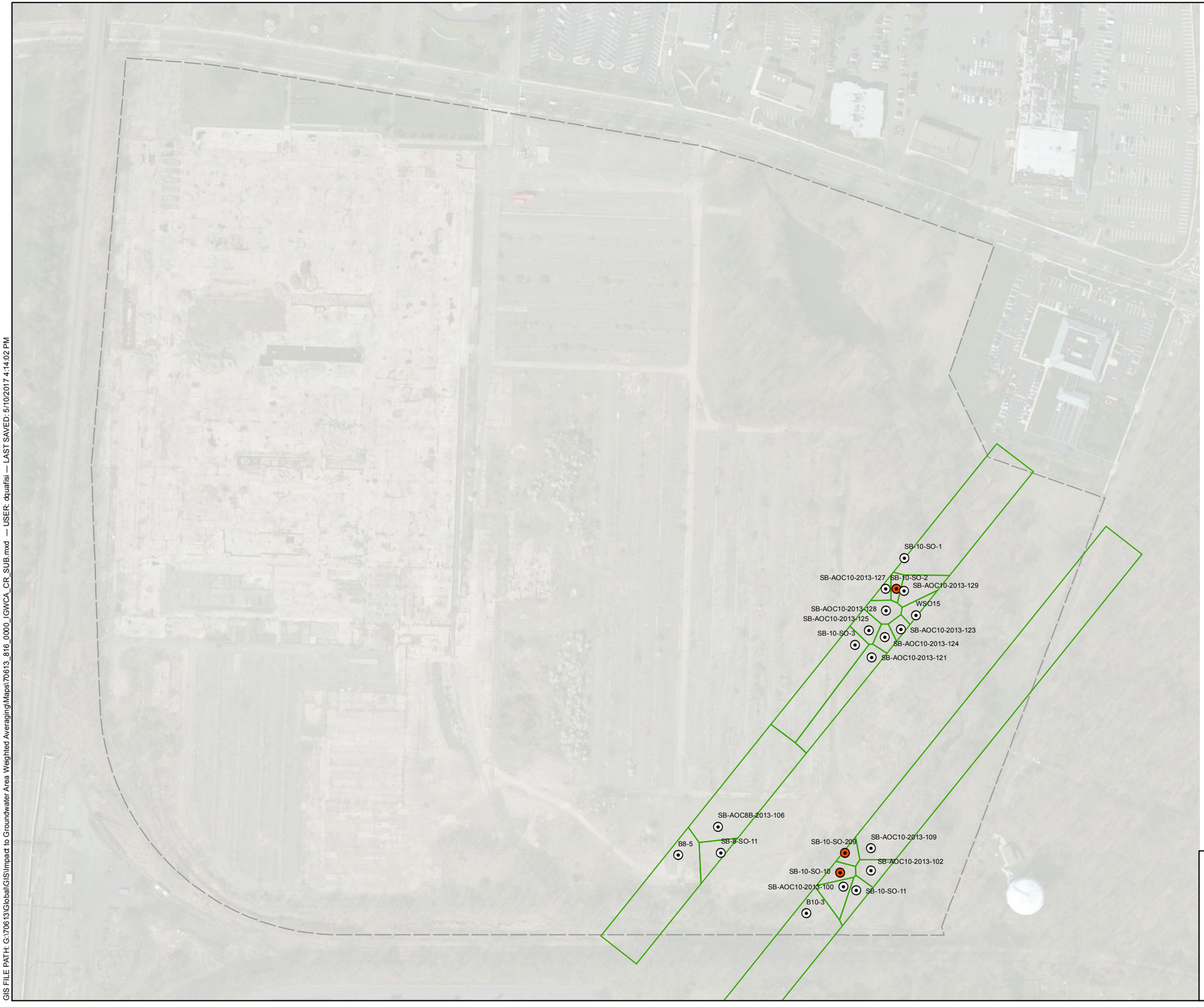
HALEY ALDRICH

RACER TRUST
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

IMPACT TO GROUNDWATER EVALUATION CHROMIUM - SURFACE

MAY 2017

FIGURE L-3



LEGEND

CHROMIUM CONCENTRATION, SUBSURFACE ZONE

- EXCEEDS SITE-SPECIFIC IGWSRS (1540 MG/KG)
- NO EXCEEDANCE
- THIESSEN POLYGON BOUNDARY
- SITE BOUNDARY

NOTES

1. SUBSURFACE ZONE: 2 FEET ABOVE WATER TABLE TO WATER TABLE

2. DUE TO THE DENSITY OF SAMPLING LOCATIONS IN SOME AREAS, NOT ALL SAMPLING LOCATION LABELS ARE SHOWN ON THIS FIGURE.

3. EACH SOIL BORING CONSISTED OF ONE OR MORE SAMPLES AT VARIOUS DEPTHS IN THE SOIL. REFER TO THE TEXT FOR DETAILED METHODOLOGY USED TO DETERMINE WHICH SAMPLE IS DEPICTED FOR COMPARISON.

4. REFER TO TABLES FOR DETAILED RESULTS.

N

0 220 440

SCALE IN FEET

HALEY ALDRICH

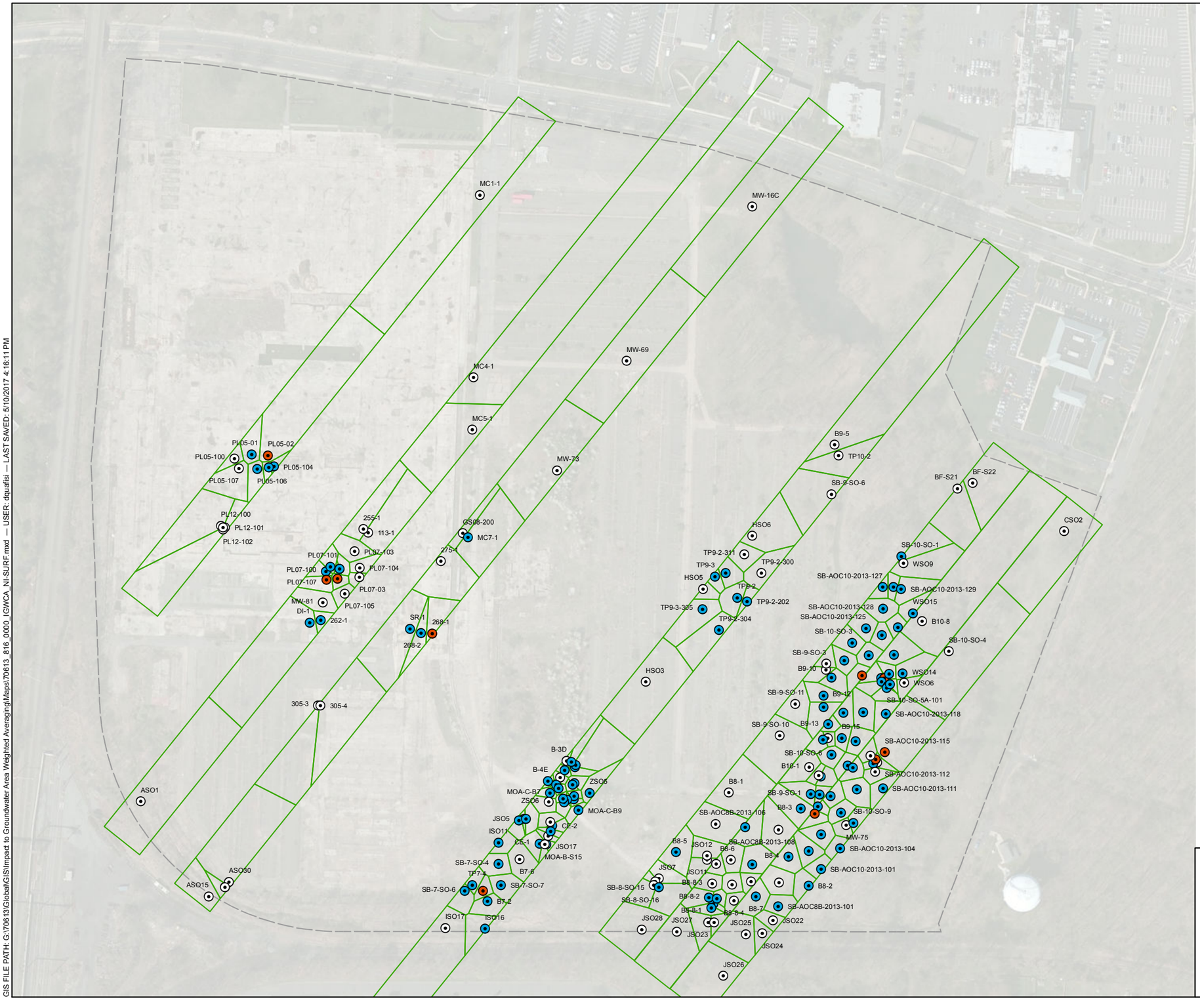
RACER TRUST
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

IMPACT TO GROUNDWATER EVALUATION CHROMIUM - SUBSURFACE

MAY 2017

FIGURE L-4

GIS FILE PATH: G:\70613\Global\GIS\Impact to Groundwater Area Weighted Averaging\Maps\70613_816_0000_IGWCA_CR_SUB.mxd — USER: dquafisi — LAST SAVED: 5/10/2017 4:14:02 PM



LEGEND

NICKEL CONCENTRATION, SURFACE ZONE

- EXCEEDS SITE-SPECIFIC IGWSRS (9200 MG/KG)
- EXCEEDS 2013 DEFAULT IGWSSL (48 MG/KG)
- NO EXCEEDANCE
- THIESSEN POLYGON BOUNDARY
- SITE BOUNDARY

NOTES

1. SURFACE ZONE: SURFACE TO 2 FEET ABOVE THE WATER TABLE

2. DUE TO THE DENSITY OF SAMPLING LOCATIONS IN SOME AREAS, NOT ALL SAMPLING LOCATION LABELS ARE SHOWN ON THIS FIGURE.

3. EACH SOIL BORING CONSISTED OF ONE OR MORE SAMPLES AT VARIOUS DEPTHS IN THE SOIL. REFER TO THE TEXT FOR DETAILED METHODOLOGY USED TO DETERMINE WHICH SAMPLE IS DEPICTED FOR COMPARISON.

4. REFER TO TABLES FOR DETAILED RESULTS.

N

0 220 440

SCALE IN FEET

HALEY ALDRICH

RACER TRUST
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

IMPACT TO GROUNDWATER EVALUATION NICKEL - SURFACE

MAY 2017

FIGURE L-5

GIS FILE PATH: G:\70613\Global\GIS\Impact to Groundwater Area Weighted Averaging\Maps\70613_816_0000_IGWCA_NI-SURF.mxd — USER: dquafisi — LAST SAVED: 5/10/2017 4:16:11 PM

LEGEND

NICKEL CONCENTRATION, SUBSURFACE ZONE

- EXCEEDS SITE-SPECIFIC IGWSRS (9200 MG/KG)
- EXCEEDS 2013 DEFAULT IGWSSL (48 MG/KG)
- NO EXCEEDANCE
- THIESSEN POLYGON BOUNDARY
- SITE BOUNDARY

NOTES

1. SUBSURFACE ZONE: 2 FEET ABOVE WATER TABLE TO WATER TABLE

2. DUE TO THE DENSITY OF SAMPLING LOCATIONS IN SOME AREAS, NOT ALL SAMPLING LOCATION LABELS ARE SHOWN ON THIS FIGURE.

3. EACH SOIL BORING CONSISTED OF ONE OR MORE SAMPLES AT VARIOUS DEPTHS IN THE SOIL. REFER TO THE TEXT FOR DETAILED METHODOLOGY USED TO DETERMINE WHICH SAMPLE IS DEPICTED FOR COMPARISON.

4. REFER TO TABLES FOR DETAILED RESULTS.

N

0 220 440

SCALE IN FEET

HALEY ALDRICH

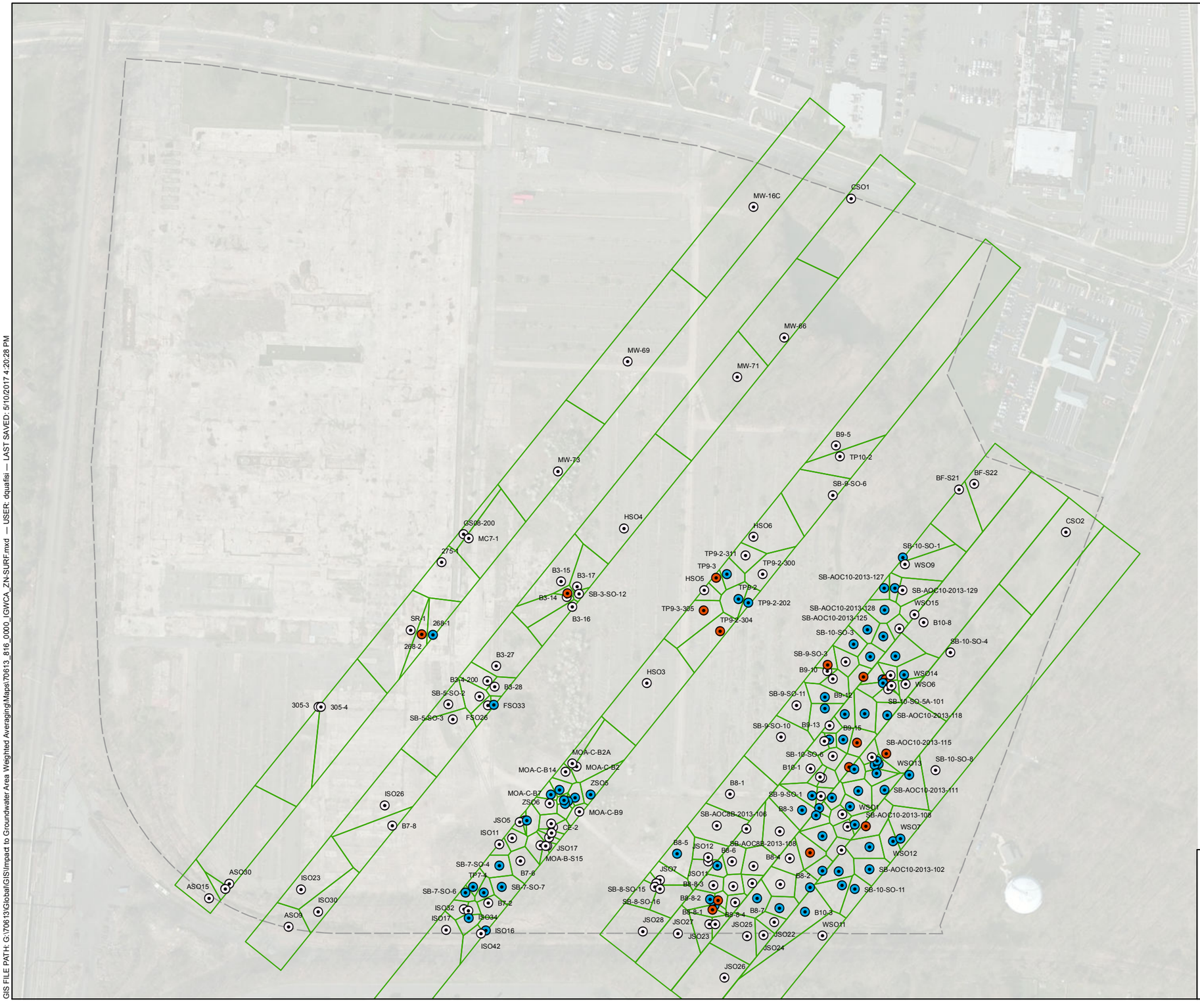
RACER TRUST
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

IMPACT TO GROUNDWATER EVALUATION
NICKEL - SUBSURFACE

MAY 2017

FIGURE L-6

GIS FILE PATH: G:\70613\Global\GIS\Impact to Groundwater Area Weighted Averaging\Maps\70613_816_0000_IGWCA_NI-SUB.mxd — USER: dquafisi — LAST SAVED: 5/10/2017 4:15:28 PM



LEGEND

ZINC CONCENTRATION, SURFACE ZONE

- EXCEEDS SITE-SPECIFIC IGWSRS (14200 MG/KG)
- EXCEEDS 2013 DEFAULT IGWSSL (930 MG/KG)
- NO EXCEEDANCE
- THIESSEN POLYGON BOUNDARY
- SITE BOUNDARY

NOTES

1. SURFACE ZONE: SURFACE TO 2 FEET ABOVE THE WATER TABLE

2. DUE TO THE DENSITY OF SAMPLING LOCATIONS IN SOME AREAS, NOT ALL SAMPLING LOCATION LABELS ARE SHOWN ON THIS FIGURE.

3. EACH SOIL BORING CONSISTED OF ONE OR MORE SAMPLES AT VARIOUS DEPTHS IN THE SOIL. REFER TO THE TEXT FOR DETAILED METHODOLOGY USED TO DETERMINE WHICH SAMPLE IS DEPICTED FOR COMPARISON.

4. REFER TO TABLES FOR DETAILED RESULTS.

N

0 220 440

SCALE IN FEET

HALEY ALDRICH

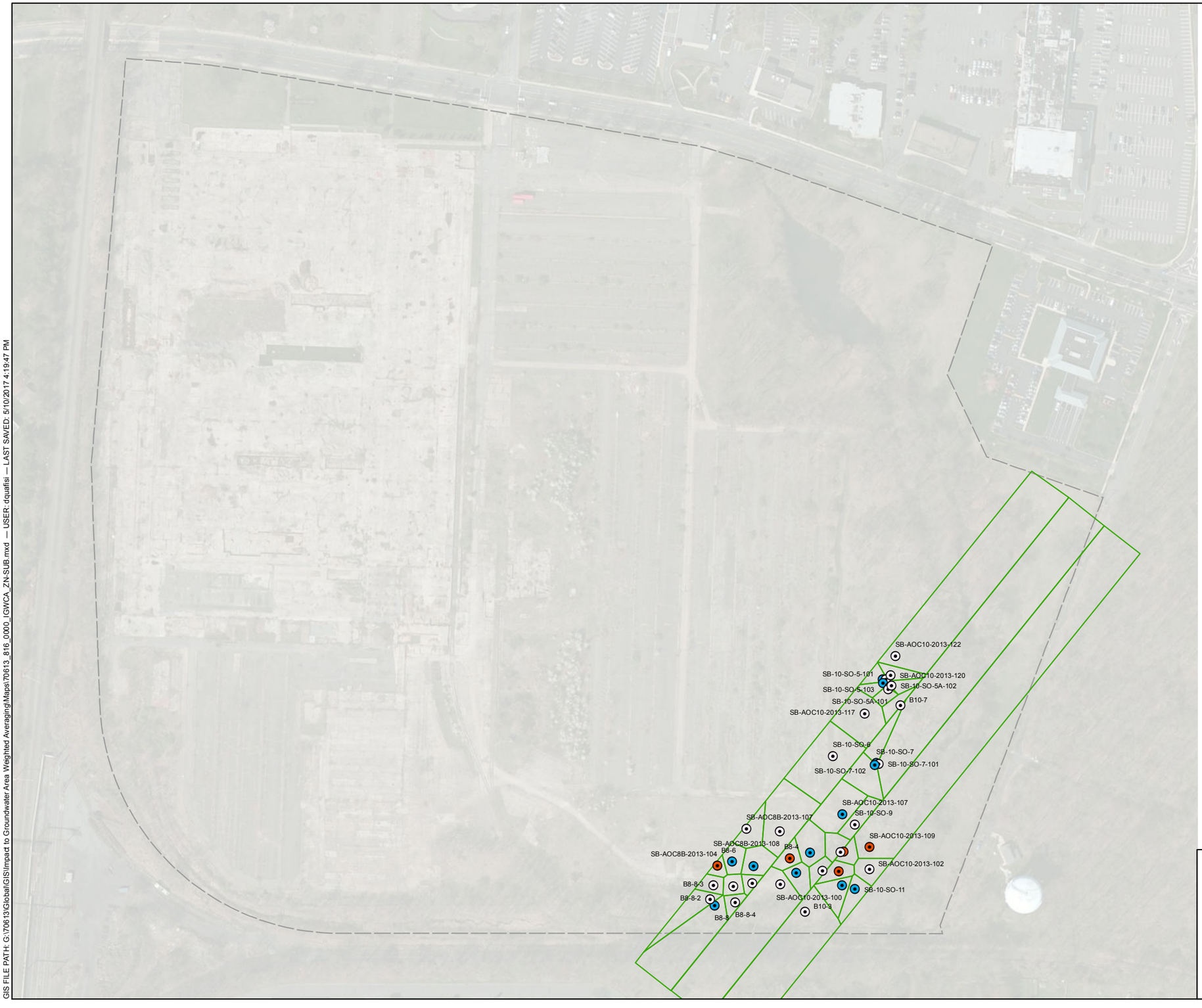
RACER TRUST
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

IMPACT TO GROUNDWATER EVALUATION ZINC - SURFACE

MAY 2017

FIGURE L-7

GIS FILE PATH: G:\70613\Global\GIS\Impact to Groundwater Area Weighted Averaging\Maps\70613_816_0000_IGWCA_ZN-SURF.mxd — USER: dquafisi — LAST SAVED: 5/10/2017 4:20:28 PM



LEGEND

ZINC CONCENTRATION, SUBSURFACE ZONE

- EXCEEDS SITE-SPECIFIC IGWSRS (14200 MG/KG)
- EXCEEDS 2013 DEFAULT IGWSSL (930 MG/KG)
- NO EXCEEDANCE
- THIESSEN POLYGON BOUNDARY
- SITE BOUNDARY

NOTES

1. SUBSURFACE ZONE: 2 FEET ABOVE WATER TABLE TO WATER TABLE

2. DUE TO THE DENSITY OF SAMPLING LOCATIONS IN SOME AREAS, NOT ALL SAMPLING LOCATION LABELS ARE SHOWN ON THIS FIGURE.

3. EACH SOIL BORING CONSISTED OF ONE OR MORE SAMPLES AT VARIOUS DEPTHS IN THE SOIL. REFER TO THE TEXT FOR DETAILED METHODOLOGY USED TO DETERMINE WHICH SAMPLE IS DEPICTED FOR COMPARISON.

4. REFER TO TABLES FOR DETAILED RESULTS.

N

0 220 440

SCALE IN FEET

HALEY ALDRICH

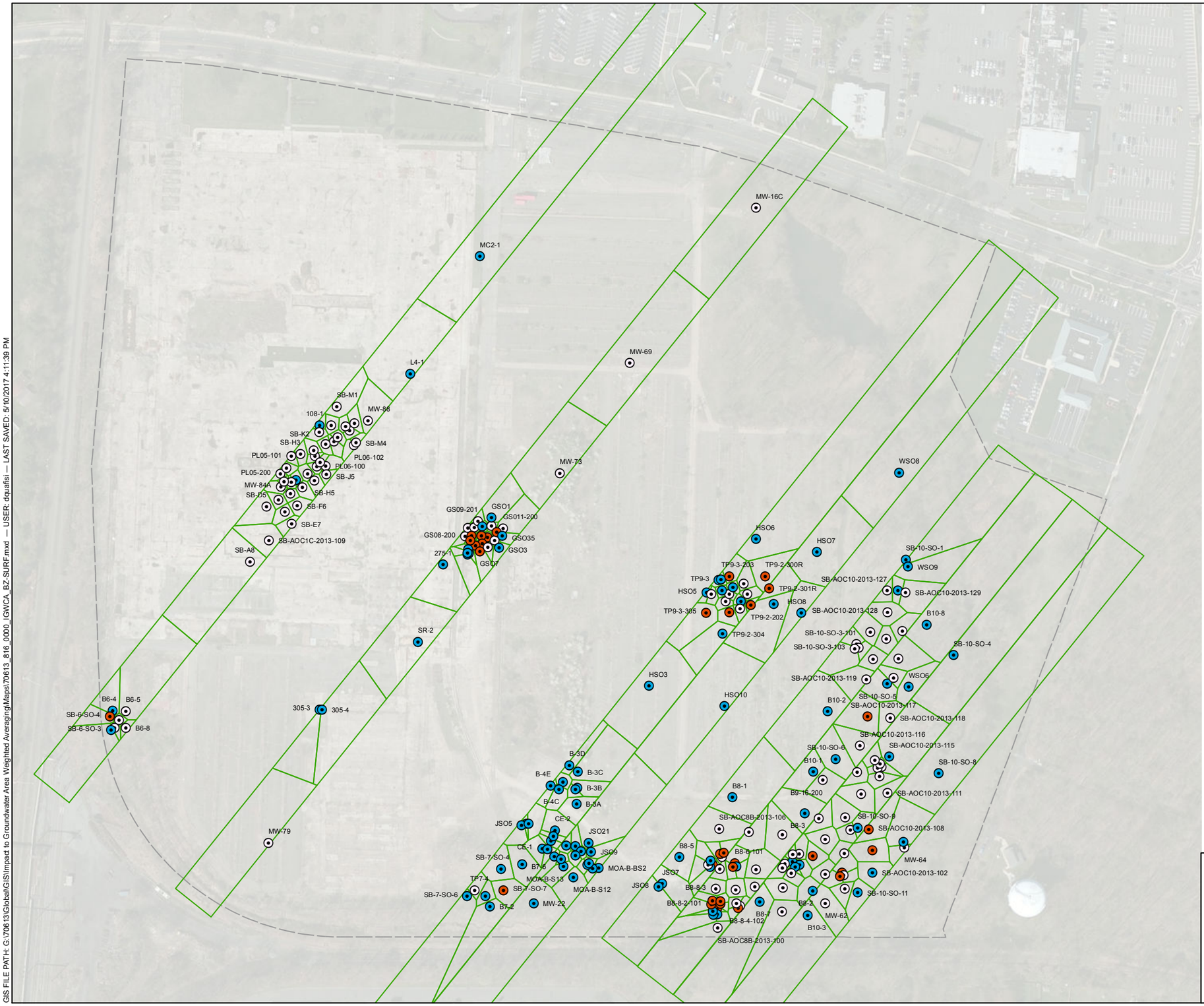
RACER TRUST
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

IMPACT TO GROUNDWATER EVALUATION ZINC- SUBSURFACE

MAY 2017

FIGURE L-8

GIS FILE PATH: G:\706\13\Global\GIS\Impact to Groundwater Area Weighted Averaging\Maps\706\13_816_0000_IGWCA_ZN-SUB.mxd — USER: dquafisi — LAST SAVED: 5/10/2017 4:19:47 PM



LEGEND

BENZENE CONCENTRATION, SURFACE ZONE

- EXCEEDS SITE-SPECIFIC IGWSRS (0.2 MG/KG)
- EXCEEDS 2013 DEFAULT IGWSSL (0.005 MG/KG)
- NO EXCEEDANCE
- THIESSEN POLYGON BOUNDARY
- SITE BOUNDARY

NOTES

1. SURFACE ZONE: SURFACE TO 2 FEET ABOVE THE WATER TABLE

2. DUE TO THE DENSITY OF SAMPLING LOCATIONS IN SOME AREAS, NOT ALL SAMPLING LOCATION LABELS ARE SHOWN ON THIS FIGURE.

3. EACH SOIL BORING CONSISTED OF ONE OR MORE SAMPLES AT VARIOUS DEPTHS IN THE SOIL. REFER TO THE TEXT FOR DETAILED METHODOLOGY USED TO DETERMINE WHICH SAMPLE IS DEPICTED FOR COMPARISON.

4. REFER TO TABLES FOR DETAILED RESULTS.

N

0 220 440

SCALE IN FEET

HALEY ALDRICH

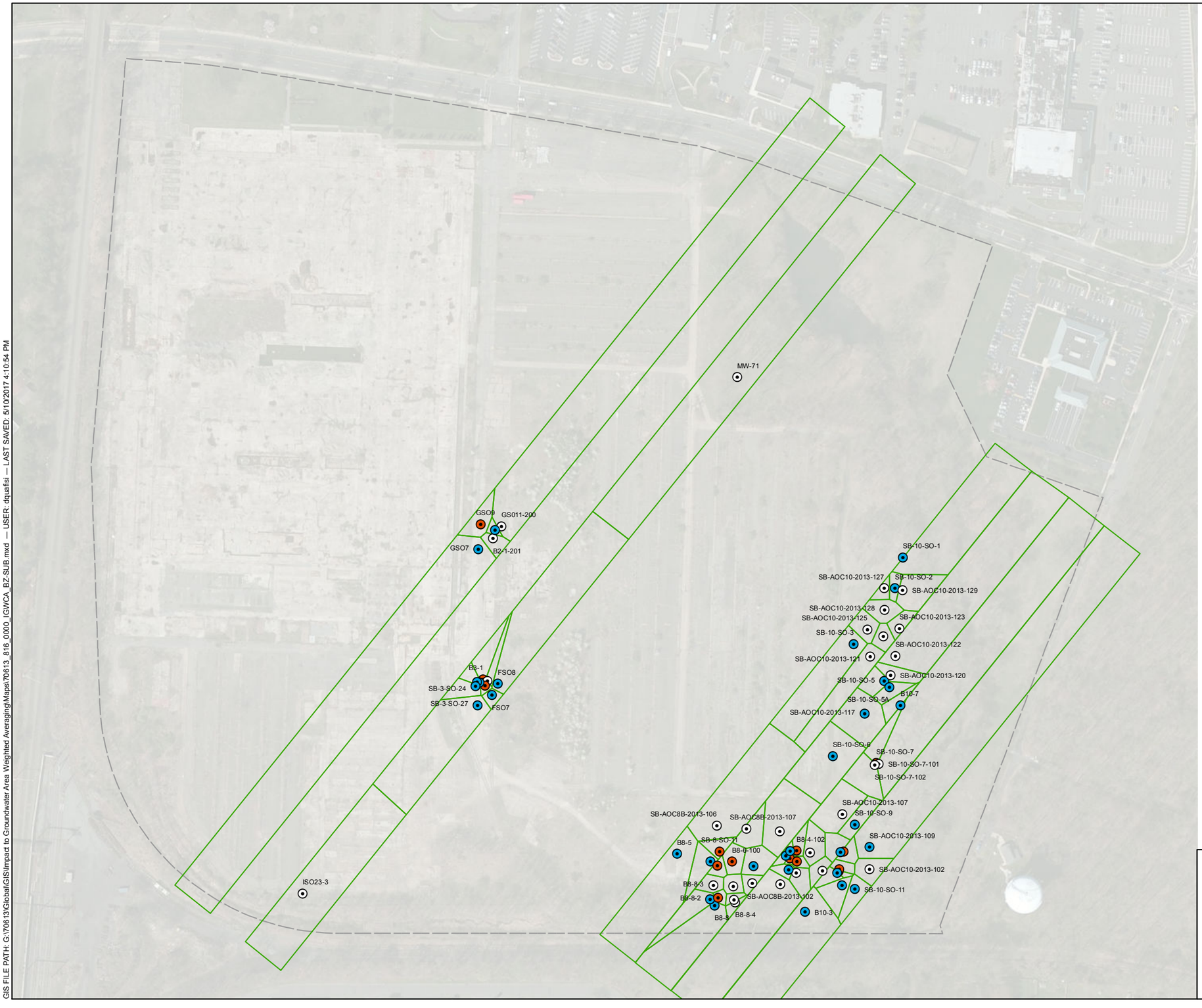
RACER TRUST
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

IMPACT TO GROUNDWATER EVALUATION BENZENE - SURFACE

MAY 2017

FIGURE L-9

GIS FILE PATH: G:\70613\Global\GIS\Impact to Groundwater Area Weighted Averaging\Maps\70613_816_0000_IGWCA_BZ-SURF.mxd — USER: dquafisi — LAST SAVED: 5/10/2017 4:11:39 PM



LEGEND

BENZENE CONCENTRATION, SUBSURFACE ZONE

- EXCEEDS SITE-SPECIFIC IGWSRS (0.2 MG/KG)
- EXCEEDS 2013 DEFAULT IGWSSL (0.005 MG/KG)
- NO EXCEEDANCE
- THIESSEN POLYGON BOUNDARY
- SITE BOUNDARY

NOTES

1. SUBSURFACE ZONE: 2 FEET ABOVE WATER TABLE TO WATER TABLE

2. DUE TO THE DENSITY OF SAMPLING LOCATIONS IN SOME AREAS, NOT ALL SAMPLING LOCATION LABELS ARE SHOWN ON THIS FIGURE.

3. EACH SOIL BORING CONSISTED OF ONE OR MORE SAMPLES AT VARIOUS DEPTHS IN THE SOIL. REFER TO THE TEXT FOR DETAILED METHODOLOGY USED TO DETERMINE WHICH SAMPLE IS DEPICTED FOR COMPARISON.

4. REFER TO TABLES FOR DETAILED RESULTS.

N

0 220 440

SCALE IN FEET

HALEY ALDRICH

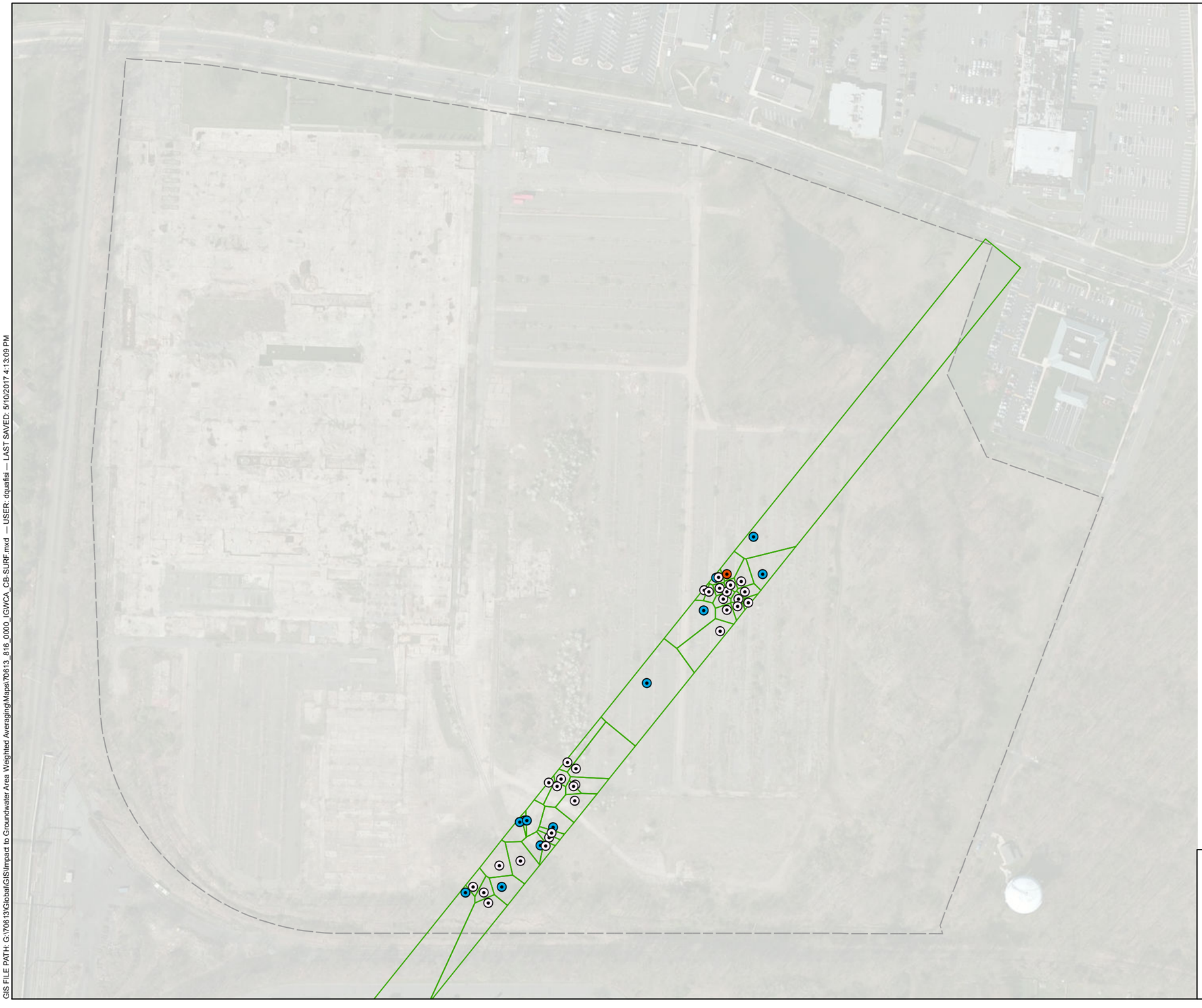
RACER TRUST
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

IMPACT TO GROUNDWATER EVALUATION BENZENE - SUBSURFACE

MAY 2017

FIGURE L-10

GIS FILE PATH: G:\70613\Global\GIS\Impact to Groundwater Area Weighted Averaging\Maps\70613_816_0000_IGWCA_BZ-SUB.mxd — USER: dquafisi — LAST SAVED: 5/10/2017 4:10:54 PM



LEGEND

CHLOROBENZENE CONCENTRATION, SURFACE ZONE

- EXCEEDS SITE-SPECIFIC IGWSRS (83 MG/KG)
- EXCEEDS 2013 DEFAULT IGWSSL (0.60 MG/KG)
- NO EXCEEDANCE
- THIESSEN POLYGON BOUNDARY
- SITE BOUNDARY

NOTES

1. SURFACE ZONE: SURFACE TO 2 FEET ABOVE THE WATER TABLE

2. DUE TO THE DENSITY OF SAMPLING LOCATIONS IN SOME AREAS, NOT ALL SAMPLING LOCATION LABELS ARE SHOWN ON THIS FIGURE.

3. EACH SOIL BORING CONSISTED OF ONE OR MORE SAMPLES AT VARIOUS DEPTHS IN THE SOIL. REFER TO THE TEXT FOR DETAILED METHODOLOGY USED TO DETERMINE WHICH SAMPLE IS DEPICTED FOR COMPARISON.

4. REFER TO TABLES FOR DETAILED RESULTS.

N

0 220 440

SCALE IN FEET

HALEY ALDRICH

RACER TRUST
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

IMPACT TO GROUNDWATER EVALUATION CHLOROBENZENE - SURFACE

MAY 2017

FIGURE L-11

GIS FILE PATH: G:\70613\Global\GIS\Impact to Groundwater Area Weighted Averaging\Maps\70613_816_0000_IGWCA_CB-SURF.mxd — USER: dquatlsi — LAST SAVED: 5/10/2017 4:13:09 PM

LEGEND

CHLOROBENZENE CONCENTRATION, SUBSURFACE ZONE

- EXCEEDS SITE-SPECIFIC IGWSRS (83 MG/KG)
- EXCEEDS 2013 DEFAULT IGWSSL (0.60 MG/KG)
- NO EXCEEDANCE
- THIESSEN POLYGON BOUNDARY
- SITE BOUNDARY

NOTES

1. SUBSURFACE ZONE: 2 FEET ABOVE WATER TABLE TO WATER TABLE

2. DUE TO THE DENSITY OF SAMPLING LOCATIONS IN SOME AREAS, NOT ALL SAMPLING LOCATION LABELS ARE SHOWN ON THIS FIGURE.

3. EACH SOIL BORING CONSISTED OF ONE OR MORE SAMPLES AT VARIOUS DEPTHS IN THE SOIL. REFER TO THE TEXT FOR DETAILED METHODOLOGY USED TO DETERMINE WHICH SAMPLE IS DEPICTED FOR COMPARISON.

4. REFER TO TABLES FOR DETAILED RESULTS.

N

0 220 440

SCALE IN FEET

HALEY ALDRICH

RACER TRUST
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

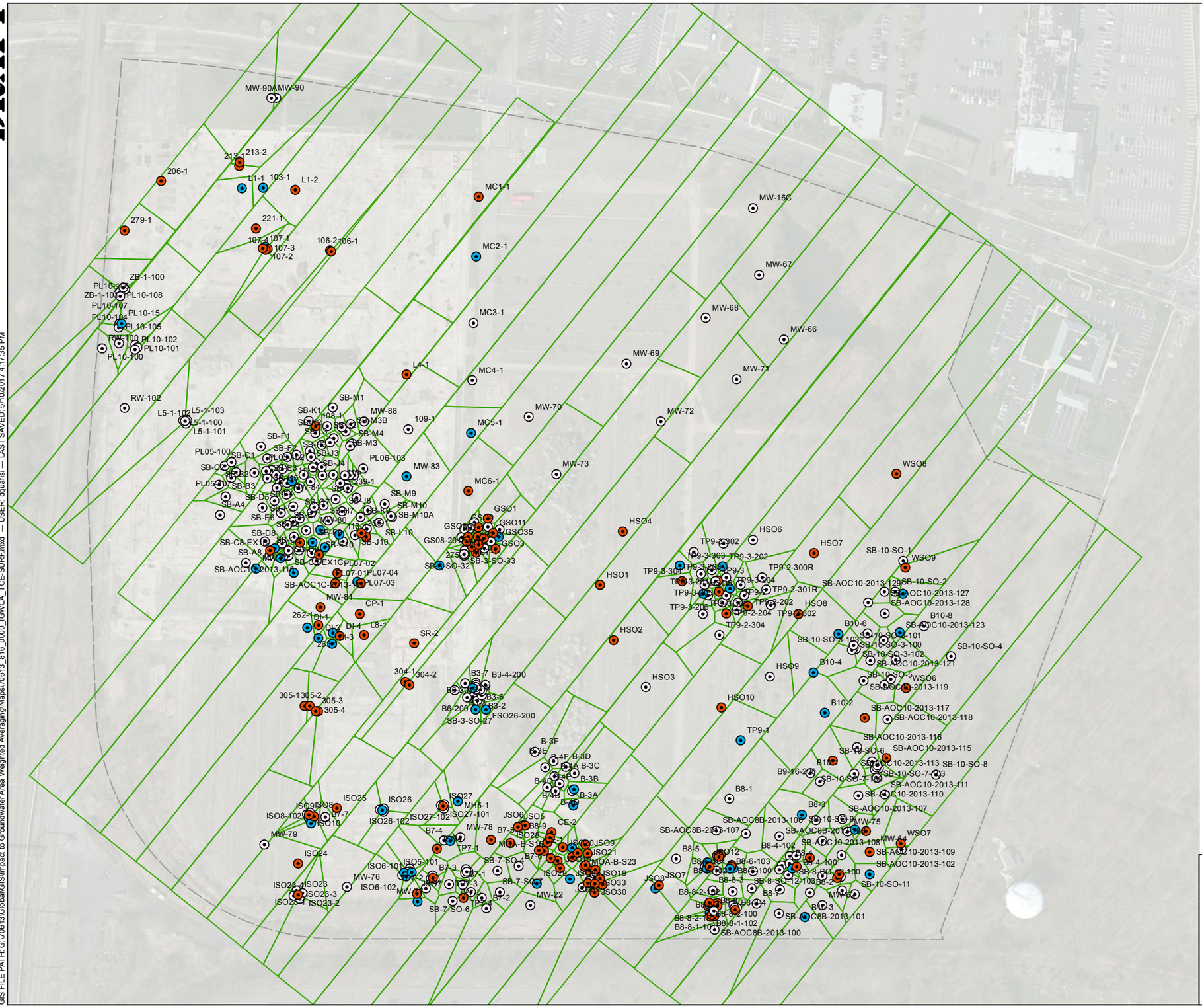
IMPACT TO GROUNDWATER EVALUATION CHLOROBENZENE - SUBSURFACE

MAY 2017

FIGURE L-12

GIS FILE PATH: G:\70613\Global\GIS\Impact to Groundwater Area Weighted Averaging\Maps\70613_816_0000_IGWCA_CB-SUB.mxd — USER: dqualfisi — LAST SAVED: 5/10/2017 4:12:20 PM

DRAFT



LEGEND

TRICHLOROETHENE CONCENTRATION, SURFACE ZONE

- EXCEEDS SITE-SPECIFIC IGWSRS (0.13 MG/KG)
- EXCEEDS 2013 DEFAULT IGWSSL (0.01 MG/KG)
- NO EXCEEDANCE
- THIESSEN POLYGON BOUNDARY
- SITE BOUNDARY

NOTES

1. SURFACE ZONE: SURFACE TO 2 FEET ABOVE THE WATER TABLE

2. DUE TO THE DENSITY OF SAMPLING LOCATIONS IN SOME AREAS, NOT ALL SAMPLING LOCATION LABELS ARE SHOWN ON THIS FIGURE.

3. EACH SOIL BORING CONSISTED OF ONE OR MORE SAMPLES AT VARIOUS DEPTHS IN THE SOIL. REFER TO THE TEXT FOR DETAILED METHODOLOGY USED TO DETERMINE WHICH SAMPLE IS DEPICTED FOR COMPARISON.

4. REFER TO TABLES FOR DETAILED RESULTS.

HALEY ALDRICH

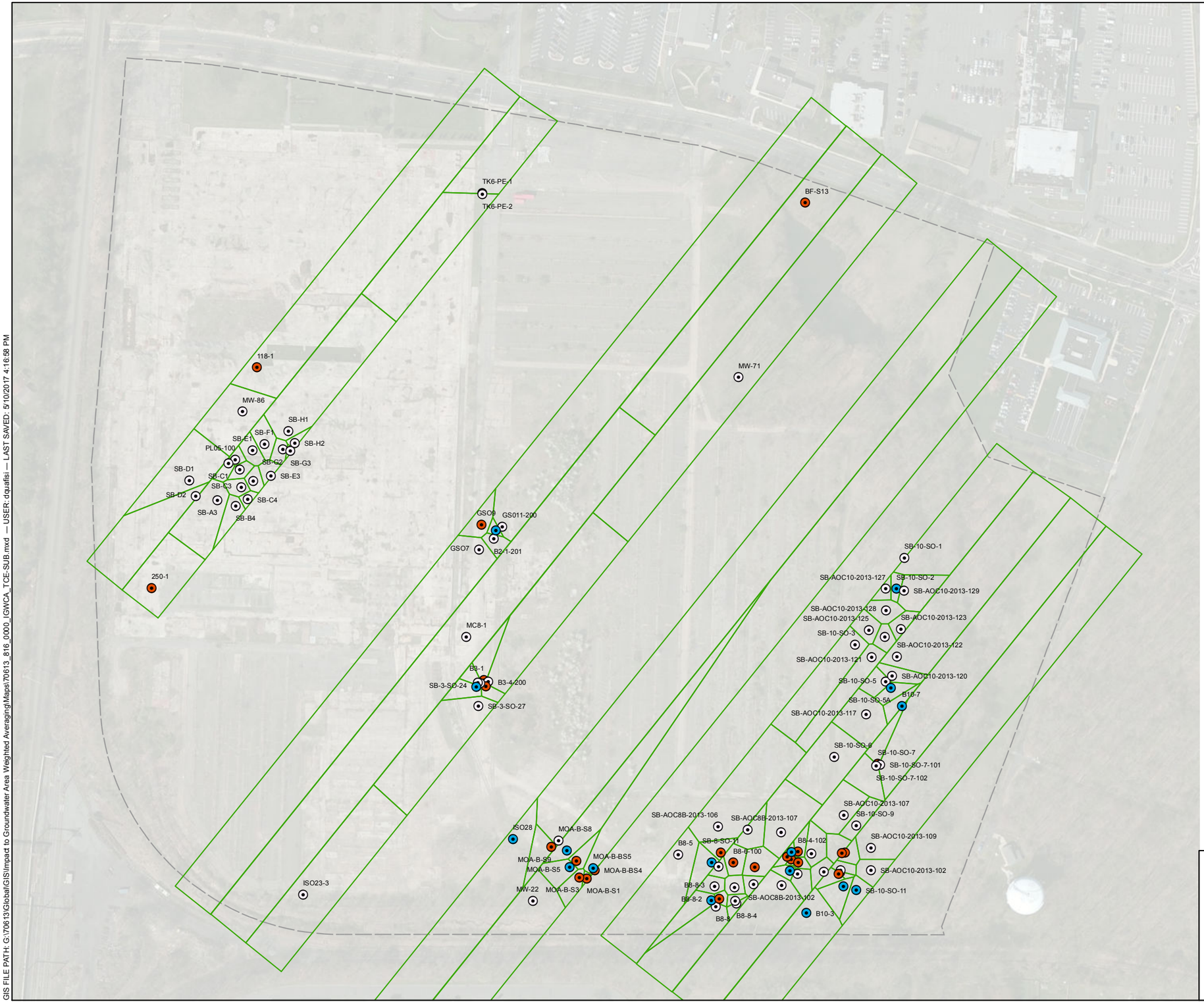
RACER TRUST
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

IMPACT TO GROUNDWATER EVALUATION TRICHLOROETHENE - SURFACE

MAY 2017

FIGURE L-13

GIS FILE PATH: G:\706193\Global\GIS\Impact to Groundwater Area Weighted Averaging\Maps\706193_816_0000_IGWCA_TCE-SURF.mxd — USER: dquafisi — LAST SAVED: 5/10/2017 4:17:35 PM



LEGEND

TRICHLOROETHENE CONCENTRATION, SUBSURFACE ZONE

- EXCEEDS SITE-SPECIFIC IGWSRS (0.13 MG/KG)
- EXCEEDS 2013 DEFAULT IGWSSL (0.01 MG/KG)
- NO EXCEEDANCE
- THIESSEN POLYGON BOUNDARY
- SITE BOUNDARY

NOTES

1. SUBSURFACE ZONE: 2 FEET ABOVE WATER TABLE TO WATER TABLE

2. DUE TO THE DENSITY OF SAMPLING LOCATIONS IN SOME AREAS, NOT ALL SAMPLING LOCATION LABELS ARE SHOWN ON THIS FIGURE.

3. EACH SOIL BORING CONSISTED OF ONE OR MORE SAMPLES AT VARIOUS DEPTHS IN THE SOIL. REFER TO THE TEXT FOR DETAILED METHODOLOGY USED TO DETERMINE WHICH SAMPLE IS DEPICTED FOR COMPARISON.

4. REFER TO TABLES FOR DETAILED RESULTS.

N

0 220 440

SCALE IN FEET

HALEY ALDRICH

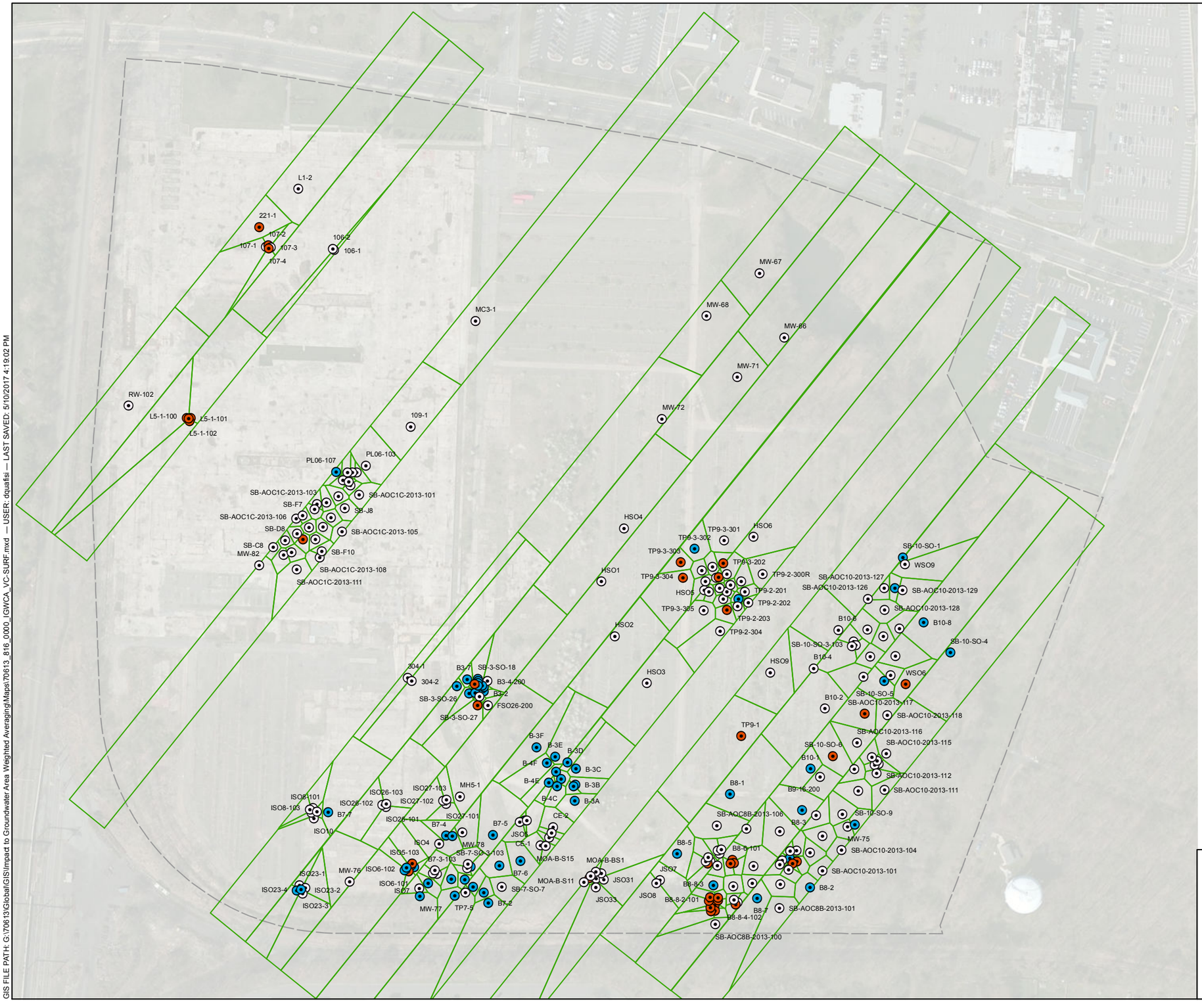
RACER TRUST
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

IMPACT TO GROUNDWATER EVALUATION TRICHLOROETHENE - SUBSURFACE

MAY 2017

FIGURE L-14

GIS FILE PATH: G:\70613\GlobalGIS\Impact to Groundwater Area Weighted Averaging\Maps\706613_816_0000_IGWCA_TCE-SUB.mxd — USER: dqufisi — LAST SAVED: 5/10/2017 4:16:58 PM



GIS FILE PATH: G:\70613\Global\GIS\Impact to Groundwater Area Weighted Averaging\Maps\70613_816_0000_IGWCA_VC-SURF.mxd — USER: dquatisi — LAST SAVED: 5/10/2017 4:19:02 PM

LEGEND

VINLY CHLORIDE CONCENTRATION, SURFACE ZONE

- EXCEEDS SITE-SPECIFIC IGWSRS (0.06 MG/KG)
- EXCEEDS 2013 DEFAULT IGWSSL (0.005 MG/KG)
- NO EXCEEDANCE
- THIESSEN POLYGON BOUNDARY
- SITE BOUNDARY

NOTES

1. SURFACE ZONE: SURFACE TO 2 FEET ABOVE THE WATER TABLE

2. DUE TO THE DENSITY OF SAMPLING LOCATIONS IN SOME AREAS, NOT ALL SAMPLING LOCATION LABELS ARE SHOWN ON THIS FIGURE.

3. EACH SOIL BORING CONSISTED OF ONE OR MORE SAMPLES AT VARIOUS DEPTHS IN THE SOIL. REFER TO THE TEXT FOR DETAILED METHODOLOGY USED TO DETERMINE WHICH SAMPLE IS DEPICTED FOR COMPARISON.

4. REFER TO TABLES FOR DETAILED RESULTS.

HALEY ALDRICH

RACER TRUST
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

IMPACT TO GROUNDWATER EVALUATION
VINYL CHLORIDE - SURFACE

MAY 2017

FIGURE L-15

GIS FILE PATH: G:\70613\Global\GIS\Impact to Groundwater Area Weighted Averaging\Maps\70613_816_0000_IGWCA_VC-SUB.mxd — USER: dquafisi — LAST SAVED: 5/10/2017 4:18:15 PM

MW-71

GSO9 GS011-200

GSO7 B2-1-201

B3-1

SB-3-SO-24 B3-4-200

SB-3-SO-27

ISO23-3

SB-10-SO-1

SB-AOC10-2013-127 SB-10-SO-2

SB-AOC10-2013-129

SB-AOC10-2013-128

SB-AOC10-2013-125 SB-AOC10-2013-123

SB-10-SO-3

SB-AOC10-2013-122

SB-AOC10-2013-121

SB-10-SO-5 SB-AOC10-2013-120

SB-10-SO-5A B10-7

SB-AOC10-2013-117

SB-10-SO-6

SB-10-SO-7

SB-10-SO-7-101

SB-10-SO-7-102

SB-AOC10-2013-107

SB-AOC8B-2013-106 SB-AOC8B-2013-107 SB-10-SO-9

B8-5 SB-8-SO-11 B8-4-102

SB-AOC10-2013-109

B8-8-100

SB-AOC10-2013-102

B8-8-3

SB-10-SO-11

B8-8-2 SB-AOC8B-2013-102

B8-8-4

B8-8 B10-3

LEGEND

VINYL CHLORIDE CONCENTRATION, SUBSURFACE ZONE

- EXCEEDS SITE-SPECIFIC IGWSRS (0.06 MG/KG)
- EXCEEDS 2013 DEFAULT IGWSSL (0.005 MG/KG)
- NO EXCEEDANCE
- THIESSEN POLYGON BOUNDARY
- SITE BOUNDARY

NOTES

1. SUBSURFACE ZONE: 2 FEET ABOVE WATER TABLE TO WATER TABLE

2. DUE TO THE DENSITY OF SAMPLING LOCATIONS IN SOME AREAS, NOT ALL SAMPLING LOCATION LABELS ARE SHOWN ON THIS FIGURE.

3. EACH SOIL BORING CONSISTED OF ONE OR MORE SAMPLES AT VARIOUS DEPTHS IN THE SOIL. REFER TO THE TEXT FOR DETAILED METHODOLOGY USED TO DETERMINE WHICH SAMPLE IS DEPICTED FOR COMPARISON.

4. REFER TO TABLES FOR DETAILED RESULTS.

N

0 220 440

SCALE IN FEET

HALEY ALDRICH

RACER TRUST
EWING TOWNSHIP INDUSTRIAL LAND
EWING, NEW JERSEY

IMPACT TO GROUNDWATER EVALUATION
VINYL CHLORIDE - SUBSURFACE

MAY 2017

FIGURE L-16