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August 23, 2025

Washington Department of Ecology
Northwest Regional Office
Attn: Ms. Donna Kirkman
15700 Dayton Avenue North
Shoreline, WA 98133

Dear Ms. Kirkman:

Please find the enclosed Remedial Investigation Report, that documents the results at ARCO Facility No. 980 located at 10822 Roosevelt Way NE, Seattle, Washington

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Wade Melton', on a light blue background.

Wade Melton
Liability Manager
BP Products North America, Inc. (BPPNA)



Remedial Investigation Report

ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Antea[®]Group

Understanding today.
Improving tomorrow.

PREPARED FOR

BP Products North America, Inc. (BPPNA)
201 Helios Way, Office 3.423B
Houston, TX 77079

PREPARED BY

Antea Group - Seattle, WA
August 23, 2025
WA - 000980 - Seattle 2025
FSID 68996432
CSID 10186

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Remedial Investigation Report

ARCO Facility No. 980

10822 Roosevelt Way Northeast, Seattle, Washington

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BP Products North America, Inc. (BPPNA)
201 Helios Way, Office 3.423B
Houston, TX 77079

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Date: August 23, 2025



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ACRONYMS AND ABBREVIATIONS

Acronyms and Abbreviations	Definitions
APEX	Apex Laboratories, LLC
APH	Air-phase petroleum hydrocarbons
ARARs	Applicable or Relevant and Appropriate Requirements
ARCO	Atlantic Richfield Company
AS	Air sparge
ASTM	ASTM International
bgs	Below ground surface
BP	British Petroleum
BPPNA	BP Products North America, Inc.
BTEX	Benzene, toluene, ethylbenzene, and total xylenes
BV	Bioventing well
CLARC	Cleanup Levels and Risk Calculation
COC	Contaminant of Concern
CSID	Cleanup Site Identification number
CSM	Conceptual Site Model
Delta	Delta Environmental Consultants
DO	Dissolved oxygen
DPE	Dual phase extraction
Ecology	Washington State Department of Ecology
EDB	1,2-Dibromoethane
EDC	1,2-Dichloroethane
EDR	Environmental database report
EFR	Enhanced fluid recovery
FS	Feasibility study
FSID	Facility Site identification number

Acronyms and Abbreviations	Definitions
inHg	Inches of mercury
JPHC	James P. Hurley Company
LNAPL	Light non-aqueous phase liquid
mg/kg	Milligrams per kilogram
mg/L	Milligrams per liter
MRLs	Method reporting limits
mS/cm	MilliSiemens per centimeter
MTBE	Methyl tert-butyl ether
MTCA	Model Toxics Control Act
mV	Millivolts
MW	Monitoring well
NAVD88	North American Vertical Datum of 1988
ORP	Oxidation-reduction potential
PAHs	Polycyclic aromatic hydrocarbons
PCBs	Polychlorinated biphenyls
PID	Photoionization detector
PLPs	Potentially Liable Persons
POC	Point of compliance
PVC	Polyvinyl-chloride
RCRA	Resource Conservation and Recovery Act
RI	Remedial Investigation
RMSC	Remediation Management Services Company
SG	Soil gas
SIM	Selected ion monitoring
SVE	Soil vapor extraction
TEE	Terrestrial Ecological Evaluation
TO	Toxic organics

Acronyms and Abbreviations	Definitions
TPH	Total petroleum hydrocarbon
TPH-D	Total petroleum hydrocarbons as diesel
TPH-G	Total petroleum hydrocarbons as gasoline
TPH-O	Total petroleum hydrocarbons as oil
U.S. EPA	United States Environmental Protection Agency
USDA	U.S. Department of Agriculture
UST	Underground storage tank
VI	Vapor intrusion
VOC	Volatile organic compound
WAC	Washington State Administrative Code
µg/L	Micrograms per liter

Remedial Investigation Report

ARCO Facility No. 980

10822 Roosevelt Way Northeast, Seattle, Washington

1.0 INTRODUCTION

On behalf of BP Products North America, Inc. (BPPNA), Antea®Group prepared this Remedial Investigation Report for ARCO Facility No. 980 located at 10822 Roosevelt Way Northeast, Seattle, Washington (hereinafter referred to as the “Site”). This RI report summarizes data and conclusions generated from the implementation of RI activities, as well as from pre-RI activities, in order to characterize the nature and extent of contamination at the Site.

1.1 GENERAL SITE INFORMATION

Site Name	ARCO Facility No. 980
Address	10822 Roosevelt Way Northeast, Seattle, Washington
Assessor Parcel Number	116000-0025
Ecology Cleanup Site ID	10186
Ecology Facility Site ID	68996432
Ecology UST ID	8742
Latitude/Longitude	47°42'29.88"N, 122°19'02.55"W
Township/Range/Section	Section 29 Township 26 North, Range 04 East
Current Owner/Operator	BP West Coast Products, LLC
Potentially Liable Persons (PLPs)	BP West Coast Products, LLC

1.2 SITE DESCRIPTION AND SETTING

For the purposes of this document, the following terminology will apply:

- “Property” refers to the property located at 10822 Roosevelt Way Northeast, Seattle, Washington, which is impacted by one or more potential petroleum releases from past operations as a service station.
- The “Site” is herein referred to as the area defined by the nature and extent of contamination associated with one or more releases of hazardous substances, which is not necessarily bound by the property lines.

The Property is located at the southeastern corner of Roosevelt Way Northeast and Northeast Northgate Way in Seattle, Washington. A Site Location Map and Site Aerial Map are included as **Figure 1** and **Figure 2**, respectively. The Property is an active ARCO-branded retail gasoline station with a convenience store. On-site features include the station building with a canopy extending over two pump islands north of the building and a separate canopy over a third pump island west of the building. The UST complex contains four double-walled tanks and is

located just northeast of the station building. The surface consists of asphalt pavement and concrete, except in three designated planter areas. A Site Layout Map depicting current and former on-site features is presented as **Figure 3**.

1.2.1 ADJACENT PROPERTIES

The Property is bound by Northeast Northgate Way to the north and Roosevelt Way Northeast to the west. Land use in the area is a mix of commercial businesses and residential properties. Three adjacent residential properties are included as part of the Site. They are the Caribbean House Apartments (King County Parcel Number 116000-0005) and a single-family residence (King County Parcel Number 116000-0075) to the south, and a multi-family residence (King County Parcel Number 116000-0045) that operates as the Ismahan Family Childcare to the east.

Former ARCO Facility No. 11062 (King County Parcel Number 292604-9119) is located on the northwestern corner of the intersection of Northeast Northgate Way and Roosevelt Way Northeast. This former service station is currently vacant and is listed on Ecology's Cleanup and Tank Search database with Facility Site ID 83336195 and has a status of "Cleanup Started".

1.2.2 TOPOGRAPHY

The Property has an elevation of approximately 270.91 to 272.56 feet above sea level, with respect to NAVD88. The surface of the Property slopes gently to the southeast. The Caribbean House Apartments to the south lie at a lower elevation of approximately 258.82 to 269.22 feet above sea level, and is separated from the Property by a short, concrete retaining wall.

1.2.3 SURFACE WATER

The Property is located approximately 400 feet from Thornton Creek and Beaver Pond Natural Area to the east and south, respectively.

1.3 SITE HISTORY

The Property was purchased by BP West Coast Products, LLC in 2001. A review of historic air photos and the EDR report indicate that the station has operated in its current configuration since at least 1977 and has been a service station since at least 1951.

1.4 SITE USE

1.4.1 CURRENT SITE USE

The Site includes an active retail gas station with a convenience store.

1.4.2 LAND USE/ZONING

The Site is located in Seattle City limits within King County, Washington.

- The Property is zoned as Neighborhood Commercial 3 (NC3-55 (M)) for mixed use residential and commercial development.
- The off-Property Caribbean House Apartments are zoned as Neighborhood Commercial 2 (NC2-55(M)) for mixed use residential and commercial development.
- The off-Property residence to the south is zoned as Residential Small Lot (RSL (M)).
- The off-Property Ismahan Family Childcare is zoned as Lowrise 2 (LR2 (M)).

1.4.3 FUTURE USE PLANS

Antea Group is not aware of the specific future plans for the Property, however, based on the zoning it is presumed that this Property will remain as a retail gas station.

2.0 PREVIOUS ENVIRONMENTAL INVESTIGATIONS

Environmental investigations at the Site began in 1989 when Geraghty & Miller, Inc. advanced four soil borings (B1 through B4) on behalf of ARCO to evaluate soil conditions and determine if hydrocarbons had been released to the subsurface. Station upgrades took place in October of 1990 and included the removal and replacement of four gasoline USTs, associated product piping, and a waste oil tank. A more detailed summary of previous environmental investigations can be found in **Appendix A** and sample locations are presented in **Figure 4**. Soil and groundwater analytical data are summarized in **Table 1** through **Table 5**. Soil vapor analytical data are summarized in **Table 6**. **Figure 5** presents the historical extent of soil impacts. The following sections provide a brief summary of previous remedial activities performed at the Site.

2.1 PREVIOUS REMEDIAL ACTIVITIES

Remedial activities were first initiated when a SVE system was installed in September of 1994 and subsequently started the following November, initially operated using BV-3, BV-7, and MW-5. An air sparge pilot test was conducted in April of 1995 to evaluate the feasibility of this technology to remediate the petroleum impacted soil and groundwater. The results of the pilot test suggested that air sparging would be an effective option for remediation. In April of 1996 the remediation system was shut down for upgrades including the addition of air sparge components, modification of BV-4 and MW-11 for use as SVE wells, and the installation of SVE-3. The SVE system extracted vapor from six wells: BV-3, BV-4, BV-7, MW-5, MW-11, and SVE-3.

The air sparge system was shut down in October 1999 and the SVE system was shut down in October 2002. The AS/SVE system was replaced by a DPE system that became fully operational in 2008 and operated until the fourth quarter of 2012.

Due to the presence of LNAPL at the Site, product bailing was performed in monitoring wells BV-7, MW-4, MW-11, and B1 (JPHC) from March of 1995 through March of 1997. Additionally, an EFR program was implemented beginning in September of 1997, and events were conducted on monitoring wells BV-7, MW-4, MW-11, MW-12, and B1 (JPHC) until 2007. The EFR activities removed approximately 22,000 gallons of total fluids.

Injection wells IW-1 through IW-4 were installed at the Caribbean House Apartments in December of 2014 ahead of hydrogen peroxide injections which were implemented in April 2016. A total of 50 gallons of 3.5% hydrogen peroxide solution and 50 gallons of catalyst was injected in IW-2 before injections were stopped prematurely due to the presence of LNAPL in the injection wells and the health and safety concerns associated with hydrogen peroxide application into free product. Measurable LNAPL was last observed at the Site in August of 2017 within IW-1.

Antea Group injected PetroFix™ into the subsurface via the existing injection wells IW-1 through IW-4 and monitoring wells MW-13 and MW-15 in November of 2021 to reduce concentrations of petroleum hydrocarbons in groundwater to below MTCA Method A Cleanup Levels in monitoring wells MW-12, MW-13, MW-15, and B1 (JPHC). The results of these remedial activities are discussed in **Section 4.4**.

A vapor intrusion evaluation at the Site began in 2017 to evaluate whether petroleum contamination associated with the Site had the potential to adversely affect indoor air on the property or neighboring properties. A Tier 1

soil vapor intrusion evaluation was conducted from January of 2023 through March of 2024. The results of the Tier 1 soil vapor intrusion evaluation indicated that the vapor intrusion pathways at the Property, the Caribbean Apartments, and the residential building to the east of the Property are incomplete and are protective of human health. More information can be found in Antea Group's *Tier 1 Soil Vapor Intrusion Evaluation Report* dated September 18, 2024 (Antea Group, 2024). The Tier 1 report did indicate one data gap in the investigation. APH fractions were not analyzed during soil vapor sampling at the Caribbean House Apartments and thus represented a data gap that was addressed and is described in in **Section 3.4**.

3.0 REMEDIAL INVESTIGATION ACTIVITIES

This section provides a summary of the work performed for this RI as well as the results of RI activities. The objective of this work included the following:

- A soil investigation to delineate the lateral and vertical extents of historical petroleum impacts to soil and to assess the effectiveness of historical interim remedial actions on decreasing petroleum impacts in soil (**Section 3.2**).
- A groundwater investigation to further delineate the petroleum impacts to groundwater at the Site (**Section 3.3**).
- Collection of soil vapor samples at the Caribbean House Apartments to close the data gap that was identified in the Tier 1 soil vapor intrusion evaluation (**Section 3.4**).

3.1 CHRONOLOGY OF RI FIELD ACTIVITIES

For the purposes of this report, the RI field activities detailed below include only the last completed phase of investigation completed by Antea Group between May 5 and May 27, 2025. RI sample locations referenced in this section are shown on **Figure 4**. Additional details regarding the methods utilized and results of these activities are presented in **Sections 3.2** through **3.4**.

3.2 RI SOIL INVESTIGATION

This section presents a summary of the procedures, field events, and results of the sampling activities intended to further delineate the lateral and vertical extents of historical petroleum impacts to soil at the Site and to evaluate the effectiveness of the remedial efforts. The RI soil investigation results are based on field screening and analysis of soil samples collected from the following eight borings:

- SB-9 through SB-14.
- MW-22 and MW-25.

3.2.1 SOIL BORING AND SAMPLING PROCEDURES

3.2.1.1 UTILITY CLEARANCE

Prior to beginning the RI activities, all underground utilities were marked by the Public Utilities Underground Location Center. Additionally, a private utility locate was performed by Ground Penetrating Radar Systems, LLC using multi-frequency locators to identify subsurface utilities and ground penetrating radar to locate non-conductive utilities and other subsurface anomalies. These surveys were used to identify locations where soil boring and sample collection could be performed safely without risk of encountering underground utilities or other subsurface infrastructure.

3.2.1.2 DRILLING AND SAMPLING METHODS

From May 5 to May 9, 2025, Antea Group oversaw the advancement of six soil borings (SB-9 through SB-14) and an additional two soil borings that were completed as monitoring wells (MW-22 and MW-25) by Cascade

Drilling, L.P. of Woodinville, Washington. Each boring was pre-cleared with a vacuum truck, air knife, and/or hand auger to a minimum depth of 6.5 feet bgs at 120% of the diameter of the drilling equipment.

To characterize and/or sample the soils at depths less than 6.5 feet bgs, air knife and vacuum truck operations ceased 18 inches above target sample depths, at which time a decontaminated hand auger was advanced into undisturbed soils. Soil samples were then collected directly from the hand auger.

Starting at 6.5 feet bgs, a limited access hollow stem auger drill rig was used to complete the boring to the final depths. Samples were collected by driving a stainless-steel split spoon to sample depth. The drilling equipment was decontaminated after each boring with detergent and a water pressure washer.

3.2.1.3 SOIL CLASSIFICATION AND FIELD SCREENING

Soil samples were logged in the field in accordance with the United Soil Classification System and field-screened for the presence of VOCs by measuring headspace vapor concentrations with a PID to aid in the selection of representative soil samples for chemical analysis. All samples were also tested for the presence and degree of sheen by placing soil in a pan of water and observing the water surface for signs of sheen.

Boring logs describing soil lithology, field-screening results, sample recovery, and boring/well completion details are presented in **Appendix B**.

3.2.2 SAMPLE SELECTION AND LABORATORY ANALYSIS

Discrete soil samples were collected for analytical testing based on depth, indication of petroleum contamination (e.g., sheen, staining, or odor), and moisture content. A total of 24 soil samples and one waste characterization sample were submitted to APEX in Tigard, Oregon for quantitative chemical analysis following chain of custody procedures.

Selected soil samples (and one groundwater sample for waste purposes) were analyzed for the presence of the following:

- BTEX and MTBE by EPA Method 8260D.
- TPH-G by Northwest Method NWTPH-Gx.
- TPH-D and TPH-O by Northwest Method NWTPH-Dx.
- Naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene by EPA Method 8270E SIM.
- RCRA 8 metals by EPA Method 6020B and 7471B (waste characterization purposes only).

Analytical laboratory reports and chain of custody documentation are included in **Appendix C**.

3.2.3 RI SOIL INVESTIGATION RESULTS

Soil observed during this investigation consisted of primarily well and poorly graded sand with varying amounts of silt and gravel. The observed lithology is consistent with those encountered during previous investigations. Detailed soil descriptions, including field screening conditions, are presented in the boring logs in **Appendix B**.

Soil data collected during this RI are presented in **Table 3** and **Figure 5**. Based on analytical results, the only constituent exceeding MTCA Method A Cleanup Levels was TPH-G (104 mg/kg) in SB-9 at five feet bgs. As such, samples collected from borings SB-10 through SB-14 confirm that impacts previously found in soil west of the station building (BV-5), near the former fuel and waste oil USTs (MW-4 and EX-4, and BV-7, respectively), and at

the southern edge of the former UST excavation (MW-6, BV-3, SW1, SW2, SE3, and SE4) are no longer present and have been remediated by the operations of the AS/SVE and DPE systems.

3.3 RI GROUNDWATER INVESTIGATION

This section presents a summary of the procedures, field events, and results of the groundwater sampling activities intended to further delineate the petroleum impacts to groundwater at the Site. The RI groundwater investigation results are based on analysis of groundwater samples collected from the following monitoring wells:

- On-Property monitoring wells MW-4, MW-11 through MW-13, and MW-22.
- Off-Property monitoring wells MW-23, MW-25, B1 (JPHC), and B3 (JPHC).

3.3.1 RI GROUNDWATER INVESTIGATION FIELD ACTIVITIES

Newly installed groundwater monitoring wells MW-22 and MW-25 were completed in accordance with WAC Minimum Standards for Construction and Maintenance of Wells (Chapter 173-160 WAC). Each well was constructed using two-inch diameter, schedule-40 PVC well casings with 0.010-inch factory-slotted well screens. The screened intervals of wells MW-22 and MW-25 are 5 to 20 feet bgs. The annular space of each boring was filled with sand to approximately two feet above the screen, followed by a hydrated bentonite chip seal that was finished with concrete and a flush-mounted well monument to grade.

The monitoring wells were developed following installation to produce representative formation water free of drilling fluids, cuttings, or other material potentially introduced during drilling and well construction activities. Each new monitoring well was developed using a submersible whale pump and frequent surging until the groundwater from the monitoring well was clear.

3.3.2 GROUNDWATER MONITORING AND SAMPLING PROCEDURE

Groundwater samples were collected on May 27, 2025, from monitoring wells MW-4, MW-11, MW-12, MW-13, MW-22, MW-23, MW-25, B1 (JPHC), and B3 (JPHC).

3.3.2.1 SAMPLING METHODS

The depth to water measurements were collected prior to purging and subsequent sampling and were reported in 0.01-foot increments. The monitoring wells were purged and sampled using standard low-flow sampling procedures. Water quality parameters (temperature, pH, ORP, DO, and conductivity) were measured and recorded while purging. Samples were collected after all water quality parameters stabilized for three consecutive readings according to the following criteria:

- Temperature: ± 0.1 ° Celsius.
- pH: ± 0.1 units.
- ORP: ± 10 mV.
- DO: ± 0.05 mg/L for values less than 1.0 mg/L, or ± 0.2 mg/L for values greater than 1.0 mg/L.
- Conductivity: ± 0.010 mS/cm for values less than 1.0 mS/cm, or ± 0.020 mS/cm for values greater than 1.0 mS/cm.

Groundwater samples were collected using a peristaltic pump and dedicated tubing. The groundwater was decanted into laboratory-supplied containers, and each sample bottle was properly labeled. Groundwater samples were submitted to APEX for quantitative chemical analysis following chain of custody procedures.

Selected groundwater samples were analyzed for the presence of the following:

- BTEX, MTBE, EDC, and EDB by EPA Method 8260D.
- TPH-G by Northwest Method NWTPH-Gx.
- TPH-D and TPH-O by Northwest Method NWTPH-Dx.
- Total and dissolved lead by EPA Method 6020B.

Analytical laboratory reports and chain of custody documentation are included in **Appendix D**.

3.3.3 RI GROUNDWATER SAMPLING RESULTS

Antea Group collected depth to water measurements on May 27, 2025, which were then used to calculate groundwater elevation referenced to NAVD88. Groundwater elevations ranged from 249.39 feet in monitoring well MW-10 to 269.24 feet in monitoring well MW-1, with groundwater flow direction primarily to the southeast. The groundwater flow direction observed at the Site is consistent with historical flow direction. A map depicting elevation contours during this sampling event is presented as **Figure 6**.

Groundwater samples collected from the newly installed wells MW-22 and MW-25 did not contain concentrations above the laboratory MRLs for any of the requested analytes. TPH-D exceedances above MTCA Method A Cleanup Levels were observed in wells MW-4 and B1 (JPHC), results of which are consistent with historical data.

3.4 RI SOIL VAPOR INTRUSION INVESTIGATION

This section presents a summary of the procedures, field events, and results of the vapor sampling activities completed on the Caribbean Apartments property. A Tier 1 Soil Vapor Intrusion study was previously completed on the Site. This study is detailed in Antea Group's *Tier 1 Soil Vapor Intrusion Evaluation Report* dated September 18, 2024. A supplemental vapor sampling event was conducted on May 13, 2025, to address a data gap identified in that report. This supplemental event is detailed below.

3.4.1 RI SOIL VAPOR INTRUSION INVESTIGATION FIELD ACTIVITIES

On May 13, 2025, Antea Group collected soil vapor samples from SG-1, SG-2, and SG-4. Soil vapor point SG-3 was intended to be sampled, however upon opening the monument it became apparent that the tubing had been compromised, and SG-2 (located adjacent to SG-3) was sampled instead.

3.4.1.1 SOIL VAPOR SAMPLING PROCEDURES

Prior to sample collection, a shut-in test was conducted on the sampling train by closing the ball valves connected to the top of the vapor probes. The ball valve connected to the peristaltic pump was opened, and the pump was run until a vacuum of approximately 10 inHg was registered on the inline vacuum gauge. Once a vacuum was induced in the sampling train assembly, the ball valve to the peristaltic pump was closed, and the pump was turned off. The vacuum gauge was monitored for five minutes to confirm tightness. If the sampling train did not hold the vacuum for five minutes, fittings and connections between the vapor probe, SUMMA® canister, and sample train were tightened, and another shut-in test was performed. Helium leak detection testing and purging were not completed until the sampling train passed the shut-in test.

Following the shut in test, a helium leak detection test was completed. A shroud was placed around the vapor probe, SUMMA® canister, and sampling train and a vacuum was applied to the sampling train. The vapor probe was purged with a peristaltic pump to run the leak detection test. Helium was deployed around the vapor probe surface to ensure there were no leaks in the surface seal or design. A Dielectric MGD-2002 helium detector was used to measure the helium under the shroud and in the effluent tubing. A helium concentration from the

effluent tubing on the sampling train greater than zero would indicate that the sampling system may have been compromised. If a leak was suspected based on field testing, tubing connections were reviewed and corrected, and the helium test was run again. The process continued until the helium in the effluent was zero. In addition to the field testing for helium, the samples were analyzed for helium to determine if there was a leak in the sample train.

After purging was completed, the ball valve connecting the sample train to the vapor probe was closed, the pump was turned off, and the SUMMA® canister valve was opened to collect a sample until a vacuum of approximately three to five inHg read on the gauge. The final vacuum reading was recorded on the chain of custody to ensure there was no leak in transit to the laboratory.

3.4.1.2 SOIL VAPOR ANALYSIS

Soil vapor samples were submitted to Eurofins Environment Testing Air Toxics in Folsom, California for quantitative chemical analysis following chain of custody procedures to be analyzed for the presence of the following:

- APH fractions C5-8 (Aliphatics), C9-12 (Aliphatics), and C9-10 (Aromatics) by Massachusetts Department of Environmental Protection APH Test Methods.
- BTEX, MTBE, and naphthalene by EPA Method TO-15 SIM.
- Carbon dioxide, oxygen, methane, and helium by ASTM Method D1946.

Analytical laboratory reports and chain of custody documentation are included in **Appendix E**. Analytical laboratory reports and chain of custody documentation for previous sampling events are detailed in Antea Group's *Tier 1 Soil Vapor Intrusion Evaluation Report* dated September 18, 2024.

3.4.2 SOIL VAPOR RESULTS AND DISCUSSION

Concentrations analyzed from the May 2025 sampling event were below the Method B Soil Gas Screening Levels in each sample collected. Based on the data collected from this sampling event, in conjunction with the data presented in Antea Group's *Tier 1 Soil Vapor Intrusion Evaluation Report* dated September 18, 2024, soil vapor conditions on Property as well as at the Caribbean House Apartments and the adjacent residential property to the east are protective of human health and the vapor intrusion pathway at the Site is incomplete.

4.0 CONCEPTUAL SITE MODEL

A CSM is a written and/or illustrative representation of the collective information that is known or suspected regarding the presence of contamination at a site, and the physical, chemical, or biological processes that may impact contaminant migration, transport to other media, or exposure by human and/or ecological receptors. Development and refinement of a CSM is an iterative process, in which the CSM is updated when new investigation data or other information is available for a site. Preparation and updates of a CSM are beneficial within the RI process to identify data gaps and to provide a comprehensive understanding of the potential risks associated with a site. This CSM incorporates information gathered through the completion of the RI.

4.1 GEOLOGY AND HYDROGEOLOGY

4.1.1 GEOLOGY

According to the Washington State Department of Natural Resources Geologic Map of Washington, the Site is located within the Puget Lowlands physiographic region of Washington State. The Puget Lowlands is a basin lying between the Cascade Mountains to the east and the Olympic Mountains to the west. The local geology and

surrounding area are Pleistocene-age glacial deposits consisting of alluvium mixtures of sand and gravel, lodgment till, sandy till, and lacustrine silts, commonly characterized by hummocky topography. The United States Department of Agriculture Soil Survey Database states that the dominant soil composition in the area is classified as Urban Land, which is a miscellaneous area characterized by cuts and fills, and is covered by impervious surfaces (paving and structures) such that characterization is impractical. Soils observed at the Site during previous investigations include dense to very dense sand with varying amounts of silt and gravel.

4.1.2 HYDROGEOLOGY

Groundwater was first encountered during RI activities at approximately 10 (SB-10, MW-22, and MW-25) to 25 (SB-13) feet bgs. On May 27, 2025, Antea Group collected depth to water measurements at select monitoring wells, which were then converted to water elevation measurements referenced to NAVD 88. Groundwater elevations ranged from 249.39 feet in monitoring well MW-10 to 269.24 feet in monitoring well MW-1. The inferred groundwater flow direction from the May 27, 2025, sampling event was to the southeast, consistent with historical flow direction.

4.2 CONTAMINANT RELEASE

In this document, the term “contaminant” is used in the sense defined in MTCA: “Contaminant means any hazardous substance that does not occur naturally or occurs at greater than natural background levels” [WAC 173-340-200]. Thus, a contaminant does not imply that the substance is above a regulatory cleanup level or is hazardous to a receptor, but merely that it is impacting some environmental media beyond natural levels.

A review of available historical data indicates that Ecology identified a release from the former USTs in 1989. No other releases have been documented by Ecology. Based on data from the RI and previous environmental investigations, Antea Group has identified the following as likely potential sources for the petroleum hydrocarbon impacts at the Site:

- Past releases to the subsurface soils associated with leaking petroleum USTs.
- Past releases to near-surface soils associated with leaking conveyance piping and product dispensers.
- Past releases to near-surface soils associated with a leaking hydraulic oil UST.
- Past releases to near-surface soils associated with leaking USTs.

4.3 CONTAMINANTS OF CONCERN

COCs are hazardous substances that are known to be present at a site and those which may be present based on information regarding the nature of a known release or past operations at a site. Based on the results of the RI, and previous environmental investigations carried out at the Site, the following hazardous substances have been identified as COCs:

- TPH-G.
- TPH-D/TPH-O.
- Benzene.
- Toluene.
- Ethylbenzene.
- Xylenes.
- Naphthalene.
- MTBE (groundwater only).
- Total and dissolved lead (groundwater only).

4.4 NATURE AND EXTENT OF PETROLEUM IMPACTS

4.4.1 NATURE AND EXTENT OF SOIL IMPACTS

Petroleum impacts to soil, consisting of the COCs identified above in **Section 4.3**, were previously identified across the Site as depicted in **Figure 7**. This figure represents soil impact prior to remedial activities. Soil impacts remaining after remedial activities are shown in **Figure 8**. The use of MTCA Method A Cleanup Levels is for screening-level purposes only, and further discussion regarding the selection of appropriate cleanup levels for the Site is presented in **Section 5.1**.

As shown in **Figure 4**, soil sampling results taken prior to RI activities indicated four areas of petroleum-impacted soil:

1. MTCA Method A Cleanup Level exceedances for TPH-G and one or more components of BTEX were present near the pump islands and associated product piping.
2. MTCA Method A Cleanup Level exceedances for TPH-G and one or more components of BTEX were present near the UST complex in the northeastern portion of the Property.
3. MTCA Method A Cleanup Level exceedances for TPH-G, TPH-D, TPH-O, naphthalenes, and one or more components of BTEX were present near the former hydraulic oil UST in the northwestern portion of the Property.
4. MTCA Method A Cleanup Level exceedances for TPH-G and one or more components of BTEX were present near the southern Property boundary towards the Caribbean House Apartments.

The first of these areas appear to have originated from potential releases associated with the pump islands and/or the associated product piping. These petroleum impacts were relatively shallow (less than five feet bgs with the exception of soil samples at MW-1 and B-6) and extended west towards the northwestern portion of the Property. MW-1 contained a benzene exceedance at six feet bgs but has since been confirmed below MTCA Method A Cleanup Levels with a clean soil sample collected from B-7. Soil samples 1011A, 1011B, 1011C, and 1016A were originally collected from excavated piping trenches during UST removal activities in 1990. These samples were collected at two feet bgs and contained petroleum hydrocarbon exceedances above MTCA Method A Cleanup Levels. During product line and dispenser upgrades in 2017, confirmation soil samples were collected at 2.5 and four feet bgs to confirm soil concentrations previously identified as impacted during the 1990 upgrades. All four samples collected in 2017 had petroleum hydrocarbon concentrations below MTCA Method A Cleanup Levels or laboratory method reporting limits and indicate that the previously identified impacts have degraded.

The second area likely originated from the former USTs that were removed in 1990. These soil impacts were previously identified at approximate depths of 5, 10, and 15 feet bgs and COCs in this area were primarily BTEX and TPH-G. These impacts have been remediated and degraded based on the results of confirmation soil samples from SB-11, SB-12, and SB-14 collected in May of 2025 during RI activities. Additionally, downgradient groundwater samples collected from MW-6 and MW-7 have been below MTCA Method A Cleanup Levels since 1996 and 2008, respectively, providing empirical data that the that soil impacts are now below MTCA Method A Cleanup levels.

The third area likely originated from the former hydraulic oil UST located west of the pump islands in the central portion of the Property. Petroleum-impacted soil in this area was identified at depths ranging from two to six feet bgs and contained MTCA Method A Cleanup Level exceedances for TPH-G, TPH-D, TPH-O, naphthalenes, and one or more components of BTEX. These soil impacts were removed from the Site during over-excavation

activities in 2018, although impacted soil remained in the north, south, and east sidewalls of the excavation. Additional soil was unable to be removed due to the limits imposed by underground utilities and fuel dispensers in the area.

The fourth area with petroleum-impacted soil was observed in the southern portion of the Property and south across the Property line towards the Caribbean House Apartments. These impacts were identified at depths ranging from 8 to 21 feet bgs and included COCs of benzene, total xylenes, and TPH-G.

Soil borings SB-11 through SB-14, advanced in May of 2025, did not contain any petroleum concentrations above MTCA Method A Cleanup Levels. This data indicates that the previously operated SVE and DPE systems successfully remediated soil conditions in the area to below MTCA Method A Cleanup Levels. The area remediated by these systems are shown in **Figure 9** (SVE) and **Figure 10** (DPE). Additionally, downgradient groundwater samples for VOCs collected from MW-4, MW-5, MW-11, and MW-15 have been below MTCA Method A Cleanup Levels since 2008, 2005, 2009, and 2012, respectively. This provides empirical data that soils upgradient from these wells are now below MTCA Method A Cleanup Levels.

Current soil impacts are observed in the northwestern portion of the Property at B-6 and SB-9, as well as near the former hydraulic oil UST (**Figure 8**). Samples collected from B-6 at five and eight feet bgs contained concentrations of total xylenes, TPH-G, and naphthalenes above MTCA Method A Cleanup Levels, and a sample collected from SB-9 at five feet bgs contained a concentration of TPH-G slightly above MTCA Method A Cleanup Levels. Samples collected from SB-9 at 8, 12.5, and 15 feet bgs did not contain any concentrations above MTCA Method A Cleanup Levels and provide vertical delineation for B-6. Impacts also remain in the vicinity of the former hydraulic oil UST.

Current soil impacts are also assumed to be observed south of the Property at the Caribbean House Apartments at B1 (JPHC), B-4, MW-12, and MW-13. This is based on the continuing groundwater exceedances in B1 (JPHC), MW-12, and MW-13. Concentrations of TPH-G and BTEX have decreased to below MTCA Method A Cleanup Levels since the implementation of remedial activities (e.g., DPE and AS/SVE systems). Concentrations of TPH-D and/or TPH-O have been reduced significantly, however still slightly exceed MTCA Method A Cleanup Levels. Based on these continuing exceedances there is potentially a limited volume of petroleum-impacted soil in the area.

4.4.2 NATURE AND EXTENT OF GROUNDWATER IMPACTS

Petroleum impacts to groundwater were previously identified across the Site as depicted in **Figure 11** and represent groundwater impacts prior to remedial activities. Groundwater impacts remaining after remedial activities are shown in **Figure 12**. The use of MTCA Method A Cleanup Levels is for screening-level purposes only, and further discussion regarding the selection of appropriate cleanup levels for the Site is presented in **Section 5.1**.

As shown in **Figure 11**, petroleum-impacted groundwater has been observed near and down-gradient from the pump islands and UST complex. Current groundwater impacts are observed near the Property line separating the on-site Property from the Caribbean House Apartments (**Figure 12**); however, these concentrations have decreased since the 2021 *PetroFix™* injections. TPH-O concentrations have been detected above MTCA Method A Cleanup Levels in MW-23 during sampling events in 2023 and 2024; however, the concentrations have declined to below Method A Cleanup Levels and laboratory reporting limits since.

4.5 ENVIRONMENTAL MEDIA OF CONCERN

The RI evaluated the following environmental media that were identified as potential media of concern:

Evaluation of Potential Media of Concern		
Potential Media of Concern Evaluated by the RI	Retained as a Media of Concern?	Justification
Soil	Yes	One or more hazardous substances have been detected in soil above naturally occurring background conditions. Therefore, soil is considered a media of concern for the Site.
Groundwater	Yes	One or more hazardous substances have been detected in groundwater above naturally occurring background conditions. Therefore, groundwater is considered a media of concern for the Site.
Soil Vapor	No	As previously discussed in Section 3.4 , results of recent Tier 1 VI evaluation indicate that the presence of petroleum contamination at the Site is not resulting in VI to existing buildings on the service station property or nearby properties. Therefore, soil vapor is not considered a media of concern for potential future land use scenarios.
Surface Water	No	No surface water is located within 400 feet of the Site, and the groundwater plume is fully delineated and stable to receding.

4.6 POTENTIAL RECEPTOR AND TRANSPORT/EXPOSURE PATHWAY EVALUATION

4.6.1 POTENTIAL RECEPTORS

Receptors are individuals or populations that are at risk of being exposed to hazardous substances at or originating from a contaminated site. Based on the location and setting of the Site, the RI evaluated the following potential receptors:

Evaluation of Potential Receptors		
Potential Receptors Evaluated by the RI	Retained as a Receptor of Concern?	Justification
Humans	Yes	The Site is located in a commercial and residential area in the City of Seattle, Washington. Based on current and future expected land use on and in the vicinity of the Site, humans are considered receptors of concern for the hazardous substances present at the Site.
Terrestrial Ecological Organisms	No	The Site qualifies under WAC 173-340-749 for an exclusion from completion of a TEE; therefore, site conditions do not pose a threat to terrestrial organisms.

Evaluation of Potential Receptors		
Aquatic Ecological Organisms	No	Based on results of the RI, surface water is not considered an environmental media of concern. Therefore, aquatic ecological organisms are not considered receptors of concern for the Site.

4.6.1.1 TERRESTRIAL ECOLOGICAL EVALUATION

For sites impacted by releases of hazardous substances to soil, WAC chapters 173-340-7490 through 173-340-7494 establish the requirement, and define the procedures, for conducting a TEE to determine whether conditions at the Site may pose a threat to the terrestrial environment. The Site qualifies under WAC 173-340-749 for an exclusion from completion of a TEE. This exclusion is based on less than 1.5 acres of contiguous undeveloped land within 500 feet of any area of the Site.

4.6.2 EXPOSURE PATHWAY ANALYSIS

Exposure pathways are the paths that hazardous substances may take from a source to a receptor. Exposure pathways include transport pathways (how a hazardous substance moves through and across different environmental media) and an exposure route (the path by which receptors may be exposed to hazardous substances). Examples of exposure routes include:

- Direct contact – Ingestion and/or dermal contact with hazardous substances.
- Inhalation – Breathing hazardous substances in air (dust, vapor, or gases).

This section presents an analysis of potential exposure pathways for the media of concern that have been identified for the Site: soil, groundwater, and soil vapor.

4.6.2.1 POTENTIAL TRANSPORT PATHWAYS AND EXPOSURE ROUTES FOR SOIL

The following tables provide an evaluation of potential transport pathways and exposure routes that may be associated with the presence of petroleum-impacted soil at the Site.

Evaluation of Potential Transport Pathways – Soil		
Potential Transport Pathways	Retained as a Transport Pathway of Concern?	Justification
Human Direct Contact – Ingestion and Dermal Absorption	Yes	Subsurface investigations performed at the Site indicate that petroleum hydrocarbons were present within soil at concentrations exceeding the MTCA Method A Cleanup Levels at depths less than 15 feet bgs. The direct contact pathway POC is considered to be 15 feet bgs across the entirety of the Site. Soil containing concentrations of petroleum hydrocarbons above MTCA Method A remains in the subsurface between 5 and 21 feet bgs. All residual soil impacts are located in the vicinity northwest of the dispenser islands and south along the property boundary with the Caribbean House Apartments have been delineated laterally throughout the Site and are covered by impervious surfaces such as asphalt or concrete. Future Site redevelopment activities have

Evaluation of Potential Transport Pathways – Soil		
		the potential to encounter impacted soils in these areas, and therefore, the direct soil contact pathway is a transport pathway of potential concern.
Migration	No	Based on the Site operating history and results of pre-RI investigations, most petroleum impacts to soil are expected to have occurred prior to 1995. Based on the expected age of these releases, petroleum impacts to soil would be expected to have reached stable conditions with no significant further migration.
Leaching to Groundwater	Yes	The water table at the Site is situated at approximately 1.5 to 19 feet bgs. The shallower depths are located in the northwestern portion of the Property while the deeper depths are located in the southeastern portion of the Site. As soil impacts are observed at these depths, it is possible that leaching to groundwater is a transport pathway of concern.
Volatilization to Soil Vapor	No	Based on the lateral distance from soil impacts and an evaluation of potential pathways, this pathway was considered a potential pathway of concern, however the results of the Tier 1 vapor evaluation indicated that this is not a pathway of concern.

Evaluation of Potential Exposure Routes – Soil	
Potential Exposure Routes	Applicability
Human Direct Contact – Ingestion and Dermal Absorption	Exposure route of concern for future subsurface work – The areas of soil impacted by petroleum hydrocarbons at the Site are mostly covered by impervious surfaces, such as asphalt, and are generally present at depth that could be encountered by routine construction activities. Therefore, potential ingestion or dermal contact exposures may be possible for workers if impacted soils are exposed during future subsurface construction activities.
Inhalation of Hazardous Vapors and/or Airborne Particulates (i.e., dust) in Outdoor Air	Exposure route of concern for future subsurface work – Similar to above, under typical conditions the potential for exposure by inhalation of hazardous vapors and/or airborne particulates such as dust in outdoor air from contaminated soil is limited. However, potential for exposure by inhalation may exist for workers or the public if impacted soils are exposed during future subsurface construction activities.

4.6.2.2 POTENTIAL TRANSPORT PATHWAYS AND EXPOSURE ROUTES FOR GROUNDWATER

The following tables provide an evaluation of potential transport pathways and exposure routes that may be associated with the presence of petroleum-impacted groundwater at the Site.

Evaluation of Potential Transport Pathways – Groundwater		
Potential Transport Pathways	Retained as a Transport Pathway of Concern?	Justification
Migration	No	Based on the current extent of petroleum-impacted groundwater, the plume is receding, and further migration is not a concern.
Leaching to Groundwater	Yes	Residual soil impacts in limited areas on the Site could potentially still be leaching into groundwater.
Volatilization to Indoor Air	No	Based on the results of the <i>Tier 1 Soil Vapor Intrusion Evaluation Report</i> (Antea Group, 2024), and the vapor sampling conducted as part of the RI, this transport pathway is not a pathway of concern.

Evaluation of Potential Exposure Routes – Groundwater	
Potential Exposure Routes	Applicability
Ingestion of, or dermal contact with, contaminated groundwater.	Exposure route of concern for future subsurface work.
Inhalation of hazardous vapors in indoor or outdoor air	Exposure route of concern for future subsurface work for outdoor air only.

4.6.2.3 POTENTIAL TRANSPORT PATHWAYS AND EXPOSURE ROUTES FOR VAPOR

The following tables provide an evaluation of potential transport pathways and exposure routes that may be associated with the presence of petroleum impacted soil vapor at the Site.

Evaluation of Potential Transport Pathways – Soil Vapor		
Potential Transport Pathways	Retained as a Transport Pathway of Concern?	Justification
Migration to Indoor Air	No	Based on the results of the <i>Tier 1 Soil Vapor Intrusion Evaluation Report</i> (Antea Group, 2024), petroleum impacted soil vapor is not impacting indoor air quality in existing buildings on or near the Site. Therefore, migration of impacted soil vapor to indoor air has not been retained as a pathway of concern for future buildings or changes in land use at, or near, the Site.

Evaluation of Potential Exposure Routes – Soil Vapor	
Potential Exposure Routes	Applicability
Inhalation	Not an exposure route of concern based on soil vapor concentrations not exceeding MTCA Method B screening levels.

5.0 CLEANUP STANDARDS

Cleanup standards define the requirements that must be achieved by a cleanup action. As defined in WAC 173-340-700, cleanup standards consist of the following three components:

- Cleanup levels for the hazardous substances present.
- The location(s) where these cleanup levels must be met (i.e., the point(s) of compliance).
- Other regulatory requirements that apply to the site because of the type of action and/or location of the site. These requirements are specified in applicable state and federal laws and are generally established in conjunction with the selection of a specific cleanup action.

5.1 DEVELOPMENT OF CLEANUP LEVELS

A cleanup level defines the concentration of a hazardous substance above which a contaminated medium (e.g., soil or groundwater) must be remediated in some manner (Ecology, 2013b). The MTCA Cleanup Regulation provides the following three options for establishing cleanup levels:

- **Method A** - Method A cleanup levels are intended to provide conservative cleanup levels for relatively simple sites undergoing routine cleanup actions or for sites with relatively few hazardous substances. Most petroleum-contaminated sites can use this method. Method A provides tables of cleanup levels that are protective of human health for a number of the most common hazardous substances found in soil and groundwater at contaminated sites. For soil, the Method A cleanup level must also be at least as stringent as a concentration that will not result in significant adverse effects on the protection and propagation of terrestrial ecological receptors, unless it can be demonstrated that such impacts are not a concern at the site. Method A Cleanup Levels can be used at this Site.
- **Method B** - Method B is the universal method to establish cleanup levels under MTCA. It can be used at any site to develop site-specific cleanup levels for all of the hazardous substances present.
- **Method C** - Method C can only be used under limited circumstances for cleanup at industrial facilities. Based on the Site setting and land use, Method C cleanup levels cannot be used for this Site.

WAC 173-340-700 provides specific procedures for setting cleanup levels at petroleum contaminated sites.

5.1.1 PROPOSED CLEANUP LEVELS FOR SOIL

As described above, Method A provides conservative cleanup levels for relatively simple sites that are protective of human health. Method A Cleanup Levels are based on reasonable maximum exposure scenarios or potential routes of exposure. The reasonable maximum exposure is defined as the highest exposure that could occur under both current and future land uses. The Site is expected to continue to operate as a mixed commercial facility for the foreseeable future. As such, the proposed cleanup levels for soil are MTCA Method A Cleanup Levels for Unrestricted Land Use.

Antea Group proposes the use of Method A to provide cleanup levels for this Site. MTCA Method A Cleanup Levels for COCs found in soil at this Site are as follows:

Hazardous Substance	Cleanup Level (mg/kg)
TPH-G	30
TPH-D/TPH-O	2,000
Benzene	0.03
Total Xylenes	9
Naphthalene	5

5.1.2 PROPOSED CLEANUP LEVELS FOR GROUNDWATER

The proposed cleanup levels for groundwater are MTCA Method A Cleanup Levels for Unrestricted Land Use and are based on drinking water use applicable to petroleum-contaminated sites. MTCA Method A Cleanup Levels for COCs found in groundwater at this Site are as follows:

Hazardous Substance	Cleanup Level (µg/L)
TPH-G	1,000
TPH-D/TPH-O	500
Benzene	5
Ethylbenzene	700
Total Xylenes	1,000
Toluene	1,000
Naphthalene	160
MTBE	20
Total Lead	15

The proposed cleanup level for TPH-G is 1,000 µg/L. Benzene is not present in groundwater, thus the higher cleanup level is appropriate.

5.1.3 CLEANUP LEVELS FOR SOIL VAPOR

Soil vapor samples collected were evaluated against MTCA Method B soil gas screening levels and the Commercial Worker Sub-Slab Soil Gas Screening Levels (CLARC, 2025).

5.2 POINTS OF COMPLIANCE

POCs are the locations on a site where cleanup levels must be met. MTCA defines the standard POC for each environmental media (soil, groundwater, air, and surface water).

5.2.1 POCS FOR SOIL

In accordance with MTCA, the POC for direct contact with soil extends to depths of 15 feet bgs, based on a reasonable maximum depth of excavation and assumed placement of excavated soil at the surface where contact occurs. For the soil-leaching-to-groundwater pathway, the soil POC is all depths, above and below the water table. For the soil-volatilization-to-air pathway, the soil POC is throughout the Site from the ground surface to the uppermost saturated zone.

Given the complete soil-leaching-to-groundwater pathway, the POC for soil is soil from all depths, above and below the water table throughout the Site.

5.2.2 POCS FOR GROUNDWATER

Under MTCA and in accordance with WAC 173-340-720(8)(b), the standard POC for groundwater cleanup levels is from the uppermost level of the saturated zone extending vertically to the lowest depth which could be potentially affected by the Site. If it is not practical to meet groundwater cleanup levels throughout the Site, Ecology may approve a conditional POC for groundwater, as in accordance with WAC 173-340-720(8)(c) and (d).

For the purpose of this RI and for this Site, the standard POC applies.

5.3 OTHER REGULATORY REQUIREMENTS

WAC 173-340-710 requires that all cleanup actions conducted under MTCA comply with applicable state and federal laws. Applicable state and federal laws include those that are legally applicable requirements, as well as those requirements that Ecology determines are relevant and appropriate. Applicable, relevant, and appropriate requirements are collectively referred to as ARARs.

For the purpose of this document, detailed analysis and discussion of potential ARARs are not intended. Potential ARARs that may be associated with specific cleanup actions will be addressed in the future FS for the Site.

5.4 PROPOSED CLEANUP STANDARDS AND KNOWN POINTS OF EXCEEDANCES

5.4.1 PROPOSED CLEANUP STANDARDS

As detailed in **Section 5.3**, Method A Cleanup Levels are proposed for the Site. As previously discussed, additional components of these cleanup standards, in the form of ARARs, will be integrated, as necessary, during the FS process for the Site.

5.4.2 KNOWN POINTS OF EXCEEDANCES

Based on review of the RI and pre-RI soil sampling results, petroleum impacts to soil are currently above the proposed cleanup standards at the following sampling locations (**Figure 4**):

Soil Sample Location ID	Sample Depth (feet bgs)	Investigation	Sample Date	Results
Northern Portion of the Site				
SB-9	5 and 13	RI (Antea Group, 2025)	5/7/2025	TPH-G detected at 5 feet bgs and 13 feet bgs at concentrations of 104 mg/kg, and 95.8 mg/kg, respectively. No detections at 15 feet bgs.
B-6	5 and 8	Pre-RI (Antea Group, 2022)	11/4/2022	Total xylenes, TPH-G, and total naphthalenes detected at 5 feet bgs with concentrations of 20.5 mg/kg, 2,150 mg/kg, and 16.1 mg/kg, respectively. Total xylenes, TPH-G, and total naphthalenes are detected at 8

Soil Sample Location ID	Sample Depth (feet bgs)	Investigation	Sample Date	Results
				feet bgs with concentrations of 12.7 mg/kg, 1,070 mg/kg, and 7.98 mg/kg, respectively.
HO-N2-5	5	Pre-RI (Antea Group, 2019)	1/2/2019	TPH-D detected at 2,700 mg/kg.
HO-E2-5	5	Pre-RI (Antea Group, 2019)	1/3/2019	Benzene, TPH-G, and TPH-O detected at concentrations of 0.48 mg/kg, 290 mg/kg, and 6,400 mg/kg, respectively.
HO-S2-5	5	Pre-RI (Antea Group, 2019)	1/2/2019	TPH-O detected at 9,000 mg/kg.
HO-PIPE 2-3	3	Pre-RI (Antea Group, 2019)	1/3/2019	TPH-G and TPH-O detected at concentrations of 49 mg/kg and 4,200 mg/kg, respectively.
Southern Portion of the Site				
B1 (JPHC)	20	Pre-RI (JPHC, 1993)	10/4/1993	TPH-G detected at 66 mg/kg.
B3 (JPHC)	5 and 10	Pre-RI (JPHC, 1993)	10/4/1993	TPH detected at 2,100 mg/kg at 5 feet bgs and at 2,300 mg/kg at 10 feet bgs.
B-4	10 and 20	Pre-RI (Delta, 1996)	7/9/1996	TPH-G detected at 355 mg/kg at 10 feet bgs and benzene and TPH-G detected at 0.823 mg/kg and 536 mg/kg, respectively, at 20 feet bgs.
MW-12	10	Pre-RI (Delta, 1996)	7/9/1996	TPH-G detected at 104 mg/kg.
MW-13	8, 10, and 14	Pre-RI (Antea Group, 2019)	9/12/2019	TPH-G detected at 930 mg/kg at 8 feet bgs, 340 mg/kg at 10 feet bgs, and 120 mg/kg at 14 feet bgs.

6.0 SUMMARY AND CONCLUSIONS

RI field activities conducted at the Site in May 2025 were sufficient to collect the data necessary to finish adequately characterizing the Site. The soil and groundwater impacts have been delineated both vertically and laterally. As detailed in **Section 4**, the series of remedial activities completed at the Site have reduced the impacted soil plume such that MTCA Method A exceedances are limited to the area near the former hydraulic oil tank and a limited area just south the Property line, in the driveway area of the Caribbean Apartments.

The groundwater plume is limited to a small defined area along the southern portion of the property and a slight exceedance of TPH-O detected in MW-23. TPH-O has not been detected in MW-23 during the last two sampling events, including the May 2025 event, during which the reporting limits were significantly lower. Due to elevated method detection limits being reported for the NWTPH-Dx analytical method from Eurofins

Environment Testing Northwest, LLC in Tacoma, Washington, samples in May 2025 were sent to APEX to obtain more accurate and higher quality data.

In conclusion, the RI and previous assessment activities have sufficiently investigated the Site. There are no complete pathways to receptors, unless subgrade work is conducted in the limited areas with remaining soil and groundwater impacts.

7.0 REMARKS

The recommendations contained in this report represent Antea USA, Inc.'s professional opinions based upon the currently available information and are arrived at in accordance with currently accepted professional standards. This report is based upon a specific scope of work requested by the client. The contract between Antea USA, Inc. and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were performed. This report is intended only for the use of Antea USA, Inc.'s client and anyone else specifically identified in writing by Antea USA, Inc. as a user of this report. Antea USA, Inc. will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Antea USA, Inc. makes no express or implied warranty as to the contents of this report.

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9.0 REFERENCES

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Tables

Table 1 – Groundwater Gauging Data

Table 2 – Groundwater Analytical Data

Table 3 – Soil Analytical Data

Table 4 – Soil Analytical Data – PAHs

Table 5 – Soil Analytical Data – PCBs and Naphthalenes

Table 6 – Soil Vapor Analytical Data

Table 1
Groundwater Gauging Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-1	10/5/1994	262.35	2.31	NP	--	260.04	--
MW-1	2/15/1995	262.35	1.39	NP	--	260.96	--
MW-1	4/10/1995	262.35	1.11	NP	--	261.24	--
MW-1	7/20/1995	262.35	1.78	NP	--	260.57	--
MW-1	10/25/1995	262.35	1.53	NP	--	260.82	--
MW-1	1/23/1996	262.35	0.79	NP	--	261.56	--
MW-1	4/17/1996	262.35	1.13	NP	--	261.22	--
MW-1	7/8/1996	262.35	1.30	NP	--	261.05	--
MW-1	10/10/1996	262.35	1.67	NP	--	260.68	--
MW-1	3/11/1997	262.35	0.82	NP	--	261.53	--
MW-1	5/29/1997	262.35	0.99	NP	--	261.36	--
MW-1	8/5/1997	262.35	0.31	NP	--	262.04	--
MW-1	10/23/1997	262.35	0.32	NP	--	262.03	--
MW-1	3/11/1998	262.35	0.81	NP	--	261.54	--
MW-1	6/30/1998	262.35	1.26	NP	--	261.09	--
MW-1	9/25/1998	262.35	1.73	NP	--	260.62	--
MW-1	12/29/1998	262.35	0.84	NP	--	261.51	--
MW-1	3/9/1999	262.35	0.60	NP	--	261.75	--
MW-1	6/2/1999	262.35	1.04	NP	--	261.31	--
MW-1	9/27/1999	262.35	1.71	NP	--	260.64	--
MW-1	12/20/1999	262.35	1.60	NP	--	260.75	--
MW-1	3/16/2000	262.35	1.40	NP	--	260.95	--
MW-1	6/30/2000	262.35	1.50	NP	--	260.85	--
MW-1	9/27/2000	262.35	1.50	NP	--	260.85	--
MW-1	11/10/2000	262.35	1.43	NP	--	260.92	--
MW-1	3/19/2001	262.35	1.45	NP	--	260.90	--
MW-1	6/27/2001	262.35	1.75	NP	--	260.60	--
MW-1	9/26/2001	262.35	2.15	NP	--	260.20	--
MW-1	12/3/2001	262.35	1.35	NP	--	261.00	--
MW-1	6/6/2002	262.35	1.54	NP	--	260.81	--
MW-1	6/26/2003	262.35	1.62	NP	--	260.73	--
MW-1	12/9/2003	262.35	1.37	NP	--	260.98	--
MW-1	4/7/2004	262.35	1.25	NP	--	261.10	--
MW-1	11/16/2004	262.35	1.82	NP	--	260.53	--
MW-1	3/29/2005	262.35	1.00	NP	--	261.35	--
MW-1	6/22/2005	262.35	1.40	NP	--	260.95	--
MW-1	9/12/2005	262.35	1.95	NP	--	260.40	--
MW-1	12/6/2005	262.35	1.64	NP	--	260.71	--
MW-1	6/5/2006	262.35	1.77	NP	--	260.58	--
MW-1	9/24/2007	262.35	2.98	NP	--	259.37	--
MW-1	12/31/2007	262.35	--	--	--	--	WI
MW-1	1/30/2008	262.35	2.83	NP	--	259.52	--
MW-1	4/3/2008	262.35	3.13	NP	--	259.22	--
MW-1	7/2/2008	262.35	3.88	NP	--	258.47	--
MW-1	10/3/2008	262.35	3.53	NP	--	258.82	--
MW-1	1/5/2009	262.35	2.87	NP	--	259.48	--
MW-1	4/7/2009	262.35	3.08	NP	--	259.27	--
MW-1	7/8/2009	262.35	2.89	NP	--	259.46	--

Table 1
Groundwater Gauging Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-1	10/6/2009	262.35	3.03	NP	--	259.32	--
MW-1	1/5/2010	262.35	2.06	NP	--	260.29	--
MW-1	5/25/2010	262.35	2.20	NP	--	260.15	--
MW-1	8/19/2010	262.35	2.59	NP	--	259.76	--
MW-1	12/7/2010	262.35	2.18	NP	--	260.17	--
MW-1	1/26/2011	262.35	1.69	NP	--	260.66	--
MW-1	6/16/2011	262.35	1.97	NP	--	260.38	--
MW-1	9/22/2011	262.35	3.04	NP	--	259.31	--
MW-1	12/6/2011	262.35	3.40	NP	--	258.95	--
MW-1	3/8/2012	262.35	2.05	NP	--	260.30	--
MW-1	6/19/2012	262.35	2.04	NP	--	260.31	--
MW-1	9/21/2012	262.35	2.50	NP	--	259.85	--
MW-1	12/11/2012	262.35	1.57	NP	--	260.78	--
MW-1	6/25/2013	262.35	1.88	NP	--	260.47	--
MW-1	9/25/2013	262.35	2.14	NP	--	260.21	--
MW-1	11/14/2013	262.35	2.09	NP	--	260.26	--
MW-1	2/12/2014	262.35	1.62	NP	--	260.73	--
MW-1	4/1/2014	262.35	1.22	NP	--	261.13	--
MW-1	7/9/2014	262.35	1.90	NP	--	260.45	--
MW-1	10/20/2014	262.35	2.13	NP	--	260.22	--
MW-1	1/19/2015	262.35	1.45	NP	--	260.90	--
MW-1	12/14/2015	262.35	1.34	NP	--	261.01	--
MW-1	3/10/2016	262.35	0.74	NP	--	261.61	--
MW-1	3/9/2020	262.35	1.25	NP	--	261.10	--
MW-1	9/28/2020	262.35	1.89	NP	--	260.46	--
MW-1	3/23/2021	262.35	1.32	NP	--	261.03	--
MW-1	9/28/2021	262.35	1.87	NP	--	260.48	--
MW-1	9/7/2022	262.35	2.22	NP	--	260.13	--
MW-1	3/29/2023	262.35	1.60	NP	--	260.75	--
MW-1	9/19/2023	262.35	2.32	NP	--	260.03	--
MW-1	3/7/2024	262.35	1.22	NP	--	261.13	--
MW-1	9/5/2024	262.35	2.01	NP	--	260.34	--
MW-1	5/27/2025 ¹	271.77	2.53	NP	--	269.24	--
MW-2	10/5/1994	261.52	10.09	NP	--	251.43	--
MW-2	2/15/1995	261.52	9.05	NP	--	252.47	--
MW-2	4/11/1995	261.52	9.05	NP	--	252.47	--
MW-2	7/20/1995	261.52	9.70	NP	--	251.82	--
MW-2	10/25/1995	261.52	9.33	NP	--	252.19	--
MW-2	1/23/1996	261.52	8.22	NP	--	253.30	--
MW-2	4/17/1996	261.52	9.20	NP	--	252.32	--
MW-2	7/8/1996	261.52	9.45	NP	--	252.07	--
MW-2	10/10/1996	261.52	9.53	NP	--	251.99	--
MW-2	3/11/1997	261.52	8.31	NP	--	253.21	--
MW-2	5/29/1997	261.52	5.54	NP	--	255.98	--
MW-2	8/5/1997	261.52	9.40	NP	--	252.12	--
MW-2	10/23/1997	261.52	9.06	NP	--	252.46	--
MW-2	3/11/1998	261.52	12.71	NP	--	248.81	--

Table 1
Groundwater Gauging Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-2	6/30/1998	261.52	10.17	NP	--	251.35	--
MW-2	9/25/1998	261.52	10.14	NP	--	251.38	--
MW-2	3/9/1999	261.52	11.12	NP	--	250.40	--
MW-2	6/2/1999	261.52	9.66	NP	--	251.86	--
MW-2	9/27/1999	261.52	9.85	NP	--	251.67	--
MW-2	12/20/1999	261.52	8.85	NP	--	252.67	--
MW-2	3/16/2000	261.52	9.53	NP	--	251.99	--
MW-2	6/30/2000	261.52	9.74	NP	--	251.78	--
MW-2	9/27/2000	261.52	9.74	NP	--	251.78	--
MW-2	11/10/2000	261.52	8.80	NP	--	252.72	--
MW-2	3/19/2001	261.52	8.69	NP	--	252.83	--
MW-2	6/27/2001	261.52	9.32	NP	--	252.20	--
MW-2	9/26/2001	261.52	10.20	NP	--	251.32	--
MW-2	12/3/2001	261.52	9.00	NP	--	252.52	--
MW-2	6/6/2002	261.52	9.65	NP	--	251.87	--
MW-2	6/26/2003	261.52	9.68	NP	--	251.84	--
MW-2	12/9/2003	261.52	8.93	NP	--	252.59	--
MW-2	4/7/2004	261.52	8.21	NP	--	253.31	--
MW-2	11/16/2004	261.52	8.36	NP	--	253.16	--
MW-2	3/29/2005	261.52	7.35	NP	--	254.17	--
MW-2	6/22/2005	261.52	8.10	NP	--	253.42	--
MW-2	9/12/2005	261.52	9.01	NP	--	252.51	--
MW-2	12/6/2005	261.52	7.56	NP	--	253.96	--
MW-2	6/5/2006	261.52	7.66	NP	--	253.86	--
MW-2	9/29/2006	261.52	16.28	NP	--	245.24	--
MW-2	12/19/2006	261.52	8.05	NP	--	253.47	--
MW-2	9/24/2007	261.52	10.04	NP	--	251.48	--
MW-2	12/31/2007	261.52	9.01	NP	--	252.51	--
MW-2	1/30/2008	261.52	8.97	NP	--	252.55	--
MW-2	4/3/2008	261.52	15.90	NP	--	245.62	--
MW-2	7/2/2008	261.52	14.90	NP	--	246.62	--
MW-2	10/3/2008	261.52	15.56	NP	--	245.96	--
MW-2	1/5/2009	261.52	13.52	NP	--	248.00	--
MW-2	4/8/2009	261.52	15.38	NP	--	246.14	--
MW-2	7/8/2009	261.52	10.52	NP	--	251.00	--
MW-2	10/6/2009	261.52	10.60	NP	--	250.92	--
MW-2	1/5/2010	261.52	9.65	NP	--	251.87	--
MW-2	5/25/2010	261.52	9.89	NP	--	251.63	--
MW-2	8/19/2010	261.52	10.16	NP	--	251.36	--
MW-2	12/7/2010	261.52	9.68	NP	--	251.84	--
MW-2	1/26/2011	261.52	9.26	NP	--	252.26	--
MW-2	6/16/2011	261.52	9.59	NP	--	251.93	--
MW-2	9/22/2011	261.52	14.06	NP	--	247.46	--
MW-2	12/6/2011	261.52	17.30	NP	--	244.22	--
MW-2	3/8/2012	261.52	10.50	NP	--	251.02	--
MW-2	6/19/2012	261.52	9.72	NP	--	251.80	--
MW-2	9/21/2012	261.52	10.09	NP	--	251.43	--
MW-2	12/11/2012	261.52	8.86	NP	--	252.66	--

Table 1
Groundwater Gauging Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-2	6/25/2013	261.52	9.50	NP	--	252.02	--
MW-2	9/25/2013	261.52	9.69	NP	--	251.83	--
MW-2	11/14/2013	261.52	9.34	NP	--	252.18	--
MW-2	2/12/2014	261.52	8.92	NP	--	252.60	--
MW-2	4/2/2014	261.52	8.51	NP	--	253.01	--
MW-2	7/10/2014	261.52	9.42	NP	--	252.10	--
MW-2	10/21/2014	261.52	9.46	NP	--	252.06	--
MW-2	1/20/2015	261.52	8.75	NP	--	252.77	--
MW-2	12/14/2015	261.52	8.34	NP	--	253.18	--
MW-2	3/10/2016	261.52	7.81	NP	--	253.71	--
MW-2	8/29/2016	261.52	9.45	NP	--	252.07	--
MW-2	11/21/2016	261.52	8.30	NP	--	253.22	--
MW-2	2/15/2017	261.52	7.58	NP	--	253.94	--
MW-2	5/26/2017	261.52	--	--	--	--	WI
MW-2	10/17/2017	261.52	9.19	NP	--	252.33	--
MW-2	2/8/2018	261.52	7.73	NP	--	253.79	--
MW-2	9/11/2018	261.52	9.11	NP	--	252.41	--
MW-2	11/15/2018	261.52	8.93	NP	--	252.59	--
MW-2	1/29/2019	261.52	8.60	NP	--	252.92	--
MW-2	9/26/2019	261.52	9.23	NP	--	252.29	--
MW-2	3/9/2020	261.52	8.55	NP	--	252.97	--
MW-2	9/28/2020	261.52	9.25	NP	--	252.27	--
MW-2	3/23/2021	261.52	8.27	NP	--	253.25	--
MW-2	9/28/2021	261.52	9.09	NP	--	252.43	--
MW-2	9/13/2022	261.52	9.60	NP	--	251.92	--
MW-2	3/29/2023	261.52	8.29	NP	--	253.23	--
MW-2	9/19/2023	261.52	9.26	NP	--	252.26	--
MW-2	3/7/2024	261.52	7.36	NP	--	254.16	--
MW-2	9/5/2024	261.52	8.83	NP	--	252.69	--
MW-2	5/27/2025 ¹	271.19	8.40	NP	--	262.79	--
MW-3	10/5/1994	261.47	10.10	NP	--	251.37	--
MW-3	2/15/1995	261.47	8.83	NP	--	252.64	--
MW-3	4/10/1995	261.47	8.90	NP	--	252.57	--
MW-3	7/20/1995	261.47	9.65	NP	--	251.82	--
MW-3	10/25/1995	261.47	9.27	NP	--	252.20	--
MW-3	1/23/1996	261.47	8.12	NP	--	253.35	--
MW-3	4/17/1996	261.47	9.17	NP	--	252.30	--
MW-3	7/8/1996	261.47	9.21	NP	--	252.26	--
MW-3	10/10/1996	261.47	9.60	NP	--	251.87	--
MW-3	3/11/1997	261.47	8.21	NP	--	253.26	--
MW-3	5/29/1997	261.47	8.13	NP	--	253.34	--
MW-3	8/5/1997	261.47	8.13	NP	--	253.34	--
MW-3	10/23/1997	261.47	11.31	NP	--	250.16	--
MW-3	3/11/1998	261.47	9.57	NP	--	251.90	--
MW-3	6/30/1998	261.47	9.82	NP	--	251.65	--
MW-3	9/25/1998	261.47	10.14	NP	--	251.33	--
MW-3	12/29/1998	261.47	9.15	NP	--	252.32	--

Table 1
Groundwater Gauging Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-3	3/9/1999	261.47	9.50	NP	--	251.97	--
MW-3	6/2/1999	261.47	9.41	NP	--	252.06	--
MW-3	9/27/1999	261.47	9.43	NP	--	252.04	--
MW-3	12/20/1999	261.47	8.20	NP	--	253.27	--
MW-3	3/16/2000	261.47	9.30	NP	--	252.17	--
MW-3	6/30/2000	261.47	9.66	NP	--	251.81	--
MW-3	9/27/2000	261.47	9.78	NP	--	251.69	--
MW-3	11/10/2000	261.47	8.88	NP	--	252.59	--
MW-3	3/19/2001	261.47	8.90	NP	--	252.57	--
MW-3	6/27/2001	261.47	9.62	NP	--	251.85	--
MW-3	9/26/2001	261.47	10.28	NP	--	251.19	--
MW-3	12/3/2001	261.47	8.10	NP	--	253.37	--
MW-3	6/6/2002	261.47	9.70	NP	--	251.77	--
MW-3	6/26/2003	261.47	9.65	NP	--	251.82	--
MW-3	12/9/2003	261.47	8.87	NP	--	252.60	--
MW-3	4/7/2004	261.47	8.27	NP	--	253.20	--
MW-3	11/16/2004	261.47	8.40	NP	--	253.07	--
MW-3	3/29/2005	261.47	7.64	NP	--	253.83	--
MW-3	6/22/2005	261.47	8.67	NP	--	252.80	--
MW-3	9/12/2005	261.47	9.85	NP	--	251.62	--
MW-3	12/6/2005	261.47	7.83	NP	--	253.64	--
MW-3	6/5/2006	261.47	7.76	NP	--	253.71	--
MW-3	9/24/2007	261.47	10.20	NP	--	251.27	--
MW-3	12/31/2007	261.47	--	--	--	--	WI
MW-3	1/30/2008	261.47	8.73	NP	--	252.74	--
MW-3	4/3/2008	261.47	15.05	NP	--	246.42	--
MW-3	7/2/2008	261.47	14.86	NP	--	246.61	--
MW-3	10/3/2008	261.47	15.07	NP	--	246.40	--
MW-3	1/5/2009	261.47	12.74	NP	--	248.73	--
MW-3	4/7/2009	261.47	15.33	NP	--	246.14	--
MW-3	7/8/2009	261.47	10.41	NP	--	251.06	--
MW-3	10/6/2009	261.47	10.56	NP	--	250.91	--
MW-3	1/5/2010	261.47	9.48	NP	--	251.99	--
MW-3	5/25/2010	261.47	9.70	NP	--	251.77	--
MW-3	8/19/2010	261.47	10.15	NP	--	251.32	--
MW-3	12/7/2010	261.47	9.51	NP	--	251.96	--
MW-3	1/26/2011	261.47	8.80	NP	--	252.67	--
MW-3	6/16/2011	261.47	9.50	NP	--	251.97	--
MW-3	9/22/2011	261.47	14.25	NP	--	247.22	--
MW-3	3/8/2012	261.47	10.48	NP	--	250.99	--
MW-3	6/19/2012	261.47	9.54	NP	--	251.93	--
MW-3	9/21/2012	261.47	10.22	NP	--	251.25	--
MW-3	12/11/2012	261.47	8.35	NP	--	253.12	--
MW-3	6/25/2013	261.47	9.45	NP	--	252.02	--
MW-3	9/25/2013	261.47	9.78	NP	--	251.69	--
MW-3	11/14/2013	261.47	9.33	NP	--	252.14	--
MW-3	2/12/2014	261.47	8.83	NP	--	252.64	--
MW-3	4/2/2014	261.47	8.39	NP	--	253.08	--

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ARCO Facility No. 980
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Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-3	7/9/2014	261.47	9.53	NP	--	251.94	--
MW-3	10/20/2014	261.47	9.65	NP	--	251.82	--
MW-3	1/19/2015	261.47	8.64	NP	--	252.83	--
MW-3	3/9/2020	261.47	8.50	NP	--	252.97	--
MW-3	9/28/2020	261.47	9.40	NP	--	252.07	--
MW-3	3/23/2021	261.47	3.08	NP	--	258.39	--
MW-3	9/28/2021	261.47	9.69	NP	--	251.78	--
MW-3	9/7/2022	261.47	10.03	NP	--	251.44	--
MW-3	3/29/2023	261.47	8.73	NP	--	252.74	--
MW-3	9/19/2023	261.47	10.01	NP	--	251.46	--
MW-3	3/7/2024	261.47	8.05	NP	--	253.42	--
MW-3	9/5/2024	261.47	9.30	NP	--	252.17	--
MW-3	5/27/2025 ¹	270.89	8.70	NP	--	262.19	--
MW-4	10/5/1994	261.16	19.69	19.50	0.19	241.61	--
MW-4	2/15/1995	261.16	18.60	14.89	3.71	245.34	--
MW-4	4/10/1995	261.16	16.90	16.53	0.37	244.54	--
MW-4	10/25/1995	261.16	18.24	NP	--	242.92	--
MW-4	1/23/1996	261.16	15.37	NP	--	245.79	--
MW-4	4/17/1996	261.16	16.80	NP	--	244.36	--
MW-4	7/8/1996	261.16	15.29	NP	--	245.87	--
MW-4	10/10/1996	261.16	18.55	18.53	0.02	242.63	--
MW-4	3/11/1997	261.16	15.59	NP	--	245.57	--
MW-4	5/29/1997	261.16	15.65	14.93	0.72	246.05	--
MW-4	8/5/1997	261.16	16.39	15.91	0.48	245.13	--
MW-4	10/23/1997	261.16	19.72	19.70	0.02	241.46	--
MW-4	3/11/1998	261.16	14.74	NP	--	246.42	--
MW-4	6/30/1998	261.16	17.57	NP	--	243.59	--
MW-4	9/25/1998	261.16	17.80	NP	--	243.36	--
MW-4	12/29/1998	261.16	15.73	NP	--	245.43	--
MW-4	3/9/1999	261.16	14.70	NP	--	246.46	--
MW-4	6/2/1999	261.16	16.21	NP	--	244.95	--
MW-4	9/27/1999	261.16	18.58	NP	--	242.58	--
MW-4	12/20/1999	261.16	15.40	NP	--	245.76	--
MW-4	3/16/2000	261.16	15.85	NP	--	245.31	--
MW-4	6/30/2000	261.16	17.65	NP	--	243.51	--
MW-4	9/27/2000	261.16	18.25	NP	--	242.91	--
MW-4	11/10/2000	261.16	17.36	17.35	0.01	243.81	--
MW-4	3/19/2001	261.16	17.39	NP	--	243.77	--
MW-4	6/27/2001	261.16	17.83	NP	--	243.33	--
MW-4	9/26/2001	261.16	18.27	NP	--	242.89	--
MW-4	12/3/2001	261.16	16.05	NP	--	245.11	--
MW-4	6/6/2002	261.16	17.41	NP	--	243.75	--
MW-4	6/26/2003	261.16	17.56	NP	--	243.60	--
MW-4	12/9/2003	261.16	16.40	NP	--	244.76	--
MW-4	4/7/2004	261.16	16.53	NP	--	244.63	--
MW-4	11/16/2004	261.16	17.20	17.10	0.10	244.04	--
MW-4	3/29/2005	261.16	15.06	NP	--	246.10	--

Table 1
Groundwater Gauging Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-4	6/22/2005	261.16	16.97	NP	--	244.19	--
MW-4	9/12/2005	261.16	18.09	NP	--	243.07	--
MW-4	12/6/2005	261.16	16.75	NP	--	244.41	--
MW-4	6/5/2006	261.16	16.57	NP	--	244.59	--
MW-4	9/29/2006	261.16	25.28	NP	--	235.88	--
MW-4	12/19/2006	261.16	15.49	NP	--	245.67	--
MW-4	9/24/2007	261.16	18.45	NP	--	242.71	--
MW-4	12/31/2007	261.16	16.41	NP	--	244.75	--
MW-4	1/30/2008	261.16	16.49	NP	--	244.67	--
MW-4	4/3/2008	261.16	22.96	NP	--	238.20	--
MW-4	7/2/2008	261.16	20.43	NP	--	240.73	--
MW-4	10/3/2008	261.16	24.98	NP	--	236.18	--
MW-4	1/5/2009	261.16	21.07	NP	--	240.09	--
MW-4	4/8/2009	261.16	24.52	NP	--	236.64	--
MW-4	7/8/2009	261.16	18.37	NP	--	242.79	--
MW-4	10/6/2009	261.16	18.85	NP	--	242.31	--
MW-4	1/5/2010	261.16	16.52	NP	--	244.64	--
MW-4	5/25/2010	261.16	17.11	NP	--	244.05	--
MW-4	8/19/2010	261.16	18.00	NP	--	243.16	--
MW-4	12/7/2010	261.16	16.60	NP	--	244.56	--
MW-4	1/26/2011	261.16	15.32	NP	--	245.84	--
MW-4	6/16/2011	261.16	16.72	NP	--	244.44	--
MW-4	9/22/2011	261.16	20.26	NP	--	240.90	--
MW-4	12/6/2011	261.16	21.94	NP	--	239.22	--
MW-4	3/8/2012	261.16	17.42	NP	--	243.74	--
MW-4	6/19/2012	261.16	17.22	NP	--	243.94	--
MW-4	9/21/2012	261.16	18.25	NP	--	242.91	--
MW-4	12/11/2012	261.16	15.80	NP	--	245.36	--
MW-4	6/25/2013	261.16	17.15	NP	--	244.01	--
MW-4	9/25/2013	261.16	17.88	NP	--	243.28	--
MW-4	11/14/2013	261.16	17.32	NP	--	243.84	--
MW-4	2/12/2014	261.16	16.80	NP	--	244.36	--
MW-4	4/2/2014	261.16	14.55	NP	--	246.61	--
MW-4	7/10/2014	261.16	17.24	NP	--	243.92	--
MW-4	10/22/2014	261.16	17.44	NP	--	243.72	--
MW-4	1/20/2015	261.16	15.72	NP	--	245.44	--
MW-4	12/16/2015	261.16	15.04	NP	--	246.12	--
MW-4	3/11/2016	261.16	14.24	NP	--	246.92	--
MW-4	8/29/2016	261.16	18.04	NP	--	243.12	--
MW-4	11/21/2016	261.16	15.31	NP	--	245.85	--
MW-4	2/15/2017	261.16	14.20	NP	--	246.96	--
MW-4	5/26/2017	261.16	15.21	NP	--	245.95	--
MW-4	10/17/2017	261.16	17.98	NP	--	243.18	--
MW-4	2/8/2018	261.16	14.25	NP	--	246.91	--
MW-4	9/11/2018	261.16	17.85	NP	--	243.31	--
MW-4	11/15/2018	261.16	17.40	NP	--	243.76	--
MW-4	1/29/2019	261.16	15.93	NP	--	245.23	--
MW-4	8/27/2019	261.16	17.87	NP	--	243.29	--

Table 1
Groundwater Gauging Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-4	9/26/2019	261.16	18.74	NP	--	242.42	--
MW-4	3/9/2020	261.16	15.53	NP	--	245.63	--
MW-4	9/28/2020	261.16	17.59	NP	--	243.57	--
MW-4	3/23/2021	261.16	15.37	NP	--	245.79	--
MW-4	9/28/2021	261.16	18.02	NP	--	243.14	--
MW-4	11/8/2021	261.16	16.31	NP	--	244.85	--
MW-4	12/13/2021	261.16	14.97	NP	--	246.19	--
MW-4	12/13/2021	261.16	14.97	NP	--	246.19	--
MW-4	3/30/2022	261.16	15.29	NP	--	245.87	--
MW-4	6/27/2022	261.16	15.77	NP	--	245.39	--
MW-4	9/7/2022	261.16	18.11	NP	--	243.05	--
MW-4	3/29/2023	261.16	15.94	NP	--	245.22	--
MW-4	9/19/2023	261.16	18.50	NP	--	242.66	--
MW-4	3/7/2024	261.16	15.92	NP	--	245.24	--
MW-4	9/5/2024	261.16	17.51	NP	--	243.65	--
MW-4	5/27/2025 ¹	271.38	16.53	NP	--	254.85	--
MW-5	10/5/1994	261.04	19.20	NP	--	241.84	--
MW-5	2/15/1995	261.04	16.20	NP	--	244.84	--
MW-5	4/10/1995	261.04	16.59	NP	--	244.45	--
MW-5	7/20/1995	261.04	16.96	NP	--	244.08	--
MW-5	10/26/1995	261.04	16.55	NP	--	244.49	--
MW-5	1/23/1996	261.04	15.30	NP	--	245.74	--
MW-5	4/17/1996	261.04	12.72	NP	--	248.32	--
MW-5	7/8/1996	261.04	16.25	NP	--	244.79	--
MW-5	3/11/1997	261.04	14.80	NP	--	246.24	--
MW-5	5/29/1997	261.04	12.38	NP	--	248.66	--
MW-5	8/5/1997	261.04	15.54	NP	--	245.50	--
MW-5	10/23/1997	261.04	15.29	NP	--	245.75	--
MW-5	3/11/1998	261.04	14.03	NP	--	247.01	--
MW-5	6/30/1998	261.04	13.17	NP	--	247.87	--
MW-5	9/25/1998	261.04	16.79	NP	--	244.25	--
MW-5	12/29/1998	261.04	13.12	NP	--	247.92	--
MW-5	3/9/1999	261.04	10.04	NP	--	251.00	--
MW-5	6/2/1999	261.04	16.11	NP	--	244.93	--
MW-5	9/27/1999	261.04	15.50	NP	--	245.54	--
MW-5	12/20/1999	261.04	15.00	NP	--	246.04	--
MW-5	3/16/2000	261.04	11.39	NP	--	249.65	--
MW-5	6/30/2000	261.04	16.93	NP	--	244.11	--
MW-5	9/27/2000	261.04	17.67	NP	--	243.37	--
MW-5	11/10/2000	261.04	17.10	NP	--	243.94	--
MW-5	3/19/2001	261.04	16.57	NP	--	244.47	--
MW-5	6/27/2001	261.04	16.52	NP	--	244.52	--
MW-5	9/26/2001	261.04	14.22	NP	--	246.82	--
MW-5	12/3/2001	261.04	15.32	NP	--	245.72	--
MW-5	6/26/2003	261.04	16.83	NP	--	244.21	--
MW-5	12/9/2003	261.04	15.59	NP	--	245.45	--
MW-5	4/7/2004	261.04	16.10	NP	--	244.94	--

Table 1
Groundwater Gauging Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-5	11/16/2004	261.04	16.58	NP	--	244.46	--
MW-5	3/29/2005	261.04	16.03	NP	--	245.01	--
MW-5	6/22/2005	261.04	16.57	NP	--	244.47	--
MW-5	9/12/2005	261.04	17.44	NP	--	243.60	--
MW-5	12/6/2005	261.04	15.86	NP	--	245.18	--
MW-5	6/5/2006	261.04	15.78	NP	--	245.26	--
MW-5	9/29/2006	261.04	23.75	NP	--	237.29	--
MW-5	12/19/2006	261.04	14.58	NP	--	246.46	--
MW-5	9/24/2007	261.04	17.61	NP	--	243.43	--
MW-5	12/31/2007	261.04	15.40	NP	--	245.64	--
MW-5	1/30/2008	261.04	15.50	NP	--	245.54	--
MW-5	4/3/2008	261.04	20.44	NP	--	240.60	--
MW-5	7/2/2008	261.04	19.21	NP	--	241.83	--
MW-5	10/3/2008	261.04	22.82	NP	--	238.22	--
MW-5	1/5/2009	261.04	20.60	NP	--	240.44	--
MW-5	4/8/2009	261.04	21.52	NP	--	239.52	--
MW-5	7/8/2009	261.04	17.51	NP	--	243.53	--
MW-5	10/6/2009	261.04	18.30	NP	--	242.74	--
MW-5	1/5/2010	261.04	15.62	NP	--	245.42	--
MW-5	5/25/2010	261.04	16.25	NP	--	244.79	--
MW-5	8/19/2010	261.04	17.40	NP	--	243.64	--
MW-5	12/7/2010	261.04	15.81	NP	--	245.23	--
MW-5	1/26/2011	261.04	14.56	NP	--	246.48	--
MW-5	6/16/2011	261.04	15.95	NP	--	245.09	--
MW-5	9/22/2011	261.04	19.22	NP	--	241.82	--
MW-5	12/6/2011	261.04	20.45	NP	--	240.59	--
MW-5	3/8/2012	261.04	16.40	NP	--	244.64	--
MW-5	6/19/2012	261.04	16.27	NP	--	244.77	--
MW-5	9/21/2012	261.04	17.65	NP	--	243.39	--
MW-5	12/11/2012	261.04	14.24	NP	--	246.80	--
MW-5	6/25/2013	261.04	16.34	NP	--	244.70	--
MW-5	9/25/2013	261.04	17.37	NP	--	243.67	--
MW-5	11/14/2013	261.04	16.69	NP	--	244.35	--
MW-5	2/12/2014	261.04	15.95	NP	--	245.09	--
MW-5	4/1/2014	261.04	14.15	NP	--	246.89	--
MW-5	7/10/2014	261.04	16.72	NP	--	244.32	--
MW-5	10/21/2014	261.04	17.05	NP	--	243.99	--
MW-5	1/20/2015	261.04	14.53	NP	--	246.51	--
MW-5	12/14/2015	261.04	15.09	NP	--	245.95	--
MW-5	3/10/2016	261.04	13.82	NP	--	247.22	--
MW-5	8/29/2016	261.04	17.70	NP	--	243.34	--
MW-5	11/21/2016	261.04	14.77	NP	--	246.27	--
MW-5	2/15/2017	261.04	13.42	NP	--	247.62	--
MW-5	5/26/2017	261.04	14.82	NP	--	246.22	--
MW-5	10/17/2017	261.04	17.61	NP	--	243.43	--
MW-5	2/8/2018	261.04	13.66	NP	--	247.38	--
MW-5	9/11/2018	261.04	--	--	--	--	WI
MW-5	3/9/2020	261.04	14.92	NP	--	246.12	--

Table 1
Groundwater Gauging Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-5	3/23/2021	261.04	14.25	NP	--	246.79	--
MW-5	9/28/2021	261.04	17.72	NP	--	243.32	--
MW-5	9/7/2022	261.04	17.64	NP	--	243.40	--
MW-5	3/29/2023	261.04	15.28	NP	--	245.76	--
MW-5	9/19/2023	261.04	18.22	NP	--	242.82	--
MW-5	3/7/2024	261.04	15.49	NP	--	245.55	--
MW-5	9/5/2024	261.04	17.23	NP	--	243.81	--
MW-5	5/27/2025 ¹	270.41	15.86	NP	--	254.55	--
MW-6	10/5/1994	261.72	10.35	NP	--	251.37	--
MW-6	2/15/1995	261.72	9.24	NP	--	252.48	--
MW-6	4/10/1995	261.72	9.29	NP	--	252.43	--
MW-6	7/20/1995	261.72	10.08	NP	--	251.64	--
MW-6	10/25/1995	261.72	9.77	NP	--	251.95	--
MW-6	1/23/1996	261.72	8.56	NP	--	253.16	--
MW-6	4/17/1996	261.72	9.50	NP	--	252.22	--
MW-6	7/8/1996	261.72	9.65	NP	--	252.07	--
MW-6	10/10/1996	261.72	9.95	NP	--	251.77	--
MW-6	3/11/1997	261.72	8.69	NP	--	253.03	--
MW-6	5/29/1997	261.72	8.73	NP	--	252.99	--
MW-6	8/5/1997	261.72	8.90	NP	--	252.82	--
MW-6	10/23/1997	261.72	8.08	NP	--	253.64	--
MW-6	3/11/1998	261.72	11.51	NP	--	250.21	--
MW-6	6/30/1998	261.72	10.44	NP	--	251.28	--
MW-6	9/25/1998	261.72	10.56	NP	--	251.16	--
MW-6	12/29/1998	261.72	9.68	NP	--	252.04	--
MW-6	3/9/1999	261.72	11.23	NP	--	250.49	--
MW-6	6/2/1999	261.72	9.89	NP	--	251.83	--
MW-6	9/27/1999	261.72	8.22	NP	--	253.50	--
MW-6	12/20/1999	261.72	9.30	NP	--	252.42	--
MW-6	3/16/2000	261.72	9.64	NP	--	252.08	--
MW-6	6/30/2000	261.72	10.10	NP	--	251.62	--
MW-6	9/27/2000	261.72	10.51	NP	--	251.21	--
MW-6	11/10/2000	261.72	9.25	NP	--	252.47	--
MW-6	3/19/2001	261.72	9.15	NP	--	252.57	--
MW-6	6/27/2001	261.72	9.96	NP	--	251.76	--
MW-6	9/26/2001	261.72	10.53	NP	--	251.19	--
MW-6	12/3/2001	261.72	9.05	NP	--	252.67	--
MW-6	6/26/2003	261.72	10.02	NP	--	251.70	--
MW-6	12/9/2003	261.72	9.25	NP	--	252.47	--
MW-6	4/7/2004	261.72	8.65	NP	--	253.07	--
MW-6	11/16/2004	261.72	8.82	NP	--	252.90	--
MW-6	3/29/2005	261.72	8.10	NP	--	253.62	--
MW-6	6/22/2005	261.72	8.77	NP	--	252.95	--
MW-6	9/12/2005	261.72	9.65	NP	--	252.07	--
MW-6	12/6/2005	261.72	8.24	NP	--	253.48	--
MW-6	6/5/2006	261.72	8.08	NP	--	253.64	--
MW-6	9/29/2006	261.72	15.73	NP	--	245.99	--

Table 1
Groundwater Gauging Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-6	12/19/2006	261.72	8.21	NP	--	253.51	--
MW-6	9/24/2007	261.72	10.55	NP	--	251.17	--
MW-6	12/31/2007	261.72	--	--	--	--	WI
MW-6	1/30/2008	261.72	9.09	NP	--	252.63	--
MW-6	4/3/2008	261.72	15.89	NP	--	245.83	--
MW-6	7/2/2008	261.72	15.43	NP	--	246.29	--
MW-6	10/3/2008	261.72	15.48	NP	--	246.24	--
MW-6	1/5/2009	261.72	13.06	NP	--	248.66	--
MW-6	4/8/2009	261.72	17.48	NP	--	244.24	--
MW-6	7/8/2009	261.72	11.00	NP	--	250.72	--
MW-6	10/6/2009	261.72	11.17	NP	--	250.55	--
MW-6	1/5/2010	261.72	10.06	NP	--	251.66	--
MW-6	5/25/2010	261.72	10.26	NP	--	251.46	--
MW-6	8/19/2010	261.72	10.66	NP	--	251.06	--
MW-6	12/7/2010	261.72	10.04	NP	--	251.68	--
MW-6	1/26/2011	261.72	9.48	NP	--	252.24	--
MW-6	6/16/2011	261.72	9.98	NP	--	251.74	--
MW-6	9/22/2011	261.72	14.79	NP	--	246.93	--
MW-6	12/6/2011	261.72	17.88	NP	--	243.84	--
MW-6	3/8/2012	261.72	11.03	NP	--	250.69	--
MW-6	6/19/2012	261.72	15.09	NP	--	246.63	--
MW-6	9/21/2012	261.72	10.71	NP	--	251.01	--
MW-6	12/11/2012	261.72	9.46	NP	--	252.26	--
MW-6	6/25/2013	261.72	10.03	NP	--	251.69	--
MW-6	9/25/2013	261.72	10.32	NP	--	251.40	--
MW-6	11/14/2013	261.72	9.86	NP	--	251.86	--
MW-6	2/12/2014	261.72	9.44	NP	--	252.28	--
MW-6	4/1/2014	261.72	8.87	NP	--	252.85	--
MW-6	7/9/2014	261.72	9.97	NP	--	251.75	--
MW-6	10/20/2014	261.72	10.09	NP	--	251.63	--
MW-6	1/19/2015	261.72	9.05	NP	--	252.67	--
MW-6	12/14/2015	261.72	8.81	NP	--	252.91	--
MW-6	3/10/2016	261.72	8.46	NP	--	253.26	--
MW-6	3/9/2020	261.72	8.97	NP	--	252.75	--
MW-6	9/28/2020	261.72	9.98	NP	--	251.74	--
MW-6	3/23/2021	261.72	8.64	NP	--	253.08	--
MW-6	9/28/2021	261.72	10.16	NP	--	251.56	--
MW-6	9/7/2022	261.72	10.60	NP	--	251.12	--
MW-6	3/29/2023	261.72	8.99	NP	--	252.73	--
MW-6	9/19/2023	261.72	10.46	NP	--	251.26	--
MW-6	3/7/2024	261.72	8.55	NP	--	253.17	--
MW-6	9/5/2024	261.72	9.82	NP	--	251.90	--
MW-6	5/27/2025 ¹	271.11	9.50	NP	--	261.61	--
MW-7	10/5/1994	261.21	17.62	NP	--	243.59	--
MW-7	2/15/1995	261.21	15.00	NP	--	246.21	--
MW-7	4/10/1995	261.21	15.10	NP	--	246.11	--
MW-7	7/20/1995	261.21	16.70	NP	--	244.51	--

Table 1
Groundwater Gauging Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-7	10/26/1995	261.21	16.38	NP	--	244.83	--
MW-7	1/23/1996	261.21	14.26	NP	--	246.95	--
MW-7	4/17/1996	261.21	15.39	NP	--	245.82	--
MW-7	7/8/1996	261.21	15.65	NP	--	245.56	--
MW-7	10/10/1996	261.21	16.35	NP	--	244.86	--
MW-7	3/11/1997	261.21	14.21	NP	--	247.00	--
MW-7	5/29/1997	261.21	11.56	NP	--	249.65	--
MW-7	8/5/1997	261.21	14.92	NP	--	246.29	--
MW-7	10/23/1997	261.21	13.96	NP	--	247.25	--
MW-7	3/11/1998	261.21	14.30	NP	--	246.91	--
MW-7	6/30/1998	261.21	15.88	NP	--	245.33	--
MW-7	12/29/1998	261.21	13.98	NP	--	247.23	--
MW-7	3/9/1999	261.21	13.59	NP	--	247.62	--
MW-7	6/2/1999	261.21	14.84	NP	--	246.37	--
MW-7	9/27/1999	261.21	15.10	NP	--	246.11	--
MW-7	12/20/1999	261.21	14.00	NP	--	247.21	--
MW-7	3/16/2000	261.21	14.55	NP	--	246.66	--
MW-7	6/30/2000	261.21	16.08	NP	--	245.13	--
MW-7	9/27/2000	261.21	16.53	NP	--	244.68	--
MW-7	11/10/2000	261.21	15.85	NP	--	245.36	--
MW-7	3/19/2001	261.21	15.48	NP	--	245.73	--
MW-7	6/27/2001	261.21	16.11	NP	--	245.10	--
MW-7	9/26/2001	261.21	16.67	NP	--	244.54	--
MW-7	12/3/2001	261.21	14.29	NP	--	246.92	--
MW-7	12/9/2003	261.21	14.50	NP	--	246.71	--
MW-7	4/7/2004	261.21	14.97	NP	--	246.24	--
MW-7	11/16/2004	261.21	15.24	NP	--	245.97	--
MW-7	3/29/2005	261.21	14.41	NP	--	246.80	--
MW-7	6/22/2005	261.21	15.39	NP	--	245.82	--
MW-7	9/12/2005	261.21	16.18	NP	--	245.03	--
MW-7	12/6/2005	261.21	14.47	NP	--	246.74	--
MW-7	6/5/2006	261.21	14.43	NP	--	246.78	--
MW-7	9/29/2006	261.21	21.71	NP	--	239.50	--
MW-7	12/19/2006	261.21	13.63	NP	--	247.58	--
MW-7	9/24/2007	261.21	--	--	--	--	Dry
MW-7	12/31/2007	261.21	14.54	NP	--	246.67	--
MW-7	1/30/2008	261.21	14.66	NP	--	246.55	--
MW-7	4/3/2008	261.21	19.26	NP	--	241.95	--
MW-7	7/2/2008	261.21	18.34	NP	--	242.87	--
MW-7	10/3/2008	261.21	20.13	NP	--	241.08	--
MW-7	1/5/2009	261.21	18.50	NP	--	242.71	--
MW-7	4/8/2009	261.21	20.85	NP	--	240.36	--
MW-7	7/8/2009	261.21	16.45	NP	--	244.76	--
MW-7	10/6/2009	261.21	16.98	NP	--	244.23	--
MW-7	1/5/2010	261.21	14.77	NP	--	246.44	--
MW-7	5/25/2010	261.21	15.45	NP	--	245.76	--
MW-7	8/19/2010	261.21	16.30	NP	--	244.91	--
MW-7	12/7/2010	261.21	14.88	NP	--	246.33	--

Table 1
Groundwater Gauging Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-7	1/26/2011	261.21	13.84	NP	--	247.37	--
MW-7	6/16/2011	261.21	15.05	NP	--	246.16	--
MW-7	9/22/2011	261.21	18.12	NP	--	243.09	--
MW-7	12/6/2011	261.21	19.71	NP	--	241.50	--
MW-7	3/8/2012	261.21	15.50	NP	--	245.71	--
MW-7	6/19/2012	261.21	15.09	NP	--	246.12	--
MW-7	9/21/2012	261.21	16.37	NP	--	244.84	--
MW-7	12/11/2012	261.21	13.45	NP	--	247.76	--
MW-7	6/25/2013	261.21	15.19	NP	--	246.02	--
MW-7	9/25/2013	261.21	15.85	NP	--	245.36	--
MW-7	11/14/2013	261.21	15.32	NP	--	245.89	--
MW-7	2/12/2014	261.21	15.77	NP	--	245.44	--
MW-7	4/1/2014	261.21	13.15	NP	--	248.06	--
MW-7	7/9/2014	261.21	15.56	NP	--	245.65	--
MW-7	10/20/2014	261.21	15.63	NP	--	245.58	--
MW-7	1/19/2015	261.21	14.06	NP	--	247.15	--
MW-7	3/9/2020	261.21	13.66	NP	--	247.55	--
MW-7	9/28/2020	261.21	15.10	NP	--	246.11	--
MW-7	3/23/2021	261.21	12.98	NP	--	248.23	--
MW-7	9/28/2021	261.21	16.36	NP	--	244.85	--
MW-7	9/7/2022	261.21	16.52	NP	--	244.69	--
MW-7	3/29/2023	261.21	14.43	NP	--	246.78	--
MW-7	9/19/2023	261.21	16.85	NP	--	244.36	--
MW-7	3/7/2024	261.21	13.52	NP	--	247.69	--
MW-7	9/5/2024	261.21	15.80	NP	--	245.41	--
MW-7	5/27/2025 ¹	270.66	14.70	NP	--	255.96	--
MW-8	10/5/1994	259.58	18.11	NP	--	241.47	--
MW-8	2/15/1995	259.58	15.07	NP	--	244.51	--
MW-8	4/10/1995	259.58	15.07	NP	--	244.51	--
MW-8	7/20/1995	259.58	16.96	NP	--	242.62	--
MW-8	10/25/1995	259.58	16.85	NP	--	242.73	--
MW-8	1/23/1996	259.58	13.95	NP	--	245.63	--
MW-8	4/17/1996	259.58	15.46	NP	--	244.12	--
MW-8	7/8/1996	259.58	15.89	NP	--	243.69	--
MW-8	10/10/1996	259.58	16.70	NP	--	242.88	--
MW-8	3/11/1997	259.58	14.19	NP	--	245.39	--
MW-8	5/29/1997	259.58	14.41	NP	--	245.17	--
MW-8	8/5/1997	259.58	14.10	NP	--	245.48	--
MW-8	10/23/1997	259.58	14.17	NP	--	245.41	--
MW-8	3/11/1998	259.58	14.00	NP	--	245.58	--
MW-8	6/30/1998	259.58	17.58	NP	--	242.00	--
MW-8	9/25/1998	259.58	17.08	NP	--	242.50	--
MW-8	12/29/1998	259.58	14.49	NP	--	245.09	--
MW-8	3/9/1999	259.58	13.48	NP	--	246.10	--
MW-8	6/2/1999	259.58	15.36	NP	--	244.22	--
MW-8	9/27/1999	259.58	16.79	NP	--	242.79	--
MW-8	12/20/1999	259.58	14.38	NP	--	245.20	--

Table 1
Groundwater Gauging Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-8	3/16/2000	259.58	14.80	NP	--	244.78	--
MW-8	6/30/2000	259.58	16.35	NP	--	243.23	--
MW-8	9/27/2000	259.58	17.24	NP	--	242.34	--
MW-8	11/10/2000	259.58	16.80	NP	--	242.78	--
MW-8	3/19/2001	259.58	16.05	NP	--	243.53	--
MW-8	6/27/2001	259.58	16.62	NP	--	242.96	--
MW-8	9/26/2001	259.58	17.64	NP	--	241.94	--
MW-8	12/3/2001	259.58	15.17	NP	--	244.41	--
MW-8	6/6/2002	259.58	16.00	NP	--	243.58	--
MW-8	6/26/2003	259.58	16.52	NP	--	243.06	--
MW-8	12/9/2003	259.58	15.45	NP	--	244.13	--
MW-8	4/7/2004	259.58	15.51	NP	--	244.07	--
MW-8	11/16/2004	259.58	16.45	NP	--	243.13	--
MW-8	3/29/2005	259.58	16.08	NP	--	243.50	--
MW-8	6/22/2005	259.58	16.12	NP	--	243.46	--
MW-8	9/12/2005	259.58	17.15	NP	--	242.43	--
MW-8	12/6/2005	259.58	15.80	NP	--	243.78	--
MW-8	6/5/2006	259.58	15.08	NP	--	244.50	--
MW-8	9/24/2007	259.58	17.16	NP	--	242.42	--
MW-8	12/31/2007	259.58	15.00	NP	--	244.58	--
MW-8	1/30/2008	259.58	14.87	NP	--	244.71	--
MW-8	4/2/2008	259.58	18.07	NP	--	241.51	--
MW-8	7/1/2008	259.58	18.34	NP	--	241.24	--
MW-8	10/3/2008	259.58	19.32	NP	--	240.26	--
MW-8	1/6/2009	259.58	18.14	NP	--	241.44	--
MW-8	4/8/2009	259.58	17.70	NP	--	241.88	--
MW-8	7/8/2009	259.58	16.95	NP	--	242.63	--
MW-8	10/6/2009	259.58	17.80	NP	--	241.78	--
MW-8	1/5/2010	259.58	15.11	NP	--	244.47	--
MW-8	5/25/2010	259.58	15.52	NP	--	244.06	--
MW-8	8/19/2010	259.58	16.80	NP	--	242.78	--
MW-8	12/7/2010	259.58	15.54	NP	--	244.04	--
MW-8	1/26/2011	259.58	13.80	NP	--	245.78	--
MW-8	6/16/2011	259.58	15.15	NP	--	244.43	--
MW-8	9/22/2011	259.58	18.25	NP	--	241.33	--
MW-8	12/6/2011	259.58	18.16	NP	--	241.42	--
MW-8	3/8/2012	259.58	15.89	NP	--	243.69	--
MW-8	6/19/2012	259.58	12.67	NP	--	246.91	--
MW-8	9/21/2012	259.58	17.20	NP	--	242.38	--
MW-8	12/11/2012	259.58	14.28	NP	--	245.30	--
MW-8	6/26/2013	259.58	15.85	NP	--	243.73	--
MW-8	9/25/2013	259.58	16.98	NP	--	242.60	--
MW-8	11/15/2013	259.58	16.45	NP	--	243.13	--
MW-8	2/13/2014	259.58	15.84	NP	--	243.74	--
MW-8	4/2/2014	259.58	13.65	NP	--	245.93	--
MW-8	7/10/2014	259.58	16.03	NP	--	243.55	--
MW-8	10/21/2014	259.58	16.79	NP	--	242.79	--
MW-8	1/19/2015	259.58	14.35	NP	--	245.23	--

Table 1
Groundwater Gauging Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-8	6/1/2016	259.58	15.25	NP	--	244.33	--
MW-8	8/29/2016	259.58	17.04	NP	--	242.54	--
MW-8	11/21/2016	259.58	14.69	NP	--	244.89	--
MW-8	2/15/2017	259.58	10.47	NP	--	249.11	--
MW-8	5/26/2017	259.58	12.43	NP	--	247.15	--
MW-8	10/17/2017	259.58	16.62	NP	--	242.96	--
MW-8	2/8/2018	259.58	11.71	NP	--	247.87	--
MW-8	9/11/2018	259.58	16.78	NP	--	242.80	--
MW-8	11/15/2018	259.58	16.66	NP	--	242.92	--
MW-8	1/29/2019	259.58	14.89	NP	--	244.69	--
MW-8	9/26/2019	259.58	17.06	NP	--	242.52	--
MW-8	3/9/2020	259.58	14.18	NP	--	245.40	--
MW-8	9/28/2020	259.58	17.10	NP	--	242.48	--
MW-8	3/23/2021	259.58	14.06	NP	--	245.52	--
MW-8	9/28/2021	259.58	17.60	NP	--	241.98	--
MW-8	3/30/2022	259.58	13.70	NP	--	245.88	--
MW-8	9/7/2022	259.58	16.65	NP	--	242.93	--
MW-8	3/29/2023	259.58	14.33	NP	--	245.25	--
MW-8	9/19/2023	259.58	17.75	NP	--	241.83	--
MW-8	3/7/2024	259.58	13.32	NP	--	246.26	--
MW-8	9/5/2024	259.58	16.79	NP	--	242.79	--
MW-8	5/27/2025 ¹	268.97	13.85	NP	--	255.12	--
MW-9	10/5/1994	258.96	19.51	NP	--	239.45	--
MW-9	2/15/1995	258.96	16.71	NP	--	242.25	--
MW-9	4/10/1995	258.96	16.83	NP	--	242.13	--
MW-9	7/20/1995	258.96	18.66	NP	--	240.30	--
MW-9	10/25/1995	258.96	18.29	NP	--	240.67	--
MW-9	1/23/1996	258.96	15.47	NP	--	243.49	--
MW-9	4/17/1996	258.96	17.18	NP	--	241.78	--
MW-9	7/8/1996	258.96	17.73	NP	--	241.23	--
MW-9	10/10/1996	258.96	18.47	NP	--	240.49	--
MW-9	3/11/1997	258.96	15.91	NP	--	243.05	--
MW-9	5/29/1997	258.96	14.77	NP	--	244.19	--
MW-9	8/5/1997	258.96	16.21	NP	--	242.75	--
MW-9	10/23/1997	258.96	15.81	NP	--	243.15	--
MW-9	3/11/1998	258.96	15.88	NP	--	243.08	--
MW-9	6/30/1998	258.96	17.97	NP	--	240.99	--
MW-9	9/25/1998	258.96	18.57	NP	--	240.39	--
MW-9	12/29/1998	258.96	15.84	NP	--	243.12	--
MW-9	3/9/1999	258.96	15.00	NP	--	243.96	--
MW-9	6/2/1999	258.96	17.17	NP	--	241.79	--
MW-9	9/27/1999	258.96	18.39	NP	--	240.57	--
MW-9	12/20/1999	258.96	15.85	NP	--	243.11	--
MW-9	3/16/2000	258.96	16.35	NP	--	242.61	--
MW-9	6/30/2000	258.96	18.05	NP	--	240.91	--
MW-9	9/27/2000	258.96	18.87	NP	--	240.09	--
MW-9	11/10/2000	258.96	18.04	NP	--	240.92	--

Table 1
Groundwater Gauging Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-9	3/19/2001	258.96	17.50	NP	--	241.46	--
MW-9	6/27/2001	258.96	18.08	NP	--	240.88	--
MW-9	9/26/2001	258.96	18.80	NP	--	240.16	--
MW-9	12/3/2001	258.96	16.25	NP	--	242.71	WI
MW-9	6/6/2002	258.96	17.72	NP	--	241.24	--
MW-9	6/26/2003	258.96	18.07	NP	--	240.89	--
MW-9	12/9/2003	258.96	16.51	NP	--	242.45	--
MW-9	4/7/2004	258.96	17.10	NP	--	241.86	--
MW-9	11/16/2004	258.96	17.21	NP	--	241.75	--
MW-9	3/29/2005	258.96	16.81	NP	--	242.15	--
MW-9	6/22/2005	258.96	17.70	NP	--	241.26	--
MW-9	9/12/2005	258.96	18.64	NP	--	240.32	--
MW-9	12/6/2005	258.96	17.10	NP	--	241.86	--
MW-9	6/5/2006	258.96	17.01	NP	--	241.95	--
MW-9	9/24/2007	258.96	18.88	NP	--	240.08	--
MW-9	12/31/2007	258.96	16.57	NP	--	242.39	--
MW-9	1/30/2008	258.96	--	--	--	--	WI
MW-9	4/2/2008	258.96	19.63	NP	--	239.33	--
MW-9	7/1/2008	258.96	19.99	NP	--	238.97	--
MW-9	10/3/2008	258.96	20.74	NP	--	238.22	--
MW-9	1/6/2009	258.96	19.11	NP	--	239.85	--
MW-9	4/8/2009	258.96	18.98	NP	--	239.98	--
MW-9	7/8/2009	258.96	18.55	NP	--	240.41	--
MW-9	10/6/2009	258.96	19.19	NP	--	239.77	--
MW-9	1/5/2010	258.96	15.50	NP	--	243.46	--
MW-9	5/25/2010	258.96	17.17	NP	--	241.79	--
MW-9	8/19/2010	258.96	18.39	NP	--	240.57	--
MW-9	12/7/2010	258.96	16.95	NP	--	242.01	--
MW-9	1/26/2011	258.96	15.18	NP	--	243.78	--
MW-9	6/16/2011	258.96	16.84	NP	--	242.12	--
MW-9	9/22/2011	258.96	19.62	NP	--	239.34	--
MW-9	12/6/2011	258.96	19.14	NP	--	239.82	--
MW-9	3/8/2012	258.96	17.17	NP	--	241.79	--
MW-9	6/19/2012	258.96	17.22	NP	--	241.74	--
MW-9	9/21/2012	258.96	18.54	NP	--	240.42	--
MW-9	12/11/2012	258.96	15.20	NP	--	243.76	--
MW-9	6/26/2013	258.96	17.31	NP	--	241.65	--
MW-9	9/25/2013	258.96	18.23	NP	--	240.73	--
MW-9	11/14/2013	258.96	17.64	NP	--	241.32	--
MW-9	2/14/2014	258.96	16.96	NP	--	242.00	--
MW-9	4/2/2014	258.96	15.05	NP	--	243.91	--
MW-9	7/10/2014	258.96	17.54	NP	--	241.42	--
MW-9	10/21/2014	258.96	17.90	NP	--	241.06	--
MW-9	1/20/2015	258.96	15.88	NP	--	243.08	--
MW-9	12/14/2015	258.96	15.40	NP	--	243.56	--
MW-9	3/10/2016	258.96	14.74	NP	--	244.22	--
MW-9	6/1/2016	258.96	17.06	NP	--	241.90	--
MW-9	8/29/2016	258.96	18.48	NP	--	240.48	--

Table 1
Groundwater Gauging Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-9	11/21/2016	258.96	15.80	NP	--	243.16	--
MW-9	2/15/2017	258.96	13.94	NP	--	245.02	--
MW-9	5/26/2017	258.96	15.34	NP	--	243.62	--
MW-9	10/17/2017	258.96	18.29	NP	--	240.67	--
MW-9	2/8/2018	258.96	14.09	NP	--	244.87	--
MW-9	9/11/2018	258.96	18.31	NP	--	240.65	--
MW-9	11/15/2018	258.96	17.71	NP	--	241.25	--
MW-9	1/29/2019	258.96	16.02	NP	--	242.94	--
MW-9	9/26/2019	258.96	18.02	NP	--	240.94	--
MW-9	3/9/2020	258.96	15.66	NP	--	243.30	--
MW-9	9/28/2020	258.96	18.10	NP	--	240.86	--
MW-9	3/23/2021	258.96	15.65	NP	--	243.31	--
MW-9	9/28/2021	258.96	18.47	NP	--	240.49	--
MW-9	9/7/2022	258.96	18.35	NP	--	240.61	--
MW-9	3/29/2023	258.96	16.10	NP	--	242.86	--
MW-9	9/19/2023	258.96	18.94	NP	--	240.02	--
MW-9	3/7/2024	258.96	15.26	NP	--	243.70	--
MW-9	9/5/2024	258.96	17.99	NP	--	240.97	--
MW-9	5/27/2025 ¹	268.35	16.65	NP	--	251.70	--
MW-10	10/5/1994	256.56	17.52	NP	--	239.04	--
MW-10	2/15/1995	256.56	14.70	NP	--	241.86	--
MW-10	4/10/1995	256.56	14.91	NP	--	241.65	--
MW-10	7/20/1995	256.56	16.67	NP	--	239.89	--
MW-10	10/25/1995	256.56	16.22	NP	--	240.34	--
MW-10	1/23/1996	256.56	13.40	NP	--	243.16	--
MW-10	4/17/1996	256.56	15.27	NP	--	241.29	--
MW-10	7/8/1996	256.56	15.85	NP	--	240.71	--
MW-10	10/10/1996	256.56	16.50	NP	--	240.06	--
MW-10	3/11/1997	256.56	13.91	NP	--	242.65	--
MW-10	5/29/1997	256.56	12.36	NP	--	244.20	--
MW-10	8/5/1997	256.56	16.49	NP	--	240.07	--
MW-10	10/23/1997	256.56	13.82	NP	--	242.74	--
MW-10	3/11/1998	256.56	14.09	NP	--	242.47	--
MW-10	6/30/1998	256.56	16.38	NP	--	240.18	--
MW-10	9/25/1998	256.56	16.69	NP	--	239.87	--
MW-10	12/29/1998	256.56	13.83	NP	--	242.73	--
MW-10	3/9/1999	256.56	13.44	NP	--	243.12	--
MW-10	6/2/1999	256.56	15.31	NP	--	241.25	--
MW-10	9/27/1999	256.56	16.51	NP	--	240.05	--
MW-10	12/20/1999	256.56	13.99	NP	--	242.57	--
MW-10	3/16/2000	256.56	14.60	NP	--	241.96	--
MW-10	6/30/2000	256.56	16.17	NP	--	240.39	--
MW-10	9/27/2000	256.56	17.02	NP	--	239.54	--
MW-10	11/10/2000	256.56	16.02	NP	--	240.54	--
MW-10	3/19/2001	256.56	15.55	NP	--	241.01	--
MW-10	6/27/2001	256.56	16.11	NP	--	240.45	--
MW-10	9/26/2001	256.56	16.90	NP	--	239.66	--

Table 1
Groundwater Gauging Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-10	12/3/2001	256.56	14.05	NP	--	242.51	--
MW-10	6/6/2002	256.56	15.95	NP	--	240.61	--
MW-10	6/26/2003	256.56	16.30	NP	--	240.26	--
MW-10	12/9/2003	256.56	14.55	NP	--	242.01	--
MW-10	4/7/2004	256.56	15.36	NP	--	241.20	--
MW-10	11/16/2004	256.56	16.00	NP	--	240.56	--
MW-10	3/29/2005	256.56	14.88	NP	--	241.68	--
MW-10	6/22/2005	256.56	15.95	NP	--	240.61	--
MW-10	9/12/2005	256.56	16.80	NP	--	239.76	--
MW-10	12/6/2005	256.56	15.13	NP	--	241.43	--
MW-10	6/5/2006	256.56	15.22	NP	--	241.34	--
MW-10	9/24/2007	256.56	17.06	NP	--	239.50	--
MW-10	12/31/2007	256.56	14.74	NP	--	241.82	--
MW-10	1/30/2008	256.56	--	--	--	--	WI
MW-10	4/2/2008	256.56	17.65	NP	--	238.91	--
MW-10	7/1/2008	256.56	18.15	NP	--	238.41	--
MW-10	10/3/2008	256.56	18.83	NP	--	237.73	--
MW-10	1/6/2009	256.56	16.96	NP	--	239.60	--
MW-10	4/8/2009	256.56	16.88	NP	--	239.68	--
MW-10	7/8/2009	256.56	16.76	NP	--	239.80	--
MW-10	10/6/2009	256.56	17.32	NP	--	239.24	--
MW-10	1/5/2010	256.56	14.69	NP	--	241.87	--
MW-10	5/25/2010	256.56	15.57	NP	--	240.99	--
MW-10	8/19/2010	256.56	16.68	NP	--	239.88	--
MW-10	12/7/2010	256.56	15.15	NP	--	241.41	--
MW-10	1/26/2011	256.56	13.78	NP	--	242.78	--
MW-10	6/16/2011	256.56	15.41	NP	--	241.15	--
MW-10	9/22/2011	256.56	17.88	NP	--	238.68	--
MW-10	12/6/2011	256.56	17.11	NP	--	239.45	--
MW-10	3/8/2012	256.56	15.34	NP	--	241.22	--
MW-10	6/19/2012	256.56	15.63	NP	--	240.93	--
MW-10	9/21/2012	256.56	16.89	NP	--	239.67	--
MW-10	12/11/2012	256.56	13.59	NP	--	242.97	--
MW-10	6/26/2013	256.56	15.77	NP	--	240.79	--
MW-10	9/25/2013	256.56	16.42	NP	--	240.14	--
MW-10	11/14/2013	256.56	15.96	NP	--	240.60	--
MW-10	2/13/2014	256.56	15.24	NP	--	241.32	--
MW-10	4/2/2014	256.56	13.63	NP	--	242.93	--
MW-10	7/11/2014	256.56	16.15	NP	--	240.41	--
MW-10	10/21/2014	256.56	16.20	NP	--	240.36	--
MW-10	1/20/2015	256.56	14.33	NP	--	242.23	--
MW-10	3/11/2016	256.56	13.05	NP	--	243.51	--
MW-10	8/29/2016	256.56	16.92	NP	--	239.64	--
MW-10	11/21/2016	256.56	14.11	NP	--	242.45	--
MW-10	2/15/2017	256.56	12.77	NP	--	243.79	--
MW-10	5/26/2017	256.56	14.33	NP	--	242.23	--
MW-10	10/17/2017	256.56	16.68	NP	--	239.88	--
MW-10	2/8/2018	256.56	12.94	NP	--	243.62	--

Table 1
Groundwater Gauging Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-10	9/11/2018	256.56	16.81	NP	--	239.75	--
MW-10	11/15/2018	256.56	16.14	NP	--	240.42	--
MW-10	1/29/2019	256.56	14.65	NP	--	241.91	--
MW-10	9/26/2019	256.56	16.44	NP	--	240.12	--
MW-10	3/9/2020	256.56	14.43	NP	--	242.13	--
MW-10	9/28/2020	256.56	16.49	NP	--	240.07	--
MW-10	3/23/2021	256.56	14.31	NP	--	242.25	--
MW-10	9/28/2021	256.56	16.78	NP	--	239.78	--
MW-10	11/8/2021	256.56	15.16	NP	--	241.40	--
MW-10	12/13/2021	256.56	14.02	NP	--	242.54	--
MW-10	12/13/2021	256.56	14.02	NP	--	242.54	--
MW-10	3/30/2022	256.56	14.43	NP	--	242.13	--
MW-10	6/27/2022	256.56	15.00	NP	--	241.56	--
MW-10	9/7/2022	256.56	16.91	NP	--	239.65	--
MW-10	3/29/2023	256.56	14.71	NP	--	241.85	--
MW-10	9/19/2023	256.56	17.31	NP	--	239.25	--
MW-10	3/7/2024	256.56	13.92	NP	--	242.64	--
MW-10	9/5/2024	256.56	16.45	NP	--	240.11	--
MW-10	5/27/2025 ¹	265.96	16.57	NP	--	249.39	--
MW-11	4/10/1995	261.85	16.95	16.25	0.70	245.43	--
MW-11	7/20/1995	261.85	19.04	19.02	0.02	242.83	--
MW-11	10/25/1995	261.85	17.98	17.96	0.02	243.89	--
MW-11	1/23/1996	261.85	13.35	NP	--	248.50	--
MW-11	4/17/1996	261.85	20.50	NP	--	241.35	--
MW-11	7/8/1996	261.85	20.55	15.50	5.05	245.09	--
MW-11	10/10/1996	261.85	16.25	15.00	1.25	246.54	--
MW-11	3/11/1997	261.85	16.39	15.47	0.92	246.15	--
MW-11	5/29/1997	261.85	12.99	12.82	0.17	248.99	--
MW-11	8/5/1997	261.85	14.81	14.11	0.70	247.57	--
MW-11	10/23/1997	261.85	20.04	19.93	0.11	241.89	--
MW-11	3/11/1998	261.85	15.00	NP	--	246.85	--
MW-11	6/30/1998	261.85	13.26	NP	--	248.59	--
MW-11	9/25/1998	261.85	16.49	16.47	0.02	245.38	--
MW-11	12/29/1998	261.85	14.43	NP	--	247.42	--
MW-11	3/9/1999	261.85	10.35	NP	--	251.50	--
MW-11	6/2/1999	261.85	16.34	16.32	0.02	245.53	--
MW-11	9/27/1999	261.85	15.80	NP	--	246.05	--
MW-11	12/20/1999	261.85	15.21	NP	--	246.64	--
MW-11	3/16/2000	261.85	11.90	NP	--	249.95	--
MW-11	6/30/2000	261.85	17.35	NP	--	244.50	--
MW-11	9/27/2000	261.85	18.20	18.14	0.06	243.70	--
MW-11	11/10/2000	261.85	17.28	17.26	0.02	244.59	--
MW-11	3/19/2001	261.85	17.16	17.15	0.01	244.70	--
MW-11	6/27/2001	261.85	16.80	NP	--	245.05	--
MW-11	9/26/2001	261.85	15.30	NP	--	246.55	WI
MW-11	12/3/2001	261.85	15.90	NP	--	245.95	--
MW-11	6/6/2002	261.85	16.84	NP	--	245.01	WI

Table 1
Groundwater Gauging Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-11	6/26/2003	261.85	17.49	17.45	0.04	244.39	WI
MW-11	12/9/2003	261.85	16.19	NP	--	245.66	--
MW-11	4/7/2004	261.85	16.48	16.46	0.02	245.39	--
MW-11	11/16/2004	261.85	17.00	NP	--	244.85	--
MW-11	3/29/2005	261.85	16.15	NP	--	245.70	--
MW-11	6/22/2005	261.85	17.15	NP	--	244.70	--
MW-11	9/12/2005	261.85	17.99	NP	--	243.86	--
MW-11	12/6/2005	261.85	16.68	NP	--	245.17	--
MW-11	6/5/2006	261.85	16.55	NP	--	245.30	--
MW-11	9/29/2006	261.85	20.90	NP	--	240.95	--
MW-11	12/19/2006	261.85	15.25	NP	--	246.60	--
MW-11	9/24/2007	261.85	14.42	NP	--	247.43	--
MW-11	12/31/2007	261.85	--	--	--	--	WI
MW-11	4/3/2008	261.85	--	--	--	--	WI
MW-11	7/1/2008	261.85	--	--	--	--	WI
MW-11	10/3/2008	261.85	21.82	NP	--	240.03	--
MW-11	1/6/2009	261.85	--	--	--	--	Dry
MW-11	4/8/2009	261.85	19.20	NP	--	242.65	--
MW-11	7/8/2009	261.85	18.09	NP	--	243.76	--
MW-11	10/6/2009	261.85	18.77	NP	--	243.08	--
MW-11	1/5/2010	261.85	16.14	NP	--	245.71	--
MW-11	5/25/2010	261.85	16.56	NP	--	245.29	--
MW-11	8/19/2010	261.85	17.84	NP	--	244.01	--
MW-11	12/7/2010	261.85	16.95	NP	--	244.90	--
MW-11	1/26/2011	261.85	14.91	NP	--	246.94	--
MW-11	6/16/2011	261.85	16.29	NP	--	245.56	--
MW-11	9/22/2011	261.85	20.40	NP	--	241.45	--
MW-11	12/6/2011	261.85	18.11	NP	--	243.74	--
MW-11	3/8/2012	261.85	17.40	NP	--	244.45	--
MW-11	6/19/2012	261.85	16.80	NP	--	245.05	--
MW-11	9/21/2012	261.85	18.15	NP	--	243.70	--
MW-11	12/11/2012	261.85	14.80	NP	--	247.05	--
MW-11	6/27/2013	261.85	16.88	NP	--	244.97	--
MW-11	9/26/2013	261.85	17.90	NP	--	243.95	--
MW-11	11/15/2013	261.85	17.07	NP	--	244.78	--
MW-11	2/13/2014	261.85	16.51	NP	--	245.34	--
MW-11	4/2/2014	261.85	14.52	NP	--	247.33	--
MW-11	7/11/2014	261.85	17.12	NP	--	244.73	--
MW-11	10/22/2014	261.85	17.54	NP	--	244.31	--
MW-11	1/21/2015	261.85	15.60	NP	--	246.25	--
MW-11	12/14/2015	261.85	14.20	NP	--	247.65	--
MW-11	3/10/2016	261.85	14.86	NP	--	246.99	--
MW-11	6/1/2016	261.85	16.95	NP	--	244.90	--
MW-11	8/29/2016	261.85	18.11	NP	--	243.74	--
MW-11	11/21/2016	261.85	15.50	NP	--	246.35	--
MW-11	2/15/2017	261.85	14.54	NP	--	247.31	--
MW-11	5/26/2017	261.85	15.66	NP	--	246.19	--
MW-11	10/17/2017	261.85	18.04	NP	--	243.81	--

Table 1
Groundwater Gauging Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-11	2/8/2018	261.85	14.45	NP	--	247.40	--
MW-11	9/11/2018	261.85	17.96	NP	--	243.89	--
MW-11	11/15/2018	261.85	17.42	NP	--	244.43	--
MW-11	1/29/2019	261.85	15.89	NP	--	245.96	--
MW-11	8/27/2019	261.85	17.94	NP	--	243.91	--
MW-11	9/26/2019	261.85	17.77	NP	--	244.08	--
MW-11	3/9/2020	261.85	15.73	NP	--	246.12	--
MW-11	9/28/2020	261.85	17.72	NP	--	244.13	--
MW-11	3/23/2021	261.85	15.61	NP	--	246.24	--
MW-11	9/28/2021	261.85	18.09	NP	--	243.76	--
MW-11	11/5/2021	261.85	18.09	NP	--	243.76	--
MW-11	9/7/2022	261.85	18.11	NP	--	243.74	--
MW-11	3/29/2023	261.85	15.93	NP	--	245.92	--
MW-11	9/19/2023	261.85	18.53	NP	--	243.32	--
MW-11	3/7/2024	261.85	15.13	NP	--	246.72	--
MW-11	9/5/2024	261.85	17.61	NP	--	244.24	--
MW-11	5/27/2025 ¹	271.26	16.47	NP	--	254.79	--
MW-12	7/11/1996	257.84	11.69	NP	--	246.15	--
MW-12	10/10/1996	257.84	13.63	NP	--	244.21	--
MW-12	3/11/1997	257.84	8.65	NP	--	249.19	--
MW-12	5/29/1997	257.84	11.17	NP	--	246.67	--
MW-12	8/5/1997	257.84	11.68	NP	--	246.16	--
MW-12	10/23/1997	257.84	11.41	NP	--	246.43	--
MW-12	3/11/1998	257.84	10.50	NP	--	247.34	--
MW-12	6/30/1998	257.84	13.12	NP	--	244.72	--
MW-12	9/25/1998	257.84	13.57	13.51	0.06	244.32	--
MW-12	12/29/1998	257.84	11.37	NP	--	246.47	--
MW-12	3/9/1999	257.84	10.67	NP	--	247.17	--
MW-12	6/2/1999	257.84	12.48	NP	--	245.36	--
MW-12	9/27/1999	257.84	13.76	13.50	0.26	244.28	--
MW-12	12/20/1999	257.84	11.64	11.24	0.40	246.50	--
MW-12	3/16/2000	257.84	11.75	11.74	0.01	246.10	--
MW-12	6/30/2000	257.84	13.45	NP	--	244.39	--
MW-12	9/27/2000	257.84	14.00	13.84	0.16	243.96	--
MW-12	11/10/2000	257.84	13.28	13.03	0.25	244.75	--
MW-12	3/19/2001	257.84	13.20	13.00	0.20	244.79	--
MW-12	6/27/2001	257.84	13.95	13.92	0.03	243.91	--
MW-12	9/26/2001	257.84	14.10	14.08	0.02	243.76	--
MW-12	12/3/2001	257.84	12.16	12.13	0.03	245.70	--
MW-12	6/6/2002	257.84	13.30	13.25	0.05	244.58	--
MW-12	6/26/2003	257.84	13.52	13.25	0.27	244.52	--
MW-12	12/9/2003	257.84	12.18	12.16	0.02	245.68	--
MW-12	4/7/2004	257.84	12.71	NP	--	245.13	--
MW-12	11/16/2004	257.84	13.00	12.80	0.20	244.99	--
MW-12	3/29/2005	257.84	12.08	NP	--	245.76	--
MW-12	6/22/2005	257.84	13.04	NP	--	244.80	--
MW-12	9/12/2005	257.84	13.84	NP	--	244.00	--

Table 1
Groundwater Gauging Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-12	12/6/2005	257.84	12.26	NP	--	245.58	--
MW-12	6/5/2006	257.84	12.11	NP	--	245.73	--
MW-12	9/29/2006	257.84	17.50	NP	--	240.34	--
MW-12	12/19/2006	257.84	10.87	NP	--	246.97	--
MW-12	9/24/2007	257.84	14.30	NP	--	243.54	--
MW-12	12/31/2007	257.84	12.12	NP	--	245.72	--
MW-12	1/29/2008	257.84	11.92	NP	--	245.92	--
MW-12	4/3/2008	257.84	19.67	NP	--	238.17	--
MW-12	7/1/2008	257.84	17.26	NP	--	240.58	--
MW-12	10/3/2008	257.84	19.78	NP	--	238.06	--
MW-12	1/6/2009	257.84	12.93	NP	--	244.91	--
MW-12	4/8/2009	257.84	17.04	NP	--	240.80	--
MW-12	7/8/2009	257.84	13.67	NP	--	244.17	--
MW-12	10/6/2009	257.84	14.25	NP	--	243.59	--
MW-12	1/6/2010	257.84	12.09	NP	--	245.75	--
MW-12	5/25/2010	257.84	12.37	NP	--	245.47	--
MW-12	8/19/2010	257.84	13.30	NP	--	244.54	--
MW-12	12/7/2010	257.84	12.28	NP	--	245.56	--
MW-12	1/26/2011	257.84	10.83	NP	--	247.01	--
MW-12	6/16/2011	257.84	12.20	NP	--	245.64	--
MW-12	9/22/2011	257.84	16.41	NP	--	241.43	--
MW-12	12/6/2011	257.84	17.17	NP	--	240.67	--
MW-12	3/8/2012	257.84	14.07	NP	--	243.77	--
MW-12	6/19/2012	257.84	12.23	NP	--	245.61	--
MW-12	9/21/2012	257.84	13.63	NP	--	244.21	--
MW-12	12/11/2012	257.84	10.10	NP	--	247.74	--
MW-12	6/27/2013	257.84	12.58	NP	--	245.26	--
MW-12	9/26/2013	257.84	13.45	NP	--	244.39	--
MW-12	11/15/2013	257.84	12.50	NP	--	245.34	--
MW-12	2/13/2014	257.84	12.19	NP	--	245.65	--
MW-12	4/2/2014	257.84	10.28	NP	--	247.56	--
MW-12	7/11/2014	257.84	12.69	NP	--	245.15	--
MW-12	10/22/2014	257.84	13.08	NP	--	244.76	--
MW-12	1/21/2015	257.84	11.59	NP	--	246.25	--
MW-12	12/16/2015	257.84	10.76	NP	--	247.08	--
MW-12	3/11/2016	257.84	10.08	NP	--	247.76	--
MW-12	6/1/2016	257.84	12.51	NP	--	245.33	--
MW-12	8/29/2016	257.84	13.71	NP	--	244.13	--
MW-12	11/21/2016	257.84	11.20	NP	--	246.64	--
MW-12	2/15/2017	257.84	9.90	NP	--	247.94	--
MW-12	4/7/2017	257.84	9.05	NP	--	248.79	--
MW-12	5/26/2017	257.84	11.05	NP	--	246.79	--
MW-12	10/17/2017	257.84	13.60	NP	--	244.24	--
MW-12	2/8/2018	257.84	9.87	NP	--	247.97	--
MW-12	9/11/2018	257.84	13.57	NP	--	244.27	--
MW-12	11/15/2018	257.84	13.10	NP	--	244.74	--
MW-12	1/29/2019	257.84	11.50	NP	--	246.34	--
MW-12	9/26/2019	257.84	13.42	NP	--	244.42	--

Table 1
Groundwater Gauging Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-12	3/9/2020	257.84	11.44	NP	--	246.40	--
MW-12	9/28/2020	257.84	13.49	NP	--	244.35	--
MW-12	3/23/2021	257.84	11.47	NP	--	246.37	--
MW-12	9/28/2021	257.84	13.92	NP	--	243.92	--
MW-12	11/8/2021	257.84	12.33	NP	--	245.51	--
MW-12	12/13/2021	257.84	10.87	NP	--	246.97	--
MW-12	12/13/2021	257.84	10.87	NP	--	246.97	--
MW-12	3/30/2022	257.84	11.60	NP	--	246.24	--
MW-12	6/27/2022	257.84	11.51	NP	--	246.33	--
MW-12	9/7/2022	257.84	13.68	NP	--	244.16	--
MW-12	3/29/2023	257.84	11.48	NP	--	246.36	--
MW-12	9/19/2023	257.84	14.12	NP	--	243.72	--
MW-12	3/7/2024	257.84	10.70	NP	--	247.14	--
MW-12	9/5/2024	257.84	13.23	NP	--	244.61	--
MW-12	5/27/2025 ¹	267.25	12.03	NP	--	255.22	--
MW-13	9/26/2019	258.01	13.34	NP	--	244.67	--
MW-13	3/9/2020	258.01	11.37	NP	--	246.64	--
MW-13	9/28/2020	258.01	13.36	NP	--	244.65	--
MW-13	3/23/2021	258.01	11.23	NP	--	246.78	--
MW-13	9/28/2021	258.01	13.79	NP	--	244.22	--
MW-13	11/8/2021	258.01	11.89	NP	--	246.12	--
MW-13	3/30/2022	258.01	9.49	NP	--	248.52	--
MW-13	6/27/2022	258.01	10.14	NP	--	247.87	--
MW-13	9/7/2022	258.01	13.40	NP	--	244.61	--
MW-13	3/29/2023	258.01	10.36	NP	--	247.65	--
MW-13	9/19/2023	258.01	13.95	NP	--	244.06	--
MW-13	3/7/2024	258.01	7.65	NP	--	250.36	--
MW-13	9/5/2024	258.01	13.04	NP	--	244.97	--
MW-13	5/27/2025 ¹	267.02	12.55	NP	--	254.47	--
MW-14	9/26/2019	258.27	6.08	NP	--	252.19	--
MW-14	3/9/2020	258.27	5.40	NP	--	252.87	--
MW-14	9/28/2020	258.27	6.00	NP	--	252.27	--
MW-14	3/23/2021	258.27	5.04	NP	--	253.23	--
MW-14	9/28/2021	258.27	--	--	--	--	VO
MW-14	9/7/2022	258.27	6.50	NP	--	251.77	--
MW-14	3/29/2023	258.27	5.12	NP	--	253.15	--
MW-14	9/19/2023	258.27	6.17	NP	--	252.10	--
MW-14	3/7/2024	258.27	4.79	NP	--	253.48	--
MW-14	9/5/2024	258.27	--	--	--	--	VO
MW-14	5/27/2025 ¹	267.67	5.17	NP	--	262.50	--
MW-15	9/26/2019	258.25	13.92	NP	--	244.33	--
MW-15	3/9/2020	258.25	12.10	NP	--	246.15	--
MW-15	9/28/2020	258.25	--	--	--	--	WI
MW-15	3/23/2021	258.25	12.14	NP	--	246.11	--
MW-15	9/28/2021	258.25	--	--	--	--	VO

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ARCO Facility No. 980
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Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-15	11/8/2021	258.25	12.58	NP	--	245.67	--
MW-15	3/30/2022	258.25	11.94	NP	--	246.31	--
MW-15	6/27/2022	258.25	12.45	NP	--	245.80	--
MW-15	9/7/2022	258.25	14.51	NP	--	243.74	--
MW-15	3/29/2023	258.25	12.37	NP	--	245.88	--
MW-15	9/19/2023	258.25	14.80	NP	--	243.45	--
MW-15	3/7/2024	258.25	11.54	NP	--	246.71	--
MW-15	9/5/2024	258.25	13.86	NP	--	244.39	--
MW-15	5/27/2025 ¹	267.30	13.68	NP	--	253.62	--
MW-16	9/26/2019	259.53	16.41	NP	--	243.12	--
MW-16	3/9/2020	259.53	12.13	NP	--	247.40	--
MW-16	9/28/2020	259.53	16.48	NP	--	243.05	--
MW-16	3/23/2021	259.53	12.13	NP	--	247.40	--
MW-16	9/28/2021	259.53	17.03	NP	--	242.50	--
MW-16	9/19/2023	259.53	17.41	NP	--	242.12	--
MW-16	3/7/2024	259.53	11.51	NP	--	248.02	--
MW-16	9/5/2024	259.53	--	--	--	--	WO
MW-16	5/27/2025 ¹	268.92	14.53	NP	--	254.39	--
MW-17	12/14/2020	253.47	11.10	NP	--	242.37	--
MW-17	3/23/2021	253.47	10.26	NP	--	243.21	--
MW-17	9/28/2021	253.47	12.39	NP	--	241.08	--
MW-17	9/7/2022	253.47	12.68	NP	--	240.79	--
MW-17	3/29/2023	253.47	10.33	--	--	243.14	--
MW-17	9/19/2023	253.47	--	--	--	--	NO
MW-17	3/7/2024	253.47	9.79	NP	--	243.68	--
MW-17	9/5/2024	253.47	--	--	--	--	Dry
MW-17	5/27/2025 ¹	262.36	10.94	NP	--	251.42	--
MW-18	12/14/2020	249.67	8.47	NP	--	241.20	--
MW-18	3/23/2021	249.67	7.54	NP	--	242.13	--
MW-18	9/28/2021	249.67	10.03	NP	--	239.64	--
MW-18	9/7/2022	249.67	10.25	NP	--	239.42	--
MW-18	3/29/2023	249.67	7.99	NP	--	241.68	--
MW-18	9/19/2023	249.67	10.60	NP	--	239.07	--
MW-18	3/7/2024	249.67	7.09	NP	--	242.58	--
MW-18	9/5/2024	249.67	--	--	--	--	Dry
MW-18	5/27/2025 ¹	258.58	--	--	--	--	WO
MW-19	12/14/2020	249.21	8.17	NP	--	241.04	--
MW-19	3/23/2021	249.21	7.21	NP	--	242.00	--
MW-19	9/28/2021	249.21	9.60	NP	--	239.61	--
MW-19	11/8/2021	249.21	7.87	NP	--	241.34	--
MW-19	3/30/2022	249.21	7.38	NP	--	241.83	--
MW-19	6/27/2022	249.21	7.97	NP	--	241.24	--
MW-19	9/7/2022	249.21	9.85	NP	--	239.36	--

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ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-19	3/29/2023	249.21	7.65	NP	--	241.56	--
MW-20	9/28/2021	261.36	16.42	NP	--	244.94	--
MW-20	3/30/2022	261.36	13.87	NP	--	247.49	--
MW-20	6/27/2022	261.36	14.18	NP	--	247.18	--
MW-20	9/7/2022	261.36	16.09	NP	--	245.27	--
MW-20	3/29/2023	261.36	13.99	NP	--	247.37	--
MW-20	9/19/2023	261.36	16.24	NP	--	245.12	--
MW-20	5/27/2025 ¹	270.79	13.97	NP	--	256.82	--
MW-21	9/28/2021	261.26	10.83	NP	--	250.43	--
MW-21	3/30/2022	261.26	9.23	NP	--	252.03	--
MW-21	9/7/2022	261.26	11.10	NP	--	250.16	--
MW-21	3/29/2023	261.26	9.31	NP	--	251.95	--
MW-21	9/19/2023	261.26	11.16	NP	--	250.10	--
MW-21	3/7/2024	261.26	8.67	NP	--	252.59	--
MW-21	9/5/2024	261.26	10.11	NP	--	251.15	--
MW-21	5/27/2025 ¹	270.65	9.51	NP	--	261.14	--
MW-22	5/27/2025 ¹	271.26	8.70	NP	--	262.56	--
MW-23	3/29/2023	260.42	12.10	NP	--	248.32	--
MW-23	6/28/2023	260.42	13.91	NP	--	246.51	--
MW-23	9/19/2023	260.42	15.08	NP	--	245.34	--
MW-23	12/6/2023	260.42	9.85	NP	--	250.57	--
MW-23	3/7/2024	260.42	10.01	NP	--	250.41	--
MW-23	9/5/2024	260.42	13.01	NP	--	247.41	--
MW-23	5/27/2025 ¹	269.75	12.03	NP	--	257.72	--
MW-24	3/29/2023	260.08	15.28	NP	--	244.80	--
MW-24	6/28/2023	260.08	16.96	NP	--	243.12	--
MW-24	9/19/2023	260.08	18.28	NP	--	241.80	--
MW-24	3/7/2024	260.08	14.36	NP	--	245.72	--
MW-24	9/5/2024	260.08	--	--	--	--	VO
MW-24	5/27/2025	260.08	--	--	--	--	WI
MW-25	5/27/2025 ¹	269.50	12.14	NP	--	257.36	--
B1 (JPHC)	2/15/1995	257.71	14.72	11.45	3.27	245.44	--
B1 (JPHC)	7/20/1995	257.71	14.63	14.37	0.26	243.28	--
B1 (JPHC)	10/25/1995	257.71	14.20	NP	--	243.51	--
B1 (JPHC)	1/23/1996	257.71	12.20	NP	--	245.51	--
B1 (JPHC)	4/17/1996	257.71	14.13	13.43	0.70	244.11	--
B1 (JPHC)	7/8/1996	257.71	13.10	NP	--	244.61	--
B1 (JPHC)	10/10/1996	257.71	14.40	NP	--	243.31	--
B1 (JPHC)	3/11/1997	257.71	8.67	NP	--	249.04	--
B1 (JPHC)	5/29/1997	257.71	9.06	NP	--	248.65	--

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Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
B1 (JPHC)	8/5/1997	257.71	9.28	NP	--	248.43	--
B1 (JPHC)	10/23/1997	257.71	9.40	NP	--	248.31	--
B1 (JPHC)	3/11/1998	257.71	15.02	NP	--	242.69	--
B1 (JPHC)	6/30/1998	257.71	13.41	NP	--	244.30	--
B1 (JPHC)	9/25/1998	257.71	13.67	13.59	0.08	244.10	--
B1 (JPHC)	12/29/1998	257.71	12.24	NP	--	245.47	--
B1 (JPHC)	3/9/1999	257.71	11.50	NP	--	246.21	--
B1 (JPHC)	6/2/1999	257.71	12.57	NP	--	245.14	--
B1 (JPHC)	12/20/1999	257.71	--	--	--	--	Dry
B1 (JPHC)	3/16/2000	257.71	12.00	NP	--	245.71	--
B1 (JPHC)	6/30/2000	257.71	13.56	NP	--	244.15	--
B1 (JPHC)	9/27/2000	257.71	14.02	NP	--	243.69	--
B1 (JPHC)	11/10/2000	257.71	13.59	NP	--	244.12	--
B1 (JPHC)	3/19/2001	257.71	13.47	NP	--	244.24	--
B1 (JPHC)	6/27/2001	257.71	14.90	14.89	0.01	242.82	--
B1 (JPHC)	9/26/2001	257.71	14.25	14.24	0.01	243.47	--
B1 (JPHC)	12/3/2001	257.71	12.00	NP	--	245.71	--
B1 (JPHC)	6/26/2003	257.71	13.91	13.61	0.30	244.03	--
B1 (JPHC)	12/9/2003	257.71	12.20	NP	--	245.51	--
B1 (JPHC)	4/7/2004	257.71	12.71	NP	--	245.00	--
B1 (JPHC)	11/16/2004	257.71	13.58	NP	--	244.13	--
B1 (JPHC)	3/29/2005	257.71	12.30	NP	--	245.41	--
B1 (JPHC)	6/22/2005	257.71	15.50	NP	--	242.21	--
B1 (JPHC)	9/12/2005	257.71	14.04	NP	--	243.67	--
B1 (JPHC)	12/6/2005	257.71	13.27	NP	--	244.44	--
B1 (JPHC)	6/5/2006	257.71	12.79	NP	--	244.92	--
B1 (JPHC)	12/19/2006	257.71	11.40	NP	--	246.31	--
B1 (JPHC)	9/24/2007	257.71	14.95	NP	--	242.76	--
B1 (JPHC)	12/31/2007	257.71	--	--	--	--	WI
B1 (JPHC)	1/30/2008	257.71	12.76	NP	--	244.95	--
B1 (JPHC)	4/3/2008	257.71	21.44	NP	--	236.27	--
B1 (JPHC)	7/1/2008	257.71	17.62	NP	--	240.09	--
B1 (JPHC)	10/3/2008	257.71	19.15	NP	--	238.56	--
B1 (JPHC)	1/6/2009	257.71	18.50	NP	--	239.21	--
B1 (JPHC)	4/8/2009	257.71	19.79	NP	--	237.92	--
B1 (JPHC)	7/8/2009	257.71	14.12	NP	--	243.59	--
B1 (JPHC)	10/6/2009	257.71	15.70	NP	--	242.01	--
B1 (JPHC)	1/6/2010	257.71	12.68	NP	--	245.03	--
B1 (JPHC)	5/25/2010	257.71	13.12	NP	--	244.59	--
B1 (JPHC)	8/19/2010	257.71	14.04	NP	--	243.67	--
B1 (JPHC)	12/7/2010	257.71	12.87	NP	--	244.84	--
B1 (JPHC)	1/26/2011	257.71	11.58	NP	--	246.13	--
B1 (JPHC)	6/16/2011	257.71	12.84	NP	--	244.87	--
B1 (JPHC)	9/22/2011	257.71	16.09	NP	--	241.62	--
B1 (JPHC)	12/6/2011	257.71	18.31	NP	--	239.40	--
B1 (JPHC)	3/8/2012	257.71	13.30	NP	--	244.41	--
B1 (JPHC)	6/19/2012	257.71	12.98	NP	--	244.73	--
B1 (JPHC)	9/21/2012	257.71	14.19	NP	--	243.52	--

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Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
B1 (JPHC)	12/11/2012	257.71	11.16	NP	--	246.55	--
B1 (JPHC)	6/26/2013	257.71	13.20	NP	--	244.51	--
B1 (JPHC)	9/26/2013	257.71	13.90	NP	--	243.81	--
B1 (JPHC)	11/15/2013	257.71	13.20	NP	--	244.51	--
B1 (JPHC)	2/13/2014	257.71	12.72	NP	--	244.99	--
B1 (JPHC)	4/2/2014	257.71	11.21	NP	--	246.50	--
B1 (JPHC)	7/11/2014	257.71	13.37	NP	--	244.34	--
B1 (JPHC)	10/22/2014	257.71	13.73	NP	--	243.98	--
B1 (JPHC)	1/21/2015	257.71	12.10	NP	--	245.61	--
B1 (JPHC)	12/16/2015	257.71	11.42	NP	--	246.29	--
B1 (JPHC)	3/11/2016	257.71	10.85	NP	--	246.86	--
B1 (JPHC)	6/1/2016	257.71	13.11	NP	--	244.60	--
B1 (JPHC)	8/29/2016	257.71	14.18	NP	--	243.53	--
B1 (JPHC)	11/21/2016	257.71	11.70	NP	--	246.01	--
B1 (JPHC)	2/15/2017	257.71	10.75	NP	--	246.96	--
B1 (JPHC)	4/7/2017	257.71	10.85	NP	--	246.86	--
B1 (JPHC)	5/26/2017	257.71	11.87	NP	--	245.84	--
B1 (JPHC)	9/28/2017	257.71	14.05	NP	--	243.66	--
B1 (JPHC)	10/17/2017	257.71	14.04	NP	--	243.67	--
B1 (JPHC)	2/8/2018	257.71	10.66	NP	--	247.05	--
B1 (JPHC)	9/11/2018	257.71	14.02	NP	--	243.69	--
B1 (JPHC)	11/15/2018	257.71	13.50	NP	--	244.21	--
B1 (JPHC)	1/29/2019	257.71	12.03	NP	--	245.68	--
B1 (JPHC)	8/27/2019	257.71	14.05	NP	--	243.66	--
B1 (JPHC)	9/26/2019	257.71	13.78	NP	--	243.93	--
B1 (JPHC)	3/9/2020	257.71	11.95	NP	--	245.76	--
B1 (JPHC)	9/28/2020	257.71	14.76	NP	--	242.95	--
B1 (JPHC)	3/23/2021	257.71	11.81	NP	--	245.90	--
B1 (JPHC)	9/28/2021	--	--	--	--	--	VO
B1 (JPHC)	11/8/2021	257.71	12.44	NP	--	245.27	--
B1 (JPHC)	12/13/2021	257.71	11.41	NP	--	246.30	--
B1 (JPHC)	12/13/2021	257.71	11.41	NP	--	246.30	--
B1 (JPHC)	3/30/2022	257.71	11.88	NP	--	245.83	--
B1 (JPHC)	6/27/2022	257.71	12.51	NP	--	245.20	--
B1 (JPHC)	9/7/2022	257.71	14.15	NP	--	243.56	--
B1 (JPHC)	3/29/2023	257.71	12.01	NP	--	245.70	--
B1 (JPHC)	9/19/2023	257.71	14.59	NP	--	243.12	--
B1 (JPHC)	3/7/2024	257.71	11.23	NP	--	246.48	--
B1 (JPHC)	9/5/2024	257.71	13.64	NP	--	244.07	--
B1 (JPHC)	5/27/2025	257.71	12.03	NP	--	245.68	--
B3 (JPHC)	2/15/1995	258.41	13.37	NP	--	245.04	--
B3 (JPHC)	4/11/1995	258.41	13.52	NP	--	244.89	--
B3 (JPHC)	7/20/1995	258.41	15.15	NP	--	243.26	--
B3 (JPHC)	10/25/1995	258.41	14.93	NP	--	243.48	--
B3 (JPHC)	1/23/1996	258.41	12.58	NP	--	245.83	--
B3 (JPHC)	4/17/1996	258.41	13.68	NP	--	244.73	--
B3 (JPHC)	7/8/1996	258.41	9.21	NP	--	249.20	--

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		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
B3 (JPHC)	10/10/1996	258.41	15.50	NP	--	242.91	--
B3 (JPHC)	3/11/1997	258.41	9.41	NP	--	249.00	--
B3 (JPHC)	5/29/1997	258.41	9.22	NP	--	249.19	--
B3 (JPHC)	8/5/1997	258.41	19.57	NP	--	238.84	--
B3 (JPHC)	10/23/1997	258.41	--	--	--	--	Dry
B3 (JPHC)	3/11/1998	258.41	14.75	NP	--	243.66	--
B3 (JPHC)	6/30/1998	258.41	15.08	NP	--	243.33	--
B3 (JPHC)	9/25/1998	258.41	14.95	NP	--	243.46	--
B3 (JPHC)	12/29/1998	258.41	14.21	NP	--	244.20	--
B3 (JPHC)	3/9/1999	258.41	14.41	NP	--	244.00	--
B3 (JPHC)	6/2/1999	258.41	13.68	NP	--	244.73	--
B3 (JPHC)	12/20/1999	258.41	12.50	NP	--	245.91	--
B3 (JPHC)	3/16/2000	258.41	13.55	NP	--	244.86	--
B3 (JPHC)	6/30/2000	258.41	14.52	NP	--	243.89	--
B3 (JPHC)	9/27/2000	258.41	15.35	NP	--	243.06	--
B3 (JPHC)	11/10/2000	258.41	14.61	NP	--	243.80	--
B3 (JPHC)	3/19/2001	258.41	14.17	NP	--	244.24	--
B3 (JPHC)	6/27/2001	258.41	15.72	NP	--	242.69	--
B3 (JPHC)	9/26/2001	258.41	15.23	NP	--	243.18	--
B3 (JPHC)	12/3/2001	258.41	13.15	NP	--	245.26	--
B3 (JPHC)	6/6/2002	258.41	14.33	NP	--	244.08	--
B3 (JPHC)	6/26/2003	258.41	14.63	NP	--	243.78	--
B3 (JPHC)	12/9/2003	258.41	13.25	NP	--	245.16	--
B3 (JPHC)	4/7/2004	258.41	14.00	NP	--	244.41	--
B3 (JPHC)	11/16/2004	258.41	14.63	NP	--	243.78	--
B3 (JPHC)	3/29/2005	258.41	13.81	NP	--	244.60	--
B3 (JPHC)	6/22/2005	258.41	14.31	NP	--	244.10	--
B3 (JPHC)	9/12/2005	258.41	15.05	NP	--	243.36	--
B3 (JPHC)	12/6/2005	258.41	13.90	NP	--	244.51	--
B3 (JPHC)	6/5/2006	258.41	13.51	NP	--	244.90	--
B3 (JPHC)	12/19/2006	258.41	12.36	NP	--	246.05	--
B3 (JPHC)	9/24/2007	258.41	15.36	NP	--	243.05	--
B3 (JPHC)	12/31/2007	258.41	--	--	--	--	WI
B3 (JPHC)	1/29/2008	258.41	13.53	NP	--	244.88	--
B3 (JPHC)	4/3/2008	258.41	20.10	NP	--	238.31	--
B3 (JPHC)	7/1/2008	258.41	17.84	NP	--	240.57	--
B3 (JPHC)	10/3/2008	258.41	18.76	NP	--	239.65	--
B3 (JPHC)	1/6/2009	258.41	18.92	NP	--	239.49	--
B3 (JPHC)	4/8/2009	258.41	19.00	NP	--	239.41	--
B3 (JPHC)	7/8/2009	258.41	15.25	NP	--	243.16	--
B3 (JPHC)	10/6/2009	258.41	15.81	NP	--	242.60	--
B3 (JPHC)	1/6/2010	258.41	13.43	NP	--	244.98	--
B3 (JPHC)	5/25/2010	258.41	14.12	NP	--	244.29	--
B3 (JPHC)	8/19/2010	258.41	15.12	NP	--	243.29	--
B3 (JPHC)	12/7/2010	258.41	13.95	NP	--	244.46	--
B3 (JPHC)	1/26/2011	258.41	12.64	NP	--	245.77	--
B3 (JPHC)	6/16/2011	258.41	13.84	NP	--	244.57	--
B3 (JPHC)	9/22/2011	258.41	16.75	NP	--	241.66	--

Table 1
Groundwater Gauging Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
B3 (JPHC)	12/6/2011	258.41	18.04	NP	--	240.37	--
B3 (JPHC)	3/8/2012	258.41	14.34	NP	--	244.07	--
B3 (JPHC)	6/19/2012	258.41	12.14	NP	--	246.27	--
B3 (JPHC)	9/21/2012	258.41	15.33	NP	--	243.08	--
B3 (JPHC)	12/11/2012	258.41	12.70	NP	--	245.71	--
B3 (JPHC)	6/26/2013	258.41	14.32	NP	--	244.09	--
B3 (JPHC)	9/26/2013	258.41	15.06	NP	--	243.35	--
B3 (JPHC)	11/15/2013	258.41	14.39	NP	--	244.02	--
B3 (JPHC)	2/13/2014	258.41	14.00	NP	--	244.41	--
B3 (JPHC)	4/2/2014	258.41	12.31	NP	--	246.10	--
B3 (JPHC)	7/11/2014	258.41	14.54	NP	--	243.87	--
B3 (JPHC)	10/22/2014	258.41	14.77	NP	--	243.64	--
B3 (JPHC)	1/20/2015	258.41	13.25	NP	--	245.16	--
B3 (JPHC)	12/14/2015	258.41	12.68	NP	--	245.73	--
B3 (JPHC)	3/11/2016	258.41	11.97	NP	--	246.44	--
B3 (JPHC)	8/29/2016	258.41	15.33	NP	--	243.08	--
B3 (JPHC)	11/21/2016	258.41	12.23	NP	--	246.18	--
B3 (JPHC)	2/15/2017	258.41	11.77	NP	--	246.64	--
B3 (JPHC)	5/26/2017	258.41	12.67	NP	--	245.74	--
B3 (JPHC)	10/17/2017	258.41	15.19	NP	--	243.22	--
B3 (JPHC)	2/8/2018	258.41	11.88	NP	--	246.53	--
B3 (JPHC)	9/11/2018	258.41	15.18	NP	--	243.23	--
B3 (JPHC)	11/15/2018	258.41	--	--	--	--	WI
B3 (JPHC)	1/29/2019	258.41	--	--	--	--	WI
B3 (JPHC)	9/26/2019	258.41	14.84	NP	--	243.57	--
B3 (JPHC)	3/9/2020	258.41	13.00	NP	--	245.41	--
B3 (JPHC)	9/28/2020	258.41	--	--	--	--	VO
B3 (JPHC)	3/23/2021	258.41	12.84	NP	--	245.57	--
B3 (JPHC)	9/28/2021	--	--	--	--	--	VO
B3 (JPHC)	3/29/2023	258.41	13.21	NP	--	245.20	--
B3 (JPHC)	9/19/2023	258.41	15.80	NP	--	242.61	--
B3 (JPHC)	3/7/2024	258.41	12.49	NP	--	245.92	--
B3 (JPHC)	9/5/2024	258.41	14.87	NP	--	243.54	--
B3 (JPHC)	5/27/2025	258.41	11.78	NP	--	246.63	--
IW-1	3/10/2017	--	11.45	10.61	0.84	--	--
IW-1	3/17/2017	--	9.90	9.88	0.02	--	--
IW-1	3/24/2017	--	10.06	NP	--	--	--
IW-1	3/30/2017	--	10.71	NP	--	--	--
IW-1	4/7/2017	--	10.21	NP	--	--	--
IW-1	4/14/2017	--	10.51	NP	--	--	--
IW-1	4/28/2017	--	11.15	NP	--	--	--
IW-1	5/26/2017	--	11.38	11.37	0.01	--	--
IW-1	9/28/2017	--	13.63	NP	--	--	--
IW-1	10/5/2017	--	13.71	NP	--	--	--
IW-1	10/17/2017	--	13.68	NP	--	--	--
IW-1	11/6/2017	--	13.11	NP	--	--	--
IW-1	11/17/2017	--	12.58	NP	--	--	--

Table 1
Groundwater Gauging Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
IW-1	12/7/2017	--	11.28	NP	--	--	--
IW-1	1/18/2018	--	10.58	10.57	0.01	--	--
IW-1	2/8/2018	--	--	--	--	--	WI
IW-1	9/11/2018	--	--	--	--	--	WI
IW-1	11/15/2018	--	13.06	NP	--	--	--
IW-1	1/29/2019	--	12.50	NP	--	--	--
IW-1	8/27/2019	--	13.63	13.62	0.01	--	--
IW-1	9/26/2019	--	13.47	NP	--	--	--
IW-1	3/9/2020	--	11.49	NP	--	--	--
IW-1	9/28/2020	--	13.40	NP	--	--	--
IW-1	3/23/2021	--	11.43	NP	--	--	--
IW-1	9/28/2021	--	14.12	NP	--	--	--
IW-1	6/27/2022	--	11.38	NP	--	--	--
IW-1	9/7/2022	--	13.47	NP	--	--	--
IW-1	3/29/2023	--	11.43	NP	--	--	--
IW-1	9/19/2023	--	14.09	NP	--	--	--
IW-1	12/28/2023	--	11.40	NP	--	--	--
IW-1	3/7/2024	--	10.64	NP	--	--	--
IW-1	9/5/2024	--	13.19	NP	--	--	--
IW-1	5/27/2025	--	12.53	NP	--	--	--
IW-2	3/10/2017	--	11.30	NP	--	--	--
IW-2	3/17/2017	--	10.46	NP	--	--	--
IW-2	3/24/2017	--	10.69	NP	--	--	--
IW-2	3/30/2017	--	10.80	NP	--	--	--
IW-2	4/7/2017	--	10.79	NP	--	--	--
IW-2	4/14/2017	--	10.80	NP	--	--	--
IW-2	4/28/2017	--	11.32	NP	--	--	--
IW-2	5/26/2017	--	11.64	NP	--	--	--
IW-2	10/17/2017	--	14.05	NP	--	--	--
IW-2	2/8/2018	--	10.59	NP	--	--	--
IW-2	9/11/2018	--	--	--	--	--	WI
IW-2	11/15/2018	--	--	--	--	--	WI
IW-2	1/29/2019	--	11.70	NP	--	--	--
IW-2	9/26/2019	--	13.79	NP	--	--	--
IW-2	3/9/2020	--	11.91	NP	--	--	--
IW-2	9/28/2020	--	13.86	NP	--	--	--
IW-2	3/23/2021	--	11.92	NP	--	--	--
IW-2	9/28/2021	--	--	--	--	--	VO
IW-2	9/7/2022	--	14.15	NP	--	--	--
IW-2	9/19/2023	--	14.57	NP	--	--	--
IW-2	3/7/2024	--	11.24	NP	--	--	--
IW-2	9/5/2024	--	13.63	NP	--	--	--
IW-2	5/27/2025	--	12.57	NP	--	--	--
IW-3	3/10/2017	--	10.55	NP	--	--	--
IW-3	3/17/2017	--	9.80	NP	--	--	--
IW-3	3/24/2017	--	9.92	NP	--	--	--

Table 1
Groundwater Gauging Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
IW-3	3/30/2017	--	10.28	NP	--	--	--
IW-3	4/7/2017	--	10.07	NP	--	--	--
IW-3	4/14/2017	--	10.24	NP	--	--	--
IW-3	4/28/2017	--	10.75	NP	--	--	--
IW-3	5/26/2017	--	11.21	NP	--	--	--
IW-3	10/17/2017	--	13.52	NP	--	--	--
IW-3	2/8/2018	--	9.95	NP	--	--	--
IW-3	9/11/2018	--	13.45	NP	--	--	--
IW-3	11/15/2018	--	13.15	NP	--	--	--
IW-3	1/29/2019	--	11.61	NP	--	--	--
IW-3	8/27/2019	--	13.56	NP	--	--	--
IW-3	9/26/2019	--	13.32	NP	--	--	--
IW-3	3/9/2020	--	11.38	NP	--	--	--
IW-3	9/28/2020	--	13.32	NP	--	--	--
IW-3	3/23/2021	--	11.32	NP	--	--	--
IW-3	9/28/2021	--	13.76	NP	--	--	--
IW-3	9/7/2022	--	13.61	NP	--	--	--
IW-3	9/19/2023	--	14.01	NP	--	--	--
IW-3	3/7/2024	--	10.75	NP	--	--	--
IW-3	9/5/2024	--	13.06	NP	--	--	--
IW-3	5/27/2025	--	12.07	NP	--	--	--
IW-4	3/10/2017	--	10.63	NP	--	--	--
IW-4	3/17/2017	--	9.68	NP	--	--	--
IW-4	3/24/2017	--	9.78	NP	--	--	--
IW-4	3/30/2017	--	10.14	NP	--	--	--
IW-4	4/7/2017	--	9.88	NP	--	--	--
IW-4	4/14/2017	--	10.05	NP	--	--	--
IW-4	4/28/2017	--	10.68	NP	--	--	--
IW-4	5/26/2017	--	11.24	NP	--	--	--
IW-4	10/17/2017	--	13.42	NP	--	--	--
IW-4	2/8/2018	--	9.80	NP	--	--	--
IW-4	9/11/2018	--	13.39	NP	--	--	--
IW-4	11/15/2018	--	12.90	NP	--	--	--
IW-4	1/29/2019	--	11.47	NP	--	--	--
IW-4	8/27/2019	--	13.47	NP	--	--	--
IW-4	9/26/2019	--	13.24	NP	--	--	--
IW-4	3/9/2020	--	11.28	NP	--	--	--
IW-4	9/28/2020	--	13.28	NP	--	--	--
IW-4	3/23/2021	--	11.25	NP	--	--	--
IW-4	9/28/2021	--	13.74	NP	--	--	--
IW-4	9/7/2022	--	13.42	NP	--	--	--
IW-4	9/19/2023	--	13.90	NP	--	--	--
IW-4	3/7/2024	--	10.56	NP	--	--	--
IW-4	9/5/2024	--	13.00	NP	--	--	--
IW-4	5/27/2025	--	11.91	NP	--	--	--

Table 1
Groundwater Gauging Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers

Notes:

TOC = Top of Casing

ft = feet

NP = No Product

LNAPL = Light Non-Aqueous Phase Liquid

* = Corrected for LNAPL if present (assumes LNAPL specific gravity = 0.75)

¹ = Wells were resurveyed on 5/13/2025 with reference to North American Vertical Datum of 1988 (NAVD 88)

-- = No Information Available

Dry = Dry Well

WI = Well Inaccessible

IW = Insufficient Water

NO = Natural Obstruction

VO = Vehicle Obstruction

Table 2
Groundwater Analytical Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Constituent		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
Unit		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MTCA Method A Cleanup Levels		5	1,000	700	1,000	20	0.01	5	1,000	500	500	15 ¹	15
Well ID	Date												
MW-1	10/5/1994	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	--	--	--	< 2.0
MW-1	2/15/1995	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	--	--	--	< 2.0
MW-1	12/20/1999	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	--	--	--	--
MW-1	6/27/2001	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 250	< 750	--	--
MW-1	9/26/2001	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	10,100	29,100	--	--
MW-1	12/3/2001	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 250	< 500	--	--
MW-1	6/6/2002	< 0.5	0.602	< 0.5	< 1.0	< 2.0	< 0.01	< 1.0	< 50	< 250	< 500	< 1.0	< 1.0
MW-1	6/26/2003	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 250	< 500	< 1.0	< 1.0
MW-1	12/9/2003	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 250	< 500	< 1.0	< 1.0
MW-1	11/16/2004	< 0.5	< 0.5	< 0.5	< 1.0	< 2.0	--	--	< 80	< 250	< 500	< 1.0	2.49
MW-1	12/6/2005	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 255	< 510	< 1.0	1.26
MW-1	6/5/2006	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 253	< 505	< 1.0	1.76
MW-1	9/24/2007	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 236	< 472	--	--
MW-1	1/30/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 243	< 485	--	--
MW-1	4/3/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	--	--	--	--
MW-1	7/2/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 248	< 495	--	--
MW-1	10/3/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 236	< 472	--	--
MW-1	1/5/2009	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 248	< 495	--	--
MW-1	4/7/2009	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 243	< 485	< 1.0	< 1.0
MW-1	12/11/2012	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 100	< 182	< 182	< 3.0	< 3.0
MW-2	10/5/1994	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	59	--	--	--	< 2.0
MW-2	2/15/1995	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	--	--	--	< 2.0
MW-2	4/11/1995	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	--	--	--	--
MW-2	7/20/1995	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	< 250	< 750	--	--
MW-2	10/25/1995	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	< 250	< 750	--	--
MW-2	1/23/1996	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	--	--	--	--
MW-2	4/17/1996	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	< 250	< 750	--	--
MW-2	7/8/1996	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	< 250	< 750	--	--
MW-2	10/23/1997	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	54.7	< 250	< 750	--	--
MW-2	3/11/1998	0.834	< 0.5	< 0.5	< 1.0	--	--	--	< 80	< 250	< 750	--	--
MW-2	6/30/1998	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	--	--	--	--
MW-2	12/20/1999	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	--	--	--	--
MW-2	6/30/2000	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	< 250	< 750	--	--
MW-2	9/27/2000	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	< 250	< 750	--	--
MW-2	12/3/2001	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 250	< 500	--	--
MW-2	6/6/2002	< 0.5	< 0.5	< 0.5	< 1.0	< 2.0	< 0.01	< 1.00	< 50	< 250	< 500	< 1.0	< 1.0
MW-2	6/26/2003	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 250	< 500	< 1.0	< 1.0
MW-2	12/9/2003	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 250	< 500	< 1.0	< 1.0
MW-2	11/16/2004	< 0.2	< 0.5	< 0.5	< 1.0	< 2.0	--	--	< 80	< 250	< 500	< 1.0	< 1.0
MW-2	6/22/2005	< 0.2	< 0.5	< 0.5	< 1.0	< 2.0	--	--	< 80	< 250	< 500	< 1.0	< 1.0
MW-2	9/12/2005	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 281	< 562	< 1.0	< 1.0

Table 2
Groundwater Analytical Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Constituent		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
Unit		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MTCA Method A Cleanup Levels		5	1,000	700	1,000	20	0.01	5	1,000	500	500	15 ¹	15
MW-2	12/6/2005	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 248	< 495	< 1.0	< 1.0
MW-2	6/5/2006	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 248	< 495	< 1.0	< 1.0
MW-2	9/24/2007	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 243	< 485	--	--
MW-2	12/31/2007	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 236	< 472	--	--
MW-2	1/30/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 243	< 485	--	--
MW-2	4/3/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	--	--	--	--
MW-2	7/2/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 240	< 481	--	--
MW-2	10/3/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 236	< 472	--	--
MW-2	1/5/2009	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 248	< 495	--	--
MW-2	4/8/2009	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 243	< 485	< 1.0	< 1.0
MW-2	6/25/2013	< 0.5	< 0.5	< 0.5	< 1.0	< 0.50	--	--	< 50	< 250	< 500	< 10	< 10
MW-2	9/25/2013	< 0.5	< 0.5	< 0.5	< 1.0	< 0.50	--	--	< 50	< 260	< 260	< 10	< 10
MW-2	11/14/2013	< 0.5	< 0.5	< 0.5	< 1.0	< 0.50	--	--	< 50	< 260	< 260	< 10	< 10
MW-2	2/12/2014	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 50	48	61	< 2.0	< 2.0
MW-2	4/2/2014	< 1.1	< 0.89	< 0.89	< 0.82	< 0.74	--	--	< 10	< 19	48 JB	< 0.17	< 0.17
MW-2	7/10/2014	< 0.14	< 0.16	< 0.13	< 0.12	< 0.17	--	--	< 10	< 9.5	< 14	3.5	< 0.17
MW-2	10/21/2014	< 1.0	< 1.0	< 1.0	0.17 JB	< 1.0	--	--	< 50	35	< 250	< 2.0	0.55 JB
MW-2	1/20/2015	< 0.14	< 0.16	< 0.13	< 0.12	< 0.17	--	--	< 27	29	180 JB^	< 0.17	< 0.17
MW-2	8/29/2016	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0 *	--	--	< 50	37 JB	< 250	< 2.0	0.24 J
MW-2	11/21/2016	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 50	430	490	< 2.0	< 2.0
MW-2	2/15/2017	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 50	< 110	< 250	< 2.0	< 2.0
MW-2	10/17/2017	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 100	< 250	< 4.0	< 4.0
MW-2	2/8/2018	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 120	< 400	< 4.0	< 4.0
MW-2	9/11/2018	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 250	< 110	< 350	< 4.0	< 4.0
MW-2	11/15/2018	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 250	< 110	< 350	< 4.0	< 4.0
MW-2	1/29/2019	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 250	< 110	< 350	< 4.0	< 4.0
MW-2	9/26/2019	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 110	< 350	< 4.0	< 4.0
MW-2	3/9/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 110	< 360	< 4.0	< 4.0
MW-2	9/28/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 110	< 340	< 4.0	< 4.0
MW-2	3/23/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	< 110	< 360	< 2.0	< 2.0
MW-3	10/5/1994	12	3.0	< 0.5	1.5	--	3.0	< 0.51	< 50	--	--	--	< 2.0
MW-3	2/15/1995	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	--	--	--	< 2.0
MW-3	7/20/1995	0.78	< 0.5	< 0.5	< 1.0	--	--	--	< 50	--	--	--	--
MW-3	4/17/1996	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	--	--	--	--
MW-3	7/8/1996	0.879	< 0.5	< 0.5	< 1.0	--	--	--	< 50	--	--	--	--
MW-3	3/11/1997	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	--	--	--	--
MW-3	5/29/1997	2.10	< 0.5	< 0.5	< 1.0	--	--	--	223	--	--	--	--
MW-3	8/5/1997	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	56.5	--	--	--	--
MW-3	6/30/1998	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	--	--	--	--
MW-3	6/30/2000	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	< 250	< 750	--	--
MW-3	9/27/2000	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	< 250	< 750	--	--
MW-3	6/26/2003	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 250	< 500	< 1.0	< 1.0

Table 2
Groundwater Analytical Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Constituent		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
Unit		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MTCA Method A Cleanup Levels		5	1,000	700	1,000	20	0.01	5	1,000	500	500	15 ¹	15
MW-3	12/9/2003	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 250	< 500	< 1.0	< 1.0
MW-3	4/7/2004	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 250	< 500	< 1.0	< 1.0
MW-3	11/16/2004	< 0.2	< 0.5	< 0.5	< 1.0	< 2.0	--	--	< 80	< 250	< 500	< 1.0	1.52
MW-3	12/6/2005	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 250	< 500	< 1.0	< 1.0
MW-3	6/5/2006	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 258	< 515	< 1.0	< 1.0
MW-3	9/24/2007	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 236	< 472	--	--
MW-3	1/30/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 236	< 472	--	--
MW-3	4/3/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	--	--	--	--
MW-3	7/2/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 238	< 476	--	--
MW-3	10/3/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 236	< 472	--	--
MW-3	1/5/2009	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 248	< 495	--	--
MW-3	4/7/2009	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 240	< 481	< 1.0	< 1.0
MW-4	1/23/1996	5,000	5,100	2,000	15,000	--	--	--	3,300,000	9,000	14,000	--	--
MW-4	3/9/1999	4.76	< 0.5	< 0.5	1.73	--	--	--	53.3	< 250	< 750	--	--
MW-4	9/27/1999	4.04	< 0.5	< 0.500	< 10	--	--	--	2,100	590	--	--	--
MW-4	12/20/1999	690	< 2.5	4.77	33.7	--	--	--	385	< 498	--	--	--
MW-4	3/16/2000	52.8	1.22	3.25	25.3	--	--	--	685	--	--	--	--
MW-4	6/30/2000	152	5.70	3.54	31.1	--	--	--	983	3,340	< 750	--	--
MW-4	9/27/2000	147	3.51	19.4	64.7	--	--	--	1,430	1,800	< 750	--	--
MW-4	3/19/2001	338	< 5.0	14.0	31.9	319	--	--	1,040	739	< 1450	--	--
MW-4	6/27/2001	37.8	0.821	1.69	13.0	18.6	--	--	630	< 250	< 750	--	--
MW-4	9/26/2001	1,850	491	3,480	30,100	149	--	--	611,000	11,300	11,500	--	--
MW-4	12/3/2001	325	< 5.0	< 5.0	32.5	34.7	--	--	1,980	2,120	3,880	--	--
MW-4	6/6/2002	199	< 2.5	6.30	48.6	33.2	< 0.01	< 1.0	2,940	1,620	2,160	2.43	6.96
MW-4	6/26/2003	1,350	< 5.0	45.1	52.1	< 20	--	--	4,410	6,630	3,070	1.87	4.04
MW-4	12/9/2003	918	2.52	64.0	47.6	38.2	--	--	3,200	1,240	2,450	< 1.0	< 1.0
MW-4	4/7/2004	1,230	< 5.0	10.1	25.2	< 10	--	--	3,470	711	1,230	1.58	2.45
MW-4	11/16/2004	990	< 5.0	96.9	154	20.9	--	--	76,200	24,300	8,350	< 1.0	11.5
MW-4	3/29/2005	5,920	79.0	1,140	6,630	< 100	< 0.010	< 25	28,900	16,700	25,800	--	204
MW-4	6/22/2005	1,070	< 5.0	22.5	44.7	< 20	--	--	2,730	4,600	6,130	< 1.0	10
MW-4	9/12/2005	980	10.3	143	55.1	16.2	--	--	5,450	1,070	1,590	< 1.0	2.62
MW-4	12/6/2005	737	5.0	127	58.0	< 10	--	--	4,320	1,030	1,720	< 1.0	2.42
MW-4	6/5/2006	851	< 10.0	146	168	< 20	--	--	3,720	430	641	< 1.0	3.04
MW-4	9/29/2006	< 0.5	< 0.5	0.81	< 3.0	--	--	--	174	--	--	--	--
MW-4	12/19/2006	33.8	< 0.5	2.35	2.03	--	--	--	566	--	--	--	--
MW-4	9/24/2007	99.5	1.62	67.3	82.2	< 1.0	--	--	1,360	1,610	3,710	--	--
MW-4	12/31/2007	111	2.9	53.6	63.5	< 1.0	--	--	1,620	< 236	< 472	--	--
MW-4	1/30/2008	134	11.6	13.2	63.2	< 1.0	--	--	1,640	< 236	< 472	--	--
MW-4	4/3/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	--	--	--	--
MW-4	7/2/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 238	< 476	--	--
MW-4	10/3/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 236	< 472	--	--
MW-4	1/5/2009	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 236	644	--	--

Table 2
Groundwater Analytical Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Constituent		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
Unit		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MTCA Method A Cleanup Levels		5	1,000	700	1,000	20	0.01	5	1,000	500	500	15 ¹	15
MW-4	4/8/2009	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 245	< 490	< 1.0	< 1.0
MW-4	7/8/2009	0.900	< 0.5	< 0.5	< 1.0	< 2.0	--	--	< 80	< 248	< 495	2.96	3.95
MW-4	10/6/2009	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	69	< 245	< 490	2.9	3.6
MW-4	1/5/2010	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 50	< 120	250	< 2.0	3.8
MW-4	5/25/2010	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	210	< 240	< 2.0	< 2.0
MW-4	8/19/2010	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	140	< 240	< 2.0	< 2.0
MW-4	12/7/2010	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	420	920	< 2.0	2.6
MW-4	1/26/2011	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	260	330	< 2.0	3.0
MW-4	6/16/2011	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	1,200	2,200	< 2.0	< 2.0
MW-4	9/22/2011	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 96.2	< 481	< 2.0	< 2.0
MW-4	12/6/2011	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 50	< 75.5	< 377	< 10	< 10
MW-4	3/8/2012	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 50	< 82.5	< 412	< 10	< 10
MW-4	6/19/2012	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 50	< 160	< 800	< 10	< 10
MW-4	9/21/2012	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 50	< 80.8	< 404	< 10	< 10
MW-4	12/11/2012	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 100	< 189	304	< 3.0	< 3.0
MW-4	6/25/2013	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	--	--	< 50	25	71	< 10	< 10
MW-4	9/25/2013	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	--	--	< 50	< 270	< 270	< 10	< 10
MW-4	11/14/2013	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	--	--	< 50	< 260	< 260	< 10	< 10
MW-4	2/12/2014	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 50	590 BY	390 BY	< 2.0	0.30
MW-4	4/2/2014	< 1.1	< 0.89	< 0.89	< 0.82	< 0.74	--	--	< 10	900	780	< 0.17	0.51
MW-4	7/10/2014	< 0.14	< 0.16	< 0.13	< 0.12	< 0.17	--	--	14 JB	300	200	< 0.17	< 0.17
MW-4	10/22/2014	< 1.0	< 1.0	< 1.0	0.16 JB	0.25	--	--	11 JB	350	210	< 2.0	0.55 JB
MW-4	1/20/2015	< 0.14	< 0.16	< 0.13	< 0.12	< 0.17	--	--	< 27	580	510	< 0.17	< 0.17
MW-4	12/16/2015	< 0.42	< 0.44	< 0.51	< 0.50	0.20	--	--	35	280	260	--	--
MW-4	3/11/2016	< 0.025	< 0.025	< 0.030	< 0.060	0.11	--	--	< 27	440	610	--	--
MW-4	8/29/2016	< 2.0	< 2.0	< 3.0	< 3.0	0.25 JH	--	--	< 50	320 B	240 JB	< 2.0	0.26 J
MW-4	11/21/2016	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 50	160	< 250	< 2.0	< 2.0
MW-4	2/15/2017	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 50	420	460	< 2.0	< 2.0
MW-4	5/26/2017	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 500	410	600	< 4.0	< 4.0
MW-4	10/17/2017	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	740	470	< 4.0	< 4.0
MW-4	2/8/2018	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	510	790	< 4.0	< 4.0
MW-4	9/11/2018	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 250	480	510	< 4.0	< 4.0
MW-4	11/15/2018	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 250	1,000	1,100	< 4.0	< 4.0
MW-4	1/29/2019	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 250	620	1,000	< 4.0	< 4.0
MW-4	9/26/2019	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	850	650	< 4.0	< 4.0
MW-4	3/9/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	350	540	< 4.0	< 4.0
MW-4	9/28/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	480	670	< 4.0	< 4.0
MW-4	3/23/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	180	470	< 2.0	< 2.0
MW-4	9/28/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	540	870 *+	< 2.0	< 2.0
MW-4	11/8/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	550	650	< 2.0	< 2.0
MW-4	12/13/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	340	730	< 0.4	< 2.0
MW-4	3/30/2022	< 1.0	< 1.0 *+	< 1.0	< 2.0	< 1.0	--	--	< 50	130	360	< 2.0	< 2.0
MW-4	6/27/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	220	< 260	< 0.5	< 0.5

Table 2
Groundwater Analytical Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Constituent		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
Unit		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MTCA Method A Cleanup Levels		5	1,000	700	1,000	20	0.01	5	1,000	500	500	15 ¹	15
MW-4	9/7/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	410	< 260	< 2.0	< 2.0
MW-4	3/30/2023	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.0099 *+	< 1.0	< 50	420	620	< 2.0	< 2.0
MW-4	9/20/2023	--	--	--	--	--	< 0.010	< 1.0	--	760	610	--	--
MW-4	3/7/2024	--	--	--	--	--	--	--	--	350	610	--	--
MW-4	9/5/2024	--	--	--	--	--	--	--	--	440	570	--	--
MW-4	5/27/2025	--	--	--	--	--	--	--	--	826	< 152	--	--
MW-5	10/5/1994	57	2.6	0.94	2.2	--	--	--	< 50	--	--	--	2.4
MW-5	2/15/1995	160	0.96	< 0.5	< 1.0	--	--	--	63	440	3,300	--	< 2.0
MW-5	4/10/1995	270	< 2.0	< 2.0	< 4.0	--	--	--	< 100	--	--	--	--
MW-5	7/20/1995	330	1.1	1.1	< 1.0	--	--	--	80	720	870	--	--
MW-5	10/26/1995	440	< 0.5	< 0.5	< 1.0	--	--	--	61	1,100	2,400	--	--
MW-5	1/23/1996	770	< 4.0	< 4.0	8.4	--	--	--	< 200	3,200	10,000	--	--
MW-5	4/17/1996	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	490	< 750	--	--
MW-5	7/8/1996	< 0.5	< 0.5	< 0.5	2.64	--	--	--	544	683	791	--	--
MW-5	3/11/1997	3.22	10.9	1.65	13.0	--	--	--	76.4	4,241	< 750	--	--
MW-5	10/23/1997	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	447	< 750	--	--
MW-5	3/11/1998	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 80	< 250	< 750	--	--
MW-5	9/25/1998	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	< 250	< 750	--	--
MW-5	12/29/1998	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	< 250	< 750	--	--
MW-5	3/9/1999	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	< 250	< 750	--	--
MW-5	6/2/1999	< 0.5	3.17	< 0.5	< 1.0	--	--	--	< 50	< 250	< 750	--	--
MW-5	9/27/1999	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	< 250	--	--	--
MW-5	12/20/1999	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	< 250	--	--	--
MW-5	6/30/2000	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	< 250	< 750	--	--
MW-5	9/27/2000	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	< 250	< 750	--	--
MW-5	6/27/2001	< 2.5	< 2.5	< 2.5	< 5.0	90.1	--	--	< 250	< 322	< 965	--	--
MW-5	9/26/2001	< 0.5	< 0.5	< 0.5	< 1.0	19.7	--	--	< 50	< 250	< 750	--	--
MW-5	12/3/2001	< 0.5	< 0.5	< 0.5	< 1.0	27.2	--	--	< 50	< 250	< 500	--	--
MW-5	6/26/2003	< 0.5	< 0.5	< 0.5	< 1.0	22.1	--	--	< 50	< 250	< 500	< 1.0	1.63
MW-5	12/9/2003	< 0.5	< 0.5	< 0.5	< 1.0	21.0	--	--	< 50	< 250	< 500	< 1.0	< 1.0
MW-5	11/16/2004	< 0.2	< 0.5	< 0.5	< 1.0	26.9	--	--	< 80	< 250	< 500	< 1.0	< 1.0
MW-5	12/6/2005	< 0.5	< 0.5	< 0.5	< 1.0	9.4	--	--	< 50	< 243	< 485	< 1.0	< 1.0
MW-5	6/5/2006	< 0.5	< 0.5	< 0.5	< 1.0	4.37	--	--	< 50	< 263	< 526	< 1.0	2.1
MW-5	9/24/2007	< 0.5	< 0.5	< 0.5	< 3.0	1.54	--	--	< 50	< 236	< 472	--	--
MW-5	12/31/2007	< 0.5	< 0.5	< 0.5	< 3.0	1.35	--	--	< 50	< 236	< 472	--	--
MW-5	1/30/2008	< 0.5	< 0.5	< 0.5	< 3.0	1.27	--	--	< 50	< 236	< 472	--	--
MW-5	4/3/2008	< 0.5	< 0.5	< 0.5	< 3.0	1.95	--	--	< 50	--	--	--	--
MW-5	7/2/2008	< 0.5	< 0.5	< 0.5	< 3.0	2.02	--	--	< 50	< 236	< 472	--	--
MW-5	10/3/2008	< 0.5	< 0.5	< 0.5	< 3.0	1.81	--	--	< 50	< 236	< 472	--	--
MW-5	1/5/2009	< 0.5	< 0.5	< 0.5	< 3.0	1.43	--	--	< 50	< 250	< 500	--	--
MW-5	4/8/2009	< 0.5	< 0.5	< 0.5	< 1.0	2.07	--	--	< 50	< 243	< 485	< 1.0	< 1.0
MW-5	9/21/2012	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 50	< 80	< 400	< 10	< 10

Table 2
Groundwater Analytical Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Constituent		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
Unit		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MTCA Method A Cleanup Levels		5	1,000	700	1,000	20	0.01	5	1,000	500	500	15 ¹	15
MW-5	6/25/2013	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	--	--	< 50	< 250	30	< 10	< 10
MW-5	9/25/2013	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	--	--	< 50	< 270	< 270	< 10	< 10
MW-5	11/14/2013	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	--	--	< 50	< 260	< 260	< 10	< 10
MW-5	2/12/2014	< 1.0	< 1.0	< 1.0	< 3.0	0.46	--	--	< 50	78	80 JB	< 2.0	< 2.0
MW-5	4/1/2014	< 1.1	< 0.89	< 0.89	< 0.82	0.78	--	--	< 10	110 JB	160 JB	< 0.17	< 0.17
MW-5	7/10/2014	< 0.14	< 0.16	< 0.13	< 0.12	0.38	--	--	< 10	150	180 J	< 0.17	< 0.17
MW-5	10/21/2014	< 1.0	< 1.0	< 1.0	< 3.0	0.39	--	--	< 50	100	< 250	< 2.0	0.44 JB
MW-5	1/20/2015	< 0.14	< 0.16	< 0.13	< 0.12	0.43	--	--	< 27	220	230	< 0.17	< 0.17
MW-5	8/29/2016	< 2.0	< 2.0	< 3.0	< 3.0	0.31 JH	--	--	< 50	62 JB	35 JB	< 2.0	< 2.0
MW-5	11/21/2016	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 50	120	< 250	< 2.0	< 2.0
MW-5	2/15/2017	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 50	120	< 250	< 2.0	< 2.0
MW-5	5/26/2017	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 500	210	350	< 4.0	< 4.0
MW-5	10/17/2017	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	150	< 250	< 4.0	< 4.0
MW-5	2/8/2018	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	150	< 390	< 4.0	< 4.0
MW-6	10/5/1994	160	260	45	180	--	--	--	1,400	--	--	--	< 2.0
MW-6	2/15/1995	13	32	5.7	30	--	--	--	220	--	< 1,000	--	< 2.0
MW-6	7/20/1995	130	410	70	390	--	--	--	2,300	< 250	--	--	--
MW-6	4/17/1996	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	--	--	--	--
MW-6	7/8/1996	< 0.5	0.528	< 0.5	< 1.0	--	--	--	< 50	< 250	< 750	--	--
MW-6	3/11/1998	1.4	5.35	1.24	19.4	--	--	--	192	< 250	< 750	--	--
MW-6	3/16/2000	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	< 250	< 750	--	--
MW-6	11/10/2000	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 80	< 250	< 750	--	--
MW-6	3/19/2001	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 250	< 750	--	--
MW-6	12/3/2001	2.15	0.875	10.4	36.1	< 5.0	--	--	394	< 250	< 500	--	--
MW-6	6/26/2003	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 250	< 500	< 1.0	< 1.0
MW-6	12/9/2003	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 250	< 500	< 1.0	< 1.0
MW-6	11/16/2004	< 0.5	< 0.5	< 0.5	< 1.0	< 2.0	--	--	< 80	< 250	< 500	< 1.0	< 1.0
MW-6	9/12/2005	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 294	< 588	< 1.0	< 1.0
MW-6	12/6/2005	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 245	< 490	< 1.0	< 1.0
MW-6	6/5/2006	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 263	< 526	< 1.0	< 1.0
MW-6	9/24/2007	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 236	< 472	--	--
MW-6	1/30/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 243	< 485	--	--
MW-6	4/3/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 238	< 476	--	--
MW-6	7/2/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 240	< 481	--	--
MW-6	10/3/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 236	< 472	--	--
MW-6	1/5/2009	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 236	< 472	--	--
MW-6	4/8/2009	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 243	< 485	< 1.0	< 1.0
MW-6	3/24/2021	< 1.0	< 1.0	< 1.0	< 2.0	--	--	--	< 250	< 110	< 370	< 2.0	< 2.0
MW-7	10/5/1994	4,600	470	81	810	--	--	--	5,500	--	--	--	< 2.0
MW-7	2/15/1995	5,500	240	80	160	--	--	--	4,300	--	12,000	--	< 2.0
MW-7	4/10/1995	3,600	140	53	470	--	--	--	2,800	--	7,800	--	--

Table 2
Groundwater Analytical Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Constituent		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
Unit		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MTCA Method A Cleanup Levels		5	1,000	700	1,000	20	0.01	5	1,000	500	500	15 ¹	15
MW-7	7/20/1995	3,300	260	36	350	--	--	--	2,400	1,200	--	--	--
MW-7	10/26/1995	590	12	< 0.5	< 1.0	--	--	--	170	930	2,100	--	--
MW-7	1/23/1996	2.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	1,100	2,100	--	--
MW-7	4/17/1996	2,500	57	45	270	--	--	--	1,500	580	< 750	--	--
MW-7	7/8/1996	1,220	25.6	< 0.5	162	--	--	--	1,100	879	< 750	--	--
MW-7	10/10/1996	1,100	21.3	21.5	72.8	--	--	--	< 1,000	636	< 750	--	--
MW-7	3/11/1997	708	20.8	8.18	22.0	--	--	--	373	8,571	< 750	--	--
MW-7	5/29/1997	580	< 5.0	6.72	14.3	--	--	--	< 500	--	--	--	--
MW-7	8/5/1997	462	3.11	5.81	13.9	--	--	--	265	713	< 750	--	--
MW-7	10/23/1997	23.7	< 0.5	0.689	1.62	--	--	--	89.4	565	< 750	--	--
MW-7	3/11/1998	19.2	< 0.5	< 0.5	< 1.0	--	--	--	< 80	< 250	< 750	--	--
MW-7	9/25/1998	25.7	< 0.5	< 0.5	< 1.0	--	--	--	< 50	< 250	< 750	--	--
MW-7	12/29/1998	116	< 2.5	< 2.5	< 5.0	--	--	--	< 250	< 250	< 750	--	--
MW-7	3/9/1999	73.5	0.502	0.559	1.52	--	--	--	68.3	< 250	< 750	--	--
MW-7	6/2/1999	41.1	5.95	< 0.5	< 1.0	--	--	--	< 50	< 250	< 750	--	--
MW-7	9/27/1999	0.544	< 0.5	< 0.5	< 1.0	--	--	--	< 50	< 250	--	--	--
MW-7	12/20/1999	161	< 0.5	< 0.5	< 1.0	--	--	--	< 50	< 250	--	--	--
MW-7	6/30/2000	1.20	< 0.78	< 0.5	< 1.0	--	--	--	< 50	420	< 750	--	--
MW-7	9/27/2000	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	323	< 750	--	--
MW-7	11/10/2000	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 80	< 250	< 750	--	--
MW-7	3/19/2001	< 0.5	0.821	< 0.5	< 1.0	55.9	--	--	< 50	< 250	< 750	--	--
MW-7	6/27/2001	< 0.5	< 0.5	< 0.5	< 1.0	35.2	--	--	< 50	< 250	< 750	--	--
MW-7	9/26/2001	< 0.5	< 0.5	< 0.5	< 1.0	57.8	--	--	< 50	253	< 750	--	--
MW-7	12/9/2003	< 0.5	< 0.5	< 0.5	< 1.0	35.6	--	--	< 50	< 250	< 500	< 1.0	< 1.0
MW-7	11/16/2004	< 0.2	< 0.5	< 0.5	< 1.0	20.6	--	--	84.3	< 250	< 500	< 1.0	< 1.0
MW-7	12/6/2005	644	8,200	942	5,250	< 200	--	--	33,000	< 243	< 485	< 1.0	< 1.0
MW-7	6/5/2006	26.8	10.0	373	520	< 20	--	--	4,590	< 278	< 556	< 1.0	< 1.0
MW-7	9/29/2006	< 0.5	0.85	27.3	86.3	--	--	--	1,760	--	--	--	--
MW-7	12/19/2006	< 0.5	< 0.5	1.26	8.9	--	--	--	189	--	--	--	--
MW-7	12/31/2007	< 0.5	< 0.5	< 0.5	< 3.0	3.1	--	--	< 50	< 236	< 472	--	--
MW-7	1/30/2008	< 0.5	< 0.5	< 0.5	< 3.0	2.73	--	--	< 50	< 236	< 472	--	--
MW-7	4/3/2008	< 0.5	< 0.5	< 0.5	< 3.0	5.63	--	--	< 50	< 243	< 485	--	--
MW-7	7/2/2008	< 0.5	< 0.5	< 0.5	< 3.0	3.96	--	--	< 50	< 236	< 472	--	--
MW-7	10/3/2008	< 0.5	< 0.5	< 0.5	< 3.0	2.23	--	--	< 50	< 236	< 472	--	--
MW-7	1/5/2009	< 0.5	< 0.5	< 0.5	< 3.0	2.63	--	--	< 50	< 248	< 495	--	--
MW-7	4/8/2009	< 0.5	< 0.5	< 0.5	< 1.0	5.4	--	--	< 50	< 243	< 485	< 1.0	< 1.0
MW-8	10/5/1994	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	--	--	--	< 2.0
MW-8	2/15/1995	--	--	--	--	--	--	--	--	< 250	--	--	--
MW-8	7/20/1995	--	--	--	--	--	--	--	--	410	< 750	--	--
MW-8	3/11/1998	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 80	< 250	< 750	--	--
MW-8	12/20/1999	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	--	--	--	--
MW-8	6/6/2002	< 0.5	< 0.5	< 0.5	< 1.0	< 2.0	< 0.01	< 1.0	< 50	< 250	< 500	< 1.0	< 1.0

Table 2
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ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Constituent		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
Unit		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MTCA Method A Cleanup Levels		5	1,000	700	1,000	20	0.01	5	1,000	500	500	15 ¹	15
MW-8	6/26/2003	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 250	< 500	< 1.0	< 1.0
MW-8	12/9/2003	< 0.5	< 0.5	< 0.5	< 1.0	1.42	--	--	< 50	< 250	< 500	< 1.0	< 1.0
MW-8	11/16/2004	< 0.2	< 0.5	< 0.5	< 1.0	< 2.0	--	--	< 80	< 250	< 500	< 1.0	< 1.0
MW-8	9/12/2005	< 0.5	0.653	< 0.5	< 1.0	< 1.0	--	--	< 50	< 281	< 562	< 1.0	< 1.0
MW-8	12/6/2005	< 0.5	1.07	< 0.5	< 1.0	< 1.0	--	--	< 50	< 250	< 500	< 1.0	< 1.0
MW-8	6/5/2006	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 243	< 485	< 1.0	< 1.0
MW-8	9/24/2007	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 238	< 476	--	--
MW-8	12/31/2007	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 236	< 472	--	--
MW-8	1/30/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 250	< 500	--	--
MW-8	4/2/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 238	< 476	--	--
MW-8	7/1/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 236	< 472	--	--
MW-8	10/3/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 236	< 472	--	--
MW-8	1/6/2009	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 248	< 495	--	--
MW-8	4/8/2009	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 245	< 490	< 1.0	< 1.0
MW-8	6/26/2013	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	--	--	< 50	< 250	< 500	< 10	< 10
MW-8	9/25/2013	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	--	--	< 50	< 270	< 270	< 10	< 10
MW-8	11/15/2013	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	--	--	< 50	< 260	< 260	< 10	< 10
MW-8	2/13/2014	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 50	62	65	< 2.0	< 2.0
MW-8	4/2/2014	< 1.1	< 0.89	< 0.89	< 0.82	0.78	--	--	< 10	66 JB	88 JB	< 0.17	< 0.17
MW-8	7/10/2014	< 0.14	< 0.16	< 0.13	< 0.12	< 0.17	--	--	< 10	95 JB	81	< 0.17	< 0.17
MW-8	10/21/2014	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 50	55 J	< 250	< 2.0	0.44 JB
MW-8	1/19/2015	< 0.14	< 0.16	< 0.13	< 0.12	< 0.17	--	--	< 27	98	< 29 H1	< 0.17	< 0.17
MW-8	3/10/2016	--	--	--	--	--	--	--	--	--	--	< 0.17	1.7 J
MW-8	6/1/2016	--	--	--	--	--	--	--	--	--	--	< 0.17	2.9
MW-8	8/29/2016	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0 *	--	--	< 50	93 JB	59 JB	< 2.0	0.26 J
MW-8	11/21/2016	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 50	< 110	< 250	< 2.0	< 2.0
MW-8	2/15/2017	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 50	130	< 260	< 2.0	5.5
MW-8	5/26/2017	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 500	< 100	< 250	< 4.0	< 4.0
MW-8	10/17/2017	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 100	< 250	< 4.0	< 4.0
MW-8	2/8/2018	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 130	< 410	< 4.0	< 4.0
MW-8	9/11/2018	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 250	130	< 350	< 4.0	< 4.0
MW-8	11/15/2018	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 250	130	< 350	< 4.0	< 4.0
MW-8	1/29/2019	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 250	130	< 350	< 4.0	< 4.0
MW-8	9/26/2019	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	130	< 350	< 4.0	< 4.0
MW-8	3/9/2020	< 3.0 F2F1	< 2.0 F2F1	< 3.0 F2F1	< 3.0 F2F1	< 2.0 F2F1	--	--	< 250	110	< 360	< 4.0	< 4.0
MW-8	9/28/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	110	< 340	< 4.0	4.1
MW-8	3/23/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	< 110	< 360	< 2.0	< 2.0
MW-8	3/30/2022	< 1.0	< 1.0 *+	< 1.0	< 2.0	< 1.0	--	--	< 50	< 110	< 360	< 2.0	< 2.0
MW-8	9/7/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	< 100	< 260	< 2.0	< 2.0
MW-9	10/5/1994	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	--	--	--	4.6
MW-9	7/20/1995	--	--	--	--	--	--	--	--	280	--	--	--
MW-9	7/8/1996	--	--	--	--	--	--	--	--	< 250	< 750	--	--

Table 2
Groundwater Analytical Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Constituent		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
Unit		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MTCA Method A Cleanup Levels		5	1,000	700	1,000	20	0.01	5	1,000	500	500	15 ¹	15
MW-9	6/30/1998	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	< 250	--	--	--
MW-9	12/20/1999	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	--	--	--	--
MW-9	6/27/2001	< 0.5	< 0.5	< 0.5	< 1.0	< 5.0	--	--	< 50	< 250	< 750	--	--
MW-9	9/26/2001	< 0.5	< 0.5	< 0.5	< 1.0	< 5.0	--	--	< 50	< 250	< 750	--	--
MW-9	6/26/2003	< 0.5	< 0.5	< 0.5	< 1.0	< 5.0	--	--	< 50	< 250	< 500	< 1.0	< 1.0
MW-9	12/9/2003	< 0.5	< 0.5	< 0.5	< 1.0	2.12	--	--	< 50	< 250	< 500	< 1.0	< 1.0
MW-9	11/16/2004	< 0.2	< 0.5	< 0.5	< 1.0	< 2.0	--	--	< 80	< 250	< 500	< 1.0	< 1.0
MW-9	9/12/2005	< 0.5	5.91	< 0.5	< 1.0	< 2.0	--	--	156	< 312	< 625	< 1.0	< 1.0
MW-9	12/6/2005	< 0.5	0.85	< 0.5	< 1.0	1.07	--	--	< 50	< 248	< 495	< 1.0	< 1.0
MW-9	6/5/2006	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 250	< 500	< 1.0	< 1.0
MW-9	9/24/2007	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 243	< 485	--	--
MW-9	12/31/2007	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 236	< 472	--	--
MW-9	4/2/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 240	< 481	--	--
MW-9	7/1/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 236	< 472	--	--
MW-9	10/3/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 236	< 472	--	--
MW-9	1/6/2009	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 248	< 495	--	--
MW-9	4/8/2009	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 248	< 495	< 1.0	< 1.0
MW-9	9/21/2012	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 50	< 78.4	< 392	< 10	< 10
MW-9	6/26/2013	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	--	--	< 50	< 250	< 500	< 10	< 10
MW-9	9/25/2013	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	--	--	< 50	< 270	< 270	< 10	< 10
MW-9	11/14/2013	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	--	--	< 50	< 260	< 260	< 10	< 10
MW-9	2/14/2014	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 50	74	82	< 2.0	< 2.0
MW-9	4/2/2014	< 1.1	< 0.89	< 0.89	< 0.82	< 0.74	--	--	< 10	46 JB	58 JB	< 0.17	< 0.17
MW-9	7/10/2014	< 0.14	< 0.16	< 0.13	< 0.12	< 0.17	--	--	< 10	75 JB	62	0.35	< 0.17
MW-9	10/21/2014	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 50	66 J	< 240	< 2.0	0.26 JB
MW-9	1/20/2015	< 0.14	< 0.16	< 0.13	< 0.12	< 0.17	--	--	< 27	89	< 30 H1	< 0.17	< 0.17
MW-9	12/14/2015	< 0.42	< 0.44 *	< 0.51	< 0.50	< 0.17	--	--	< 27	55 JB	< 29	--	--
MW-9	3/10/2016	< 0.025	< 0.025	< 0.03	< 0.06	< 0.025	--	--	< 27	47 J	120 J	< 0.17	< 0.17
MW-9	6/1/2016	--	--	--	--	--	--	--	--	--	--	< 0.17	< 0.17
MW-9	8/29/2016	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0 *	--	--	< 50	53 JB	34 JB	< 2.0	< 2.0
MW-9	11/21/2016	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 50	< 110	< 250	< 2.0	< 2.0
MW-9	2/15/2017	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 50	< 110	< 250	< 2.0	< 2.0
MW-9	5/26/2017	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 500	< 100	< 260	< 4.0	< 4.0
MW-9	10/17/2017	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 100	< 250	< 4.0	< 4.0
MW-9	2/8/2018	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 130	< 410	< 4.0	< 4.0
MW-9	9/11/2018	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 250	< 110	< 350	< 4.0	< 4.0
MW-9	11/15/2018	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 250	140	< 350	< 4.0	< 4.0
MW-9	1/29/2019	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 250	110	< 350	< 4.0	< 4.0
MW-9	9/26/2019	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 110	< 350	< 4.0	< 4.0
MW-9	3/9/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 110	< 360	< 4.0	< 4.0
MW-9	9/28/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 110	< 340	< 4.0	< 4.0
MW-9	3/23/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	< 120	< 370	< 2.0	< 2.0

Table 2
Groundwater Analytical Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Constituent		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
Unit		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MTCA Method A Cleanup Levels		5	1,000	700	1,000	20	0.01	5	1,000	500	500	15 ¹	15
MW-10	10/5/1994	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	--	--	--	8.7
MW-10	7/20/1995	--	--	--	--	--	--	--	--	320	--	--	--
MW-10	7/8/1996	--	--	--	--	--	--	--	--	382	< 750	--	--
MW-10	6/30/1998	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	< 250	--	--	--
MW-10	3/16/2000	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	< 250	< 750	--	--
MW-10	6/26/2003	< 0.5	< 0.5	< 0.5	< 1.0	23.4	--	--	< 50	< 250	< 500	< 1.0	1.06
MW-10	12/9/2003	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 250	< 500	< 1.0	< 1.0
MW-10	11/16/2004	< 0.2	< 0.5	< 0.5	< 1.0	16.8	--	--	< 80	< 250	< 500	< 1.0	< 1.0
MW-10	3/29/2005	< 0.2	< 0.5	< 0.5	< 1.0	13.8	< 0.01	< 0.5	< 80	< 250	< 500	--	1.72
MW-10	6/22/2005	0.240	< 0.5	< 0.5	< 1.0	17.0	--	--	< 80	< 250	< 500	< 1.0	< 1.0
MW-10	9/12/2005	< 0.5	3.28	< 0.5	< 1.0	19.7	--	--	63.8	< 333	< 667	< 1.0	< 1.0
MW-10	12/6/2005	< 0.5	< 0.5	< 0.5	< 1.0	13.4	--	--	< 50	< 291	< 581	< 1.0	< 1.0
MW-10	6/5/2006	< 0.5	< 0.5	< 0.5	< 1.0	2.49	--	--	< 50	< 248	< 495	< 1.0	< 1.0
MW-10	9/24/2007	< 0.5	< 0.5	< 0.5	< 3.0	13.9	--	--	< 50	< 238	< 476	--	--
MW-10	12/31/2007	< 0.5	< 0.5	< 0.5	< 3.0	1.55	--	--	< 50	< 236	< 472	--	--
MW-10	4/2/2008	< 0.5	1.54	0.61	3.71	21.4	--	--	< 50	< 236	< 472	--	--
MW-10	7/1/2008	< 0.5	< 0.5	< 0.5	< 3.0	91.5	--	--	< 50	< 238	< 476	--	--
MW-10	10/3/2008	< 0.5	< 0.5	< 0.5	< 3.0	110	--	--	< 50	< 236	< 472	--	--
MW-10	1/6/2009	< 0.5	< 0.5	< 0.5	< 3.0	35.5	--	--	< 50	< 243	< 485	--	--
MW-10	4/8/2009	< 0.5	< 0.5	< 0.5	< 1.0	4.59	--	--	< 50	< 245	< 490	< 1.0	< 1.0
MW-10	9/21/2012	< 1.0	< 1.0	< 1.0	< 3.0	1.2	--	--	< 50	< 78.4	< 392	< 10	< 10
MW-10	6/26/2013	< 0.5	0.55	< 0.5	< 1.0	0.78	--	--	< 50	< 250	< 500	< 10	< 10
MW-10	9/25/2013	< 0.5	< 0.5	< 0.5	< 1.0	< 0.50	--	--	< 50	< 270	< 270	< 10	< 10
MW-10	11/14/2013	< 0.5	< 0.5	< 0.5	< 1.0	0.86	--	--	< 50	< 260	< 260	< 10	< 10
MW-10	2/13/2014	< 1.0	< 1.0	< 1.0	< 3.0	0.51 J	--	--	< 50	42	49	< 2.0	< 2.0
MW-10	4/2/2014	< 1.1	< 0.89	< 0.89	< 0.82	< 0.74	--	--	< 10	55 JB	64 JB	< 0.17	< 0.17
MW-10	7/11/2014	< 0.14	< 0.16	< 0.13	< 0.12	0.21 J	--	--	< 10	64 JB	31 J	< 0.17	< 0.17
MW-10	10/21/2014	< 1.0	< 1.0	< 1.0	< 3.0	0.61 J	--	--	< 50	89 J	< 240	< 2.0	0.26 JB
MW-10	1/20/2015	< 0.14	< 0.16	< 0.13	< 0.12	0.28 J	--	--	< 27	58 JH1B^	< 28 H1	< 0.17	< 0.17
MW-10	3/11/2016	--	--	--	--	--	--	--	--	--	--	< 0.17	< 0.17
MW-10	8/29/2016	< 2.0	< 2.0	< 3.0	< 3.0	0.22 JH	--	--	< 50	48 JB	29 JB	< 2.0	< 2.0
MW-10	11/21/2016	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 50	2,000	< 250	< 2.0	< 2.0
MW-10	2/15/2017	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 50	< 110	< 250	< 2.0	< 2.0
MW-10	5/26/2017	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 500	< 100	< 250	< 4.0	< 4.0
MW-10	10/17/2017	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 100	< 260	< 4.0	< 4.0
MW-10	2/8/2018	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 120	< 390	< 4.0	< 4.0
MW-10	9/11/2018	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 250	< 110	< 350	< 4.0	< 4.0
MW-10	11/15/2018	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 250	130	< 350	< 4.0	< 4.0
MW-10	1/29/2019	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 250	< 110	< 350	< 4.0	< 4.0
MW-10	9/26/2019	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 110	< 350	< 4.0	< 4.0
MW-10	3/9/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 110	< 370	< 4.0	< 4.0
MW-10	9/28/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 110	< 340	< 4.0	< 4.0 F2
MW-10	3/23/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	< 110	< 350	< 2.0	< 2.0

Table 2
Groundwater Analytical Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Constituent		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
Unit		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MTCA Method A Cleanup Levels		5	1,000	700	1,000	20	0.01	5	1,000	500	500	15 ¹	15
MW-10	11/8/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	110	< 360	< 2.0	< 2.0
MW-10	12/13/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	< 110	< 360	< 2.0	< 2.0
MW-10	3/30/2022	< 1.0	< 1.0 *+	< 1.0	< 2.0	< 1.0	--	--	< 50	< 110	< 350	< 2.0	< 2.0
MW-10	6/27/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	< 100	< 250	< 0.50	< 0.50
MW-10	9/7/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	< 110	< 270	< 2.0	< 2.0
MW-11	3/16/2000	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	15,000	24,900	--	--
MW-11	6/27/2001	386	32.4	30.4	777	29.6	--	--	11,500	700	< 750	--	--
MW-11	9/26/2001	122	13.0	18.4	692	< 20	--	--	23,600	5,890	5,510	--	--
MW-11	12/3/2001	177	9.17	19.7	320	25.8	--	--	6,220	2,510	4,850	--	--
MW-11	6/6/2002	192	4.66	30.8	456	< 2.0	< 0.01	< 1.0	5,710	5,170	6,790	4.95	16.0
MW-11	6/26/2003	301	5.01	120	568	< 20.0	--	--	9,170	72,800	107,000	3.09	8.71
MW-11	12/9/2003	99.2	3.00	48.9	314	14.8	--	--	4,650	1,610	2,910	1.14	2.94
MW-11	11/16/2004	155	2.95	66.4	610	< 10	--	--	29,000	72,200	28,500	2.06	32.1
MW-11	3/29/2005	138	< 2.5	90.6	145	< 10	< 0.01	< 2.5	6,310	42,200	22,600	--	12.3
MW-11	6/22/2005	112	1.97	105	259	5.42	--	--	6,810	20,100	10,800	1.56	10.6
MW-11	9/12/2005	217	< 12.5	224	992	3.48	--	--	22,000	81,100	169,000	21.8	43
MW-11	12/6/2005	148	< 2.5	130	504	< 5.0	--	--	13,000	85,600	178,000	3.1	33.1
MW-11	6/5/2006	245	< 5.0	149	529	< 10	--	--	10,200	58,000	111,000	32.9	132
MW-11	9/29/2006	4.44	0.57	2.84	47.5	--	--	--	4,840	--	--	--	--
MW-11	12/19/2006	5.0	< 0.5	2.3	11.8	--	--	--	1,630	--	--	--	--
MW-11	10/3/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	1,310	2,950	5,910	--	--
MW-11	4/8/2009	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	69.5	349	833	1.48	5.67
MW-11	7/8/2009	0.370	< 0.5	< 0.5	< 1.0	< 2.0	--	--	175	714	1,370	1.07	3.90
MW-11	10/6/2009	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	410	< 243	< 485	< 2.0	2.6
MW-11	1/5/2010	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	290	140	270	< 2.0	< 2.0
MW-11	5/25/2010	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	97	150	< 240	< 2.0	2.1
MW-11	8/19/2010	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	180	210	< 240	< 2.0	3.2
MW-11	12/7/2010	< 0.5	< 0.5	< 0.5	1.1	< 1.0	--	--	190	170	280	< 2.0	2.3
MW-11	1/26/2011	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	81	210	< 240	< 2.0	< 2.0
MW-11	6/16/2011	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	77	870	1,300	< 2.0	< 2.0
MW-11	9/22/2011	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	51	1,310	3,220	< 2.0	2.7
MW-11	12/6/2011	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 50	292	726	< 10	< 10
MW-11	3/8/2012	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 50	179	< 396	< 10	< 10
MW-11	6/19/2012	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 50	< 160	< 800	< 10	< 10
MW-11	9/21/2012	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	111	268	777	< 10	< 10
MW-11	12/11/2012	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 100	< 182	204	< 3.0	< 3.0
MW-11	6/27/2013	< 0.5	0.5	< 0.5	< 1.0	< 0.5	--	--	< 50	88	290	< 10	< 10
MW-11	9/26/2013	< 0.5	2.0	< 0.5	< 1.0	< 0.5	--	--	63	< 270	< 270	< 10	< 10
MW-11	11/15/2013	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	--	--	< 50	< 260	< 260	< 10	< 10
MW-11	2/13/2014	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	150	1,500 BY	2,700 BY	< 2.0	1.1 J
MW-11	4/2/2014	< 1.1	< 0.89	< 0.89	< 0.82	< 0.74	--	--	25 J	850 BY	1,700 BY	< 0.17	0.77 J
MW-11	7/11/2014	< 0.14	< 0.16	< 0.13	< 0.12	< 0.17	--	--	34 JB	360 BY	470 Y	< 0.17	0.81 J

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ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Constituent		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
Unit		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MTCA Method A Cleanup Levels		5	1,000	700	1,000	20	0.01	5	1,000	500	500	15 ¹	15
MW-11	10/22/2014	0.29 J	< 1.0	< 1.0	0.26 JB	< 1.0	--	--	58 B	430 Y	190 J	< 2.0	0.87 JB
MW-11	1/21/2015	< 0.14	< 0.16	< 0.13	< 0.12	< 0.17	--	--	33 J	230 H1BY^	180 J^H1	< 0.17	0.32 J
MW-11	12/14/2015	< 0.42	< 0.44*	< 0.51	< 0.50	< 0.17	--	--	48 J	170 B	95 J	--	--
MW-11	3/10/2016	0.035 J	< 0.025	< 0.030	< 0.060	< 0.025	--	--	41 J	420	700	--	--
MW-11	6/1/2016	< 0.42	< 0.18	< 0.21	< 0.49	< 0.11	--	--	40 J	460 B	340	--	--
MW-11	8/29/2016	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0 F1*	--	--	95	480 B	380 B	0.55 J	0.44 J
MW-11	11/21/2016	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	110	930	1,300	< 2.0	< 2.0
MW-11	2/15/2017	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	65	440	480	< 2.0	< 2.0
MW-11	5/26/2017	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 500	450	670	< 4.0	< 4.0
MW-11	10/17/2017	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	740	760	< 4.0	< 4.0
MW-11	2/8/2018	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	660	1,400	< 4.0	< 4.0
MW-11	9/11/2018	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 250	580	620	< 4.0	< 4.0
MW-11	11/15/2018	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 250	720	1,100	< 4.0	< 4.0
MW-11	1/29/2019	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 250	810	850	< 4.0	< 4.0
MW-11	9/26/2019	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	1,000	1,000	< 4.0	< 4.0
MW-11	3/9/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	930	1,500	< 4.0	< 4.0
MW-11	9/28/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	590	770	< 4.0	< 4.0
MW-11	3/24/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	440	1,200	< 2.0	< 2.0
MW-11	11/5/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	720	790	< 2.0	< 2.0
MW-11	9/7/2022	--	--	--	--	--	--	--	--	210	< 250	--	--
MW-11	3/30/2023	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.01 *+	< 1.0	< 50	660	1,400	< 2.0	< 2.0
MW-11	9/20/2023	--	--	--	--	--	< 0.01	< 1.0	--	1,000	1,000	--	--
MW-11	3/7/2024	--	--	--	--	--	--	--	--	680	2,000	--	--
MW-11	9/5/2024	--	--	--	--	--	--	--	--	780	860	--	--
MW-11	5/27/2025	--	--	--	--	--	--	--	--	285	477	--	--
MW-11DUP	5/27/2025	--	--	--	--	--	--	--	--	283	478	--	--
MW-12	7/11/1996	624	174	41.6	164	--	--	--	2,620	618	--	--	--
MW-12	10/10/1996	264	2.98	3.23	60.4	--	--	--	1,720	< 250	< 750	--	--
MW-12	3/11/1997	4.02	1.01	< 0.5	9.94	--	--	--	541	402	< 750	--	--
MW-12	5/29/1997	31.1	0.530	< 0.5	16.7	--	--	--	2,100	1,460	2,500	--	--
MW-12	8/5/1997	193	5.16	5.19	87.9	--	--	--	2,010	712	< 750	--	--
MW-12	10/23/1997	71.7	< 0.5	< 0.5	5.78	--	--	--	358	996	1,840	--	--
MW-12	3/11/1998	204	9.30	< 1.0	18	--	--	--	398	< 250	< 750	--	--
MW-12	6/30/1998	134	< 2.50	< 5.00	< 30	--	--	--	8,070	289	--	--	--
MW-12	12/29/1998	85.9	< 1.0	< 1.0	5.80	--	--	--	313	< 250	< 750	--	--
MW-12	3/9/1999	62.1	1.71	< 3.0	< 41.0	--	--	--	6,920	770	1,810	--	--
MW-12	6/27/2001	2,920	452	275	1,360	350	--	--	33,600	679	< 750	--	--
MW-12	9/26/2001	619	1,380	966	6,890	< 50	--	--	3,630,000	23,900	37,800	--	--
MW-12	12/3/2001	4,180	323	315	1,580	386	--	--	27,600	4,450	7,690	--	--
MW-12	6/26/2003	712	878	258	1,780	< 20.0	--	--	17,000	62,300	87,100	4.93	315
MW-12	12/9/2003	2,520	338	142	1,320	114	--	--	18,000	2,730	4,960	4.84	4.77
MW-12	4/7/2004	641	655	201	1,590	< 10	--	--	19,200	204,000	314,000	8.61	536

Table 2
Groundwater Analytical Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Constituent		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
Unit		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MTCA Method A Cleanup Levels		5	1,000	700	1,000	20	0.01	5	1,000	500	500	15¹	15
MW-12	11/16/2004	757	1,230	283	2,090	< 20	--	--	25,800	111,000	27,800	2.92	9.64
MW-12	3/29/2005	462	655	250	2,470	< 40	< 0.01	< 10	18,600	2,150,000	590,000	--	313
MW-12	6/22/2005	1,190	434	350	2,320	< 20	--	--	102,000	26,900	8,180	3.61	38
MW-12	9/12/2005	758	631	250	1,480	< 2.0	--	--	12,900	242,000	561,000	4.64	37.5
MW-12	12/6/2005	481	1,480	1,560	11,600	< 100	--	--	18,800	145,000	290,000	12	76.3
MW-12	6/5/2006	721	61.8	190	1,170	< 20	--	--	11,400	14,300	27,700	1.52	3.23
MW-12	9/29/2006	272	4.79	195	1,020	--	--	--	16,700	--	--	--	--
MW-12	12/19/2006	346	36.6	81.0	620	--	--	--	41,400	--	--	--	--
MW-12	12/31/2007	378	7.48	104	503	< 1.0	--	--	10,800	1,440	3,260	--	--
MW-12	1/29/2008	409	8.39	96.4	584	< 1.0	--	--	11,100	619	1,510	--	--
MW-12	1/6/2009	4.2	0.89	22.5	186	< 1.0	--	--	6,250	358	744	--	--
MW-12	4/8/2009	0.949	0.647	4.0	52.6	< 1.0	--	--	4,420	722	1,170	7.86	36
MW-12	7/8/2009	< 1.0	< 2.5	< 2.5	8.45	< 10	--	--	1,790	< 250	< 500	5.61	8.45
MW-12	10/6/2009	1.9	< 1.0	1.0	9.3	< 1.0	--	--	3,600	2,210	2,040	< 2.0	4.2
MW-12	1/6/2010	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	3,700	5,500	1,100	2.0	4.8
MW-12	5/25/2010	< 0.5	< 0.5	< 0.5	4.4	< 1.0	--	--	2,900	3,800	2,900	< 2.0	2.6
MW-12	8/19/2010	0.89	0.59	0.51	3.4	< 1.0	--	--	1,800	2,000	380	< 2.0	3.5
MW-12	12/7/2010	1.9	0.66	0.51	3.6	< 1.0	--	--	2,300	1,700	1,300	< 2.0	2.3
MW-12	1/26/2011	< 0.5	< 0.5	< 0.5	1.2	< 1.0	--	--	610	1,100	2,900	< 2.0	< 2.0
MW-12	6/16/2011	< 0.5	< 0.5	< 0.5	1.7	< 1.0	--	--	860	2,600	1,900	< 2.0	< 2.0
MW-12	9/22/2011	1.5	< 0.5	0.69	7.0	< 1.0	--	--	1,800	8,770	15,200	< 2.0	21
MW-12	12/6/2011	2.5	< 1.0	1.3	< 3.0	< 1.0	--	--	9,590	14,500	38,600	< 10	< 10
MW-12	3/8/2012	1.7	< 1.0	< 1.0	< 3.0	< 1.0	--	--	1,460	298	< 400	< 10	< 10
MW-12	6/19/2012	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 50	266	< 800	< 10	< 10
MW-12	9/21/2012	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	968	1,030	2,860	< 10	< 10
MW-12	12/11/2012	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 100	542	1,890	< 3.0	< 3.0
MW-12	6/27/2013	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	--	--	170	120	380	< 10	< 10
MW-12	9/26/2013	0.63	1.3	< 0.5	< 1.0	< 0.5	--	--	210	< 260	830	< 10	< 10
MW-12	11/15/2013	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	--	--	86 Y	400 H	1,200 O	< 10	< 10
MW-12	2/13/2014	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	170	940 BY	1,400 BY	< 2.0	0.57 J
MW-12	4/2/2014	< 1.1	< 0.89	< 0.89	< 0.82	< 0.74	--	--	15 J	190 BY	320 BY	< 0.17	0.36 J
MW-12	7/11/2014	0.35 J	< 0.16	< 0.13	< 0.12	< 0.17	--	--	100 B	460 BY	300 Y	< 0.17	0.54 J
MW-12	10/22/2014	3.9	0.46 J	0.91 J	1.4 JB	< 1.0	--	--	770 B	830 Y	790 Y	< 2.0	4.0 B
MW-12	1/21/2015	< 0.14	< 0.16	< 0.13	< 0.12	< 0.17	--	--	100	250 H1BY^	250 H1Y^	< 0.17	0.60 J
MW-12	12/16/2015	0.64 J*	< 0.44 *	< 0.51 *	< 0.50	< 0.17	--	--	170	1,300	1,900	--	--
MW-12	3/11/2016	0.086 J	< 0.025	< 0.03	< 0.060	< 0.025	--	--	53	240	320	< 0.17	0.32 J
MW-12	6/1/2016	< 0.42	< 0.18	< 0.21	< 0.49	< 0.11	--	--	85	390	310	< 0.17	390 J
MW-12	8/29/2016	1.5 J	0.46 J	< 3.0	< 3.0	< 1.0 *	--	--	120	470 B	170 JB	0.24 J	0.33 J
MW-12	11/21/2016	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	91	1,000	1,400	< 2.0	< 2.0
MW-12	2/15/2017	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	52	240	300	< 2.0	< 2.0
MW-12	5/26/2017	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 500	150	< 260	< 4.0	< 4.0
MW-12	10/17/2017	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	530	510	< 4.0	< 4.0
MW-12	2/8/2018	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	170	< 390	< 4.0	< 4.0

Table 2
Groundwater Analytical Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Constituent		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
Unit		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MTCA Method A Cleanup Levels		5	1,000	700	1,000	20	0.01	5	1,000	500	500	15 ¹	15
MW-12	9/11/2018	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 250	420	400	< 4.0	< 4.0
MW-12	11/15/2018	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 250	630	570	< 4.0	< 4.0
MW-12	1/29/2019	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 250	790	1,200	< 4.0	< 4.0
MW-12	9/26/2019	< 3.0	2.1	< 3.0	< 3.0	< 2.0	--	--	< 250	680	510	< 4.0	< 4.0
MW-12	3/9/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	890	2,100	< 4.0	< 4.0
MW-12	9/28/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	1,200	780	< 4.0	< 4.0
MW-12	3/23/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	2,500	2,500	< 2.0	< 2.0
MW-12	9/28/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	1,400	750 *+	< 2.0	< 2.0
MW-12	11/8/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	3,100	1,600	< 2.0	< 2.0
MW-12	12/13/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	470	860	< 2.0	< 2.0
MW-12	3/30/2022	< 1.0	< 1.0 *+	< 1.0	< 2.0	< 1.0	--	--	< 50	180	< 350	< 2.0	< 2.0
MW-12	4/7/2022	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 50	240	470	< 2.0	< 2.0
MW-12	6/27/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	160	< 250	< 0.50	< 0.50
MW-12	9/7/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	660	< 250	< 2.0	< 2.0
MW-12	3/29/2023	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.01	< 1.0	< 50	240	420	< 2.0	< 2.0
MW-12	9/19/2023	--	--	--	--	--	< 0.01	< 1.0	--	1,200	820	--	--
MW-12	3/7/2024	--	--	--	--	--	--	--	--	170	400	--	--
MW-12	9/5/2024	--	--	--	--	--	--	--	--	670	850	--	--
MW-12	5/27/2025	--	--	--	--	--	--	--	--	< 76.2	431	--	--
MW-13	9/26/2019	140	3.2 F1	19 F1	140	< 2.0 F1F2	--	--	2,900	6,900	3,500 F1	< 4.0	< 4.0
MW-13	3/9/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	170	< 350	< 4.0	< 4.0
MW-13	9/28/2020	16	< 2.0	20	35	< 2.0	--	--	1,100	990	590	< 4.0	< 4.0
MW-13	3/23/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	260	210	< 360	< 2.0	< 2.0
MW-13	9/28/2021	27	1.0	8.8	16	< 1.0	--	--	880	2,300	1,400	< 2.0	< 2.0
MW-13	11/8/2021	< 1.0	< 1.0	< 1.0	15	< 1.0	--	--	790	590	410	< 2.0	2.5
MW-13	3/30/2022	< 1.0	< 1.0 *+	< 1.0	< 2.0	< 1.0	--	--	< 50	--	--	--	--
MW-13	6/27/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	--	--	--	--
MW-13	9/7/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	230	< 250	< 2.0	45
MW-13	3/29/2023	< 1.0 H	< 1.0 H	< 1.0 H	< 2.0 H	< 1.0 H	< 0.01	< 1.0 H	< 50	360	< 350	< 2.0	< 2.0
MW-13	9/19/2023	--	--	--	--	--	< 0.01	< 1.0	--	4,200	< 360	< 2.0	4.3
MW-13	3/7/2024	--	--	--	--	--	--	--	--	110	< 360	< 2.0	< 2.0
MW-13	9/5/2024	--	--	--	--	--	--	--	--	490	< 340	< 2.0	2.8
MW-13	5/27/2025	--	--	--	--	--	--	--	--	< 76.9	< 154	--	--
MW-14	9/26/2019	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 110	< 350	< 4.0	< 4.0
MW-14	3/9/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 110	< 360	< 4.0	< 4.0
MW-14	9/28/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 110	< 340	< 4.0	< 4.0
MW-14	3/24/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	< 110	< 350	< 2.0	< 2.0
MW-15	9/26/2019	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	1,100	710	< 4.0	< 4.0
MW-15	3/9/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	210	< 360	< 4.0	< 4.0
MW-15	3/23/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	150	< 360	< 2.0	< 2.0

Table 2
Groundwater Analytical Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Constituent		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
Unit		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MTCA Method A Cleanup Levels		5	1,000	700	1,000	20	0.01	5	1,000	500	500	15 ¹	15
MW-15	11/8/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	130	< 360	< 2.0	< 2.0
MW-15	3/30/2022	< 1.0	3.4	1.0	< 2.0	< 1.0	--	--	< 50 *3	< 120	< 380	< 2.0	3.0
MW-15	6/27/2022	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	7/5/2022	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 50	--	--	--	--
MW-15	9/7/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	< 110	< 280	< 2.0	6.8
MW-16	9/26/2019	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	540	350	< 4.0	< 4.0
MW-16	3/9/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 110 **1	< 350 **1	< 4.0	< 4.0
MW-16	9/28/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 110	< 340	< 4.0	< 4.0
MW-16	3/23/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	< 120	< 370	< 2.0	< 2.0
MW-16	9/19/2023	--	--	--	--	--	< 0.01	< 1.0	--	--	--	--	--
MW-17	12/14/2020	< 3.0	< 2.0	< 3.0	< 3.0	--	--	--	< 250	< 110	< 350	< 4.0	< 4.0
MW-17	3/23/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	< 110	< 360	< 2.0	< 2.0
MW-18	12/14/2020	< 3.0	< 2.0	< 3.0	< 3.0	--	--	--	< 250	< 110	< 350	< 4.0	< 4.0
MW-18	3/23/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	< 120	< 370	< 2.0	< 2.0
MW-19	12/14/2020	< 3.0	< 2.0	< 3.0	< 3.0	--	--	--	< 250	< 110	< 360	< 4.0	< 4.0
MW-19	3/23/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	< 110	< 360	< 2.0	< 2.0
MW-19	11/8/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	< 110	< 360	< 2.0	< 2.0
MW-19	3/30/2022	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 50	< 110	< 360	< 2.0	< 2.0
MW-19	6/27/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	< 100	< 250	< 0.50	< 0.50
MW-19	9/7/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	< 100	< 260	< 2.0	< 2.0
MW-20	9/28/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	160	390 *+	< 2.0	< 2.0
MW-20	3/30/2022	< 1.0	< 1.0 F1	< 1.0 F1	< 2.0 F1	1.1	--	--	< 50	110	< 350	< 2.0	< 2.0
MW-20	9/7/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	< 110 F1	< 270	< 2.0	< 2.0
MW-20	3/30/2023	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.01 *+	< 1.0	< 50	150	< 360	< 2.0	< 2.0
MW-20	9/20/2023	--	--	--	--	--	< 0.01	< 1.0	--	--	--	--	--
MW-21	9/28/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	350	510 *+	< 2.0	< 2.0
MW-21	3/30/2022	< 1.0	< 1.0 *+	< 1.0	< 2.0	< 1.0	--	--	< 50	110	< 350	< 2.0	< 2.0
MW-21	9/7/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	< 100	< 260	< 2.0	< 2.0
MW-21	3/30/2023	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.01 *+	< 1.0	< 50	140	< 360	< 2.0	< 2.0
MW-21	9/20/2023	--	--	--	--	--	< 0.01	< 1.0	--	180	< 370	--	--
MW-22	5/27/2025	< 0.2	< 1.0	< 0.5	< 1.5	< 1.0	< 0.5	< 0.4	< 100	< 76.9	< 154	< 0.2	< 0.2
MW-23	3/29/2023	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.01	< 1.0	< 50	190	370	< 2.0	< 2.0
MW-23	6/28/2023	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.01	< 1.0	< 50	< 110	< 360	< 2.0	< 2.0
MW-23	9/19/2023	--	--	--	--	--	--	--	--	170	< 360	--	--
MW-23	12/6/2023	--	--	--	--	--	--	--	--	200	550	--	--

Table 2
Groundwater Analytical Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Constituent		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
Unit		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MTCA Method A Cleanup Levels		5	1,000	700	1,000	20	0.01	5	1,000	500	500	15 ¹	15
MW-23	3/7/2024	--	--	--	--	--	--	--	--	200	620	--	--
MW-23	9/5/2024	--	--	--	--	--	--	--	--	< 200	360	--	--
MW-23	5/27/2025	--	--	--	--	--	--	--	--	< 76.9	< 154	--	--
MW-24	3/29/2023	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.01	< 1.0	< 50	< 110	< 350	< 2.0	< 2.0
MW-24	6/28/2023	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.01	< 1.0	< 50	< 110	< 350	< 2.0	< 2.0
MW-25	5/27/2025	< 0.2	< 1.0	< 0.5	< 1.5	< 1.0	< 0.5	< 0.4	< 100	< 77.7	< 155	< 0.2	< 0.2
B1 (JPHC)	1/23/1996	1,500	1,200	1,200	7,900	--	--	--	3,900,000	7,200	15,000	--	--
B1 (JPHC)	3/11/1997	< 2.5	< 2.5	< 2.5	< 5.0	--	--	--	2,600	16,500	34,300	--	--
B1 (JPHC)	5/29/1997	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	934	14,000	32,400	--	--
B1 (JPHC)	8/5/1997	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	238	7,500	16,100	--	--
B1 (JPHC)	10/23/1997	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	240	75,500	280,000	--	--
B1 (JPHC)	3/11/1998	3.15	13.6	2.1	31.4	--	--	--	894	< 250	< 750	--	--
B1 (JPHC)	6/30/1998	203	< 10.0	< 10.0	< 60.0	--	--	--	23,100	3,540	--	--	--
B1 (JPHC)	12/29/1998	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	1,170	2,730	--	--
B1 (JPHC)	3/9/1999	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	746	1,830	--	--
B1 (JPHC)	6/2/1999	57.3	5.34	0.729	5.70	--	--	--	196	1,050	1,530	--	--
B1 (JPHC)	3/16/2000	538	119	42.6	142	--	--	--	2,170	4,580	1,880	--	--
B1 (JPHC)	6/30/2000	1,430	629	155	658	--	--	--	6,510	4,820	973	--	--
B1 (JPHC)	9/27/2000	1,180	203	62.0	309	--	--	--	6,780	6,490	8,870	--	--
B1 (JPHC)	11/10/2000	2,260	456	159	621	--	--	--	8,610	2,230	5,090	--	--
B1 (JPHC)	3/19/2001	1,400	569	138	672	212	--	--	9,680	1,360	1,450	--	--
B1 (JPHC)	6/27/2001	1,360	2,230	419	2,060	< 125	--	--	47,300	73,900	132,000	--	--
B1 (JPHC)	9/26/2001	1,930	1,370	1,180	8,990	40.4	--	--	4,790,000	197,000	304,000	--	--
B1 (JPHC)	12/3/2001	204	727	290	1,790	48.7	--	--	40,500	14,300	28,200	--	--
B1 (JPHC)	6/26/2003	2,850	286	584	2,570	19.1	--	--	31,600	185,000	263,000	14.3	447
B1 (JPHC)	12/9/2003	454	10.7	34.8	354	< 5.0	--	--	4,650	10,700	20,500	1.62	4.60
B1 (JPHC)	4/7/2004	2,650	428	383	1,730	< 100	--	--	24,500	11,200	20,200	13.3	5.13
B1 (JPHC)	11/16/2004	3,470	15	260	1,190	< 40	--	--	45,000	6,730	3,770	1.39	9.55
B1 (JPHC)	3/29/2005	3,800	267	600	2,330	< 40	< 0.01	< 10	19,500	50,400	18,600	--	26.6
B1 (JPHC)	6/22/2005	594	80.8	326	1,450	< 10	--	--	9,760	13,300	7,820	1.73	24.5
B1 (JPHC)	9/12/2005	3,890	64.4	986	4,280	25.4	--	--	115,000	4,270	7,990	11.5	69.4
B1 (JPHC)	12/6/2005	5,400	99.0	625	2,220	< 100	--	--	25,400	6,360	12,700	1.51	4.1
B1 (JPHC)	6/5/2006	4,440	75.0	316	885	< 100	--	--	16,800	4,750	--	1.56	21.5
B1 (JPHC)	12/19/2006	17.8	< 0.5	< 0.5	34.2	--	--	--	4,140	--	--	--	--
B1 (JPHC)	7/1/2008	< 0.5	< 0.5	< 0.5	< 3.0	4.44	--	--	486	252	671	--	4.39
B1 (JPHC)	10/3/2008	< 0.5	< 0.5	< 0.5	< 3.0	2.82	--	--	5,870	4,260	10,400	--	18.4
B1 (JPHC)	1/6/2009	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	163	2,270	7,700	--	8.21
B1 (JPHC)	4/8/2009	< 0.5	< 0.5	< 0.5	1.13	1.12	--	--	185	< 245	< 490	5.19	5.36
B1 (JPHC)	7/8/2009	24.6	< 0.5	< 0.5	< 1.0	< 2.0	--	--	152	< 240	< 481	5.74	6.81
B1 (JPHC)	10/6/2009	54	1.2	3.6	< 2.0	< 1.0	--	--	950	315	534	5.6	31

Table 2
Groundwater Analytical Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Constituent		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
Unit		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MTCA Method A Cleanup Levels		5	1,000	700	1,000	20	0.01	5	1,000	500	500	15¹	15
B1 (JPHC)	1/6/2010	110	2.2	9.5	10	< 1.0	--	--	1,000	810	< 240	6.9	7.7
B1 (JPHC)	5/25/2010	250	11	26	64	< 1.0	--	--	1,400	13,000	720	6.5	13
B1 (JPHC)	8/19/2010	280	26	32	120	< 1.0	--	--	2,000	11,000	780	5.0	11
B1 (JPHC)	12/7/2010	150	42	39	160	< 1.0	--	--	2,900	4,700	650	4.8	6.6
B1 (JPHC)	1/26/2011	41	16	21	100	< 1.0	--	--	1,200	3,000	370	4.1	4.9
B1 (JPHC)	6/16/2011	140	8.2	52	340	< 1.0	--	--	4,600	7,700	1,600	4.2	8.0
B1 (JPHC)	9/22/2011	3.3	< 0.5	2.7	9.2	1.5	--	--	520	304	< 476	< 2.0	3.3
B1 (JPHC)	12/6/2011	< 1.0	< 1.0	< 1.0	< 3.0	1.6	--	--	337	129	< 381	< 10	< 10
B1 (JPHC)	3/8/2012	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	83.0	86.6	< 400	< 10	< 10
B1 (JPHC)	6/19/2012	16.9	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 50	697	< 800	< 10	< 10
B1 (JPHC)	9/21/2012	37.5	< 1.0	< 1.0	< 3.0	< 1.0	--	--	448	232	546	< 10	< 10
B1 (JPHC)	12/11/2012	9.4	< 1.0	< 1.0	< 3.0	< 1.0	--	--	359	989	464	< 3.0	< 3.0
B1 (JPHC)	6/26/2013	150	2.2	23	41	< 0.50	--	--	1,000	140	250	11	11
B1 (JPHC)	9/26/2013	150	3.6	29	75	< 0.50	--	--	990	< 260	< 260	< 10	< 10
B1 (JPHC)	11/15/2013	200 D	4.4	31	89	< 0.50	--	--	1,000 Y	< 260	< 260	< 10	< 10
B1 (JPHC)	2/13/2014	150	3.9	29	86	< 1.0	--	--	2,100	4,800 BY	670 BY	1.3 J	2.0
B1 (JPHC)	4/2/2014	110	3.4 J	23	70	< 0.74	--	--	1,800	4,500 BY	410 BY	0.93 J	1.4 J
B1 (JPHC)	7/11/2014	140	3.9	32	100	< 0.17	--	--	1,600 B	5,400 BY	600 Y	1.0 J	1.4 J
B1 (JPHC)	10/22/2014	160	4.9	39	180 B	0.20 J	--	--	2,500 B	2,300 Y	30 J	0.60 J	1.4 JB
B1 (JPHC)	1/21/2015	130	2.4	21	88	< 0.17	--	--	1,700	4,600 H1BY^	300 H1Y^	0.39 J	0.51 J
B1 (JPHC)	12/16/2015	89	2.0	15	36	< 0.17	--	--	1,600	2,600	330	--	--
B1 (JPHC)	3/11/2016	80	0.99 J	7.9	22	0.27 J	--	--	950	4,300	1,000	< 0.17	0.27 J
B1 (JPHC)	6/1/2016	93	2.1	10	34	< 0.11	--	--	1,400	4,400	1,000	0.32 J	1.6 J
B1 (JPHC)	8/29/2016	140	3.3	15	79	< 1.0 *	--	--	1,900	3,300 B	410 B	0.39 J	0.39 J
B1 (JPHC)	11/21/2016	120	3.0	15	78	< 1.0	--	--	2,100	4,400	1,300	< 2.0	< 2.0
B1 (JPHC)	2/15/2017	86	< 2.0	10	40	< 1.0	--	--	1,600	3,800	880	< 2.0	< 2.0
B1 (JPHC)	5/26/2017	67	< 2.0	6.3	24 F1	< 2.0	--	--	1,100 F1	4,200	1,200	< 4.0	< 4.0
B1 (JPHC)	10/17/2017	97	2.0	7.7	48	< 2.0	--	--	1,700	4,600	1,300	< 4.0	< 4.0
B1 (JPHC)	2/8/2018	88	< 2.0	6.6	39	< 2.0	--	--	1,400	3,700	1,500	< 4.0	< 4.0
B1 (JPHC)	9/11/2018	130	< 2.0	6.0	38	< 1.0	--	--	1,600	5,100	2,000	< 4.0	< 4.0
B1 (JPHC)	11/15/2018	130	2.4	6.3	51	< 1.0	--	--	2,500	5,300	3,000	< 4.0	< 4.0
B1 (JPHC)	1/29/2019	57	< 2.0	3.7	34	< 1.0	--	--	1,800	3,600	2,100	< 4.0	< 4.0
B1 (JPHC)	9/26/2019	80	3.2	3.1	39	< 2.0	--	--	1,700	3,900	2,200	< 4.0	< 4.0
B1 (JPHC)	3/9/2020	11	< 2.0	< 3.0	11	< 2.0	--	--	980	1,200 **1	< 360 **1	< 4.0	< 4.0
B1 (JPHC)	9/28/2020	13	< 2.0	< 3.0	11	< 2.0	--	--	870	2,200	1,300	< 4.0	< 4.0
B1 (JPHC)	3/23/2021	9.4	< 1.0	< 1.0	3.4	< 1.0	--	--	640	1,600	1,000	< 2.0	< 2.0
B1 (JPHC)	11/8/2021	19	< 1.0	1.4	9.3	< 1.0	--	--	910	2,500	1,700	< 2.0	< 2.0
B1 (JPHC)	12/13/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	670	< 360	< 2.0	2.2
B1 (JPHC)	3/30/2022	12	< 1.0	< 1.0	< 2.0	< 1.0	--	--	76 *3	1,100	550	< 2.0	< 2.0
B1 (JPHC)	6/27/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	330	< 260	< 0.50	1.8
B1 (JPHC)	9/7/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	700	400	< 2.0	< 2.0
B1 (JPHC)	3/29/2023	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.01	< 1.0	< 50	570	< 370	< 2.0	< 2.0
B1 (JPHC)	9/19/2023	< 1.0	< 1.0	< 1.0	< 2.0	--	< 0.01	< 1.0	--	630	420	--	--

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Groundwater Analytical Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Constituent		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
Unit		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MTCA Method A Cleanup Levels		5	1,000	700	1,000	20	0.01	5	1,000	500	500	15 ¹	15
B1 (JPHC)	3/7/2024	--	--	--	--	--	--	--	--	580	420	--	--
B1 (JPHC)	9/5/2024	--	--	--	--	--	--	--	--	740	520	--	--
B1 (JPHC)	5/27/2025	--	--	--	--	--	--	--	--	1,200	< 152	--	--
B3 (JPHC)	2/15/1995	1.0	< 0.5	< 0.5	< 1.0	--	--	--	< 50	340	1,200	--	10
B3 (JPHC)	4/11/1995	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	--	--	--	--
B3 (JPHC)	7/20/1995	< 0.5	0.90	< 0.5	2.6	--	--	--	91	370	< 750	--	--
B3 (JPHC)	10/25/1995	0.57	2.6	0.84	9.0	--	--	--	750	810	1,600	--	--
B3 (JPHC)	1/23/1996	0.64	11	3.6	35.0	--	--	--	5,400	810	1,900	--	--
B3 (JPHC)	4/17/1996	< 0.5	1.0	< 0.5	< 1.0	--	--	--	80	330	< 750	--	--
B3 (JPHC)	7/8/1996	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	415	< 750	--	--
B3 (JPHC)	10/10/1996	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	< 250	< 750	--	--
B3 (JPHC)	3/11/1997	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	407	< 750	--	--
B3 (JPHC)	5/29/1997	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	402	1,180	--	--
B3 (JPHC)	8/5/1997	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	269	< 750	--	--
B3 (JPHC)	3/11/1998	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 80	< 250	< 750	--	--
B3 (JPHC)	6/30/1998	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	76.6	< 250	--	--	--
B3 (JPHC)	9/25/1998	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	< 250	< 750	--	--
B3 (JPHC)	12/29/1998	< 2.5	< 2.5	< 2.5	< 5.0	--	--	--	< 250	< 250	< 750	--	--
B3 (JPHC)	3/9/1999	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	< 250	< 750	--	--
B3 (JPHC)	6/2/1999	< 0.5	5.43	< 0.5	4.39	--	--	--	51.9	< 250	< 750	--	--
B3 (JPHC)	12/20/1999	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	98.2	< 250	--	--	--
B3 (JPHC)	9/27/2000	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 50	< 250	< 750	--	--
B3 (JPHC)	11/10/2000	< 0.5	< 0.5	< 0.5	< 1.0	--	--	--	< 80	< 250	< 750	--	--
B3 (JPHC)	3/19/2001	< 0.5	< 0.5	< 0.5	< 1.0	204	--	--	< 50	1,180	2,750	--	--
B3 (JPHC)	6/27/2001	< 0.5	< 0.5	< 0.5	< 1.0	9.44	--	--	< 50	< 250	< 750	--	--
B3 (JPHC)	9/26/2001	< 0.5	< 0.5	< 0.5	< 1.0	8.06	--	--	< 50	< 250	< 750	--	--
B3 (JPHC)	12/3/2001	< 0.5	< 0.5	< 0.5	< 1.0	49.3	--	--	< 50	< 250	< 500	--	--
B3 (JPHC)	6/6/2002	< 0.5	1.05	< 0.5	< 1.0	5.03	< 0.01	< 1.0	< 50	< 250	< 500	< 1.0	23.5
B3 (JPHC)	6/26/2003	< 0.5	< 0.500	1.30	7.36	< 1.00	--	--	296	289	< 500	< 1.0	11.3
B3 (JPHC)	12/9/2003	< 0.5	< 0.5	< 0.5	< 1.0	1.61	--	--	< 50	< 250	< 500	< 1.0	< 1.0
B3 (JPHC)	11/16/2004	< 0.2	< 0.5	< 0.5	< 1.0	3.76	--	--	< 80	< 250	< 500	< 1.0	2.28
B3 (JPHC)	3/29/2005	< 0.2	< 0.5	< 0.5	< 1.0	2.58	< 0.01	< 0.5	< 80	< 250	< 500	--	2.09
B3 (JPHC)	6/22/2005	< 0.2	< 0.5	< 0.5	< 1.0	< 2.0	--	--	< 80	291	< 500	< 1.0	18.9
B3 (JPHC)	9/12/2005	< 0.5	< 0.5	< 0.5	< 1.0	3.82	--	--	< 50	< 250	< 500	< 1.0	4.12
B3 (JPHC)	12/6/2005	< 0.5	< 0.5	< 0.5	< 1.0	4.49	--	--	74.3	253	< 485	< 1.0	3.25
B3 (JPHC)	6/5/2006	< 0.5	< 0.5	< 0.5	< 1.0	1.17	--	--	< 50	< 278	< 556	< 1.0	1.95
B3 (JPHC)	9/24/2007	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 245	< 490	--	--
B3 (JPHC)	1/29/2008	< 0.5	< 0.5	< 0.5	< 3.0	< 1.0	--	--	< 50	< 238	< 476	--	1.59
B3 (JPHC)	7/1/2008	< 0.5	< 0.5	< 0.5	< 3.0	15.6	--	--	< 50	< 236	< 472	--	< 1.0
B3 (JPHC)	10/3/2008	< 0.5	< 0.5	< 0.5	< 3.0	23.5	--	--	< 50	< 236	< 472	--	16.9
B3 (JPHC)	1/6/2009	< 0.5	< 0.5	< 0.5	< 3.0	24.1	--	--	< 50	< 236	< 472	--	7.6
B3 (JPHC)	4/8/2009	< 0.5	< 0.5	< 0.5	< 1.0	5.94	--	--	< 50	< 240	< 481	< 1.0	1.62

Table 2
Groundwater Analytical Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Constituent		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
Unit		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MTCA Method A Cleanup Levels		5	1,000	700	1,000	20	0.01	5	1,000	500	500	15 ¹	15
B3 (JPHC)	7/8/2009	< 0.2	< 0.5	< 0.5	< 1.0	< 2.0	--	--	< 80	842	< 472	< 1.0	< 1.0
B3 (JPHC)	10/6/2009	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	130	< 236	< 472	< 2.0	7.6
B3 (JPHC)	1/6/2010	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 50	< 120	< 240	< 2.0	< 2.0
B3 (JPHC)	5/25/2010	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 120	< 240	< 2.0	< 2.0
B3 (JPHC)	8/19/2010	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	340	420	< 2.0	6.1
B3 (JPHC)	12/7/2010	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 120	< 240	< 2.0	6.1
B3 (JPHC)	1/26/2011	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 120	< 240	< 2.0	< 2.0
B3 (JPHC)	6/16/2011	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	260	450	< 2.0	2.3
B3 (JPHC)	9/22/2011	< 0.5	< 0.5	< 0.5	< 1.0	< 1.0	--	--	< 50	< 95.2	< 476	< 2.0	< 2.0
B3 (JPHC)	12/6/2011	< 1.0	< 1.0	< 1.0	< 3.0	2.2	--	--	< 50	< 80.0	< 400	< 10	< 10
B3 (JPHC)	3/8/2012	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 50	< 78.4	< 392	< 10	< 10
B3 (JPHC)	6/19/2012	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 50	< 160	< 800	< 10	< 10
B3 (JPHC)	9/21/2012	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 50	< 80.8	< 404	< 10	< 10
B3 (JPHC)	12/11/2012	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 100	< 182	444	< 3.0	< 3.0
B3 (JPHC)	6/26/2013	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	--	--	< 50	< 250	22	< 10	< 10
B3 (JPHC)	9/26/2013	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	--	--	< 50	< 260	< 260	< 10	< 10
B3 (JPHC)	11/15/2013	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	--	--	< 50	< 260	< 260	< 10	< 10
B3 (JPHC)	2/13/2014	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	16 J	44	46	< 2.0	< 2.0
B3 (JPHC)	4/2/2014	< 1.1	< 0.89	< 0.89	< 0.82	< 0.74	--	--	14 J	76 JB	80 JB	< 0.17	< 0.17
B3 (JPHC)	7/11/2014	< 0.14	< 0.16	< 0.13	0.13 J	< 0.17	--	--	15 JB	140 BY	130 J	0.77 J	0.22 J
B3 (JPHC)	10/22/2014	< 1.0	< 1.0	< 1.0	0.18 JB	0.72 J	--	--	< 50	210 Y	67 J	< 2.0	< 2.0
B3 (JPHC)	1/20/2015	< 0.14	< 0.16	< 0.13	< 0.12	< 0.17	--	--	31 J	210 H1BY^	170 J^H1	< 0.17	< 0.17
B3 (JPHC)	12/14/2015	< 0.42	< 0.44 *	< 0.51	< 0.50	0.19 J	--	--	< 27	57	< 30	--	--
B3 (JPHC)	3/11/2016	< 0.025	< 0.025	< 0.03	< 0.060	0.058 J	--	--	44 J	130	200 J	< 0.17	< 0.17
B3 (JPHC)	8/29/2016	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0 *	--	--	< 50	51 JB	34 JB	< 2.0	< 2.0
B3 (JPHC)	11/21/2016	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 50	110	< 250	< 2.0	< 2.0
B3 (JPHC)	2/15/2017	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 50	140	< 250	< 2.0	< 2.0
B3 (JPHC)	5/26/2017	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 500	150	< 260	< 4.0	< 4.0
B3 (JPHC)	10/17/2017	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	230	< 250	< 4.0	< 4.0
B3 (JPHC)	2/8/2018	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	160	< 430	< 4.0	< 4.0
B3 (JPHC)	9/11/2018	< 2.0	< 2.0	< 3.0	< 3.0	< 1.0	--	--	< 250	5,000	1,900	< 4.0	< 4.0
B3 (JPHC)	9/26/2019	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	180	< 350	< 4.0	< 4.0
B3 (JPHC)	3/9/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 110 **1	< 360 **1	< 4.0	< 4.0
B3 (JPHC)	3/23/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	< 110	< 370	< 2.0	< 2.0
B3 (JPHC)	3/29/2023	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.01	< 1.0	< 50	110	< 350	< 2.0	< 2.0
B3 (JPHC)	9/19/2023	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.01	< 1.0	< 50	320	490	< 2.0	< 2.0
B3 (JPHC)	3/7/2024	--	--	--	--	--	--	--	--	140	< 350	--	--
B3 (JPHC)	9/5/2024	--	--	--	--	--	--	--	--	< 200	< 350	--	--
B3 (JPHC)	5/27/2025	--	--	--	--	--	--	--	--	225	< 152	--	--
IW-1	11/17/2017	--	--	--	--	--	--	--	--	--	--	--	3.1
IW-1	12/7/2017	11	2.5	25	310	--	--	--	9,800	--	--	--	--

Table 2
Groundwater Analytical Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Constituent	B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MTCA Method A Cleanup Levels	5	1,000	700	1,000	20	0.01	5	1,000	500	500	15 ¹	15

Notes:

B = Benzene
T = Toluene
E = Ethylbenzene
X = Total xylenes
MTBE = Methyl tert-butyl ether
EDB = 1,2-Dibromoethane
EDC = 1,2-Dichloroethane
TPH-G = Total petroleum hydrocarbons as gasoline
TPH-D = Total petroleum hydrocarbons as diesel
TPH-O = Total petroleum hydrocarbons as oil
15¹ = Cleanup Level of 15 µg/L for dissolved lead is based on that for total lead
** Sample from PDB within well
ND = Not detected
< 1.0 = Concentrations were not detected above the laboratory method reporting limit
µg/L = Micrograms per liter
-- = No value given/Not analyzed/Not applicable
MTCA = Model Toxics Control Act
Results in **bold** indicate concentrations in excess of MTCA Method A Cleanup Levels

Laboratory Qualifiers:

* = Lab Control Spike (LCS) or Lab Control Spike Duplicate (LCSD) is outside acceptance limits
*1 = LCS/LCSD Relative Percentage Difference (RPD) exceeds control limits
*3 = Internal Standard (ISTD) response or retention time outside acceptable limits
Y = The chromatographic response resembles a typical fuel pattern
J = Result is less than the RL but greater than or equal to the Method Detection Limit (MDL) and the concentration is an approximate value
B = Compound was found in the blank and sample
H and H1 = Sample was prepped or analyzed beyond the specific holding time
F1 = Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) Recovery is outside acceptance limits
F2 = MS/MSD RPD exceeds control limits
^ = Re-extraction and re-analysis of samples was performed beyond the specified holding time as the LCS or LCSD exceeded control limits and the compound was found in the blank and sample
D = The reported result is from a dilution
*+ = LCS and/or LCSD is outside acceptance limits, high biased

Table 3
Soil Analytical Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Constituent				B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Lead	Total Petroleum Hydrocarbons	Total Petroleum Hydrocarbons as Hydraulic Fluid	Total Recoverable Hydrocarbons	Volatile Petroleum Hydrocarbons	Total Napthalene
Unit				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
MTCA Method A Cleanup Levels				0.03	7	6	9	0.1	0.005	NVG	30	2,000	2,000	250	--	--	--	--	5
Well/Boring ID	Sample ID	Date	Depth (feet bgs)																
B-1 (1989)	B-1_5-6.5_19890912	9/12/1989	6.5	0.017	0.016	0.006	0.042	--	--	--	--	--	--	--	--	--	--	< 10	--
B-1 (1989)	B-1_15-16_19890912	9/12/1989	15-16	< 0.005	0.017	< 0.005	0.01	--	--	--	--	--	--	--	--	--	--	< 10	--
B-2 (1989)	B-2_10-10.5_19890912	9/12/1989	10-10.5	< 0.005	0.017	< 0.005	0.012	--	--	--	--	--	--	--	--	--	--	< 10	--
B-2 (1989)	B-2_15-16_19890912	9/12/1989	15-16	0.047	< 0.005	< 0.005	< 0.005	--	--	--	--	--	--	--	--	--	--	< 10	--
B-3 (1989)	B-3_5-6.5_19890912	9/12/1989	5-6.5	0.11	0.008	0.004	< 0.005	--	--	--	--	--	--	--	--	--	--	< 10	--
B-3 (1989)	B-3_10-11.5_19890912	9/12/1989	10-11.5	0.032	0.017	< 0.005	0.014	--	--	--	--	--	--	--	--	--	--	< 10	--
B-4 (1989)	B-4_5-6.5_19890912	9/12/1989	5-6.5	0.016	< 0.005	< 0.005	< 0.005	--	--	--	--	--	--	--	--	--	--	< 10	--
B-4 (1989)	B-4_10-10.5_19890912	9/12/1989	10-10.5	2.1	3.5	3.0	18	--	--	--	--	--	--	--	--	--	--	150	--
COMPOSITE	COMPOSITE_19890912	9/12/1989	--	< 0.005	< 0.005	0.006	0.032	--	--	--	--	--	--	--	--	--	--	< 10	--
EC	EC_10_19901003	10/3/1990	10	0.2	0.017 J	0.009 J	0.008 J	--	--	--	< 13	< 13	< 13	--	--	--	--	--	--
NC	NC_10_19901003	10/3/1990	10	0.006 J	0.006 J	0.006 J	0.006 J	--	--	--	< 9.3	< 9.3	< 9.3	--	--	--	--	--	--
NE	NE_15_19901003	10/3/1990	15	< 0.006	< 0.006	< 0.006	< 0.006	--	--	--	< 9.8	< 9.8	< 9.8	--	--	--	--	--	--
SE3	SE-3_15_19901003	10/3/1990	15	0.18	0.022	0.03	0.053	--	--	--	3,200	< 95	< 95	--	--	--	--	--	--
SE4	SE-4_15_19901003	10/3/1990	15	0.19	< 0.006	0.01	0.01	--	--	--	< 9.4	< 9.4	< 9.4	--	--	--	--	--	--
SW1	SW-1_15_19901002	10/2/1990	15	24	180	90	610	--	--	--	5,400	< 95	< 95	--	--	< 190	--	--	--
SW2	SW-2_5_19901002	10/2/1990	5	1.3	4.1	3.6	28	--	--	--	1,000	< 93	< 93	--	--	< 190	--	--	--
W5	W-5_5_19901002	10/2/1990	5	0.62	0.39	0.67	4.7	--	--	--	190	< 98	< 98	--	--	< 200	--	--	--
WOHOLE	WOHOLE_5-5_19901002	10/2/1990	5	--	--	--	--	--	--	--	< 93	< 93	< 93	--	--	1,100	--	--	--
WOPILE	WOPILE_19901002	10/2/1990	--	--	--	--	--	--	--	--	< 93	< 93	< 93	--	--	1,200	--	--	--
1011A	1011A_2_19901011	10/11/1990	2	20	340	140	960	--	--	--	5,800	< 9.3	< 9.3	--	--	< 18	--	--	--
1011A	1011A_20170817	8/17/2017	4	< 0.03	< 0.05	< 0.05	< 0.2	--	--	--	< 3.0	--	--	--	--	--	--	--	--
1011B	1011B_2_19901011	10/11/1990	2	< 1.0	< 1.0	< 1.0	4.4	--	--	--	1,600	< 12	< 12	--	--	96	--	--	--
1011B	1011B_20170823	8/23/2017	2.5	< 0.03	< 0.05	< 0.050	< 0.2	--	--	--	< 3.0	--	--	--	--	--	--	--	--
1011C	1011C_2_19901011	10/11/1990	2	1.5	32	11	77	--	--	--	48	< 9.7	< 9.7	--	--	48	--	--	--
1011C	1011C_20170817	8/17/2017	2.5	< 0.03	< 0.05	< 0.05	< 0.2	--	--	--	< 3.0	--	--	--	--	--	--	--	--
1016A	1016A_2_19901016	10/16/1990	2	0.7	0.013	0.12	0.49	--	--	--	320	< 9.8	< 9.8	--	--	200	--	--	--
1016A	1016A_20170817	8/17/2017	2.5	< 0.03	< 0.05	< 0.05	< 0.2	--	--	--	< 3.0	--	--	--	--	--	--	--	--
MW-1	MW-1_6_19920818	8/18/1992	6	0.049	0.038	0.21	0.72	--	--	--	16	--	--	153	--	--	--	--	--
MW-1	MW-1_11_19920818	8/18/1992	11	< 0.029	< 0.029	< 0.029	< 0.029	--	--	--	< 6.0	--	--	5.4	--	--	--	--	--
MW-2	MW-2_3.5_19920821	8/21/1992	3.5	< 0.027	0.042	< 0.027	0.068	--	--	--	< 5.0	--	--	21.9	--	--	--	--	--
MW-2	MW-2_13.5_19920821	8/21/1992	13.5	< 0.027	< 0.027	< 0.027	< 0.027	--	--	--	< 5.0	--	--	2.7	--	--	--	--	--
MW-3	MW-3_11_19920818	8/18/1992	11	< 0.027	< 0.027	< 0.027	< 0.027	--	--	--	< 5.0	--	--	2.7	--	--	--	--	--
MW-3	MW-3_16_19920818	8/18/1992	16	< 0.029	< 0.029	< 0.029	< 0.029	--	--	--	< 6.0	--	--	< 1.5	--	--	--	--	--
MW-4	MW-4_9_19920820	8/20/1992	9	< 0.027	< 0.03	< 0.027	< 0.027	--	--	--	< 5.0	--	--	2.1	--	--	--	--	--
MW-4	MW-4_19_19920820	8/20/1992	19	1.9	1.8	0.14	1.2	--	--	--	71	--	--	2.9	--	--	--	--	--
MW-5	MW-5_6_19920818	8/18/1992	6	0.077	0.33	0.037	0.2	--	--	--	20	--	--	22.8	--	--	--	--	--
MW-5	MW-5_21_19920818	8/18/1992	21	< 0.027	< 0.027	< 0.027	< 0.027	--	--	--	< 5.0	--	--	1.8	--	--	--	--	--
BV-1	BV-1_6_19920821	8/21/1992	6	< 0.027	< 0.027	< 0.027	0.079	--	--	--	< 5.0	--	--	2.2	--	--	--	--	--
BV-2	BV-2_6.5_19920821	8/21/1992	6.5	< 0.027	< 0.027	< 0.027	< 0.027	--	--	--	8.0	--	--	57.4	--	--	--	--	--
BV-2	BV-2_11.5_19920821	8/21/1992	11.5	< 0.027	< 0.027	< 0.027	< 0.027	--	--	--	< 6.0	--	--	< 1.5	--	--	--	--	--
BV-3	BV-3_6_19920819	8/19/1992	6	0.066	< 0.03	0.038	1.4	--	--	--	9.3	< 30	--	2.7	--	--	--	--	--
BV-3	BV-3_16_19920819	8/19/1992	16	0.034	0.087	0.061	0.34	--	--	--	35	< 28	--	< 1.5	--	--	--	--	--

Table 3
Soil Analytical Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Constituent				B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Lead	Total Petroleum Hydrocarbons	Total Petroleum Hydrocarbons as Hydraulic Fluid	Total Recoverable Hydrocarbons	Volatile Petroleum Hydrocarbons	Total Napthalene
Unit				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
MTCA Method A Cleanup Levels				0.03	7	6	9	0.1	0.005	NVG	30	2,000	2,000	250	--	--	--	--	5
Well/Boring ID	Sample ID	Date	Depth (feet bgs)																
BV-4	BV-4_6_19920819	8/19/1992	6	< 0.027	< 0.027	< 0.027	< 0.027	--	--	--	< 6.0	--	--	17.5	--	--	--	--	--
BV-4	BV-4_11_19920819	8/19/1992	11	< 0.028	< 0.028	< 0.028	< 0.028	--	--	--	< 6.0	--	--	6.3	--	--	--	--	--
BV-5	BV-5_5_19920821	8/21/1992	5	0.1	< 0.027	3.6	6.0	--	--	--	5,900	--	--	3.2	--	--	--	--	--
BV-5	BV-5_10_19920821	8/21/1992	10	0.095	0.19	0.077	0.34	--	--	--	36	--	--	1.6	--	--	--	--	--
MW-6	MW-6_10-10_19930324	3/24/1993	10	0.19	3.0	1.5	6.4	--	--	--	85	--	--	--	--	--	--	--	--
MW-6	MW-6_15-15_19930324	3/24/1993	15	0.063	0.13	0.064	0.31	--	--	--	6.0	--	--	--	--	--	--	--	--
BV-6	BV-6_5_19930324	3/24/1993	5	< 0.027	< 0.028	< 0.028	< 0.028	--	--	--	< 6.0	--	--	--	--	--	--	--	--
BV-6	BV-6_10_19930324	3/24/1993	10	< 0.029	0.04	0.029	0.032	--	--	--	< 6.0	--	--	--	--	--	--	--	--
BV-7	BV-7_6_19930324	3/24/1993	6	0.028	0.04	0.069	0.48	--	--	--	76	--	--	--	--	--	1,600	--	--
BV-7	BV-7_17_19930324	3/24/1993	17	0.039	0.15	0.027	0.14	--	--	--	< 5.0	--	--	--	--	--	< 22	--	--
MW-7	MW-7_10_19930324	3/24/1993	10	< 0.027	< 0.027	< 0.027	< 0.027	--	--	--	< 5.0	--	--	--	--	--	--	--	--
MW-7	MW-7_15_19930324	3/24/1993	15	< 0.027	< 0.028	< 0.028	< 0.028	--	--	--	< 6.0	--	--	--	--	--	--	--	--
B-1 (JPHC)	B-1_15_19931004	10/4/1993	15	--	--	--	--	--	--	--	--	--	--	--	370	--	--	--	--
B-1 (JPHC)	B-1_20_19931004	10/4/1993	20	< 0.5	0.23	0.2	0.74	--	--	--	66	--	--	--	1,100	--	--	--	--
B-3 (JPHC)	B-3_5_19931004	10/4/1993	5	< 0.05	0.062	< 0.05	0.285	--	--	--	< 5.0	--	--	--	2,100	--	--	--	--
B-3 (JPHC)	B-3_10_19931004	10/4/1993	10	--	--	--	--	--	--	--	--	--	2,300	--	--	--	--	--	--
VP-1	VP-1_10_19940427	4/27/1994	10	< 0.05	< 0.05	< 0.05	< 0.1	--	--	--	< 1.0	12 D-2	< 100	< 10	--	--	--	--	--
VP-1	VP-1_25_19940427	4/27/1994	25	< 0.05	< 0.05	< 0.05	< 0.1	--	--	--	< 1.0	< 10	< 100	< 10	--	--	--	--	--
VP-2	VP-2_12.5_19940427	4/27/1994	12.5	< 0.05	< 0.05	< 0.05	< 0.1	--	--	--	< 1.0	< 10	< 100	< 10	--	--	--	--	--
VP-2	VP-2_20_19940427	4/27/1994	20	< 0.05	< 0.05	< 0.05	< 0.1	--	--	--	< 1.0	< 10	< 100	< 10	--	--	--	--	--
MW-8	MW-8_15_19940428	4/28/1994	15	< 0.05	< 0.05	< 0.05	< 0.1	--	--	--	< 1.0	< 10	< 100	< 10	--	--	--	--	--
MW-8	MW-8_22.5_19940428	4/28/1994	22.5	< 0.05	< 0.05	< 0.05	< 0.1	--	--	--	< 1.0	< 10	< 100	< 10	--	--	--	--	--
MW-8	MW-8_27.5_19940428	4/28/1994	27.5	< 0.05	< 0.05	< 0.05	< 0.1	--	--	--	< 1.0	< 10	< 100	< 10	--	--	--	--	--
MW-9	MW-9_10_19940429	4/29/1994	10	< 0.05	< 0.05	< 0.05	< 0.1	--	--	--	< 1.0	14 D-2	< 100	15	--	--	--	--	--
MW-9	MW-9_22.5_19940429	4/29/1994	22.5	< 0.05	< 0.05	< 0.05	< 0.1	--	--	--	< 1.0	< 10	< 100	< 10	--	--	--	--	--
MW-10	MW-10_10_19940427	4/27/1994	10	< 0.05	< 0.05	< 0.05	< 0.1	--	--	--	< 1.0	27	< 100	< 10	--	--	--	--	--
MW-10	MW-10_15_19940427	4/27/1994	15	< 0.05	< 0.05	< 0.05	< 0.1	--	--	--	< 1.0	18 D-2	< 100	14	--	--	--	--	--
SVE-1/AS-1	ASVE/AS-1_10_19940428	4/28/1994	10	< 0.05	< 0.05	< 0.05	< 0.1	--	--	--	< 1.0	< 10	< 100	< 10	--	--	--	--	--
SVE-1/AS-1	ASVE/AS-1_25_19940428	4/28/1994	25	< 0.05	< 0.05	< 0.05	< 0.1	--	--	--	< 1.0	< 10	< 100	< 10	--	--	--	--	--
SVE-1/AS-1	ASVE/AS-1_35_19940428	4/28/1994	35	< 0.05	< 0.05	< 0.05	< 0.1	--	--	--	< 1.0	< 10	< 100	--	--	--	--	--	--
SVE-2/AS-2	ASVE/AS-2_12.5_19940427	4/27/1994	12.5	< 0.05	< 0.05	< 0.05	< 0.1	--	--	--	< 1.0	< 10	< 100	11	--	--	--	--	--
SVE-2/AS-2	ASVE/AS-2_15_19940427	4/27/1994	15	< 0.05	< 0.05	< 0.05	< 0.1	--	--	--	< 1.0	< 10	< 100	--	--	--	--	--	--
SVE-2/AS-2	ASVE/AS-2_27.5_19940427	4/27/1994	27.5	< 0.05	< 0.05	< 0.05	< 0.1	--	--	--	< 1.0	< 10	< 100	< 10	--	--	--	--	--
SVE-3/AS-3	AS-3_10_19940428	4/28/1994	10	< 0.05	< 0.05	< 0.05	< 0.1	--	--	--	< 1.0	< 10	< 100	< 10	--	--	--	--	--
SVE-3/AS-3	AS-3_12.5_19940428	4/28/1994	12.5	< 0.05	< 0.05	< 0.05	< 0.1	--	--	--	< 1.0	< 10	< 100	< 10	--	--	--	--	--
SVE-3/AS-3	ASVE/AS-3_25_19940428	4/28/1994	25	< 0.05	< 0.05	< 0.05	< 0.1	--	--	--	< 1.0	< 10	< 100	--	--	--	--	--	--
MW-12	MW-12_10_19960709	7/9/1996	10	< 0.2	< 0.2	< 0.2	< 0.4	--	--	--	104	10.6	29.7	--	--	--	--	--	--
MW-12	MW-12_12_19960709	7/9/1996	12	< 0.05	< 0.05	< 0.05	< 0.1	--	--	--	7.29	< 10	< 25	--	--	--	--	--	--
MW-12	MW-12_15_19960709	7/9/1996	15	< 0.05	< 0.05	< 0.05	< 0.1	--	--	--	< 5.0	< 10	< 25	--	--	--	--	--	--

Table 3
Soil Analytical Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Constituent				B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Lead	Total Petroleum Hydrocarbons	Total Petroleum Hydrocarbons as Hydraulic Fluid	Total Recoverable Hydrocarbons	Volatile Petroleum Hydrocarbons	Total Napthalene
Unit				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
MTCA Method A Cleanup Levels				0.03	7	6	9	0.1	0.005	NVG	30	2,000	2,000	250	--	--	--	--	5
Well/Boring ID	Sample ID	Date	Depth (feet bgs)																
B-4 (1996)	B-4_10_19960709	7/9/1996	10	< 0.2	< 0.2	< 0.2	< 0.4	--	--	--	355	19.2	48	--	--	--	--	--	--
B-4 (1996)	B-4_12_19960709	7/9/1996	12	< 0.05	< 0.05	< 0.05	< 0.1	--	--	--	15.3	< 10	< 25	--	--	--	--	--	--
B-4 (1996)	B-4_20_19960709	7/9/1996	20	0.823	1.33	0.37	1.82	--	--	--	536	34.7	113	--	--	--	--	--	--
B-4 (1996)	B-4_22_19960709	7/9/1996	22	< 0.689	0.063	< 0.05	< 0.1	--	--	--	20.4	< 10	< 25	--	--	--	--	--	--
B-5 (1996)	B-5_10_19960709	7/9/1996	10	< 0.05	< 0.05	< 0.05	< 0.1	--	--	--	< 5.0	< 10	< 25	--	--	--	--	--	--
B-5 (1996)	B-5_20_19960709	7/9/1996	20	< 0.05	< 0.05	< 0.05	< 0.1	--	--	--	< 5.0	< 10	< 25	--	--	--	--	--	--
EX-1	EX-1_6.5_20051026	10/26/2005	6.5	< 0.0270	< 0.0900	< 0.0900	< 0.270	< 0.0900	--	--	< 4.5	< 10.9	< 27.2	1.45	--	--	--	--	--
EX-1	EX-1_10.5_20051026	10/26/2005	10.5	< 0.0264	< 0.0880	< 0.0880	< 0.264	< 0.0880	--	--	< 4.4	< 10.8	< 27.0	3.67	--	--	--	--	--
EX-2	EX-2_6.5_20051026	10/26/2005	6.5	< 0.0258	< 0.0861	< 0.0861	< 0.258	< 0.0861	--	--	25.9	14.5	47.7	1.37	--	--	--	--	--
EX-3	EX-3_6.5_20051027	10/27/2005	6.5	< 0.0412	< 0.137	< 0.137	< 0.412	< 0.137	--	--	< 6.87	15	92.5	14.7	--	--	--	--	--
EX-3	EX-3_11.5_20051027	10/27/2005	11.5	< 0.0271	< 0.0452	< 0.0452	< 0.0904	< 0.0904	--	--	< 4.52	< 10.7	< 26.7	1.19	--	--	--	--	--
EX-3	EX-3_16_20051027	10/27/2005	16	< 0.0271	0.0451	0.0469	0.269	< 0.0902	--	--	11.8	22.3	< 27.1	4.39	--	--	--	--	--
EX-3	EX-3_20.5_20051027	10/27/2005	20.5	< 0.0353	< 0.0589	< 0.0589	< 0.118	< 0.118	--	--	< 5.89	< 12.1	< 30.3	2.74	--	--	--	--	--
EX-4	EX-4_11.5_20051027	10/27/2005	11.5	< 0.0279	< 0.0465	< 0.0465	< 0.0930	< 0.0930	--	--	< 4.65	< 10.8	< 27.0	1.6	--	--	--	--	--
EX-4	EX-4_16.5_20051027	10/27/2005	16.5	< 0.0291	< 0.0484	< 0.0484	< 0.0968	< 0.0968	--	--	1,240	122	272	0.937	--	--	--	--	--
EX-4	EX-4_21_20051027	10/27/2005	21	0.893	< 0.0434	0.092	0.109	< 0.0868	--	--	16	< 11.0	< 27.6	1.03	--	--	--	--	--
EX-5	EX-5_6.5_20051025	10/25/2005	6.5	< 0.0284	< 0.0473	< 0.0473	< 0.0945	< 0.0945	--	--	< 4.73	11.3	38	9.22	--	--	--	--	--
EX-5	EX-5_11_20051025	10/25/2005	11	< 0.0260	< 0.0433	< 0.0433	< 0.0865	< 0.0865	--	--	< 4.33	< 10.9	< 27.1	14.5	--	--	--	--	--
EX-5	EX-5_16.5_20051025	10/25/2005	16.5	< 0.0279	< 0.0465	< 0.0465	< 0.0930	< 0.0930	--	--	< 4.64	< 10.9	< 27.3	1.11	--	--	--	--	--
EX-6	EX-6_6.5_20051025	10/25/2005	6.5	< 0.0325	< 0.0542	< 0.0542	< 0.108	< 0.108	--	--	< 5.42	34.2	238	150	--	--	--	--	--
EX-6	EX-6_11_20051025	10/25/2005	11	< 0.0286	< 0.0477	< 0.0477	< 0.0954	< 0.0954	--	--	< 4.77	29.7	143	40.8	--	--	--	--	--
EX-6	EX-6_16_20051025	10/25/2005	16	< 0.0276	< 0.0460	< 0.0460	< 0.0921	< 0.0921	--	--	< 4.6	20.8	108	30	--	--	--	--	--
SG-1	SG-1-5-11022018	11/2/2018	5	< 0.0017	< 0.0017	< 0.0017	< 0.0051	< 0.0017	< 0.0017	< 0.0017	14	< 54	93	--	--	--	--	--	--
SG-2	SG-2-5-11022018	11/2/2018	5	< 0.0016	< 0.0016	< 0.0016	< 0.0049	< 0.0016	< 0.0016	< 0.0016	5.4	< 56	64	--	--	--	--	--	--
SG-3	SG-3-5-11022018	11/2/2018	5	< 0.0017	< 0.0017	< 0.0017	< 0.0052	< 0.0017	< 0.0017	< 0.0017	< 4.8	< 55	71	--	--	--	--	--	--
SG-3	SG-3-8-11022018	11/2/2018	8	< 0.0017	< 0.0017	< 0.0017	< 0.0051	< 0.0017	< 0.0017	< 0.0017	< 4.9	< 55	< 55	--	--	--	--	--	--
SG-4	SG-4-5-11272018	11/27/2018	5	< 0.0016	< 0.0016	< 0.0016	< 0.0047	< 0.0016	< 0.0016	< 0.0016	< 4.6	< 49	56	--	--	--	--	--	--
HO-B	HO-B-6	12/18/2018	6	0.1	< 0.01	0.43	1.24	--	--	--	120	2,100	3,900	4.0	--	--	--	--	0.58
HO-B	HO-B2-7	1/3/2019	7	< 0.0050	< 0.01	< 0.01	< 0.03	--	--	--	< 3.0	< 25	< 50	0.88	--	--	--	--	--
HO-E	HO-E-4	12/18/2018	4	0.84	0.41	16	98	--	--	--	970	3,700	14,000	24	--	--	--	--	7.7
HO-E	HO-E2-5	1/3/2019	5	0.48	< 0.01	2.7	13.7	--	--	--	290	740	6,400	2.1	--	--	--	--	--
HO-N	HO-N-4	12/18/2018	4	0.056	< 0.01	0.024	0.05	--	--	--	230	4,500	2,800	3.8	--	--	--	--	0.53
HO-N	HO-N2-5	1/2/2019	5	< 0.005	< 0.01	< 0.01	< 0.03	--	--	--	< 3.0	2,700	2,000	2.1	--	--	--	--	--
HO-PIPE	HO-PIPE-2	12/20/2018	2	< 0.005	< 0.01	0.37	1.88	--	--	--	64	1,800	5,400	61	--	--	--	--	0.5
HO-PIPE	HO-PIPE 2-3	1/3/2019	3	< 0.005	< 0.01	< 0.081	0.29	--	--	--	49	< 120	4,200	8.3	--	--	--	--	--
HO-S	HO-S-4	12/18/2018	4	0.31	0.061	1.5	5.7	--	--	--	300	8,400	5,900	8.7	--	--	--	--	2.6
HO-S	HO-S2-5	1/2/2019	5	< 0.005	< 0.01	< 0.01	< 0.03	--	--	--	< 3.0	720	9,000	7.4	--	--	--	--	--
HO-W	HO-W-4	12/18/2018	4	0.14	< 0.01	0.41	0.85	--	--	--	250	7,200	9,000	3.9	--	--	--	--	2.3
HO-W	HO-W3-5	1/3/2019	5	< 0.005	< 0.01	< 0.01	< 0.03	--	--	--	< 3.0	< 25	87	1.3	--	--	--	--	--
MW-13	MW-13-5_20190909	9/9/2019	5	--	--	--	--	--	--	--	< 6.3	< 60	< 60	3.9	--	--	--	--	< 0.0061
MW-13	MW-13-8-20190912 (580-89186-	9/12/2019	8	< 0.00081	0.00146	0.0055	--	< 0.00081	< 0.00081	< 0.00081	930	860	760	2.1	--	--	--	--	0.0323
MW-13	MW-13-10-20190912 (580-89186-	9/12/2019	10	< 0.00076	0.00030 J	0.0193	--	< 0.00076	< 0.00076	< 0.00076	340	< 54	69	1.1	--	--	--	--	0.0286
MW-13	MW-13-12.5-20190912 (580-89186-	9/12/2019	12.5	0.00029 J	< 0.00081	0.00030 J	--	< 0.00081	< 0.00081	< 0.00081	4.1	< 50	< 50	0.9	--	--	--	--	0.0095

Table 3
Soil Analytical Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Constituent				B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Lead	Total Petroleum Hydrocarbons	Total Petroleum Hydrocarbons as Hydraulic Fluid	Total Recoverable Hydrocarbons	Volatile Petroleum Hydrocarbons	Total Naphthalene
Unit				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
MTCA Method A Cleanup Levels				0.03	7	6	9	0.1	0.005	NVG	30	2,000	2,000	250	--	--	--	--	5
Well/Boring ID	Sample ID	Date	Depth (feet bgs)																
MW-13	W-13-14-20190912 (580-89186	9/12/2019	14	0.00121	0.00025 J	0.00111	--	< 0.00077	< 0.00077	< 0.00077	120	< 50	< 50	1.1	--	--	--	--	0.0189
MW-14	MW-14-5_20190909	9/9/2019	5	--	--	--	--	--	--	--	< 4.5	< 50	< 50	1.6	--	--	--	--	--
MW-14	W-14-7.5-20190912 (580-89186	9/12/2019	7.5	< 0.00076	0.00035 J	< 0.00076	--	< 0.00076	< 0.00076	< 0.00076	< 4.4	< 52	< 52	1.2	--	--	--	--	--
MW-14	W-14-10-20190912 (580-89186	9/12/2019	10	< 0.00072	< 0.00072	< 0.00072	--	< 0.00072	< 0.00072	< 0.00072	< 4.2	< 52	< 52	1.0	--	--	--	--	--
MW-15	MW-15-5_20190909	9/9/2019	5	--	--	--	--	--	--	--	9.1	< 54	320	81	--	--	--	--	0.17
MW-15	W-15-10-20190911 (580-89147	9/11/2019	10	< 0.00079	< 0.00079	< 0.00079	--	< 0.00079	< 0.00079	< 0.00079	< 4.4	< 50	< 50	1.1	--	--	--	--	< 0.005
MW-15	W-15-12-20190911 (580-89147	9/11/2019	12	< 0.00080	0.00026 J	< 0.00080	--	< 0.00080	< 0.00080	< 0.00080	< 4.4	< 51	65	1.4	--	--	--	--	< 0.004
MW-15	W-15-14-20190911 (580-89147	9/11/2019	14	< 0.00078	< 0.00078	< 0.00078	--	< 0.00078	< 0.00078	< 0.00078	17	< 56	< 56	1.1	--	--	--	--	< 0.0041
MW-16	MW-16-5_20190909	9/9/2019	5	--	--	--	--	--	--	--	< 5.4	< 56	120	33	--	--	--	--	--
MW-16	W-16-9-20190910 (580-89123-	9/10/2019	9	< 0.00079	< 0.00079	< 0.00079	--	< 0.00079	< 0.00079	< 0.00079	< 4.3	< 51	< 51	2.4	--	--	--	--	--
MW-16	W-16-12-20190910 (580-89123	9/10/2019	12	< 0.00075	< 0.00075	< 0.00075	--	< 0.00075	< 0.00075	< 0.00075	< 4.4	< 54	< 54	1.4	--	--	--	--	--
MW-17	MW-17_5_20201117-11172020	11/17/2020	5	< 0.0024	< 0.012	< 0.0024	< 0.012	< 0.0024	< 0.0012	< 0.0012	< 6.4	< 56	< 56	9.7	--	--	--	--	--
MW-17	MW-17_10_20201118-1118202	11/18/2020	10	< 0.0016	< 0.0080	< 0.0016	< 0.0080	< 0.0016	< 0.00080	< 0.00080	8.9 H	< 49	< 49	2.1	--	--	--	--	--
MW-17	MW-17_15_20201118-1118202	11/18/2020	15	< 0.0017	< 0.0086	< 0.0017	< 0.0086	< 0.0017	< 0.00086	< 0.00086	< 4.6	< 54	< 54	2.5	--	--	--	--	--
MW-18	MW-18_5_20201117-11172020	11/17/2020	5	< 0.0020	< 0.010	< 0.0020	< 0.010	< 0.0020	< 0.0010	< 0.0010	< 6.8	< 61	< 61	6.9	--	--	--	--	--
MW-18	MW-18_12_20201119-1119202	11/19/2020	12	< 0.0017	0.013	0.003	0.017	< 0.0017	< 0.00083	< 0.00083	< 6.3	< 54	< 54	1.9	--	--	--	--	--
MW-18	MW-18_16_20201119-1119202	11/19/2020	16	< 0.0016	< 0.0080*3	< 0.0016*3	< 0.0080	< 0.0016*	< 0.00080*3	< 0.00080	< 5.4	< 57	< 57	2.0	--	--	--	--	--
MW-19	MW-19_3_20201117-11172020	11/17/2020	3	< 0.0018	< 0.0088	< 0.0018	< 0.0088	< 0.0018	< 0.00088	< 0.00088	< 5.0	< 54	< 54	10	--	--	--	--	--
MW-19	MW-19_5_20201119-11192020	11/19/2020	5	< 0.0018	0.043	0.011	0.065	< 0.0018	< 0.00088	< 0.00088	< 7.0	< 57	< 57	3.1	--	--	--	--	--
MW-19	MW-19_10_20201118-1118202	11/18/2020	10	< 0.0018	< 0.0089	< 0.0018	< 0.0089	< 0.0018	< 0.00089	< 0.00089	10	< 52	< 52	2.2	--	--	--	--	--
MW-21	MW-21_5.2_20210909	9/9/2021	5.2	< 0.0018*	< 0.0088	< 0.0018*	< 0.0132*	< 0.0018	--	--	< 4.7	100	790	66	--	--	--	--	0.13
MW-21	MW-21_10_20210909	9/10/2021	10	< 0.0014*	< 0.0072	< 0.0014*	< 0.0108*	< 0.0014	--	--	< 4.4	< 56	< 56	1.3	--	--	--	--	< 0.0053
MW-21	MW-21_15_20210909	9/10/2021	15	< 0.0017*	< 0.0083	< 0.0017*	< 0.0124*	< 0.0017	--	--	15	< 53	< 53	1.4	--	--	--	--	< 0.0052
MW-21	MW-21_20_20210909	9/10/2021	20	< 0.0016*	< 0.0078	< 0.0016*	< 0.0117*	< 0.0016	--	--	< 4.4	< 53	< 53	1.1	--	--	--	--	< 0.0051
MW-21	MW-21_25_20210909	9/10/2021	25	< 0.0016*	< 0.0082	< 0.0016*	< 0.0123*	< 0.0016	--	--	< 5.0	< 54	< 54	1.5	--	--	--	--	< 0.0052
B-6	B-6-2_20221104	11/4/2022	2	<0.00132	<0.00661	0.0289	0.137	< 0.00132	--	--	8.63	24.7	< 11.5	--					0.079
B-6	B-6-5_20221104	11/4/2022	5	< 0.114	< 0.568	3.44	20.5	< 0.114	--	--	2,150	325	18.5	--					16.1
B-6	B-6-8_20221104	11/4/2022	8	< 0.0107	< 0.0536	1.83	12.7	< 0.0107	--	--	1,070	70.3	17.9	--					7.98
B-7	B-7-6_20221103	11/3/2022	6	< 0.00162	< 0.00811	< 0.00406	0.0150	< 0.00162	--	--	< 3.27	< 22.7	60.9	--					< 0.0227
B-8	B-8-2_20221103	11/3/2022	2	< 0.00118	< 0.00588	< 0.00294	< 0.00765	< 0.00118	--	--	< 2.95	< 4.31	< 10.8	--					< 0.0215
B-8	B-8-5_20221103	11/3/2022	5	0.0012	0.0103	0.00409	0.0182	< 0.00118	--	--	< 2.96	< 4.35	< 10.9	--					< 0.0217
B-8	B-8-10_20221104	11/4/2022	10	< 0.00130	< 0.00648	0.00386	0.0131	< 0.00130	--	--	< 3.24	< 4.50	< 11.3	--					< 0.0225
B-8	B-8-15_20221104	11/4/2022	15	< 0.00129	< 0.00646	< 0.00323	< 0.00840	< 0.00129	--	--	< 3.22	< 4.50	< 11.2	--					< 0.0225
SB-9	SB-9-5_20250507	5/7/2025	5	< 0.0110	< 0.0548	< 0.0274	0.133	< 0.0548	--	--	104	28.6	52.8 Q-42	--					1.489 Q-42
SB-9	SB-9-8_20250507	5/7/2025	8	< 0.0100	< 0.0501	< 0.0251	< 0.0752	< 0.0501	--	--	10.1	< 19.1	46.5	--					0.094
SB-9	SB-9-12.5-13.0_20250509	5/9/2025	12.5-13.0	< 0.0122	< 0.0610	< 0.0305	0.173	< 0.0610	--	--	95.8	< 19.6	47.7	--					0.434
SB-9	SB-9-15.0-15.5_20250509	5/9/2025	15.0-15.5	< 0.0139	< 0.0697	< 0.0349	< 0.105	< 0.0697	--	--	< 6.97	< 22.2	< 44.4	--					< 0.00555
SB-11	SB-11-6.5-7_20250507	5/7/2025	6.5-7	< 0.0107	< 0.0536	< 0.0268	< 0.0804	< 0.0536	--	--	9.66	< 19.5	52.1	--					< 0.0195
SB-11	SB-11-15.0-15.5_20250507	5/7/2025	15-15.5	< 0.00953	< 0.0476	< 0.0238	< 0.0714	< 0.0476	--	--	< 4.76	< 19.4	< 38.7	--					< 0.00484
SB-11	SB-11-20.0-20.5_20250507	5/7/2025	20-20.5	< 0.00854	< 0.0427	< 0.0213	< 0.0640	< 0.0427	--	--	< 4.27	< 18.5	< 37	--					< 0.00462
SB-12	SB-12-6.5-7.0_20250507	5/7/2025	6.5-7.0	< 0.0121	< 0.0605	< 0.0303	< 0.0908	< 0.0605	--	--	20.3	259	544	--					0.2366
SB-12	SB-12-15.0-15.5_20250507	5/7/2025	15.0-15.5	< 0.00932	< 0.0466	< 0.0233	< 0.0699	< 0.0466	--	--	< 4.66	< 18.9	< 37.7	--					< 0.00471
SB-12	SB-12-20.0-20.5_20250507	5/7/2025	20.0-20.5	< 0.0117	< 0.0584	< 0.0292	< 0.0876	< 0.0584	--	--	< 5.84	< 21.2	< 42.5	--					0.01204

Table 3
Soil Analytical Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Constituent				B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Lead	Total Petroleum Hydrocarbons	Total Petroleum Hydrocarbons as Hydraulic Fluid	Total Recoverable Hydrocarbons	Volatile Petroleum Hydrocarbons	Total Naphthalene
Unit				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
MTCA Method A Cleanup Levels				0.03	7	6	9	0.1	0.005	NVG	30	2,000	2,000	250	--	--	--	--	5
Well/Boring ID	Sample ID	Date	Depth (feet bgs)																
SB-13	SB-13-10-10.5_20250507	5/7/2025	10-10.5	< 0.0104	< 0.0519	< 0.0259	< 0.0778	< 0.0519	--	--	5.97	30.9	103	--					< 0.0191
SB-13	SB-13-15-15.5_20250507	5/7/2025	15-15.5	< 0.00913	< 0.0456	< 0.0228	< 0.0684	< 0.0456	--	--	< 4.56	< 18.8	60.7	--					< 0.0235
SB-13	SB-13-20-20.5_20250507	5/7/2025	20-20.5	< 0.0107	< 0.0535	< 0.0267	< 0.0802	< 0.0535	--	--	< 5.35	< 19	57.8	--					< 0.0238
SB-13	SB-13-25-25.5_20250507	5/7/2025	25-25.5	< 0.0118	< 0.0592	< 0.0296	< 0.0888	< 0.0592	--	--	< 5.92	< 19.7	< 39.4	--					< 0.00492
SB-14	SB-14-10.0-10.5_20250507	5/7/2025	10.0-10.5	< 0.00775	< 0.0388	< 0.0194	< 0.0581	< 0.0388	--	--	5.54	--	--	--					--
SB-14	SB-14-15.0-15.5_20250507	5/7/2025	15.0-15.5	< 0.0119	< 0.0593	< 0.0297	< 0.0890	< 0.0593	--	--	13.1	< 20.5	< 41.4	--					< 0.0205
SB-14	SB-14-20.0-20.5_20250507	5/7/2025	20.0-20.5	< 0.0124	< 0.0619	< 0.0309	< 0.0928	< 0.0619	--	--	< 6.19	51	< 40.7	--					0.0454
SB-10	SB-10-8.0-8.5_20250508	5/8/2025	8.0-8.5	< 0.0110	< 0.0552	< 0.0276	< 0.0827	< 0.0552	--	--	< 5.52	100	66.4	--					0.0945 Q-42
SB-10	SB-10-10.0-10.5_20250508	5/8/2025	10.0-10.5	< 0.00955	< 0.0477	< 0.0239	< 0.0716	< 0.0477	--	--	< 4.77	< 19.9	< 39.8	--					< 0.00497 Q-42
SB-10	SB-10-15.0-15.5_20250508	5/8/2025	15.0-15.5	< 0.0110	< 0.0550	< 0.0275	< 0.0825	< 0.0550	--	--	< 5.50	< 19.5	< 39.1	--					< 0.00488
MW-22	MW-22-10.0-10.5_20250508	5/8/2025	10.0-10.5	< 0.00987	< 0.0493	< 0.0247	< 0.0740	< 0.0493	--	--	< 4.93	321 F-11	< 184	--					< 0.0184
MW-22	MW-22-19.5-20.0_20250508	5/8/2025	19.5-20.0	< 0.0149	< 0.0744	< 0.0372	< 0.112	< 0.0744	--	--	< 7.44	< 22.8	< 45.6	--					< 0.00570
MW-25	MW-25-10.5-11.0_20250509	5/9/2025	10.5-11.0	< 0.0201	< 0.100	< 0.0502	< 0.151	< 0.100	--	--	< 10.0	< 26.2	< 52.3	--					< 0.00654
MW-25	MW-25-19.5-20.0_20250509	5/9/2025	19.5-20.0	< 0.0116	< 0.0579	< 0.0289	< 0.0866	< 0.0578	--	--	< 5.78	< 19.7	< 39.4	--					< 0.00492

Notes:
B = Benzene
T = Toluene
E = Ethylbenzene
X = Total xylenes
MTBE = Methyl tert-butyl ether
EDB = 1,2-Dibromoethane
EDC = 1,2-Dichloroethane
TPH-G = Total petroleum hydrocarbons as gasoline
TPH-D = Total petroleum hydrocarbons as diesel
TPH-O = Total petroleum hydrocarbons as oil
NGV = No given value
mg/kg = milligrams/kilogram
-- = No information available
< = Not detected at or above indicated laboratory reporting limit
= Highlighted represents soil that has been removed from the site during over-excavation activities or soil that has been subsequently remediated
MTCA = Model Toxics Control Act
Results in **bold** indicate concentrations in excess of MTCA Method A Cleanup Levels
bgs = below ground surface

Laboratory Qualifiers:
H = Sample was prepped or analyzed beyond the specified holding time
J = Result is less than the Reporting Limit (RL) but greater than or equal to the Method Detection Limit (MDL) and the concentration is an approximate value
* = Lab Control Spike (LCS) or Lab Control Spike Duplicate (LCSD) is outside acceptance limits
*3 = Internal Standard (ISTD) response or retention time outside acceptable limits
D-2 = Hydrocarbons present in this sample resemble heavy, non-resolvable oil range organics
Q-42 = MS/MSD analysis was performed on this sample. Percent recovery or RPD for this analyte is outside laboratory control limits

Table 4
Soil Analytical Data - PAHs
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

		Sample ID	B-6		B-6		B-6		B-7		B-8	
		Depth (ft bgs)	2		5		8		6		2	
		Date	11/4/2022		11/4/2022		11/4/2022		11/3/2022		11/3/2022	
Constituent	MTCA Method A (mg/kg)	Toxicity Equivalency Factor (unitless)	Measured Soil Concentration (mg/kg)	Toxic Equivalent Concentration (mg/kg) 1	Measured Soil Concentration (mg/kg)	Toxic Equivalent Concentration (mg/kg) 1	Measured Soil Concentration (mg/kg)	Toxic Equivalent Concentration (mg/kg) 1	Measured Soil Concentration (mg/kg)	Toxic Equivalent Concentration (mg/kg) 1	Measured Soil Concentration (mg/kg)	Toxic Equivalent Concentration (mg/kg) 1
Carcinogenic PAHs												
Benzo(a)anthracene	--	0.10	0.00689	0.000689	< 0.00712	0.000712	< 0.00694	0.000694	< 0.00681	0.000681	< 0.00646	0.000646
Benzo(a)pyrene	0.1	1.00	< 0.00689	0.00689	< 0.00712	0.00712	< 0.00694	0.00694	< 0.00681	0.00681	< 0.00646	0.00646
Benzo(b)fluoranthene	--	0.10	< 0.00689	0.000689	< 0.00712	0.000712	< 0.00694	0.000694	< 0.00681	0.000681	< 0.00646	0.000646
Benzo(k)fluoranthene	--	0.10	< 0.00689	0.000689	< 0.00712	0.000712	< 0.00694	0.000694	< 0.00681	0.000681	< 0.00646	0.000646
Chrysene	--	0.01	< 0.00689	0.0000689	< 0.00712	0.0000712	< 0.00694	0.0000694	< 0.00681	0.0000681	< 0.00646	0.0000646
Dibenzo(a,h)anthracene	--	0.10	< 0.00689	0.000689	< 0.00712	0.000712	< 0.00694	0.000694	< 0.00681	0.000681	< 0.00646	0.000646
Indeno (1,2,3-cd) pyrene	--	0.10	< 0.00689	0.000689	< 0.00712	0.000712	< 0.00694	0.000694	< 0.00681	0.000681	< 0.00646	0.000646
Total PAHs	0.1		0.0482	0.0104	0.0498	0.0108	0.0486	0.0105	0.0477	0.0103	0.0452	0.00975

		Sample ID	B-8		B-8		B-8		MW-13		MW-13	
		Depth (ft bgs)	5		10		15		5		8	
		Date	11/3/2022		11/4/2022		11/4/2022		9/9/2019		9/12/2019	
Constituent	MTCA Method A (mg/kg)	Toxicity Equivalency Factor (unitless)	Measured Soil Concentration (mg/kg)	Toxic Equivalent Concentration (mg/kg) 1	Measured Soil Concentration (mg/kg)	Toxic Equivalent Concentration (mg/kg) 1	Measured Soil Concentration (mg/kg)	Toxic Equivalent Concentration (mg/kg) 1	Measured Soil Concentration (mg/kg)	Toxic Equivalent Concentration (mg/kg) 1	Measured Soil Concentration (mg/kg)	Toxic Equivalent Concentration (mg/kg) 1
Carcinogenic PAHs												
Benzo(a)anthracene	--	0.10	< 0.00652	0.000652	< 0.00676	0.0007	< 0.00675	0.0007	< 0.0061	0.0006	< 0.0053	0.00053
Benzo(a)pyrene	0.1	1.00	< 0.00652	0.00652	< 0.00676	0.0068	< 0.00675	0.0068	< 0.0061	0.0061	< 0.0053	0.00530
Benzo(b)fluoranthene	--	0.10	< 0.00652	0.000652	< 0.00676	0.0007	< 0.00675	0.0007	< 0.0061	0.0006	< 0.0053	0.00053
Benzo(k)fluoranthene	--	0.10	< 0.00652	0.000652	< 0.00676	0.0007	< 0.00675	0.0007	< 0.0061	0.0006	< 0.0053	0.00053
Chrysene	--	0.01	< 0.00652	0.0000652	< 0.00676	0.0001	< 0.00675	0.0001	< 0.0061	0.0001	< 0.0053	0.00005
Dibenzo(a,h)anthracene	--	0.10	< 0.00652	0.000652	< 0.00676	0.0007	< 0.00675	0.0007	< 0.0061	0.0006	< 0.0053	0.00053
Indeno (1,2,3-cd) pyrene	--	0.10	< 0.00652	0.000652	< 0.00676	0.0007	< 0.00675	0.0007	< 0.0061	0.0006	< 0.0053	0.00053
Total PAHs	0.1		0.0456	0.0098	0.0473	0.0102	0.0473	0.0102	< 0.0427	0.0092	< 0.0371	0.00800

Table 4
Soil Analytical Data - PAHs
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

		Sample ID	MW-13		MW-13		MW-13		MW-15		MW-15	
		Depth (ft bgs)	10		12.5		14		5		10	
		Date	9/12/2019		9/12/2019		9/12/2019		9/9/2019		9/11/2019	
Constituent	MTCA Method A (mg/kg)	Toxicity Equivalency Factor (unitless)	Measured Soil Concentration (mg/kg)	Toxic Equivalent Concentration (mg/kg) 1	Measured Soil Concentration (mg/kg)	Toxic Equivalent Concentration (mg/kg) 1	Measured Soil Concentration (mg/kg)	Toxic Equivalent Concentration (mg/kg) 1	Measured Soil Concentration (mg/kg)	Toxic Equivalent Concentration (mg/kg) 1	Measured Soil Concentration (mg/kg)	Toxic Equivalent Concentration (mg/kg) 1
Carcinogenic PAHs												
Benzo(a)anthracene	--	0.10	< 0.0054	0.00054	< 0.0046	0.00045	< 0.0050	0.0005	0.031	0.0031	< 0.0050	0.0005
Benzo(a)pyrene	0.1	1.00	< 0.0054	0.0054	< 0.0046	0.0046	< 0.0050	0.005	0.02	0.02	< 0.0050	0.005
Benzo(b)fluoranthene	--	0.10	< 0.0054	0.00054	< 0.0046	0.00046	< 0.0050	0.0005	0.039	0.0039	< 0.0050	0.0005
Benzo(k)fluoranthene	--	0.10	< 0.0054	0.00054	< 0.0046	0.00046	< 0.0050	0.0005	0.012	0.0012	< 0.0050	0.0005
Chrysene	--	0.01	< 0.0054	0.000054	< 0.0046	0.000046	< 0.0050	0.00005	0.041 F2	0.0041	< 0.0050	0.00005
Dibenzo(a,h)anthracene	--	0.10	< 0.0054	0.00054	< 0.0046	0.00046	< 0.0050	0.0005	< 0.0057	0.00057	< 0.0050	0.0005
Indeno (1,2,3-cd) pyrene	--	0.10	< 0.0054	0.00054	< 0.0046	0.00046	< 0.0050	0.0005	0.028	0.0028	< 0.0050	0.0005
Total PAHs	0.1		< 0.0378	0.00815	< 0.0322	0.00694	< 0.035	0.0076	0.1739	0.0357	< 0.035	0.00755

		Sample ID	MW-15		MW-15		HO-W		HO-N		HO-E	
		Depth (ft bgs)	12		14		4		4		4	
		Date	9/11/2019		9/11/2019		12/18/2018		12/18/2018		12/18/2018	
Constituent	MTCA Method A (mg/kg)	Toxicity Equivalency Factor (unitless)	Measured Soil Concentration (mg/kg)	Toxic Equivalent Concentration (mg/kg) 1	Measured Soil Concentration (mg/kg)	Toxic Equivalent Concentration (mg/kg) 1	Measured Soil Concentration (mg/kg)	Toxic Equivalent Concentration (mg/kg) 1	Measured Soil Concentration (mg/kg)	Toxic Equivalent Concentration (mg/kg) 1	Measured Soil Concentration (mg/kg)	Toxic Equivalent Concentration (mg/kg) 1
Carcinogenic PAHs												
Benzo(a)anthracene	--	0.10	< 0.0040	0.0004	< 0.0041	0.00041	0.062	0.0062	< 0.02	0.002	0.13	0.013
Benzo(a)pyrene	0.1	1.00	< 0.0040	0.004	< 0.0041	0.0041	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02
Benzo(b)fluoranthene	--	0.10	< 0.0040	0.0004	< 0.0041	0.00041	< 0.02	0.002	< 0.02	0.002	< 0.02	0.002
Benzo(k)fluoranthene	--	0.10	< 0.0040	0.0004	< 0.0041	0.00041	< 0.02	0.002	< 0.02	0.002	< 0.02	0.002
Chrysene	--	0.01	< 0.0040	0.00004	< 0.0041	0.000041	< 0.02	0.0002	< 0.02	0.0002	0.14	0.0014
Dibenzo(a,h)anthracene	--	0.10	< 0.0040	0.0004	< 0.0041	0.00041	< 0.02	0.002	< 0.02	0.002	< 0.02	0.002
Indeno (1,2,3-cd) pyrene	--	0.10	< 0.0040	0.0004	< 0.0041	0.00041	< 0.02	0.002	< 0.02	0.002	< 0.02	0.002
Total PAHs	0.1		< 0.028	0.00604	< 0.0287	0.006191	0.182	0.0344	0.14	0.0302	0.37	0.0424

Table 4
Soil Analytical Data - PAHs
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

		Sample ID	HO-S		HO-B		HO-PIPE	
		Depth (ft bgs)	4		6		2	
		Date	12/18/2018		12/18/2018		12/18/2018	
Constituent	MTCA Method A (mg/kg)	Toxicity Equivalency Factor (unitless)	Measured Soil Concentration (mg/kg)	Toxic Equivalent Concentration (mg/kg) 1	Measured Soil Concentration (mg/kg)	Toxic Equivalent Concentration (mg/kg) 1	Measured Soil Concentration (mg/kg)	Toxic Equivalent Concentration (mg/kg) 1
Carcinogenic PAHs								
Benzo(a)anthracene	--	0.10	< 0.02	0.002	0.033	0.0033	0.083	0.0083
Benzo(a)pyrene	0.1	1.00	< 0.02	0.02	< 0.02	0.02	< 0.02	0.02
Benzo(b)fluoranthene	--	0.10	< 0.02	0.002	< 0.02	0.002	< 0.02	0.002
Benzo(k)fluoranthene	--	0.10	< 0.02	0.002	< 0.02	0.002	< 0.02	0.002
Chrysene	--	0.01	< 0.02	0.0002	0.045	0.00045	0.099	0.00099
Dibenzo(a,h)anthracene	--	0.10	< 0.02	0.002	< 0.02	0.002	< 0.02	0.002
Indeno (1,2,3-cd) pyrene	--	0.10	< 0.02	0.002	< 0.02	0.002	0.026	0.0026
Total PAHs	0.1	--	0.14	0.0302	0.178	0.03175	0.288	0.03789

Notes:

PAH = Polycyclic aromatic hydrocarbons by Environmental Protection Agency (EPA) Method 8270D selective ion monitoring (SIM)

mg/kg = milligrams/kilogram

ft bgs = feet below ground surface

-- = No information available

< = Not detected at or above indicated laboratory reporting limit

Additional non-carcinogenic PAHs analyzed can be found in the laboratory analytical report

MTCA Method A Cleanup Level for PAHs is 0.1 mg/kg for the total of all carcinogenic PAHs

1 = Toxic equivalent concentration calculated by multiplying the measured soil concentration by the toxicity equivalency factor

Values not detected at or above laboratory reporting limits, the reporting limit value was used in the toxic equivalency calculation

MTCA = Model Toxics Control Act

Laboratory Qualifiers:

F2 = Matrix spike/matrix spike duplicate (MS/MSD) relative percent difference (RPD) exceeds control limits

Table 5
Soil Analytical Data - PCBs and Naphthalenes
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

	Sample ID	WOHOLE	WOPILE	MW-13	MW-13	MW-13	MW-13	MW-13	MW-15	MW-15	MW-15	MW-15
	Depth	5	--	5	8	10	12.5	14	5	10	12	14
	Date	10/2/1990	10/2/1990	9/9/2019	9/12/2019	9/12/2019	9/12/2019	9/12/2019	9/9/2019	9/11/2019	9/11/2019	9/12/2019
PCBs	MTCA Method A Cleanup Level											
PCB-1016	--	--	--	< 0.025	< 0.021	< 0.021	< 0.021	< 0.021	< 0.023	< 0.021	< 0.022	< 0.022
PCB-1221	--	--	--	< 0.025	< 0.021	< 0.021	< 0.021	< 0.021	< 0.023	< 0.021	< 0.022	< 0.022
PCB-1232	--	--	--	< 0.025	< 0.021	< 0.021	< 0.021	< 0.021	< 0.023	< 0.021	< 0.022	< 0.022
PCB-1242	--	--	--	< 0.025	< 0.021	< 0.021	< 0.021	< 0.021	< 0.023	< 0.021	< 0.022	< 0.022
PCB-1248	--	--	--	< 0.025	< 0.021	< 0.021	< 0.021	< 0.021	< 0.023	< 0.021	< 0.022	< 0.022
PCB-1254	--	--	--	< 0.025	0.12 p	< 0.021	< 0.021	0.089	< 0.023	< 0.021	< 0.022	< 0.022
PCB-1260	--	--	--	< 0.025	< 0.021	< 0.021	< 0.021	< 0.021	< 0.023	< 0.021	< 0.022	< 0.022
Total PCBs	1	ND J	ND J	< 0.175	< 0.246	< 0.147	< 0.147	< 0.215	< 0.161	< 0.147	< 0.154	< 0.154
Naphthalenes												
1-Methylnaphthalene	--	--	--	< 0.0061	0.0095	0.0068	< 0.0046	< 0.005	0.038	< 0.005	< 0.004	< 0.0041
2-Methylnaphthalene	--	--	--	< 0.0061	0.017	0.012	0.0049	0.0082	0.09	< 0.005	< 0.004	< 0.0041
Naphthalene	--	--	--	< 0.0061	0.0058	0.0098	< 0.0046	0.0082	0.042	< 0.005	< 0.004	< 0.0041
Total Naphthalenes	5	--	--	< 0.0061	0.0323	0.0286	0.0095	0.0189	0.17	< 0.005	< 0.004	< 0.0041

Notes:

All depths are reported in feet below ground surface (ft bgs)

All analytical data is reported in milligrams per kilogram (mg/kg)

PCB = Polychlorinated Biphenyls

PCBs analyzed by EPA Method 8080 in 1990 and by EPA Method 8082A in 2013

-- = No information available, not applicable, or not analyzed

< = Not detected at or above indicated laboratory reporting limit

ND = Undetected

Total naphthalenes are the summation of 1-methylnaphthalene, 2-methylnaphthalene, and naphthalene

MTCA Method A Cleanup Level is based on applicable federal law. This is a total value for all PCBs

EPA = Environmental Protection Agency

MTCA = Model Toxics Control Act

Laboratory Qualifiers:

J = Value estimated by the laboratory

p = The relative percentage difference (RPD) between the primary and confirmation column/detector is > 40%. The lower value has been reported

Table 6
Soil Vapor Analytical Data
ARCO Facility No. 980
10822 Roosevelt Way Northeast, Seattle, Washington

Constituent Unit			Benzene (µg/m³)	Toluene (µg/m³)	Ethylbenzene (µg/m³)	Total Xylenes (µg/m³)	Methyl tert-Butyl Ether (µg/m³)	Naphthalene (µg/m³)	APH [C5-8 Aliphatics] (µg/m³)	APH [C9-12 Aliphatics] (µg/m³)	APH [C9-10 Aromatics] (µg/m³)	Total TPH (µg/m³)
Method B Soil Gas Screening Level - Noncancer			460	76,000	15,000	1,500	46,000	46	--	--	--	1,500 ^a
Method B Soil Gas Screening Level - Cancer			11	--	--	--	320	2.5	--	--	--	--
Commercial Worker Sub-Slab Soil Gas Screening Level - Noncancer			3,900	650,000	130,000	13,000	390,000	390	--	--	--	13,000 ^a
Commercial Worker Sub-Slab Soil Gas Screening Level - Cancer			50	--	--	--	1,500	11	--	--	--	--
Sample Location	Date	Depth of Screen (feet bgs)										
SG-1	5/13/2025	5.5 - 6.0	< 0.86	< 5.1	< 1.2	< 8.8	< 9.7	< 1.4	16	< 13	< 11	28.68
SG-2	5/13/2025	5.0 - 5.5	< 0.85	< 5.0	< 1.2	< 8.7	< 9.6	< 1.4	< 12	< 12	< 10	25.58
SG-4	5/13/2025	4.5 - 5.0	< 0.79	< 4.7	< 1.1	< 8.1	< 8.9	< 1.3	< 12	< 12	< 10	25.00
SG-6	1/27/2023	3.5-4.0	0.16	2.3	0.36	1.86	< 0.037	< 0.15	56	100	3.8 V	164.56
SG-6	7/27/2023	3.5-4.0	0.26	2.5	< 0.17	< 0.34	< 0.042	< 0.17	59	< 15	< 3.8	71.50
SG-7	1/27/2023	4.0-4.5	< 0.11	1.9	0.43	2.31	< 0.036	< 0.14	< 28	< 14	< 3.6	27.57
SG-7	7/27/2023	4.0-4.5	0.59	0.34	< 0.14	0.29	< 0.035	< 0.14	58	16	< 3.5	77.11
SG-8	7/27/2023	4.0-4.5	0.17	0.94	< 0.15	< 0.30	< 0.038	< 0.15	37	< 14	< 3.5	47.16
SG-8	3/4/2024	4.0-4.5	< 0.10	< 0.14	< 0.14	<0.28	< 0.034	< 0.14	< 27	< 14	< 3.4	22.59

Notes:
Screening Levels take from Washington State Department of Ecology (Ecology) - Cleanup Levels and Risk Calculation (CLARC) Vapor Intrusion Method B Table - February 2025
All concentrations are in µg/m³
a = Total Petroleum Hydrocarbon (TPH) Generic Cleanup Level
(µg/m³) = micrograms per cubic meter
< = Less than the stated laboratory method reporting limit (MRL)
Air-phase petroleum hydrocarbons (APH) by Massachusetts Department of Environmental Protection (DEP) APH Test Methods
Benzene, toluene, ethylbenzene, xylenes (BTEX), MTBE, and naphthalene by Environmental Protection Agency (EPA) Method TO-15 Selective Ion Monitoring (SIM)
Total xylenes = Sum of m,p-Xylenes and o-Xylene, non-detect concentrations of o-Xylenes are included in the calculation for total as half their MRL value
Total petroleum hydrocarbons (TPH) concentrations for each sample = Sum of the APHs, BTEX, and Naphthalene values. Non-detect concentrations are included in the calculation as half their MRL value
Results in **bold** indicate concentrations in excess of Commercial Worker Cleanup Levels or the TPH Generic Cleanup Level

Laboratory Qualifiers:
V - The continuing calibration verification standard was outside (biased high) for the specified limits for this compound

Figures

Figure 1 – Site Location Map

Figure 2 – Site Aerial Map

Figure 3 – Site Layout Map

Figure 4 – Remedial Investigation Sample Locations

Figure 5 – Remedial Investigation Soil Analytical Data Map

Figure 6 – Remedial Investigation Groundwater Elevation and Analytical Data Map

Figure 7 – Historical MTCA Method A Site Boundary Map for Soil

Figure 8 – Current MTCA Method A Site Boundary Map for Soil

Figure 9 – Soil Vapor Extraction System

Figure 10 – Dual Phase Extraction System

Figure 11 – Historical MTCA Method A Site Boundary Map for Groundwater

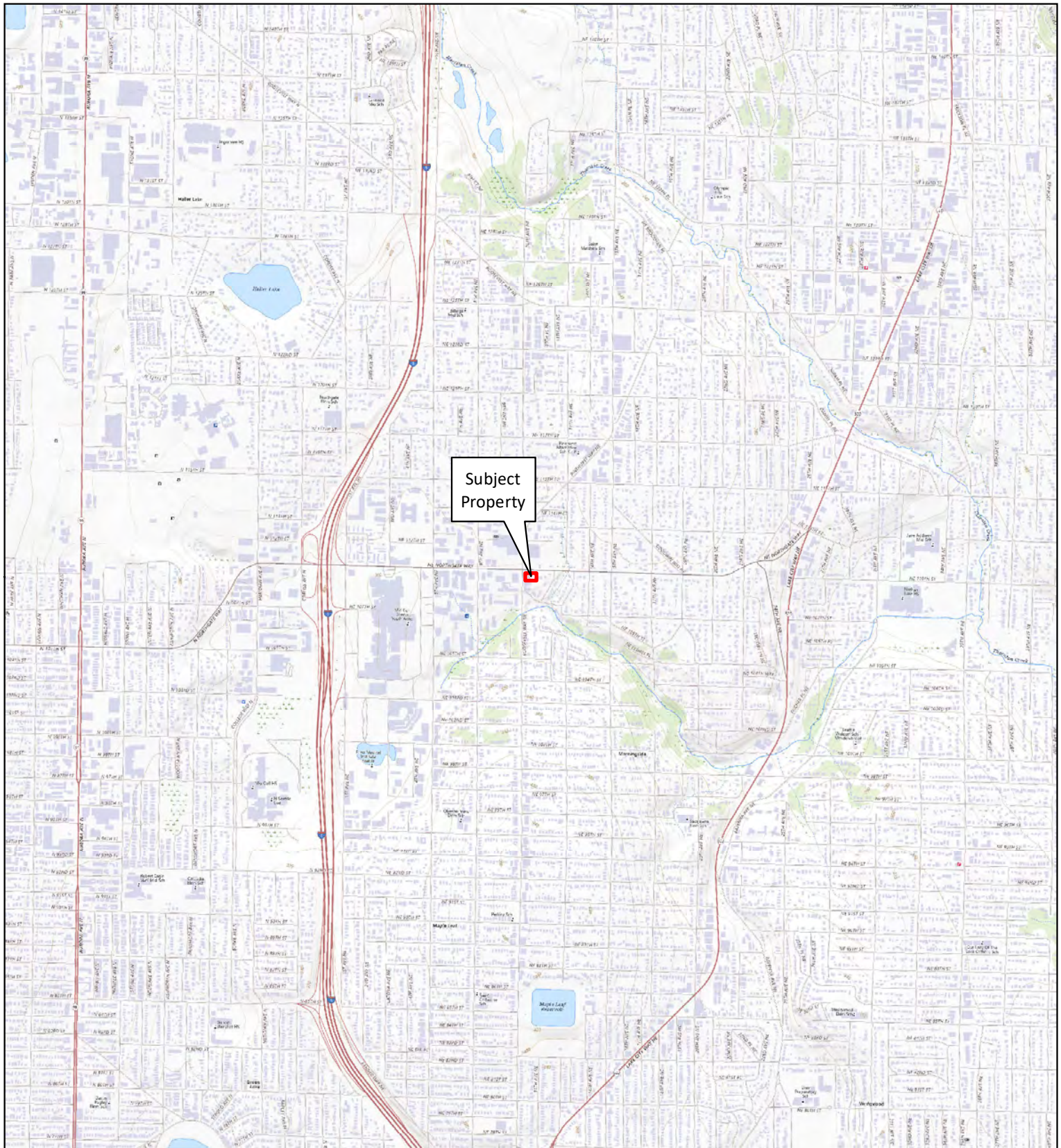
Figure 12 – Current MTCA Method A Site Boundary Map for Groundwater

Figure 13 – Cross Section Location Map

Figure 14 – Geologic Cross Section A-A'

Figure 15 – Geologic Cross Section B-B'

Figure 16 – Geologic Cross Section C-C'



Subject Property



USGS 7.5-minute
Topographic Series
Seattle North, Washington



0 500 1,000 2,000 3,000 4,000 Feet

FIGURE 1

SITE LOCATION MAP
ARCO FACILITY NO. 980
10822 ROOSEVELT WAY NORTHEAST
SEATTLE, WASHINGTON

PROJECT NO. WA - 00980 SEATTLE	PREPARED BY CG	REF SCALE 1:24,000	
DATE 7/9/2024	REVIEWED BY BJ	MAP SCALE 1 INCH = 2,000 FEET	

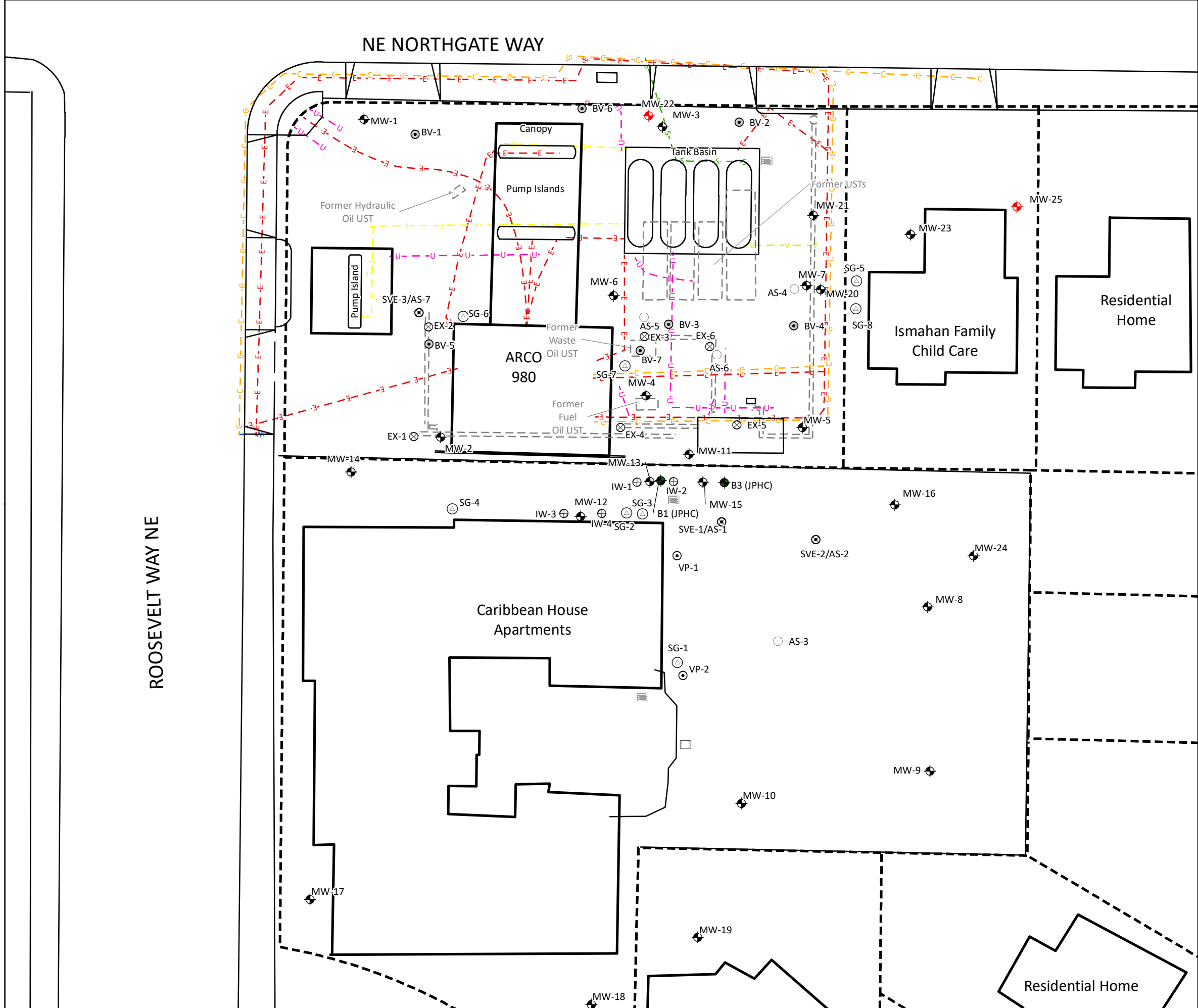


Legend
Subject Property Boundary



FIGURE 2
SITE AERIAL MAP
ARCO FACILITY NO. 980
10822 ROOSEVELT WAY NORTHEAST
SEATTLE, WASHINGTON

PROJECT NO. 24WA000980	PREPARED BY CG	REF SCALE 1:1,200	 data management analytics
DATE 7/18/2025	REVIEWED BY BJ	MAP SCALE 1 INCH = 100 FEET	



LEGEND

- REMEDIAL INVESTIGATION GROUNDWATER MONITORING WELL
- GROUNDWATER MONITORING WELL
- GROUNDWATER MONITORING WELL (JPHC 1993)
- AIR SPARGING WELL LOCATION
- EXTRACTION WELL LOCATION
- SOIL VAPOR EXTRACTION WELL
- INJECTION WELL (INNOVEX 2014)
- SOIL VAPOR EXTRACTION / VACUUM PRESSURE MONITORING WELL
- BIOVENTING WELL
- SOIL GAS PROBE
- CATCH BASIN
- PROPERTY BOUNDARY
- BUILDING
- SITE FEATURES
- FORMER SITE FEATURES
- UNDERGROUND ELECTRICAL UTILITY
- UNDERGROUND COMMUNICATIONS UTILITY
- UNDERGROUND WATER UTILITY
- UNDERGROUND SEWER UTILITY
- UNDERGROUND FUEL UTILITY
- UNDERGROUND VENT UTILITY
- UNDERGROUND UNKNOWN UTILITY

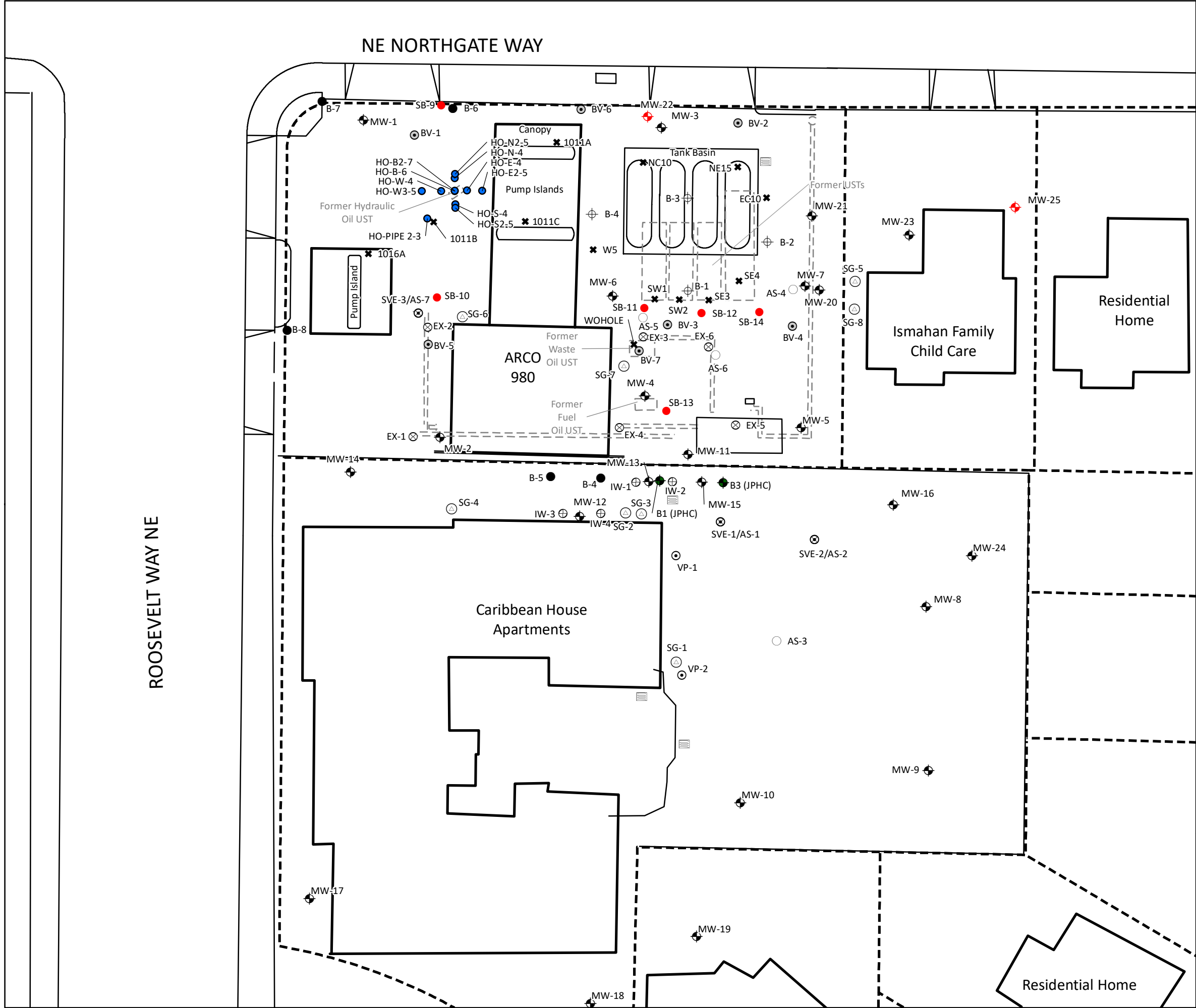
NOTE:

JPHC = JAMES P. HURLEY COMPANY

FIGURE 3

SITE LAYOUT MAP
ARCO FACILITY NO. 980
10822 ROOSEVELT WAY NORTHEAST
SEATTLE, WASHINGTON

PROJECT NO. WA - 0980 Seattle	PREPARED BY MB/JH	REF SCALE 1:360	 data management + analytics
DATE 8/4/2025	REVIEWED BY BC	MAP SCALE 1 inch = 30 feet	



LEGEND

- REMEDIAL INVESTIGATION GROUNDWATER MONITORING WELL
- REMEDIAL INVESTIGATION SOIL BORING
- GROUNDWATER MONITORING WELL
- GROUNDWATER MONITORING WELL (JPHC 1993)
- AIR SPARGING WELL
- EXTRACTION WELL
- SOIL VAPOR EXTRACTION WELL
- INJECTION WELL (INNOVEX 2014)
- SOIL VAPOR EXTRACTION / VACUUM PRESSURE MONITORING WELL
- BIOVENTING WELL
- SOIL GAS PROBE
- SOIL BORING (1989)
- SOIL BORING (GERAGHTY & MILLER 1989)
- SOIL SAMPLING LOCATIONS (1990)
- HYDRAULIC EXCAVATION SAMPLES
- CATCH BASIN
- PROPERTY BOUNDARY
- BUILDING
- SITE FEATURES
- FORMER SITE FEATURES

NOTE:

JPHC = JAMES P. HURLEY COMPANY

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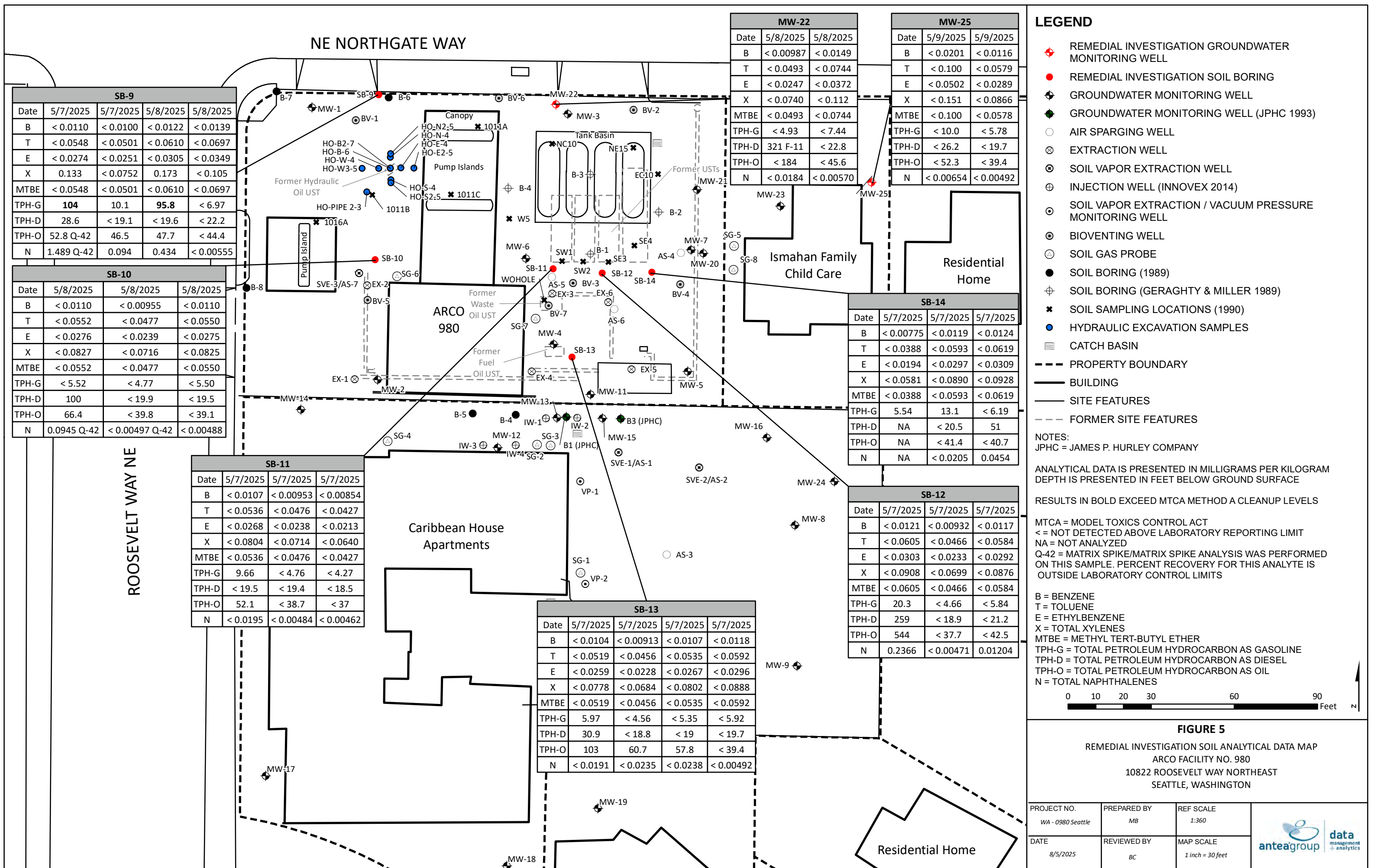
Feet

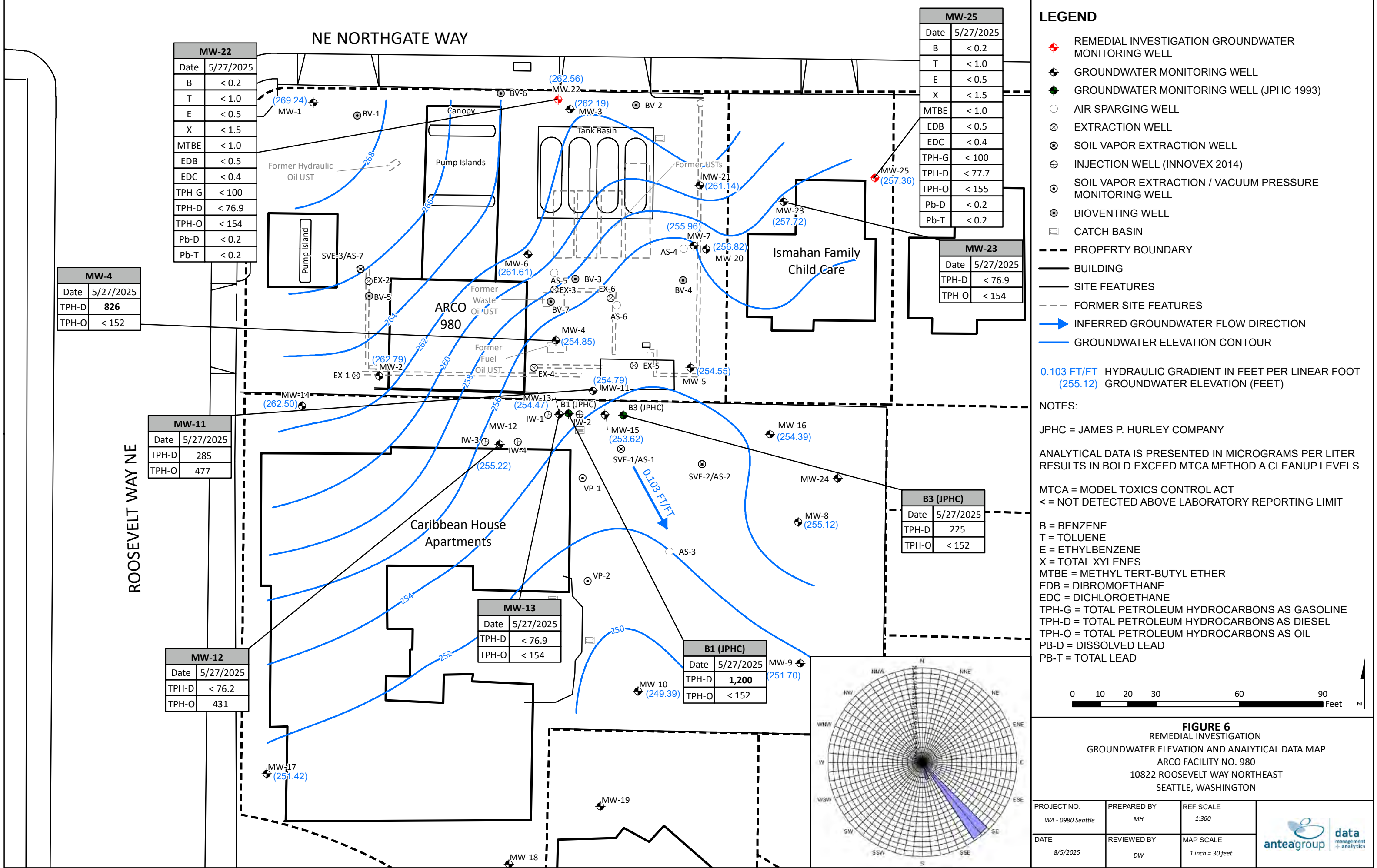
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FIGURE 4

REMEDIAL INVESTIGATION SAMPLE LOCATIONS
ARCO FACILITY NO. 980
10822 ROOSEVELT WAY NORTHEAST
SEATTLE, WASHINGTON

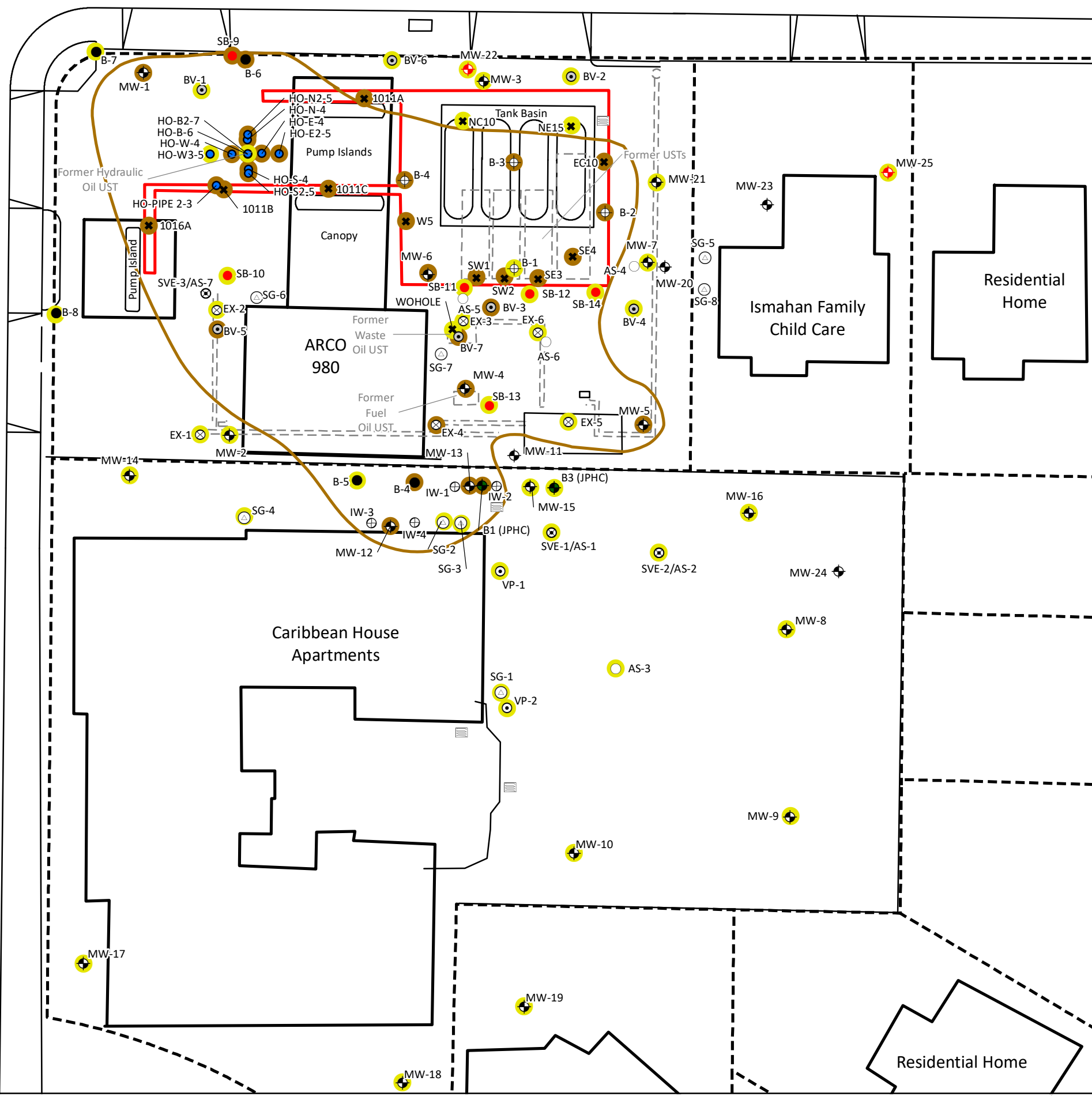
PROJECT NO. WA - 0980 Seattle	PREPARED BY MB	REF SCALE 1:360	 data management analytics
DATE 8/5/2025	REVIEWED BY BC	MAP SCALE 1 inch = 30 feet	





ROOSEVELT WAY NE

NE NORTHGATE WAY



LEGEND

- REMEDIAL INVESTIGATION GROUNDWATER MONITORING WELL
- REMEDIAL INVESTIGATION SOIL BORING
- GROUNDWATER MONITORING WELL
- GROUNDWATER MONITORING WELL (JPHC 1993)
- AIR SPARGING WELL
- EXTRACTION WELL
- SOIL VAPOR EXTRACTION WELL
- INJECTION WELL (INNOVEX 2014)
- SOIL VAPOR EXTRACTION / VACUUM PRESSURE MONITORING WELL
- BIOVENTING WELL
- SOIL GAS PROBE
- SOIL BORING (1989)
- SOIL BORING (GERAGHTY & MILLER 1989)
- SOIL SAMPLING LOCATIONS (1990)
- HYDRAULIC EXCAVATION SAMPLES
- CATCH BASIN
- ONE OR MORE CONSTITUENTS HISTORICALLY EXCEEDED MTCA METHOD A CULS
- NO CONSTITUENTS ANALYZED HISTORICALLY EXCEEDED MTCA METHOD A CULS
- PROPERTY BOUNDARY
- BUILDING
- SITE FEATURES
- FORMER SITE FEATURES
- APPROXIMATE EDGE OF EXCAVATION
- HISTORICAL MTCA BOUNDARY FOR PETROLEUM IMPACTED SOIL EXCEEDING MTCA METHOD A CULS

NOTES:
JPHC = JAMES P. HURLEY COMPANY
MTCA = MODEL TOXICS CONTROL ACT
CULS = CLEANUP LEVELS

0 10 20 30 60 90 Feet

FIGURE 7

HISTORICAL MTCA METHOD A SITE BOUNDARY MAP FOR SOIL

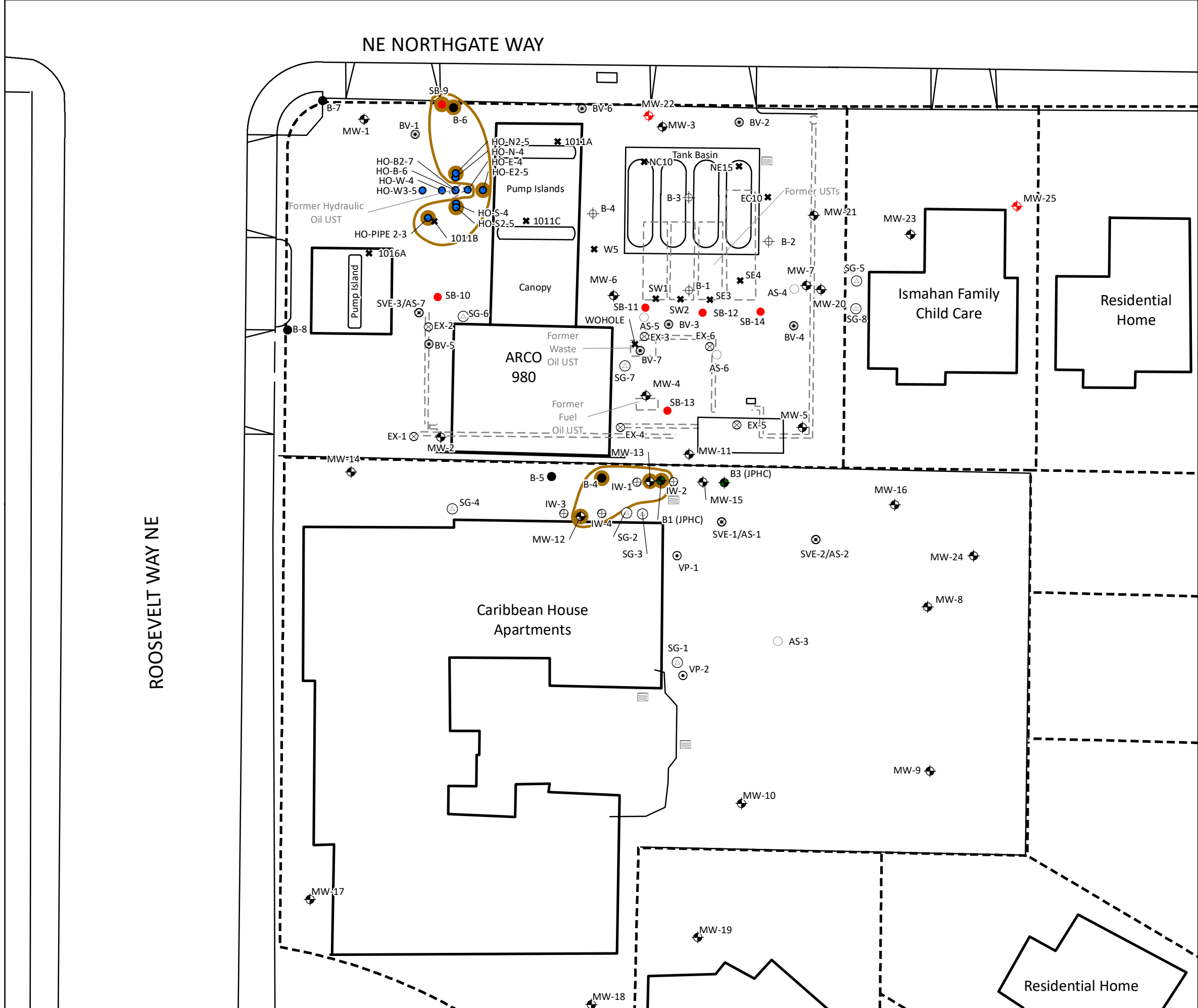
ARCO FACILITY NO. 980

10822 ROOSEVELT WAY NORTHEAST

SEATTLE, WASHINGTON

PROJECT NO. WA - 0980 Seattle	PREPARED BY MB	REF SCALE 1:360
DATE 8/5/2025	REVIEWED BY BC	MAP SCALE 1 inch = 30 feet

data management + analytics



LEGEND

REMEDIAL INVESTIGATION GROUNDWATER MONITORING WELL

REMEDIAL INVESTIGATION SOIL BORING

GROUNDWATER MONITORING WELL

GROUNDWATER MONITORING WELL (JPHC 1993)

AIR SPARGING WELL

EXTRACTION WELL

SOIL VAPOR EXTRACTION WELL

INJECTION WELL (INNOVEX 2014)

SOIL VAPOR EXTRACTION / VACUUM PRESSURE MONITORING WELL

BIOVENTING WELL

SOIL GAS PROBE

SOIL BORING (1989)

SOIL BORING GERAGHTY & MILLER 1989)

SOIL SAMPLING LOCATIONS (1990)

HYDRAULIC EXCAVATION SAMPLES

CATCH BASIN

ONE OR MORE CONSTITUENTS EXCEEDS MTCA METHOD A CULS

PROPERTY BOUNDARY

BUILDING

SITE FEATURES

FORMER SITE FEATURES

MTCA BOUNDARY FOR PETROLEUM IMPACTED SOIL EXCEEDING MTCA METHOD A CULS

NOTES:

JPHC = JAMES P. HURLEY COMPANY
MTCA = MODEL TOXICS CONTROL ACT
CULS = CLEANUP LEVELS

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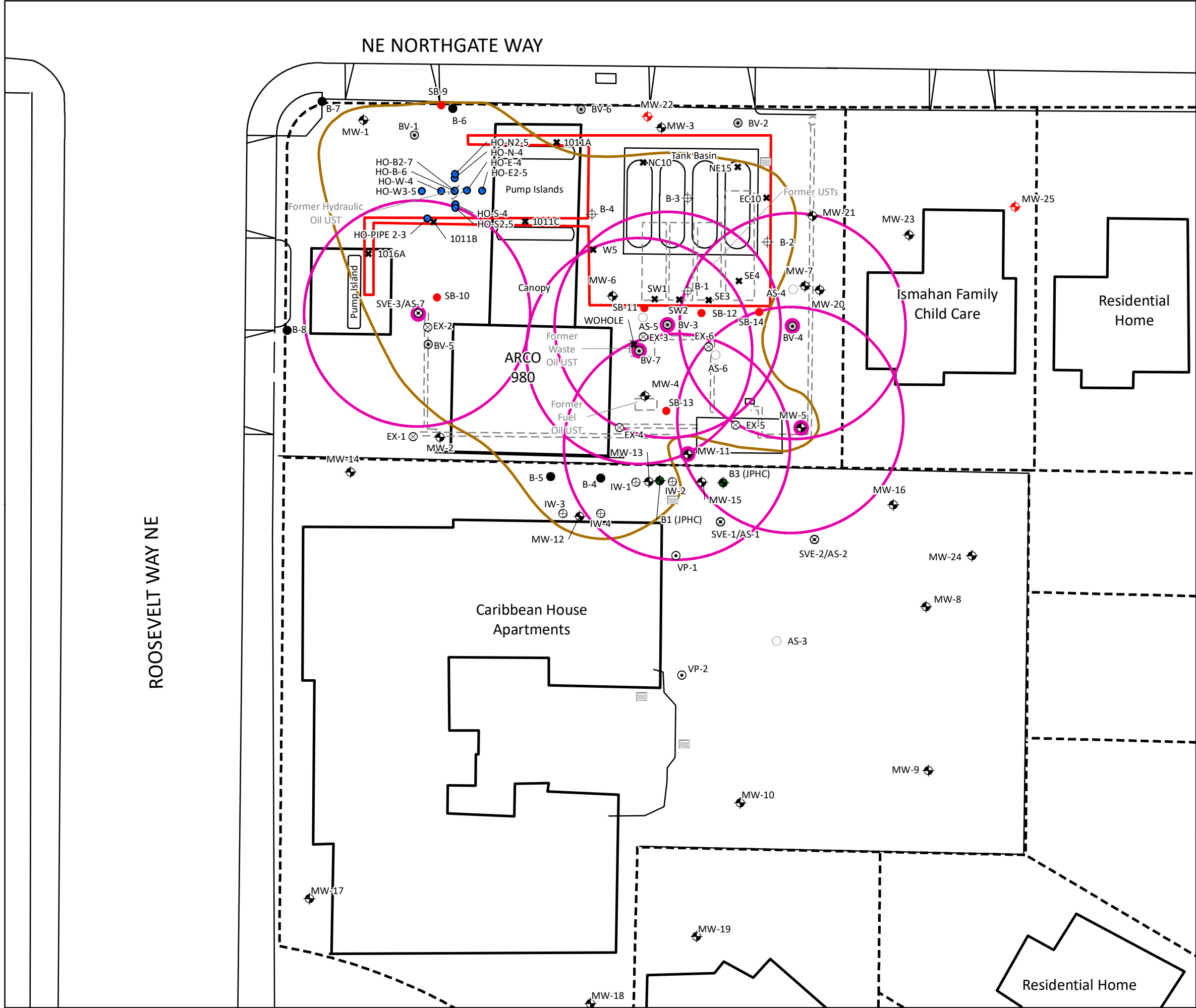
Feet

N

FIGURE 8

CURRENT MTCA METHOD A SITE BOUNDARY MAP FOR SOIL
ARCO FACILITY NO. 980
10822 ROOSEVELT WAY NORTHEAST
SEATTLE, WASHINGTON

PROJECT NO. WA - 00980 Seattle	PREPARED BY MB	REF SCALE 1:360	 data management + analytics
DATE 8/5/2025	REVIEWED BY BC	MAP SCALE 1 inch = 30 feet	



LEGEND

- REMEDIAL INVESTIGATION GROUNDWATER MONITORING WELL
- REMEDIAL INVESTIGATION SOIL BORING
- GROUNDWATER MONITORING WELL
- GROUNDWATER MONITORING WELL (JPHC 1993)
- AIR SPARGING WELL
- EXTRACTION WELL
- SOIL VAPOR EXTRACTION WELL
- INJECTION WELL (INNOVEX 2014)
- SOIL VAPOR EXTRACTION / VACUUM PRESSURE MONITORING WELL
- BIOVENTING WELL
- SOIL BORING (1989)
- SOIL BORING (GERAGHTY & MILLER 1989)
- SOIL SAMPLING LOCATIONS (1990)
- HYDRAULIC EXCAVATION SAMPLES
- CATCH BASIN
- SVE SYSTEM WELL
- PROPERTY BOUNDARY
- BUILDING
- SITE FEATURES
- FORMER SITE FEATURES
- APPROXIMATE EDGE OF EXCAVATION
- SVE WELL 35 FT. RADIUS OF INFLUENCE
- HISTORICAL MTCA BOUNDARY FOR PETROLEUM IMPACTED SOIL EXCEEDING MTCA METHOD A CULS

NOTES:

JPHC = JAMES P. HURLEY COMPANY
FT = FEET
SVE = SOIL VAPOR EXTRACTION
MTCA = MODEL TOXICS CONTROL ACT
CULS = CLEANUP LEVELS

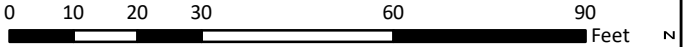
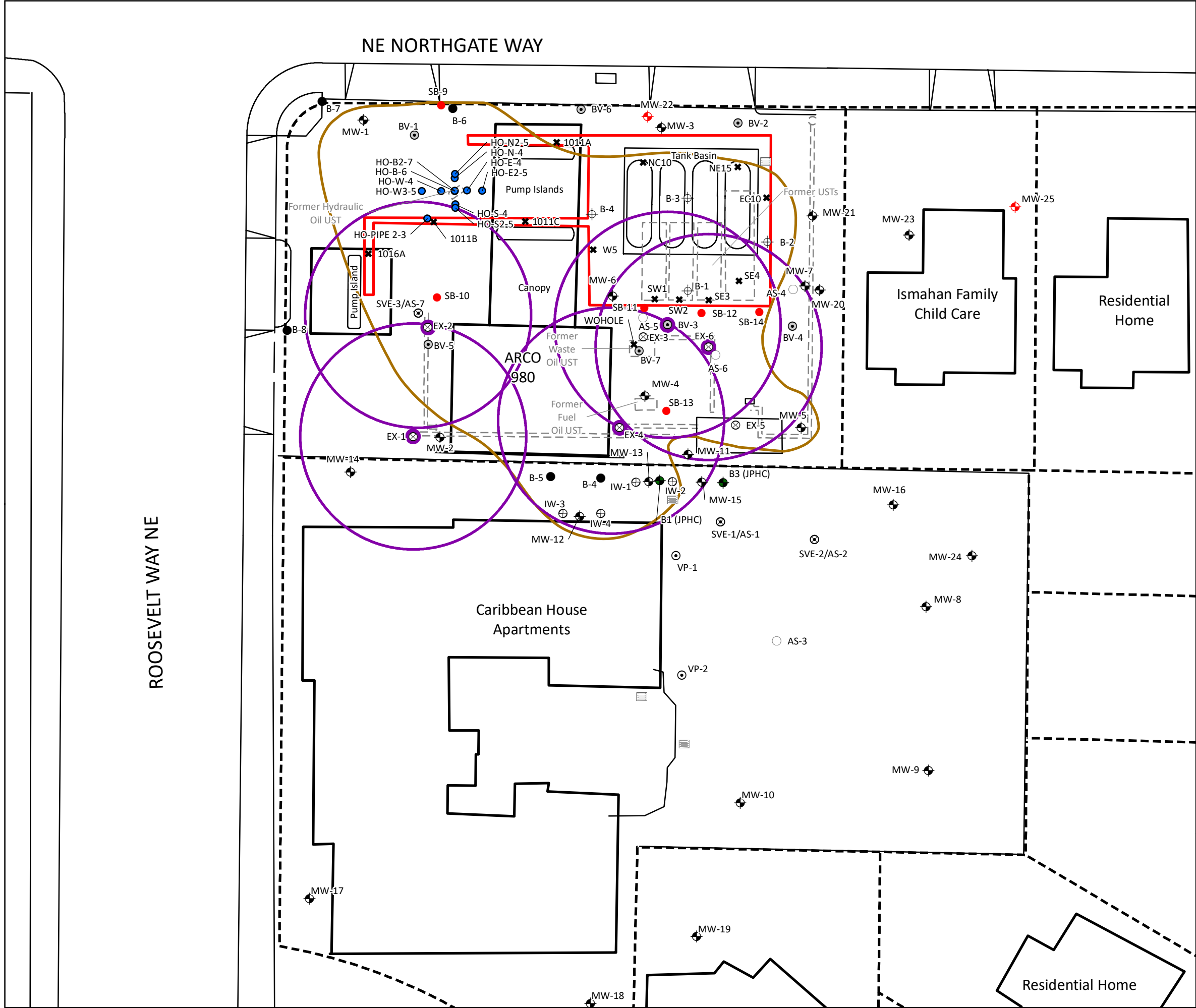


FIGURE 9
SOIL VAPOR EXTRACTION SYSTEM
ARCO FACILITY NO. 980
10822 ROOSEVELT WAY NORTHEAST
SEATTLE, WASHINGTON

PROJECT NO. WA - 0980 Seattle	PREPARED BY MB	REF SCALE 1:360	 data management + analytics
DATE 8/5/2025	REVIEWED BY BC	MAP SCALE 1 inch = 30 feet	



LEGEND

- REMEDIAL INVESTIGATION GROUNDWATER MONITORING WELL
- REMEDIAL INVESTIGATION SOIL BORING
- GROUNDWATER MONITORING WELL
- GROUNDWATER MONITORING WELL (JPHC 1993)
- AIR SPARGING WELL
- EXTRACTION WELL
- SOIL VAPOR EXTRACTION WELL
- INJECTION WELL (INNOVEX 2014)
- SOIL VAPOR EXTRACTION / VACUUM PRESSURE MONITORING WELL
- BIOVENTING WELL
- SOIL BORING (1989)
- SOIL BORING (GERAGHTY & MILLER 1989)
- SOIL SAMPLING LOCATIONS (1990)
- HYDRAULIC EXCAVATION SAMPLES
- CATCH BASIN
- DPE SYSTEM WELL
- PROPERTY BOUNDARY
- BUILDING
- SITE FEATURES
- FORMER SITE FEATURES
- APPROXIMATE EDGE OF EXCAVATION
- DPE SYSTEM WELL 35 FT. RADIUS OF INFLUENCE
- HISTORICAL MTCA BOUNDARY FOR PETROLEUM IMPACTED SOIL EXCEEDING MTCA METHOD A CULS

NOTES:

JPHC = JAMES P. HURLEY COMPANY
FT = FEET
DPE = DUAL PHASE EXTRACTION
MTCA = MODEL TOXICS CONTROL ACT
CULS = CLEANUP LEVELS

01020306090

Feet

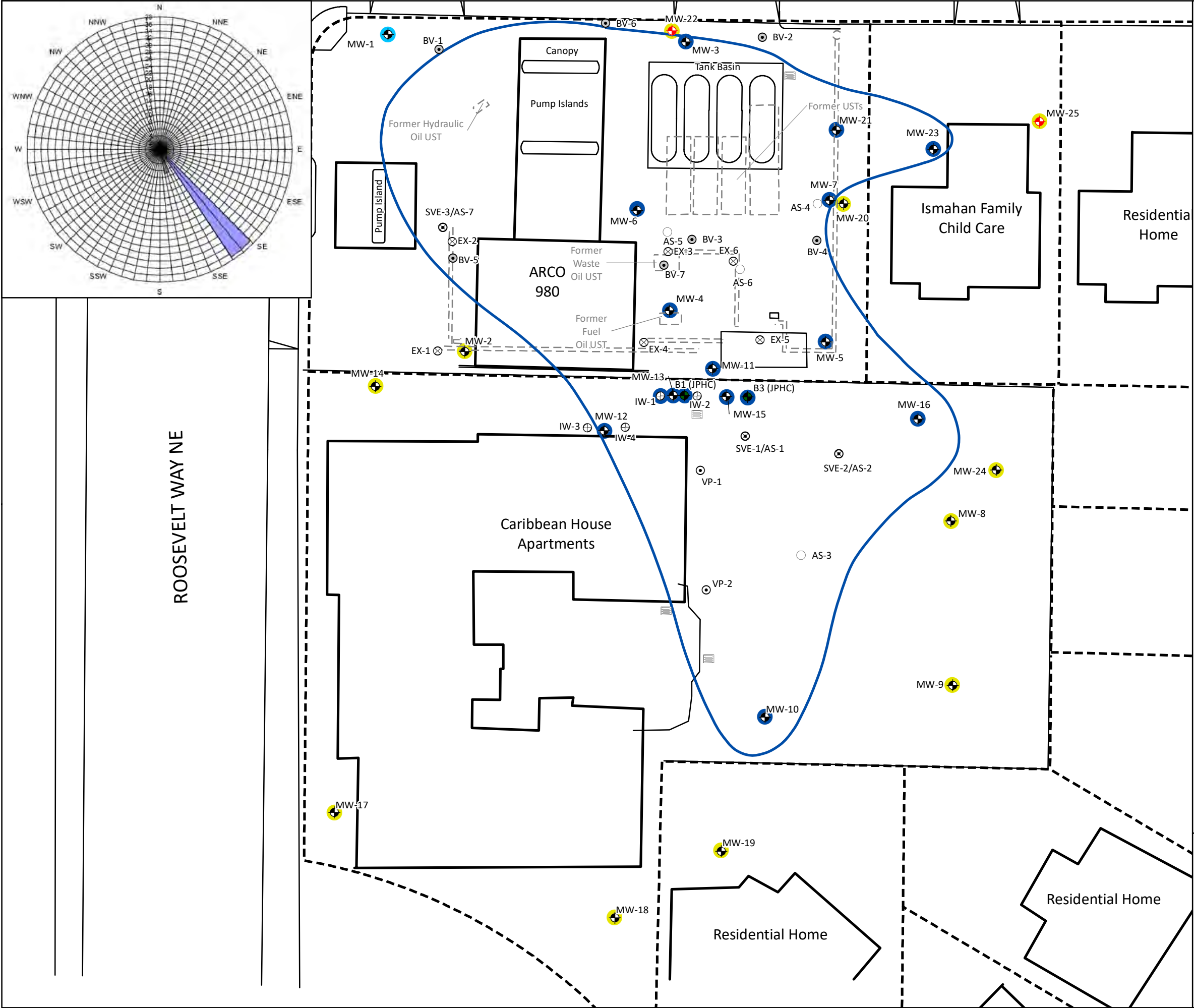
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FIGURE 10

DUAL PHASE EXTRACTION SYSTEM
ARCO FACILITY NO. 980
10822 ROOSEVELT WAY NORTHEAST
SEATTLE, WASHINGTON

PROJECT NO. WA - 0980 Seattle	PREPARED BY MB	REF SCALE 1:360	 data management + analytics
DATE 8/5/2025	REVIEWED BY BC	MAP SCALE 1 inch = 30 feet	

Z:\GIS Projects\BP\BP_WA\980 Seattle- CROSS CHECK CAD FILE\Layout\980_DPESystem.mxd



LEGEND

- REMEDIAL INVESTIGATION GROUNDWATER MONITORING WELL
- GROUNDWATER MONITORING WELL
- GROUNDWATER MONITORING WELL (JPHC 1993)
- AIR SPARGING WELL
- EXTRACTION WELL
- SOIL VAPOR EXTRACTION WELL
- INJECTION WELL (INNOVEX 2014)
- SOIL VAPOR EXTRACTION / VACUUM PRESSURE MONITORING WELL
- BIOVENTING WELL
- CATCH BASIN
- PROPERTY BOUNDARY
- BUILDING
- SITE FEATURES
- FORMER SITE FEATURES
- HISTORICAL MTCA BOUNDARY FOR PETROLEUM IMPACTED GROUNDWATER EXCEEDING MTCA METHOD A CULS
- ONE OR MORE CONSTITUENTS HISTORICALLY EXCEEDED MTCA METHOD A CULS
- NO CONSTITUENTS ANALYZED EXCEEDED MTCA METHOD A CULS
- SINGLE METHOD A EXCEEDANCE THAT APPEARS TO BE ANOMALOUS

NOTES:

JPHC = JAMES P. HURLEY COMPANY
MTCA = MODEL TOXICS CONTROL ACT
CULS = CLEANUP LEVELS

01020306090

Feet

FIGURE 11

HISTORICAL MTCA SITE BOUNDARY MAP FOR GROUNDWATER

ARCO FACILITY NO. 980

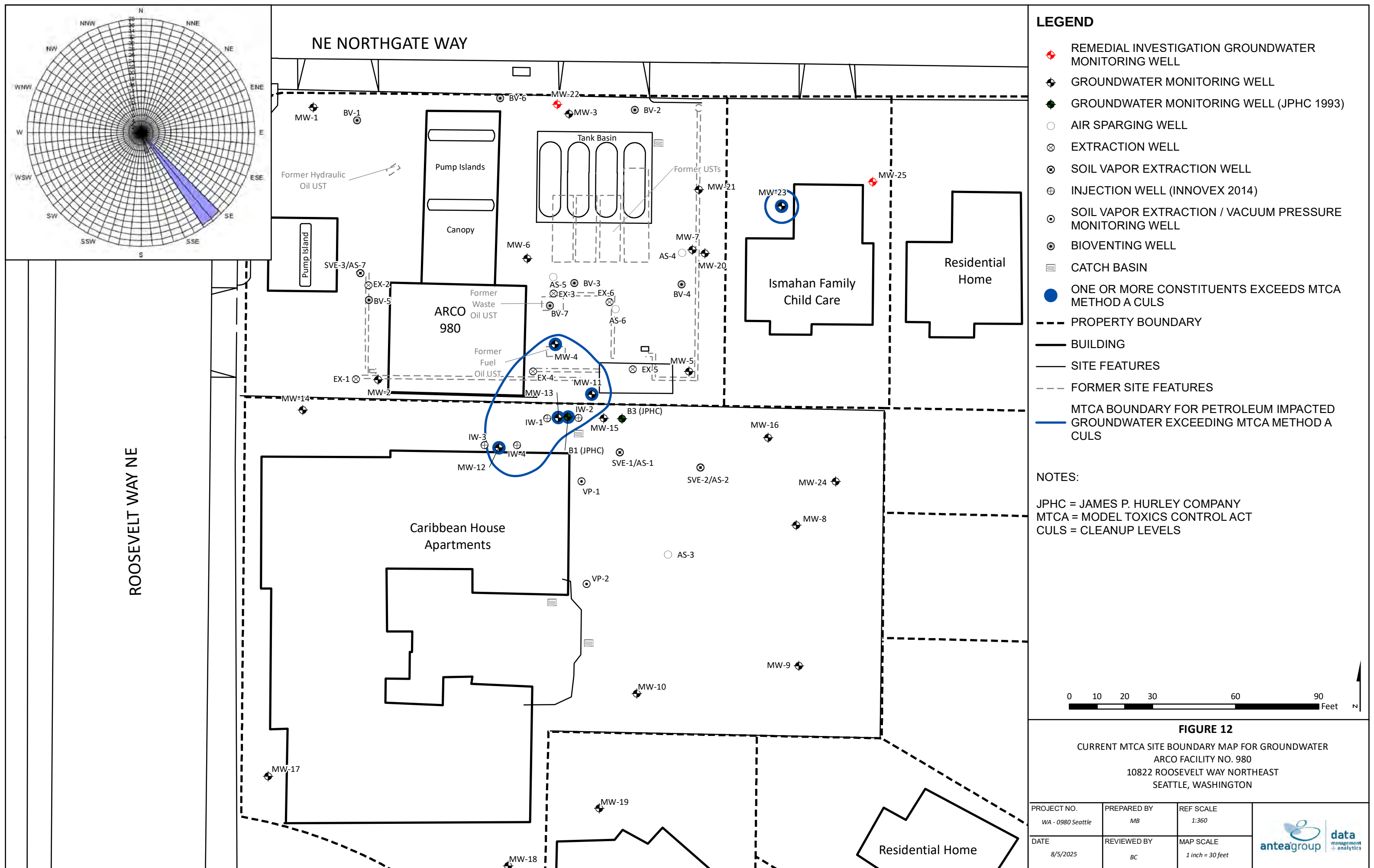
10822 ROOSEVELT WAY NORTHEAST

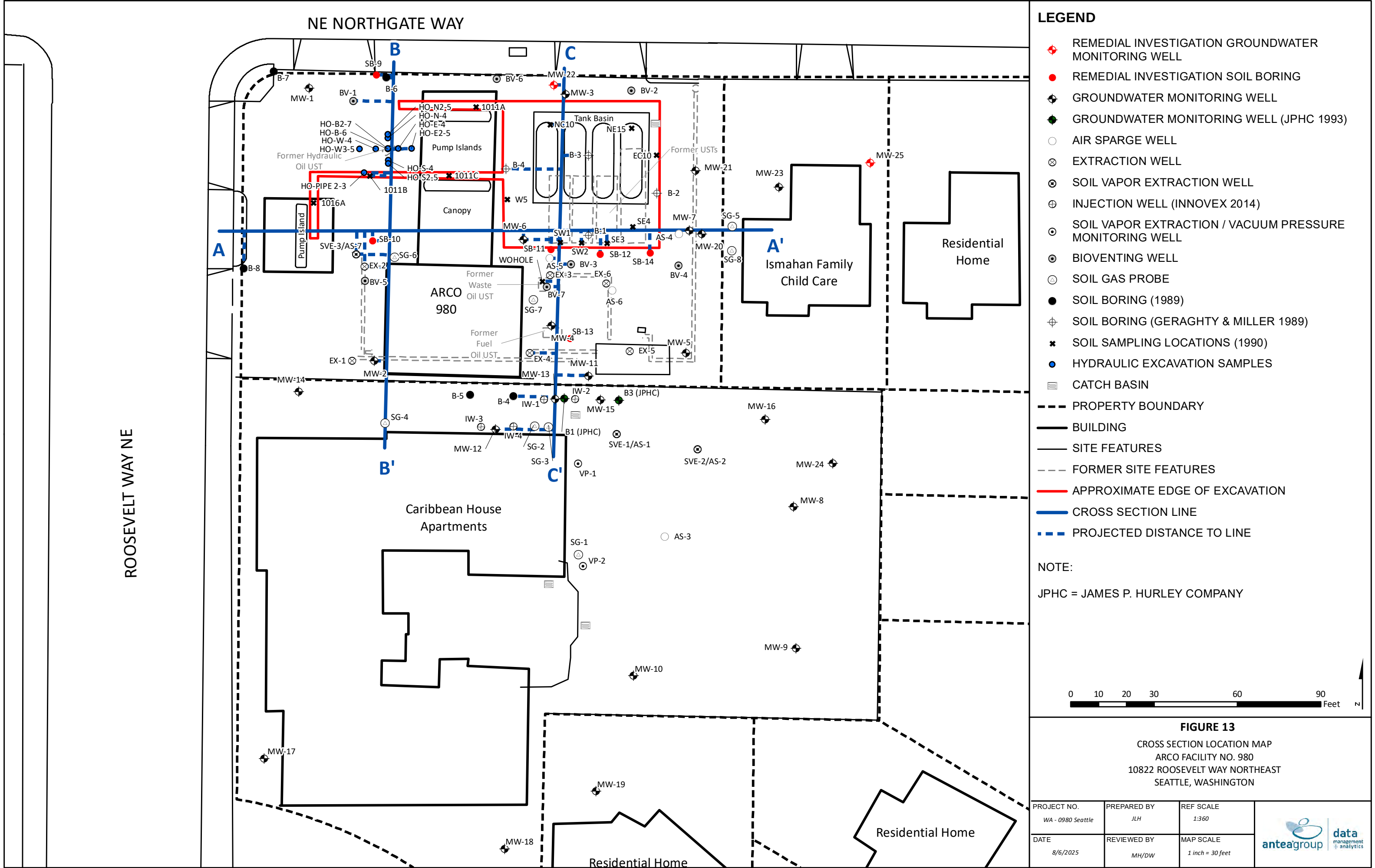
SEATTLE, WASHINGTON

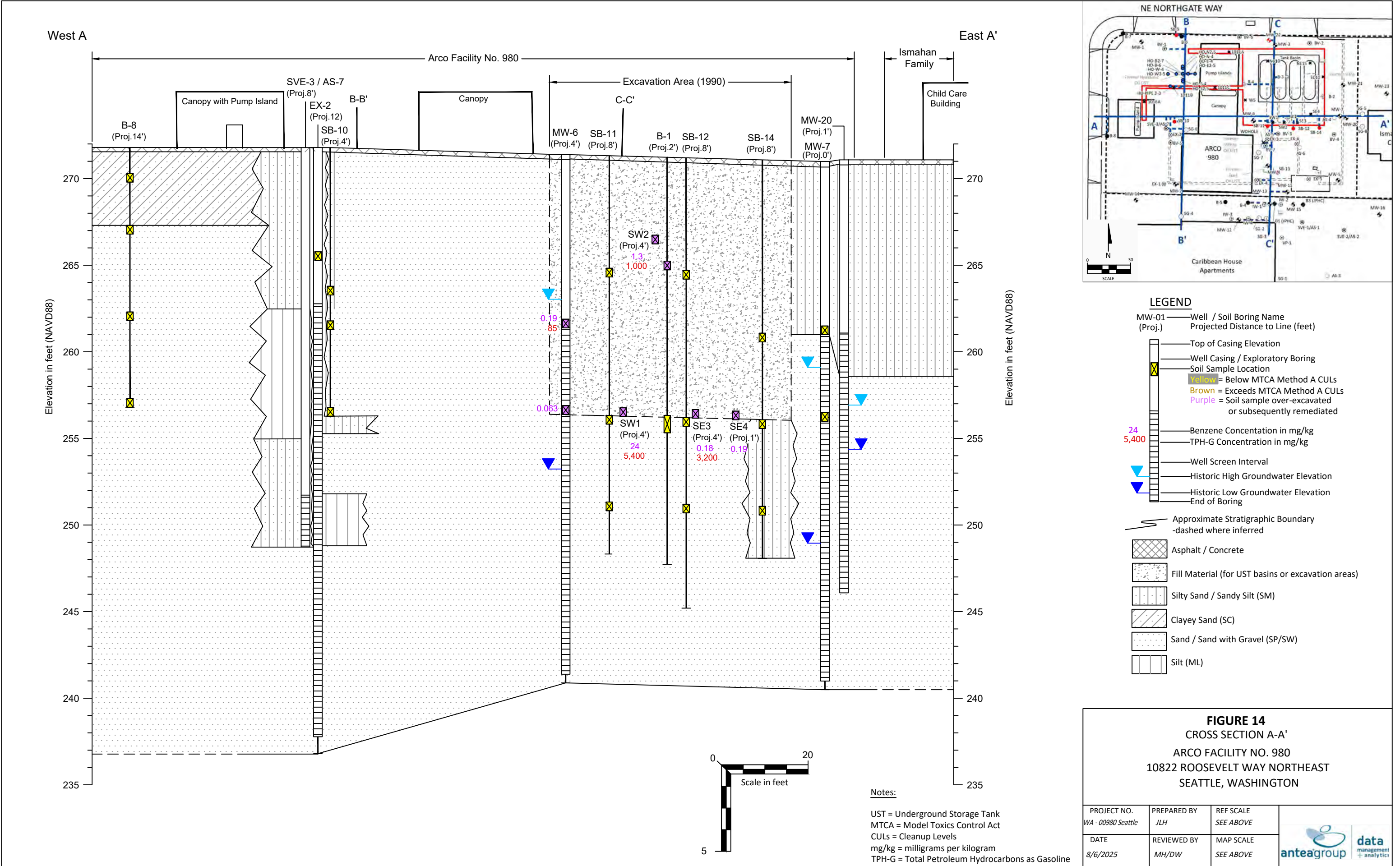
PROJECT NO. WA - 0980 Seattle	PREPARED BY MB	REF SCALE 1:360
DATE 8/5/2025	REVIEWED BY BC	MAP SCALE 1 inch = 30 feet

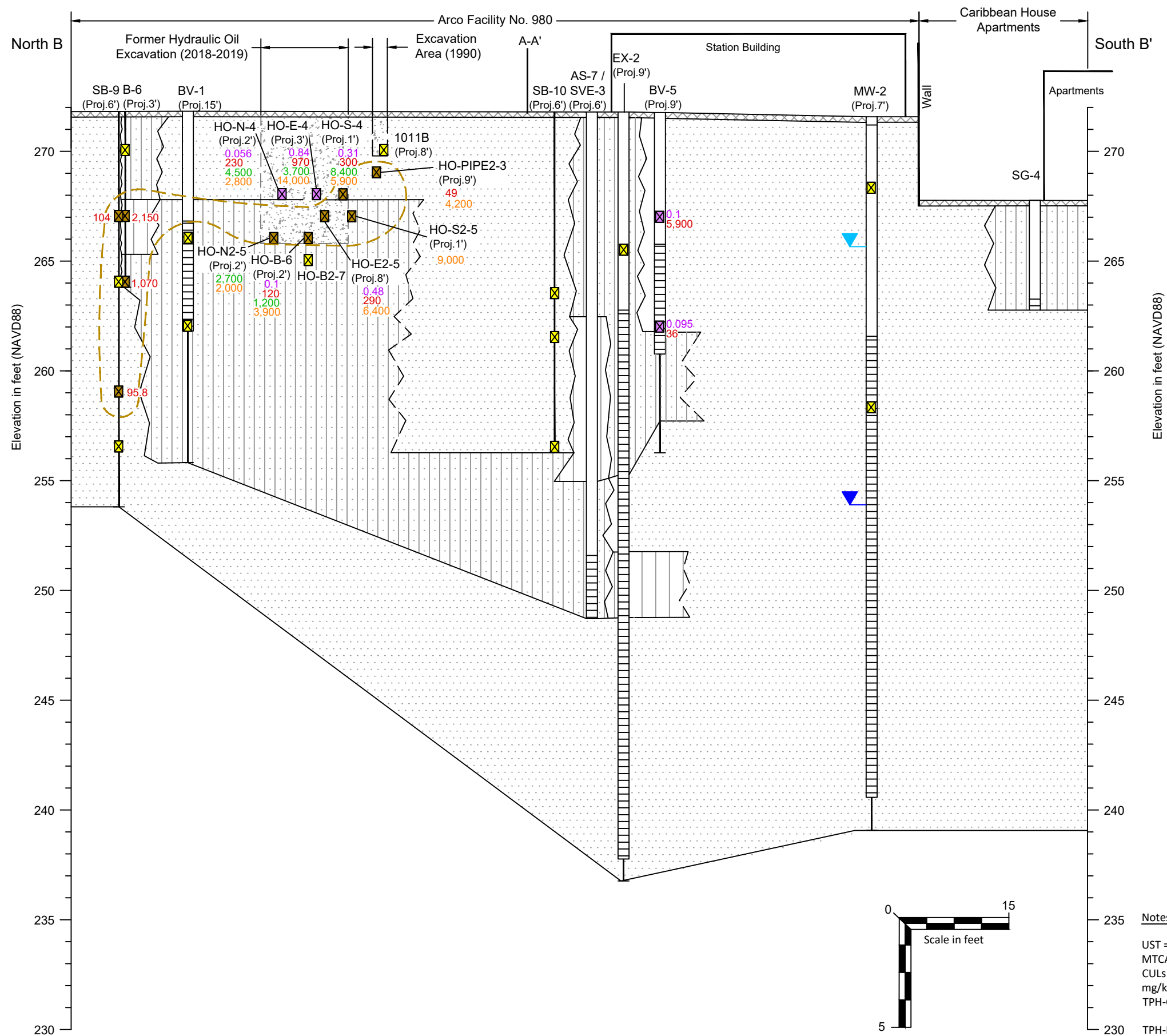


data
management
analytics



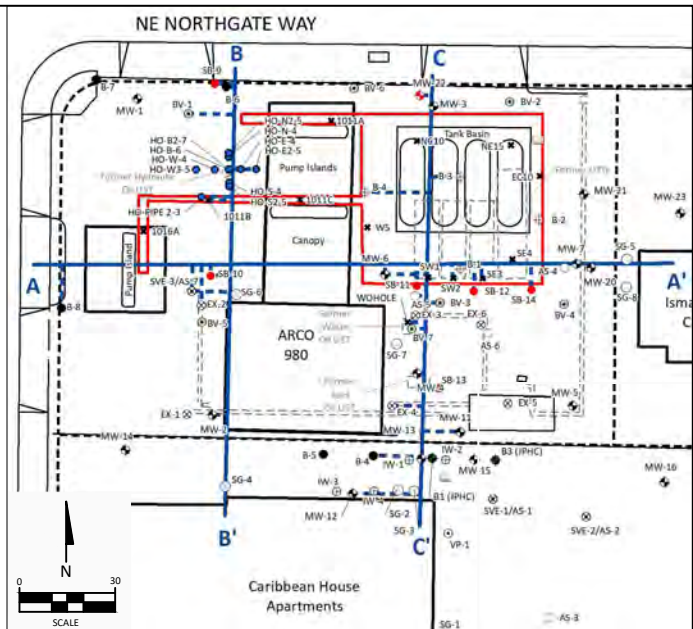






Notes:

UST = Underground Storage Tank
MTCA = Model Toxics Control Act
CULs = Cleanup Levels
mg/kg = milligrams per kilogram
TPH-G = Total Petroleum
Hydrocarbons as Gasoline
TPH-D = Total Petroleum
Hydrocarbons as Diesel
TPH-O = Total Petroleum
Hydrocarbons as Oil

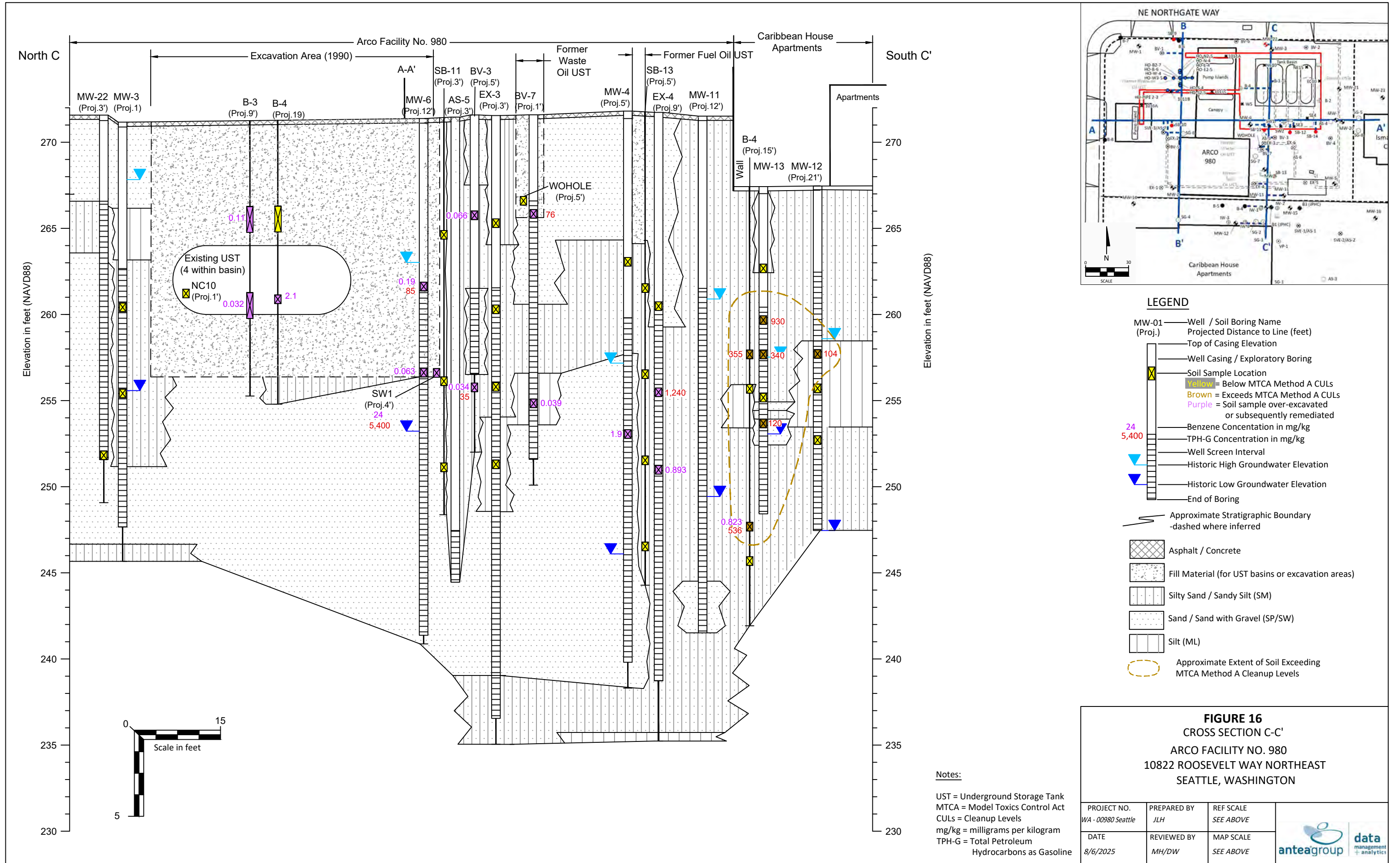


LEGEND

- MW-01 — Well / Soil Boring Name
(Proj.) — Projected Distance to Line (feet)
- Top of Casing Elevation
— Well Casing / Exploratory Boring
— Soil Sample Location
Yellow = Below MTCA Method A CULs
Brown = Exceeds MTCA Method A CULs
Purple = Soil sample over-excavated or subsequently remediated
- 0.1 — Benzene Concentration in mg/kg
5,400 — TPH-G Concentration in mg/kg
1,200 — TPH-D Concentration in mg/kg
3,900 — TPH-O Concentration in mg/kg
- Well Screen Interval
— End of Boring
- Approximate Stratigraphic Boundary
-dashed where inferred
- Asphalt / Concrete
Fill Material (for UST basins or excavation areas)
Silty Sand / Sandy Silt (SM)
Sand / Sand with Gravel (SP/SW)
Silt (ML)
- Approximate Extent of Soil Exceeding MTCA Method A Cleanup Levels

FIGURE 15
CROSS SECTION B-B'
ARCO FACILITY NO. 980
10822 ROOSEVELT WAY NORTHEAST
SEATTLE, WASHINGTON

PROJECT NO. WA - 00980 Seattle	PREPARED BY JLH	REF SCALE SEE ABOVE	
DATE 8/6/2025	REVIEWED BY MH/DW	MAP SCALE SEE ABOVE	



Appendix A – Previous Investigations

PREVIOUS INVESTIGATIONS

A summary of previous assessments is described below:

SEPTEMBER 1989 – PRELIMINARY SUBSURFACE ASSESSMENT

On September 12, 1989, Atlantic Richfield Company (ARCO) contracted Geraghty & Miller, Inc. (G&M) to install four soil borings (B1 through B4) in the vicinity of the underground storage tank (UST) complex at the Site. The soil borings were installed as part of a preliminary subsurface assessment prior to UST removal activities. Hydrocarbon concentrations were detected above the Washington State Department of Ecology's (Ecology) Model Toxics Control Act (MTCA) Method A Cleanup Levels at soil borings B2 through B4 to a maximum depth of 16 feet below ground surface (bgs) (G&M, 1989).

OCTOBER 1990 – STATION UPGRADES

In October 1990, ARCO contracted Joe Hall Construction Company to remove four gasoline USTs, and the associated product distribution piping from the Site. The USTs consisted of one 10,000-gallon steel UST, and three 6,000-gallon steel USTs. Petroleum hydrocarbon concentrations were detected above the MTCA Method A Cleanup Levels in soil samples collected from the UST cavity and from below the product lines. During excavation activities, an abandoned septic tank was discovered. Light non-aqueous phase liquid (LNAPL) was measured in the abandoned septic tank and the contents were removed; however, the septic tank was left in place due to the proximity to service station structures on the ARCO property. In addition to the gasoline USTs, a waste oil UST was also reportedly removed (G&M, 1991).

MARCH 1992 – SOIL GAS SURVEY

According to the G&M Site Characterization Report dated January 29, 1993, Tracer Research Corporation (Tracer) conducted a soil gas survey on behalf of G&M on March 30 and 31, 1992, to determine the approximate distribution of hydrocarbons and potential locations for bioventing and monitoring wells (G&M, 1993). Fifteen soil gas samples were collected and analyzed on-site by Tracer for total volatile hydrocarbons (TVH) and benzene, toluene, ethylbenzene, and xylenes (BTEX). Soil gas detected as TVH was found in 10 of the soil gas samples. The highest concentrations of TVH were detected in samples collected along the eastern side of the Site from sampling locations SG-1 at 11 feet bgs and SG-2 at 8 feet bgs (G&M, 1993).

AUGUST AND SEPTEMBER 1992 – MONITORING WELL AND BIOVENTING WELL INSTALLATION

Between August 18 and 21 1992, ARCO contracted G&M to install 10 soil borings at the Site. Five soil borings were subsequently completed as groundwater monitoring wells (MW-1 through MW-5), and five borings were completed as bioventing wells (BV-1 through BV-5). Petroleum hydrocarbon concentrations were detected above the MTCA Method A Cleanup Levels in soil samples collected from the borings for MW-1, MW-4, MW-5, BV 3, and BV-5. Groundwater samples were collected from each of the five monitoring wells on September 22, 1992. Groundwater samples collected from MW-2, MW-4, and MW-5 contained concentrations of dissolved petroleum hydrocarbons, BTEX, total petroleum hydrocarbons as diesel (TPH-D), and/or total lead in excess of MTCA Method A Cleanup Levels. LNAPL was subsequently measured in wells MW-4 and BV-3 in March 1993 (G&M, 1993).

1993 – MONITORING WELL INSTALLATION AND SOIL VAPOR EXTRACTION PILOT TEST

In early 1993, ARCO contracted G&M to install four additional soil borings to further delineate soil and groundwater contamination at the Site. Two soil borings were subsequently completed as groundwater monitoring wells (MW-6 and MW-7), and two borings were completed as bioventing wells (BV-6 and BV-7). In

addition to the subsurface investigation, a soil vapor extraction (SVE) feasibility test was conducted on select bioventing wells. Soil

samples collected from MW-6 and BV-7 contained concentrations of petroleum hydrocarbons in excess of cleanup levels (Delta, 1995). G&M's *Additional Site Characterization and Soil Vapor Extraction Field Testing Report* dated July 12, 1993 was unavailable for review at the time of this report. This information has been obtained from Delta Environmental Consultants, Inc (Delta) Project Summary dated March 10, 1995.

SEPTEMBER 1993 – OFF-SITE INVESTIGATION

James P. Hurley Company (JPHC) completed Phase I and Phase II Environmental Site Assessments (ESA) for the adjacent property located at 10800 Roosevelt Way Northeast, located just south of the ARCO station (Caribbean Apartments). The Phase II ESA included the installation of three soil borings on the Caribbean House Apartments property, two of which were completed as groundwater monitoring wells B1 (JPHC) and B3 (JPHC). The results of the assessment indicated the presence of elevated hydrocarbon concentrations in soil and groundwater (JPHC, 1993).

1994 – OFF-SITE INVESTIGATION AND WELL INSTALLATION

In early 1994, G&M completed a subsurface investigation on the Caribbean House Apartments property. The investigation consisted of the installation of nine soil borings. Three soil borings were completed as groundwater monitoring wells (MW-8 through MW-10), two as nested pressure and vacuum monitoring wells (VP-1 and VP-2), one soil vacuum extraction well nested with one air sparge well (SVE-1/AS-1) one SVE well (SVE-2), and two air sparge wells (AS-2 and AS-3). No petroleum hydrocarbon concentrations were detected above MTCA Method A Cleanup Levels from the soil or groundwater samples analyzed. Lead exceedances above Method A Cleanup Levels were present in groundwater samples collected from VP-1, VP-2, and SVE-1/AS-1 (G&M, 1994).

SEPTEMBER 1994 – SOIL VAPOR EXTRACTION SYSTEM INSTALLATION

In September 1994, G&M installed a soil vapor extraction system with a combination thermal and catalytic oxidizer at the Site. The SVE system extracted from wells BV-3, BV-7 and MW-5. The SVE system was started in November 1994 by Delta. No report documenting this information was unavailable for review at the time of this report. This information has been obtained from Delta *Project Summary* dated March 10, 1995 (Delta, 1995).

MARCH 1995 – AIR SPARGE PILOT TEST

In March and April 1995, Delta oversaw the installation of two air sparge wells (AS-4 and AS-5), and one monitoring well (MW-11) at the Site. Soil samples AS-5-12 and MW-11-17 contained concentrations of total petroleum hydrocarbons as gasoline (TPH-G) at 1,200 parts per million (ppm) and 140 ppm, respectively. Concentrations of BTEX were detected in AS-5-12, ranging from 4.7 ppm (benzene) to 240 ppm (xylenes). Following installation of the air sparge wells, Delta completed an air sparge pilot test on the newly installed air sparge wells with favorable results (Delta, 1995).

APRIL 1996 – REMEDIATION SYSTEM UPGRADES

In April 1996, the remediation system was shut down for system upgrades. Remediation system upgrades included the addition of air sparge components, the enlargement of existing SVE wells BV-3 and MW-5 from two- to four-inch diameter wells, modifying BV-4 and MW-11 for use as SVE wells, and installing well SVE-3. The remediation system was restarted on May 1, 1996. This information has been obtained from Delta's *Ground Water Remediation Report* dated January 31, 2002 (Delta, 2002).

JULY 1996 – ADDITIONAL ASSESSMENT

In July 1996, Delta oversaw the installation of soil borings B-4 and B-5 and monitoring well MW-12 on the Caribbean House Apartments property for additional assessment and delineation of soil and groundwater impacts. Soil analytical results indicated concentrations of TPH-G and/or benzene from sample B-4 and 20 feet bgs and MW-12 at 10 feet bgs (Delta, 2004).

SEPTEMBER 1997 – ENHANCED FLUID RECOVERY PROGRAM

In September 1997, Delta began an enhanced fluid recovery (EFR) program for the recovery of LNAPL and petroleum hydrocarbon impacted groundwater from wells located on the Site and the Caribbean House Apartments property. EFR events were conducted through 2003. Details on the recovered volumes are included in groundwater monitoring reports for the Site (Delta, 2004).

OCTOBER 1999 – AIR SPARGE SYSTEM SHUTDOWN

In October 1999, the air sparge portion of the remediation system was shut down (Delta, 2004).

AUGUST 2002 – TEMPORARY SYSTEM SHUTDOWN

In August 2002, the SVE system was shut down to evaluate LNAPL rebound and due to noise complaints from the adjacent apartment complex. Approximately 1,255 pounds of volatile petroleum hydrocarbons (VPH) had been removed as of August 26, 2002 (Delta, 2004).

OCTOBER 2005 – REMEDIATION SYSTEM EXPANSION

In October 2005, Delta oversaw the installation of additional remediation wells at the Site. In preparation for the installation of a dual phase extraction (DPE) remediation system, six extraction wells (EX-1 through EX-6) were installed along the southern portion of the ARCO property. Soil samples were collected during extraction well installation. Soil analytical results indicated the presence of benzene and TPH-G in the soil samples collected from EX-4 at 16.5 and 21 feet bgs. The system was tested and optimized before being placed in full-time operation in the first quarter 2008 (Delta, 2008). The DPE system operated at the Site until fourth quarter 2012, when it was shut down and subsequently removed in August 2014. A total of 6,583,867 gallons of water was treated and discharged to sanitary sewer during the operational lifetime of the DPE system.

DECEMBER 2014 – INJECTION WELL INSTALLATION

In December 2014, Innovex Environmental Management, Inc. (Innovex) personnel oversaw the installation of four injection wells IW-1 through IW-4 on the Caribbean House Apartments property to address remaining dissolved-phase and soil bound hydrocarbon impacts. A report detailing this event was not available at the time of this report. All information was obtained from Antea Group's *Subsurface Investigation Report* dated November 18, 2019 (Antea Group, 2019).

APRIL 2016 – HYDROGEN PEROXIDE INJECTION

In April 2016, Innovex contracted In-Situ Oxidative Technologies, Inc. (Isotec) to conduct injection of stabilized hydrogen peroxide in injection wells IW-1 through IW-4. On April 19, 2016, injection well IW-2 received 50 gallons of ferrous iron catalyst followed by 50 gallons of stabilized hydrogen peroxide. While preparing for injection in IW-1, Innovex measured and confirmed the presence of approximately 0.25 inches of LNAPL in IW-1. Injections were stopped due to health and safety concerns associated with hydrogen peroxide application into free LNAPL. A report detailing this event was not available at the time of this report. All information was obtained from Antea Group's *Subsurface Investigation Report* dated November 18, 2019 (Antea Group, 2019).

JULY 2017 – VAPOR INTRUSION EVALUATION

In February and June 2017, PBS Engineering and Environmental Inc. (PBS) conducted a vapor intrusion evaluation at the Caribbean House Apartments property to determine whether petroleum contamination associated with the Site has the potential to adversely affect indoor air at the Apartments. Three vapor probes (SV-1 through SV-3) were installed along the north and east sides of the building. Vapor sampling was conducted on February 14, 2017. During this event, SV-2 and SV-3 contained water and were therefore unable to be sampled. The vapor sample from SV-1 contained naphthalene above the Ecology Screening Level (ESL). A second soil vapor sampling event was conducted on June 23, 2017, during which SV-3 still contained water. Samples were collected from SV-1 and SV-2, both of which contained naphthalene above the ESL (PBS, 2017a).

AUGUST 2017 – STATION UPGRADE CONFIRMATION SOIL SAMPLING

In August 2017, Antea Group performed confirmation soil sampling during station product line and dispenser upgrade activities. Four soil samples were collected from the bottom of the excavation product piping trench at 2.5 and four feet bgs to confirm soil concentrations previously identified as impacted during the 1990 upgrades. Laboratory analytical results for BTEX and TPH-G were not detected in excess of MTCA Method A Cleanup Levels. The historic tank pit location with previous impacted soil above MTCA Method A Cleanup Levels was not accessible during August 2017 upgrades and no soil samples were collected (Antea Group, 2017).

NOVEMBER 2017 – VAPOR INTRUSION AND INDOOR QUALITY INVESTIGATION

In October 2017, PBS conducted a vapor intrusion and limited indoor air quality investigation at the Caribbean House Apartments to determine if indoor air had been affected by soil vapor intrusion. Indoor and outdoor air samples were collected over eight-hour sampling intervals to compare indoor air to ambient air conditions. No volatile organic compounds (VOC) concentrations exceeded the California Office of Environmental Health Hazard Assessments reference exposure levels adopted by PBS as the most protective cleanup standards for residential receptors (PBS, 2017b).

DECEMBER 2018 – ORPHAN TANK DECOMMISSIONING

On December 12, 2018, Antea Group was notified of the presence of an unknown oily substance in an open trench cut at ARCO facility 980. Upon arrival at the site, Antea Group personnel observed the accumulated fluid and collected a sample for profiling. Laboratory analysis identified the fluid as a light, oil-range petroleum product with a chromatogram characteristic of transmission or hydraulic fluid. Between December 12 and 18, 2018, a previously unidentified 140-gallon oil tank was discovered and removed from the Site. Approximately 175 gallons of a mixture of oil, stormwater, sludge, soil, and rinse water was removed from the tank prior to removal from the ground on December 18, 2018. An area approximately eight feet wide, eight feet long, and six feet deep was excavated from around the tank to remove petroleum impacted soil. Soil samples contained petroleum hydrocarbon impacts in excess of the MTCA Method A Cleanup Levels. On January 2 and 3, 2019, additional soil was removed to extend each sidewall three to four feet beyond the prior limit and an additional one foot of soil was removed from the bottom of the excavation. Following removal of additional soil from the sidewalls, soil samples collected from the north, south and east sidewalls still contained petroleum hydrocarbon impacts in excess of the respective MTCA Method A Cleanup Levels. Due to the limits imposed by buried utilities and fuel dispensers in the area, no additional soil was removed (Antea Group, 2019).

NOVEMBER 2018 AND JANUARY 2019 – VAPOR PROBE INSTALLATION AND SOIL VAPOR SAMPLING

Antea Group oversaw the installation of four soil borings to depths between five and 8.25 feet bgs using a hand auger and subsequently completing them as soil vapor probes on November 11 and November 27, 2018. Soil samples were collected at approximately five feet bgs in borings SB-1 and SB-2; five feet and eight feet in SB-3;

and three feet and 4.5 feet in SB-4. Laboratory analytical results did not indicate petroleum hydrocarbons in excess of MTCA Method A Cleanup Levels. Well screen intervals were positioned from 5.5 to six feet bgs in SG-1, from five to 5.5 feet bgs in SG-2, from 7.75 to 8.25 feet bgs in SG-3, and 4.5 to five feet bgs in SG-4. The depth to groundwater has historically ranged from 12.36 to 18.83 feet bgs in the vicinity of SG-1, from 8.65 to 21.82 in the vicinity of SG-2 and SG-3, and from 5.54 to 17.30 feet bgs in the vicinity of SG-4. The soil vapor probes were constructed in accordance with the provisions set forth in the Petroleum Vapor Intrusion Guidance Document prepared by The Interstate Technology & Regulatory Council (ITRC) Petroleum Vapor Intrusion Team, dated October 2014. Following vapor probe installation, soil vapor conditions were allowed to equilibrate for more than one month before sampling. Antea Group conducted seasonal soil vapor sampling from vapor probes SG-1 and SG-4 on January 15, 2019 and SG-2 on January 30, 2019. A soil vapor sample was not collected from SB-3 due to the presence of water. Laboratory analytical results indicated concentrations of BTEX, MTBE, naphthalene, and hexane were not detected in excess of Washington State ESLs in any of the samples collected. A second round of soil vapor sampling was completed on August 27, 2019 and samples were collected from SG-1, SG-2, SG-3, and SG-4. Laboratory analytical results indicated concentrations of BTEX, MTBE, naphthalene, and hexane were not detected in excess of Washington State ESLs in any of the samples collected (Antea Group, 2020).

SEPTEMBER 2019 – SITE INVESTIGATION

On September 9th and 10th, 2019 Antea Group oversaw the installation of four soil borings converted to permanent monitoring wells MW-13, MW-14, MW-15, and MW-16. Soil samples collected from MW-13 at 8, 10, and 14 feet bgs exceeded the TPH-G MTCA Method A Cleanup Level at concentrations of 930 milligrams per kilogram (mg/kg), 340 mg/kg, and 120 mg/kg, respectively. The soil sample collected from MW-15 at 5 feet bgs contained a total concentration of combined carcinogenic PAHs of 0.17385 mg/kg. Under WAC 173-340-708(8), Toxicity Equivalency Factors (TEF) are defined to establish Cleanup Levels for carcinogenic PAHs. When PAH concentrations are corrected for toxicity, the total concentration of combined carcinogenic PAHs is 0.03567, which is below the MTCA Method A Cleanup Level for combined carcinogenic PAHs. All other soil samples collected from MW-13, MW-14, MW-15, and MW-16 did not exceed MTCA Method A Cleanup Levels for benzene, TPH-G, TPH-D, or total petroleum hydrocarbons as oil (TPH-O). Groundwater analytical results from MW-13, MW-15, and MW-16 exceeded MTCA Method A Levels for one or more of the following; benzene, TPH-G, TPH-D, or TPH-O (Antea Group, 2019).

SEPTEMBER 2020 – SUBSURFACE INVESTIGATION

In November 2020, two soil borings were advanced at the Caribbean Apartments property and one soil boring was advanced on the property southeast of the Caribbean Apartments building. The three borings were completed as groundwater monitoring wells (MW-17, MW-18, and MW-19). A total of 10 soil samples were submitted to Eurofins-TestAmerica for quantitative chemical analysis. Laboratory analytical results indicated that concentrations of petroleum hydrocarbons were not detected above laboratory method detection limits and/or MTCA Method A Cleanup Levels in any of the samples collected. Groundwater was sampled from the new monitoring wells MW-17, MW-18, and MW-19 on December 14, 2020. All samples were submitted to Eurofins-TestAmerica for quantitative chemical analysis. None of the December 2020 groundwater samples submitted for analysis contained hydrocarbon concentrations in excess of laboratory method reporting limits and/or MTCA Method A Cleanup Levels (Antea Group, 2021).

SEPTEMBER 2021 – SUBSURFACE INVESTIGATION

In September 2021, two borings were completed as groundwater monitoring wells (MW-20 and MW-21). Both monitoring wells were constructed with a 2-inch diameter schedule 40 PVC well casing. A total of 5 soil samples

were submitted to Eurofins-TestAmerica for quantitative chemical analysis. Laboratory analytical results indicated that concentrations of petroleum hydrocarbons were not detected above MTCA Method A Cleanup Levels in any of the samples collected. Groundwater was sampled from the new monitoring wells MW-20 and MW-21 on September 28, 2021. All samples were submitted to Eurofins-TestAmerica for quantitative chemical analysis.

Quantitative laboratory analysis indicated TPH-O concentrations in excess of MTCA Method A Cleanup Levels were present in groundwater samples collected from the newly installed well MW-21. Groundwater sampled from monitoring well MW-20 did not contain concentrations of analyzed constituents above MTCA Method A Cleanup Level (Antea Group, 2022).

NOVEMBER 2021 – PETROFIX INJECTION

A pilot study was conducted to evaluate the effectiveness of PetroFix™ amendment in the in-situ remediation of petroleum hydrocarbon concentrations in groundwater at the Site. PetroFix™ consists of small particle size activated carbon and an electron acceptor mix of nitrate and sulfate compounds. The activated carbon-based remedial fluid is used to remove dissolved-phase petroleum hydrocarbons through adsorption, while the electron acceptors further stimulate hydrocarbon biodegradation. Antea Group injected PetroFix™ into the subsurface via the existing injection wells IW-1 through IW-4 and monitoring wells MW-13 and MW-15 in November of 2021 to reduce concentrations of petroleum hydrocarbons in groundwater to below MTCA Method A Cleanup Levels in monitoring wells MW-12, MW-13, MW-15, and B1 (JPHC). Baseline and performance monitoring performed during 2022 indicate that PetroFix™ has been effective at reducing petroleum hydrocarbon concentrations by its dual function of sorption and biodegradation. Concentrations decreased to below MTCA Method A Cleanup Levels in monitoring wells MW-4 and MW-11. Following an immediate drop in concentrations to below MTCA Method A Cleanup Levels in monitoring wells MW-12 and B1(JPHC) a slight rebound was observed. Additional sampling and analysis of rebound in those wells will be performed during the semi-annual groundwater monitoring activities. A report detailing this event was not available at the time of this report. All information was obtained from Antea Group's *Subsurface Investigation Report* dated January 14, 2022 (Antea Group, 2022).

JANUARY 2023 THROUGH MARCH 2024 – TIER 1 SOIL VAPOR INTRUSION EVALUATION

From January 2023 through March 2024, Antea Group conducted a soil vapor investigation to evaluate potential vapor intrusion into the existing station building and the adjacent residential property, indicate that COCs were below the Method B Soil Gas Screening Levels for Cancer and Noncancer and therefore protective of human health (Antea Group, 2024).

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Antea Group. "Subsurface Investigation Report." 18 Nov. 2019.
Antea Group. "Soil Vapor Probe Installation and Soil Vapor Sampling Report." 7 Jan. 2020.
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Appendix B – Boring Logs



WELL/BORING: SG-1	Unique Ecology Well ID: BKF 807
INSTALLATION DATE: 11/02/2018	DRILLING METHOD: Hand Auger
PROJECT: ARCO 980	SAMPLING METHOD: Hand Auger
CLIENT: BP	BORING DIAMETER: 3"
LOCATION: 10822 Roosevelt Way NE	BORING DEPTH: 6'
CITY: Seattle	WELL CASING: Teflon 1/4"
STATE: WA	WELL SCREEN: 5.5' – 6' (0.0057")
DRILLER: Cascade Drilling, Inc.	SAND PACK: 5' – 6' (12 x 20)

WELL/BORING COMPLETION	FIRST ✓	STABILIZED ▼	MOISTURE	PID (ppm)	Temperature	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	SURVEY DATE:	DTW:	DESCRIPTION/LOGGED BY: Eric Sanchez
Concrete						1								Surface = Asphalt 4" Hand Auger to 6'
Hydrated Bentonite						2								
Dry Bentonite						3								
Sand			MST	0.4	-	4								
						5			SM					Silty Gravelly SAND: brown; 10% silt; 60% fine to medium sand; 30% fine to coarse gravel; loose.
						6								
						7								
						8								
						9								
						10								
						11								



WELL/BORING: SG-2

Unique Ecology Well ID: BKF 806

INSTALLATION DATE: 11/02/2018

DRILLING METHOD: Hand Auger

PROJECT: ARCO 980

SAMPLING METHOD: Hand Auger

CLIENT: BP

BORING DIAMETER: 3"

LOCATION: 10822 Roosevelt Way NE

BORING DEPTH: 5.5'

CITY: Seattle

WELL CASING: Teflon 1/4"

STATE: WA

WELL SCREEN: 5' – 5.5' (0.0057")

DRILLER: Cascade Drilling, Inc.

SAND PACK: 4.5' – 5.5' (12 x 20)

WELL/BORING COMPLETION	FIRST ✓	STABILIZED ▼	MOISTURE	PID (ppm)	Temperature	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	SURVEY DATE:	DTW:	DESCRIPTION/LOGGED BY: Eric Sanchez
Concrete						1								Surface = Asphalt 4" Hand Auger to 5.5'
Hydrated Bentonite						2								
Dry Bentonite						3								
Sand			-	0.3	-	4								
						5			SM					Silty Gravelly <u>SAND</u> : brown; 15% silt; 75% fine to medium sand; 10% fine to coarse gravel; loose.
						6								
						7								
						8								
						9								
						10								
						11								



WELL/BORING: SG-4

Unique Ecology Well ID: BKF 871

INSTALLATION DATE: 11/27/2018

DRILLING METHOD: Hand Auger

PROJECT: ARCO 980

SAMPLING METHOD: Hand Auger

CLIENT: BP

BORING DIAMETER: 3"

LOCATION: 10822 Roosevelt Way NE

BORING DEPTH: 5'

CITY: Seattle

WELL CASING: Teflon 1/4"

STATE: WA

WELL SCREEN: 4.5' – 5' (0.0057")

DRILLER: Cascade Drilling, Inc.

SAND PACK: 4' – 5' (12 x 20)

WELL/BORING COMPLETION	FIRST STABILIZED	MOISTURE	PID (ppm)	Temperature	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	-
										SURVEY DATE:	-
										DTW:	-
										DESCRIPTION/LOGGED BY: Eric Sanchez	
Concrete					1					Surface = Asphalt 4" Hand Auger to 5'	
					2					Silty SAND: trace gravel; loose to medium density.	
Hydrated Bentonite		DRY	0.2	-	3			SM		Silty Gravelly SAND: grayish brown; 10% silt; 80% fine to coarse sand; 10% fine to medium gravel; dense.	
Dry Bentonite					4						
Sand		MST	0.3	-	5			SM		Same as Above; very dense.	
					6						
					7						
					8						
					9						
					10						
					11						



WELL/BORING: SG-5

Unique Ecology Well ID: BNE 897

INSTALLATION DATE: 11/3/22

DRILLING METHOD: Air Knife

PROJECT: WA – 00980 Seattle

DRILLING METHOD: Hand Auger

CLIENT: BP

BORING DIAMETER: 6"

LOCATION: 1019 NE Northgate Way

BORING DEPTH: 7.67'

CITY: Seattle

WELL CASING: 0.25" Teflon Tubing

STATE: WA

WELL SCREEN: 6.67-7.17' (0.0057")

DRILLER: Cascade Drilling, Inc.

SAND PACK: 7.67-6.17' (10X20)

WELL/BORING COMPLETION	FIRST STABILIZED	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	-	DTC: -
	▼									SURVEY DATE:	-	
										DTW:	-	
DESCRIPTION/LOGGED BY: Jonah Leurquin and Jesse Schewe												
Concrete					1							
Pre-Hydrated Bentonite					2							
					3							
					4							
					5							
Dry Bentonite					6							
Sand	▼				7							
		DMP	0.0	-	8			SP				
					9							
					10							
					11							

SAND with Gravel: brown; 95% fine sand; 5% gravel/cobble.
Bottom of boring at 7.75'



WELL/BORING: SG-6

Unique Ecology Well ID: BNE 900

INSTALLATION DATE: 11/4/22

DRILLING METHOD: Air Knife

PROJECT: WA – 00980 Seattle

DRILLING METHOD: NA

CLIENT: BP

BORING DIAMETER: 6"

LOCATION: 10822 Roosevelt Way NE

BORING DEPTH: 5'

CITY: Seattle

WELL CASING: 0.25" Teflon Tubing

STATE: WA

WELL SCREEN: 3.5-4' (0.0057")

DRILLER: Cascade Drilling, Inc.

SAND PACK: 3-5' (10X20)

WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	-	DTC: -
											SURVEY DATE:	-	
											DTW:	-	
DESCRIPTION/LOGGED BY: Jonah Leurquin and Jesse Schewe													
Concrete									SW				
Pre-Hydrated Bentonite						1							
Dry Bentonite						2							
Sand						3							
	▽		WET	0.0	-	4							
						5							Bottom of boring at 5'.
						6							
						7							
						8							
						9							
						10							
						11							



WELL/BORING: SG-7

Unique Ecology Well ID: BNE 899

INSTALLATION DATE: 11/4/22

DRILLING METHOD: Air Knife

PROJECT: WA – 00980 Seattle

DRILLING METHOD: NA

CLIENT: BP

BORING DIAMETER: 5"

LOCATION: 10822 Roosevelt Way NE

BORING DEPTH: 5'

CITY: Seattle

WELL CASING: 0.25" Teflon Tubing

STATE: WA

WELL SCREEN: 4.5-5' (0.0057")

DRILLER: Cascade Drilling, Inc.

SAND PACK: 3.6-5' (10X20)

WELL/BORING COMPLETION	FIRST STABILIZED	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	DTC: -
										SURVEY DATE:	-
										DTW:	-
DESCRIPTION/LOGGED BY: Jonah Leurquin and Jesse Schewe											
Concrete								SW		<u>SAND</u>: brown; fine to medium sand; trace gravel. Bottom of boring at 5'.	
Pre-Hydrated Bentonite					1						
					2						
Dry Bentonite					3						
					4						
Sand		-	0.0	-	5						
					6						
					7						
					8						
					9						
					10						
					11						



WELL/BORING: SG-8

Unique Ecology Well ID: BPR 364

INSTALLATION DATE: 6/23/23

DRILLING METHOD: Hand Auger

PROJECT: WA – 00980 Seattle

DRILLING METHOD: NA

CLIENT: BP

BORING DIAMETER: 3"

LOCATION: 1019 NE Northgate Way

BORING DEPTH: 5'

CITY: Seattle

WELL CASING: 0.25" PTFE

STATE: WA

WELL SCREEN: 4 – 4.5' (Stainless Steel)

DRILLER: Cascade Drilling, Inc.

SAND PACK: 3.5 -5'

WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	-	DTC: -
											SURVEY DATE:	-	
											DTW:	-	
											DESCRIPTION/LOGGED BY: Jeffrey Karambelas		
Concrete									SP		Grass at surface.		
Pre-Hydrated Bentonite						1					<u>SAND</u> with Gravel: brown; dry, 95% fine sand; 5% gravel.		
Dry Bentonite						2							
Sand						3							
						4							
						5					Bottom of boring at 5'.		
						6							
						7							
						8							
						9							
						10							
						11							

Project Nov 2014 WkxwMfPm			Well Diameter 6" O			TO 3/3 Wp 4 KS			FO# 3W#LL3- K 3 IF 33uA		
Logged by Jennifer Heise			Well Depth 31wy			Screen Interval 3wy			▽ ~16' = First Water		
Driller Cascade Drilling Int'l			Using Type (P)			Hole Diameter 8xO			▼ 12.33' = Static Groundwater		
Drilling Method Hollow Stem Auger			Slot Size 3/8" O			Hole Depth 31wy			TOC = Top of Casing BGS = Below Ground Surface		
Sampling Method Hand Auger/ Split Spoon			Sand Pack 0wywy			H- 3/3 Hand Auger SS 3/3 Split Spoon					
Drill Rig CM 300 with 3" Hammer			Diameter 3/3 Wp Split Spoon			Surface Completion 3/3 Flush Mount Cast Iron Monument Set in Concrete					
Using Elevation T(F)		Assumed Northing T(F)		Assumed Easting T(F)		Vertical Datum T(F)			Horizontal Datum T(F)		
Well Completion		Time	Moisture Content	PIF Reading 3 ppmH	(Low Counts per 3 inches)	FeetH	Lab Sample	Sample Recovery Interval	Soil Type	Lab Sample Designations: 3/3 Environmental 3/3 Geotechnical	
Backfill	Casing									LITHOLOGY (F#S) RIPTION	
concrete		Apup	dry	WM	Vac) learence	A				JwMwy 3" Asphalt	
		AuhxhuwA/				u				SM (0.2' - 2.9') Silty, gravelly sand, brown, (fill)	
concrete		Apux	damp	WM		p	HA	↕		SM (2Mky 3" 3Ax 10Ry 15S) Sand with Gravel, damp, brown, F sand, F-C gravel (subrounded to subangular), 60% sand, 25% silt, 15% gravel	
		AppR		WM		/					
		Ap/ R	damp	WM		R	HA	↕		(4.6') Some cobble, becomes dark brown, damp, F-M sand, F-C gravel, 40% sand, 30% silt, 25% gravel (subrounded to subangular), 5% cobble	
		ApRp		WM		7					
		A/ ww				b				333333333333 AIR KNIFE/VAC TERMINATED AT 6.5'	
		AuhAwhuwA/ Au/ R	damp	WM		x	SS	↑		(7.5') Very dense, Becomes light brown to light gray with rust mottling, damp, mostly F sand and trace amounts of M-C sand, F-C gravel (subrounded to subangular), 60% sand, 20% silt, 15% gravel, 5% cobble	
		AuR/	damp	WM		k		↓			
						Aw	SS	↑			
						AA		↓			
						Au					
=uAu: Sand		Apwu	dry	AbM	Rw	Ap	SS	↑		(12.5') Very dense, becomes blue-gray, dry, mostly F sand with trace M-C sand, F-C gravel (subrounded), 60% sand, 25% silt, 15% gravel, slight hydrocarbon like odor noted.	
					Rw	A/		↓			
		ApAR	dry	u7M		AR	SS	↑		3333JA/MRy 3" 3Mwy 15S	
						A7		↓			
						Ab					
		Apuw	wet	kbM		Ax	SS	↑		(17.5') Very dense, Becomes olive gray, wet, F sand, F-M gravel (subangular to subrounded), 60% sand, 30% silt, 10% gravel, slight hydrocarbon like odor noted	
				AkuM		Ak		↓			
		Apux	wet	uM		uw	SS	↕		GW (19.5'-20.0') Sandy Gravel with Silt, very dense, olive gray, wet F-C sand, F-C gravel (subangular to subrounded), 40% sand, 50% gravel, 10% silt, very slight HCLO	
						uA					
						uu				333333333333 BORING TERMINATED AT 20' BGS	

Project, No 7, JGG pGwh" -G			Well, %iameter 7, HD			TOF, k, GH" f, YGS			%O~, W~LL, Tz G7, Y1% T/ HG				
Logged, Yy7, Jennifer, Heise			Well, %ePTH7, HG			Screen, Interval 7, J" f, HG			▽ ~16' = First Water ▼ 12.09' = Static Groundwater,				
Driller 7, Cascade Drilling 3LP			Fasing, Type 7, PVF			Hole, %iameter 7, pD			TOC = Top of Casing BGS = Below Ground Surface				
Drilling Method 7, Hollow Stem, z uger			Slot, Size 7, GGD			Hole, %ePTH7, HG							
Sampling, Method 7 Hand Auger / Split Spoon			Sand, Pack 7, JH'HG			Hz, k, Hand, z uger, SS, k, Split, Spoon							
Drill Rig: CM~, uh, with, "GGlb=hammer 3HHD diameter, x, Jhf, split, spoon						Surface, F completion 7, pD flush, mount, cast, iron, monument, set, in, concrete							
Fasing, Elevation TY%		z ssumed, Northing TY%		z ssumed, ~asting TY%		Vertical, %atum TY%				Horizontal, %atum TY%			
Well, F completion			Time	Moisture, Fontent	PI % Reading, jppm.	Ylow, Founts jper, winches)	%ePTH, jfeet.	Lab, Sample	Sample		Soil, Type	Lab, Sample, %esignations: ~, k, ~nvironmental 3G, k, Geotechnical	
Backfill	Casing	Backfill							Recovery	Interval		LITHOLOGY, ', %~SFRIPTION	
Fconcrete			JHG	dry	GG	Vac Clearance	J				JG=Gf, T, G=Asphalt		
			JH'p'HGJM		GG		H				SM (0.3' - 0.5') Silty, gravelly sand with trace wood fragments, brown (fill)		
			JHUH	moist	GG		"				SM (0.5' - 5.0') Silty sand with gravel and some cobble, dark gray to brown, moist, F-M sand, F-C gravel (subangular to subrounded), 20% silt, 15% gravel		
			JHH	moist	GG		M				(4.5') Becomes light brownish gray, 30% silt, 10% gravel		
			JH' G		GG		h	HA					
							w						
							u				AIR KNIFE/VAC TERMINATED AT 6.5'		
							p	SS					
							/				SP (7=hfTJG) Gense of Sand with silt and trace gravel, dry, light brownish gray, M-F sand, F-C gravel (subrounded-subangular), 85% sand, 10% silt, 5% gravel		
							G' Hw	damp	GG	" GwD	JG	SS	
Yentonite				damp	GG	hGMD	JJ				SM (1G=GfTJ) Silty sand with trace gravel, very dense, light gray, damp, F-M sand, F-C gravel (subangular to subrounded).		
						JH							
					G' " G	damp	"=G	hGhD	J"	SS			SM (12.0') Increased gravel, becomes light brown to blue gray, damp, F sand, F-C gravel (~15%), (subangular to subrounded)3,
							"//		JM				
					G' " p	slightly damp	"H/	hGhD	Jh	SS			(14.5') Increased gravel, becomes blue gray, slightly damp, F sand3, F-C gravel (~20%), (subrounded to subangular)
									Jw				
									Ju	SS			
					G' hh	wet	GG	hGwD	Jp				SP (1u=GfTH) Sand with silt and gravel, very dense, light brownish gray, wet, F-M sand, F-C gravel (subangular to subrounded)
									J/				(19.5') decreased gravel content "some gravel", very dense, wet
#2/12 Sand			JGG	wet	GG	hGwD	HG	SS			BORING TERMINATED AT 20' BGS		

Project No: A/FHMFH") HF)			Well Diameter: 4 j			TOC: 0.6 FH) 0.7 S			VOZ: 0.7 LLG - # 4.5 Vgth/ /			
Logged by: A/Jennifer Heise			Well Depth: 4 FT			Screen Interval: 4) 1 FT			~(u) 0. First Water 0/ 4 (4 F) m			
Driller: Cascade Drilling Sp			Casing Type: APV<			Hole Diameter: 4 M			(/ H) 0. Static # round water 0/ 4 (4 F) m			
Drilling Method: Hollow Stem Auger			Slot Size: 4 FH/ j			Hole Depth: 4 / FT			TO< 0.6 Top of casing %S 0.6 Below ground surface			
Sampling Method: Split Spoon			Sand Pack: 4 / 1 FT			H- 0.6 Hand Auger SS 0.6 Split Spoon						
Drill Rig: CMZGW" with 0.6 FH Hammer 4 j diameter 4 H Split Spoon						Surface Completion: 4 M Flush mount cast grout monument setting concrete						
Casing Elevation T %/		- ssued: Northing T %/		- ssued: Easting T %/		Vertical Datum T %/			Horizontal Datum T %/			
Well Completion			Time	Moisture Content	PIV Reading 0 ppm=	% low Counts 0 per 6 inches)	Vegetation	Lab Sample	Sample Recovery Interval	Soil Type	Lab Sample Designations: 0.6 g Environmental 0.6 g Geotechnical	
Backfill	Casing	Backfill									LITHOLOGY: Ygg/z S< RIPTION	
< concrete			(F (M / - h ~ / F (m	damp	FHF	Vac < clearance	(				OFHFTgJg/FHalt	
			(F / "	damp	FHF		/				SM (0.2' - 0.5') Silty, gravelly sand, brown to gray, (fill), water seepage at contact with next unit	
(F / M	damp	FHF	/					SM (0.5' - 2.9') Silty Sand with Gravel, light brown, damp F-M sandSgYJ<g gravel				
(F) h	damp	FHF	)	HA								
(F " (		FHF	m						SP (2.9' - 6.5') Sand with Gravel and some Silt, appeared dense, light grayishbrown, damp F-M sand, F-C gravel, 70% sand, 20% gravel, <10% silt,			
((F (			"	HA					(4.5') Driller noted very dense soil conditions (difficulty air knitting)			
((((	damp		u						(4.9') Becomes brown, increased silt, F-sand, F-C gravel,			
((/ M		FHF	w						(6.0) Becomes light brownish gray,			
((n F			M	SS					AIR KNIFE/VAC TERMINATED AT 6.5'			
(F n F (/ - (~ / F (m	slightly damp	FHF	h						SM (7H" TgJg() HBF - Silty Sand with some Gravel, very dense, mottled gray and light brown, slightly damp, F sand, F-C gravel (subangular to subrounded)			
#2/12 Sand	(F n M	damp	FHF	" F	SS			ggg				
				(				(10.0') Becomes damp, gray with mottled brown				
				(				gggg				
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Project No: A(FFhMF-u) - F)	Well Diameter: 9	TOV/bf %GS	z OYfWYLLfT- GA/z fHn/)
Logged by: Jennifer Heise	Well Depth: FT	Screen Interval: () FT	~(uTb First Water Q / ' (' / F(m=
Driller: Cascade Drilling JLP	Vasing Type: P/V	Hole Diameter: M	(/ ~uTb Static Groundwater Q / ' (' / F(m=
Drilling Method: Hollow Stem - uger	Slot Size: F/9	Hole Depth: / FT	TOV/bf Top of casing BGS bf Below ground surface
Sampling Method: Split Spoon	Sand Pack: / FT	H- bf Hand- uger SS bf Split Spoon	
Drill Rig: CMYfw" (with FFfb- hammer) / - 9 diameter fxf(- 2 Split Spoon		Surface Completion: M flush mount cast iron monument set in concrete	

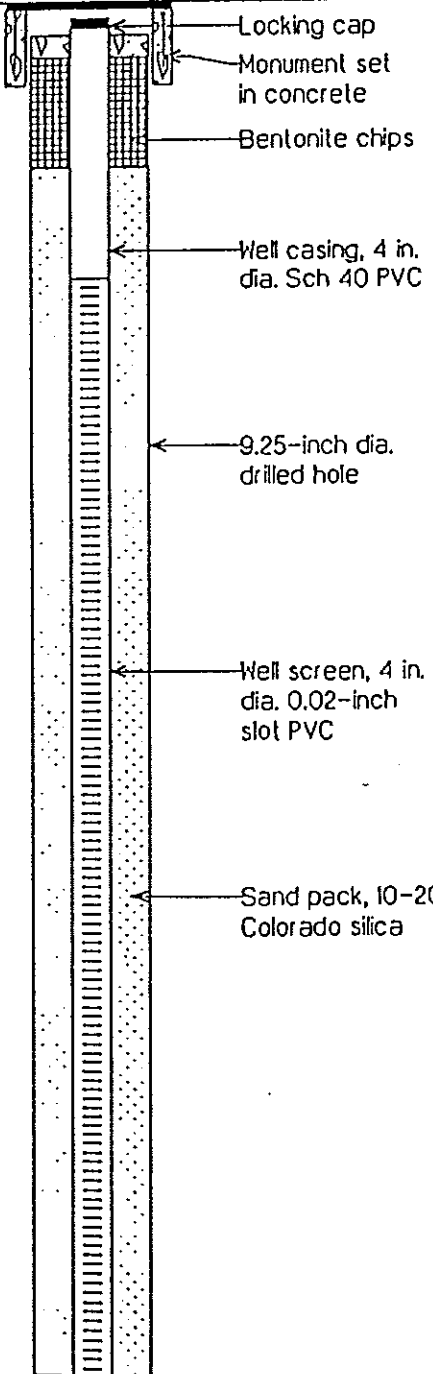
Vertical Elevation T/z			Assumed Northing T/z		Assumed Easting T/z		Vertical Datum T/z				Horizontal Datum T/z						
Well Completion			Time	Moisture Content	Plz Reading Qpm=	% of Volumes Qer (inches)	Depth z eptf Qset=	Lab Sample	Sample Recovery Interval	Soil Type	Lab Sample Designations: fYfbfYnvironmental fGfbfGeotechnical						
Backfill	Casing	Backfill									LITHOLOGY f z YSVRIPTION						
Concrete			h' "	moist	F-F	Vac Clearance	(					OF-FTfHfFA Asphalt					
			h) F		F		/						SM (0.2' - 5.0') Silty Gravelly Sand with Cobbles and concrete debris, brown, moist, F sand, F-C gravel (subrounded), 30% silt, 25% gravel, seeping observed at ~ 0.5' (fill=				
#2/12 Sand			h) /	moist	F-F		)										
			h) u		F-F		m	H-									
			hmm	moist	F-F		"	H-									
			h' "		F-F		u										
			h' "		F-F		w				AIR KNIFE/VAC TERMINATED AT 6.5'						
#2/12 Sand			() "	dry	F~F	" F	M	SS				SM (7~"TfHf(M~Silty Sand with Gravel, very dense, light brown dry, F sand, F-C gravel (subangular to subrounded)					
			() nF	damp	F-F	" F	(F	SS				(10.0') Becomes damp, brown, F sand, F-C gravel, 20% silt, 15% gravel					
			() nM	slightly damp	mW' F	" F	(/					(12.5') Becomes slightly damp, blue/greenish gray, gravel becomes F-M, hydrocarbon-like odor noted					
			() " m	slightly damp	u) ~	" F	(m	SS				(14.0') Less gravel, brownish gray, slightly damp, hydrocarbon-like odor noted					
			() " w	wet	) ~"	/) " m9 " F m9	(M	SS				(17.5') Becomes wet, brownish gray, F-M sand, F-C gravel (subangular to subrounded), slight hydrocarbon-like odor noted					
			(nFm	wet	) n" F	" F	/ F	SS				SP (19.5' - 20.0') Sand with some Silt and Gravel, wet, gray, M sand, F-C gravel (subangular to subrounded), hydrocarbon-like odor noted					
									/ (								
									/ /				BORING TERMINATED AT 20.0' BGS				

PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WA132.21

LOG OF MW-1
Page 1 of 2

CLIENT NAME: ARCO PRODUCTS COMPANY
PROJECT LOCATION: SEATTLE, WASHINGTON
DATE STARTED: 15-AUG-92
DATE COMPLETED: 15-AUG-92
LOGGED BY: A. AMR
CHECKED BY: J. SADLER

SURFACE ELEV: 263.18 feet
DATUM: CITY OF SEATTLE BOOK NO. 2627-5
DRILL COMPANY: HOLT TESTING, INC.
DRILLER: CHARLES RICHARD
DRILL METHOD: HOLLOW-STEM AUGER
SAMPLING METHOD: SPLIT SPOON (140-lb. hammer)

WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
				5" ASPHALT SILTY SAND (SM) - Grey to brown, moist, fine- to medium-grained sand, little fine gravel to 3/4", tile fragments, (FILL, strong/old hydrocarbon odor, PID = 28 ppm). Hand dug to 4 feet below land surface (bls). WELL-GRADED SAND (SW) - Brown, moist, medium dense, fine- to medium-grained sand, trace to little fine gravel, (FILL, moderate hydrocarbon odor, PID = 4 ppm). Water encountered at 10 feet bls. SILTY SAND (SM) - Grey, wet, very dense, fine-grained sand, little silt, trace fine gravel, (TILL, no hydrocarbon odor, PID = 0 ppm). SILTY SAND (SM) - Grey, wet, dense, fine-grained sand, little silt, trace fine gravel, (no hydrocarbon odor, PID = 0 ppm). Grades to POORLY GRADED SAND (SP) - Grey, wet, very dense, fine-grained sand, trace silt, (no hydrocarbon odor, PID = 0 ppm). POORLY GRADED SAND (SP) - Grey, wet, very dense, fine-grained sand, trace silt, (heaving sands, (no hydrocarbon odor, PID = 0 ppm).

PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WA132.21

LOG OF MW-1

Page 2 of 2

WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
 Threaded PVC end cap	50/4.5	I		
	28			Borehole terminated at 26.5 feet bls. Ground water encountered during drilling at 10 feet bls. Note: Blow counts taken using a 2.5-inch diameter split-spoon sampler driven with a 140-pound hammer falling 30 inches. Blow counts are recorded for evaluating relative soil density only and should not be construed as appropriate for construction or structural design purposes.
	31.5			
	35			
	38.5			
	42			
	45.5			
	49			
	52.5			

PROJECT NAME: ARCO SERVICE STATION NO. 980
 PROJECT NO: WA132.21

LOG OF MW-2
 Page 1 of 2

CLIENT NAME: ARCO PRODUCTS COMPANY
 PROJECT LOCATION: SEATTLE, WASHINGTON
 DATE STARTED: 21-AUG-92
 DATE COMPLETED: 21-AUG-92
 LOGGED BY: A. AMR
 CHECKED BY: J. SADLER

SURFACE ELEV: 262.17 feet
 DATUM: CITY OF SEATTLE BOOK NO. 2627-5
 DRILL COMPANY: HOLT TESTING, INC.
 DRILLER: CHARLES RICHARD
 DRILL METHOD: HOLLOW-STEM AUGER
 SAMPLING METHOD: SPLIT SPOON (140-lb. hammer)

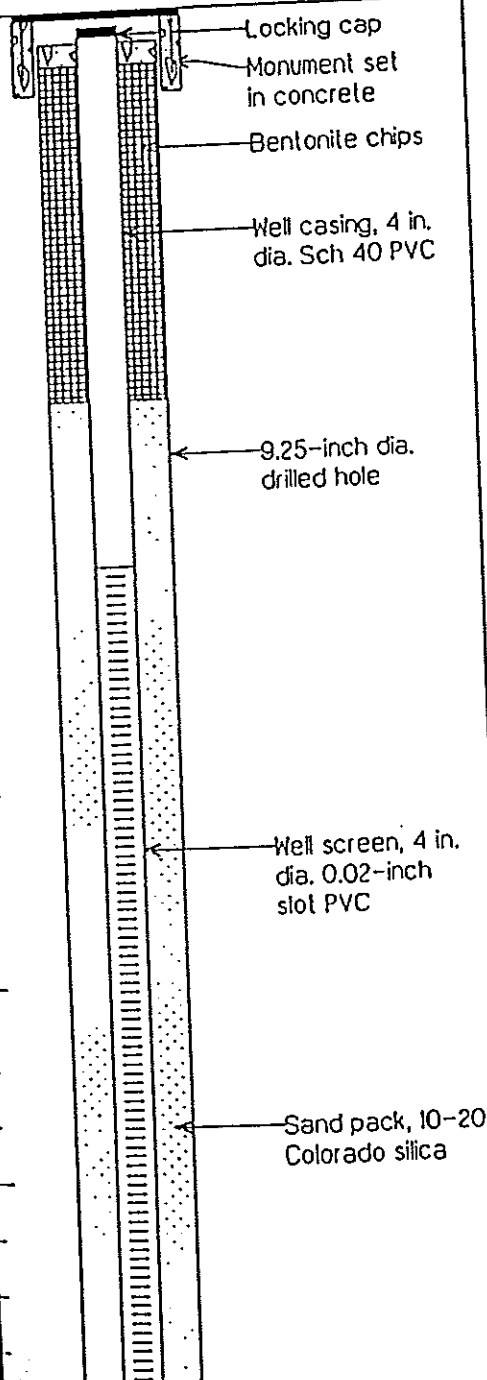
WELL CONSTRUCTION

DEPTH
(feet)

BLOWS PER
SIX IN.

SAMPLES AND
GRAPHIC
LOG

MATERIALS DESCRIPTION



5" ASPHALT

WELL-GRADED SAND with gravel (SW) - Dark brown, moist, fine- to medium-grained sand, some fine to coarse gravel, cobbles, (FILL, tile and brick fragments, no hydrocarbon odor, PID = 0 ppm).

Hand dug to 4 feet below land surface (bls).

WELL-GRADED SAND with gravel (SW) - Grey, moist, very dense, fine- to medium-grained sand, some fine to coarse gravel, cobbles, (no hydrocarbon odor, PID = 0 ppm).

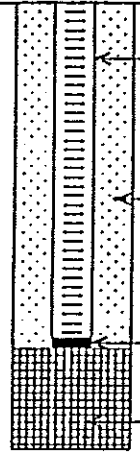
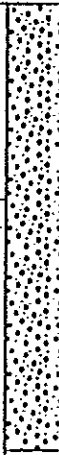
POORLY GRADED SAND (SP) - Grey, moist to wet, very dense, fine-grained sand, trace clay, trace fine to coarse gravel, (no hydrocarbon odor, PID = 0.5 ppm).
 Water encountered at 15 feet bls.

POORLY GRADED SAND (SP) - Grey, wet, very dense, fine- to medium-grained sand, trace silt, trace clay, trace fine to coarse gravel, (moderate hydrocarbon odor, PID = 17 ppm).

WELL-GRADED SAND (SW) - Dark grey, wet, very dense, fine- to coarse-grained sand, trace fine gravel, (heaving sand, no hydrocarbon odor, PID = 0 ppm).

PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WA132.21

LOG OF MW-2
Page 2 of 2

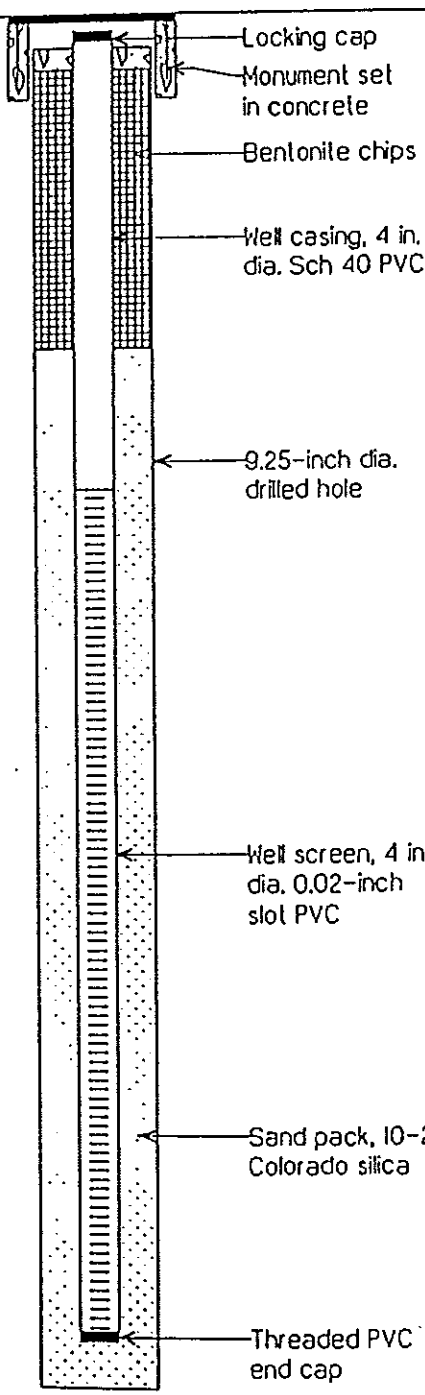
WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
 Well screen, 4 in. dia 0.02-inch slot PVC Sand pack, 10-20 Colorado silica Threaded PVC end cap Backfilled with bentonite chips	28 31.5 35 38.5 42 45.5 49 52.5	50/5.5 50/4		WELL-GRADED SAND (SW) - Dark grey, wet, very dense, fine- to coarse-grained sand, trace fine gravel, (heaving sand, no hydrocarbon odor, PID = 0 ppm). WELL-GRADED SAND (SW) - As above, (no hydrocarbon odor, PID = 0 ppm). Borehole terminated at 32.5 feet bls. Ground water encountered during drilling at 15 feet bls. Note: Blow counts taken using a 2.5-inch diameter split-spoon sampler driven with a 140-pound hammer falling 30 inches. Blow counts are recorded for evaluating relative soil density only and should not be construed as appropriate for construction or structural design purposes.

PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WA132.21

LOG OF MW-3
Page 1 of 2

CLIENT NAME: ARCO PRODUCTS COMPANY
PROJECT LOCATION: SEATTLE, WASHINGTON
DATE STARTED: 18-AUG-92
DATE COMPLETED: 18-AUG-92
LOGGED BY: A. AMR
CHECKED BY: J. SADLER

SURFACE ELEV: 261.84 feet
DATUM: CITY OF SEATTLE BOOK NO. 2627-5
DRILL COMPANY: HOLT TESTING, INC.
DRILLER: CHARLES RICHARD
DRILL METHOD: HOLLOW-STEM AUGER
SAMPLING METHOD: SPLIT SPOON (140-lb. hammer)

WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
				5.5" ASPHALT WELL-GRADED SAND with gravel (SW) - Yellow-brown, moist, fine- to medium-grained sand, little fine gravel, trace silt (FILL). Hand dug to 4 feet below land surface (bls). WELL-GRADED SAND with gravel (SW) - Grey, moist, fine- to medium-grained sand, little fine gravel, little silt (FILL). SILT with clay (ML) - Black-brown, moist, very stiff, little clay with root fragments, trace fine- to coarse-grained sand, (no hydrocarbon odor, PID = 0 ppm). SILTY SAND with gravel (SM) - Grey, moist, very dense, fine- to medium-grained sand, little silt, little fine to coarse gravel, (TILL, no hydrocarbon odor, PID = 0 ppm). Water encountered at 14 feet bls. SILTY SAND with gravel (SM) - Grey, wet, very dense, little silt, little fine gravel, (no hydrocarbon odor, PID = 0.4 ppm). WELL-GRADED SAND (SW) - Grey, wet, fine- to medium-grained sand, trace silt, (no hydrocarbon odor, PID = 0 ppm).
	3.5	5		
	7	14		
	10.5	17		
	14	50/4.5		
	17.5	50/15		
	21	50/4.5		
	24.5	50/4		

PROJECT NO: WA132.21

Page 2 of 2

WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
 Sand Slough		50/4		SILTY SAND with gravel (SM) - Grey, wet, very dense, fine- to coarse-grained sand, little fine gravel, little silt, (sand sloughing, no hydrocarbon odor).
	28			Borehole terminated at 25.5 feet bls. Ground water encountered during drilling at 14 feet bls.
	31.5			Note: Blow counts taken using a 2.5-inch diameter split-spoon sampler driven with a 140-pound hammer falling 30 inches.
	35			Blow counts are recorded for evaluating relative soil density only and should not be construed as appropriate for construction or structural design purposes.
	38.5			
	42			
	45.5			
	49			
	52.5			

PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WA132.21

CLIENT NAME: ARCO PRODUCTS COMPANY
PROJECT LOCATION: SEATTLE, WASHINGTON
DATE STARTED: 20-AUG-92
DATE COMPLETED: 20-AUG-92
LOGGED BY: A. AMR
CHECKED BY: J. SADLER

SURFACE ELEV: 262.49 feet
DATUM: CITY OF SEATTLE BOOK NO. 2627-5
DRILL COMPANY: HOLT TESTING, INC.
DRILLER: CHARLES RICHARD
DRILL METHOD: HOLLOW-STEM AUGER
SAMPLING METHOD: SPLIT SPOON (140-lb. hammer)

WELL CONSTRUCTION

DEPTH
(feet)BLOWS PER
SIX IN.SAMPLES AND
GRAPHIC
LOG

MATERIALS DESCRIPTION

Locking cap
Monument set
in concrete
Bentonite chips
Well casing, 4 in.
dia. Sch 40 PVC

9.25-inch dia.
drilled hole

Well screen, 4 in.
dia. 0.02-inch
slot PVC

Sand pack, 10-20
Colorado silica

5" ASPHALT

WELL-GRADED SAND with gravel (SW) - Brown, moist,
fine- to medium-grained sand, little fine to coarse
subrounded gravel, few silt, (FILL, no hydrocarbon
odor).

Hand dug to 4 feet below land surface (bls).

WELL-GRADED SAND with gravel (SW) - As above,
(FILL, slight to moderate hydrocarbon odor,
PID = 3 ppm).

SILTY SAND (SM) - Brown-grey, moist, very dense,
fine- to medium-grained sand, little silt, (no
hydrocarbon odor, PID = 4 ppm).

POORLY GRADED SAND with gravel (SP) - Light brown,
moist, very dense, medium-grained sand, with fine
gravel (no hydrocarbon odor, PID = 0 ppm).

Water encountered at 17 feet bls.

POORLY GRADED SAND with gravel (SW) - Grey, wet,
very dense, medium-grained sand, with fine gravel,
(strong hydrocarbon odor, PID = 439 ppm).

Cobbles and fine to coarse gravels encountered
during auger advancement at 19 feet bls. Rig
chatter from 20 feet bls.

WELL-GRADED SAND with gravel (SW) - Grey, wet,
very dense, fine- to coarse-grained sand, little
fine to coarse subrounded gravel, few silt, cobbles,
(mild hydrocarbon odor, PID = 38 ppm).

Page 2 of 2

WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
Well screen, 4 in. dia. 0.02-inch slot PVC Sand pack, 10-2- Colorado silica Threaded PVC end cap	28	50/6		WELL-GRADED SAND with gravel (SW) - As above.
	31.5	18 50/6		POORLY GRADED SAND (SP) - Grey, wet, very dense, medium-grained sand, (moderate hydrocarbon odor, PID = 49 ppm). Heaving sand at 30 feet bls. WELL-GRADED SAND (SW) - Grey, wet, very dense, fine- to medium-grained sand, trace silt, (no hydrocarbon odor, PID = 8 ppm).
	35			Borehole terminated at 33.5 feet bls. Ground water encountered during drilling at 17 feet bls. Note: Blow counts taken using a 2.5-inch diameter split-spoon sampler driven with a 140-pound hammer falling 30 inches. Blow counts are recorded for evaluating relative soil density only and should not be construed as appropriate for construction or structural design purposes.
	38.5			
	42			
	45.5			
	49			
	52.5			

PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WA132.21

CLIENT NAME: ARCO PRODUCTS COMPANY
PROJECT LOCATION: SEATTLE, WASHINGTON
DATE STARTED: 18-AUG-92
DATE COMPLETED: 19-AUG-92
LOGGED BY: A. AMR
CHECKED BY: J. SADLER

SURFACE ELEV: 261.96 feet
DATUM: CITY OF SEATTLE BOOK NO. 2627-5
DRILL COMPANY: HOLT TESTING, INC.
DRILLER: CHARLES RICHARD
DRILL METHOD: HOLLOW-STEM AUGER
SAMPLING METHOD: SPLIT SPOON (140-lb. hammer)

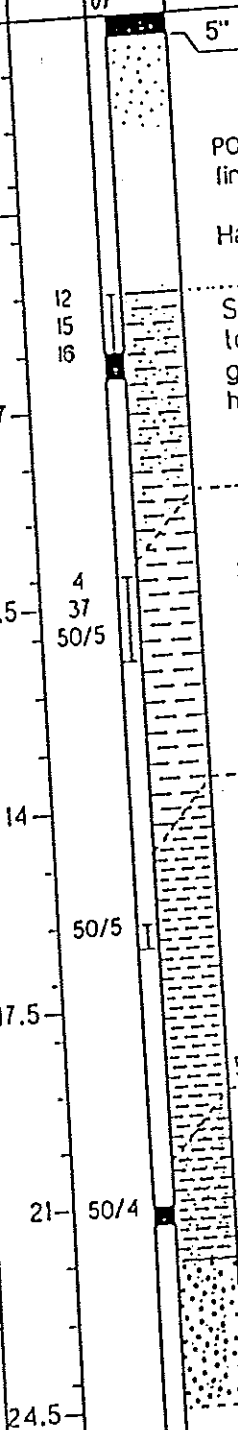
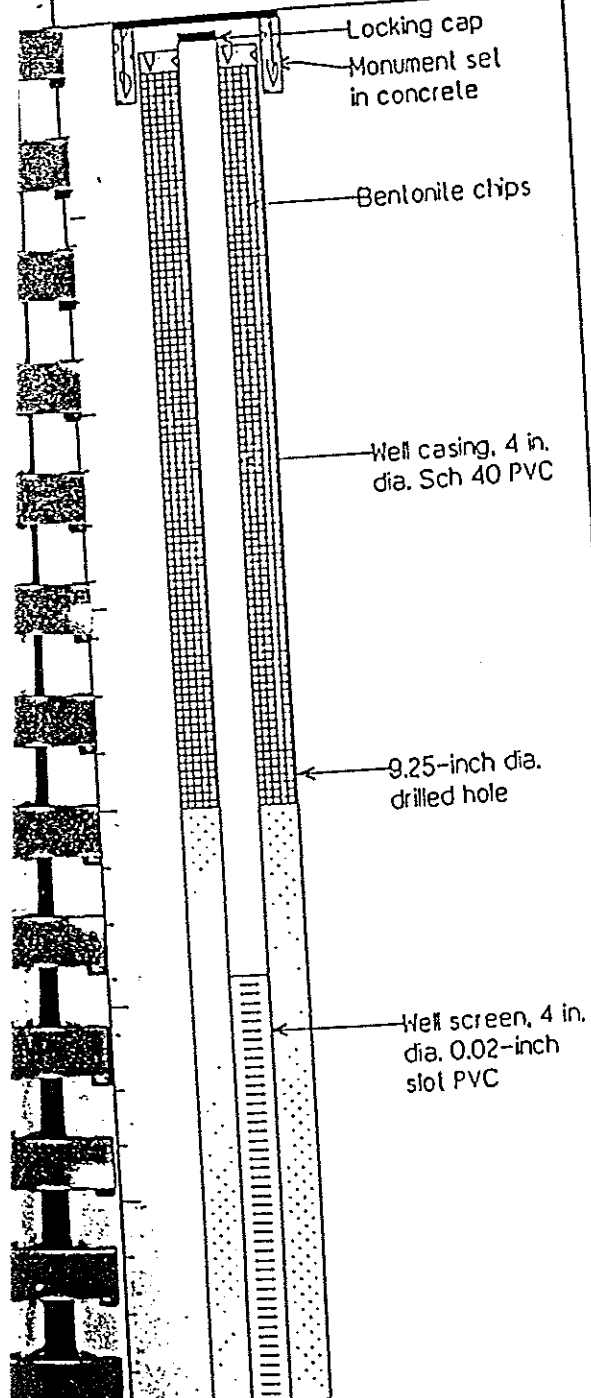
WELL CONSTRUCTION

DEPTH
(feet)

BLOWS PER
SIX IN.

SAMPLES AND
GRAPHIC
LOG

MATERIALS DESCRIPTION



5" ASPHALT

POORLY GRADED SAND (SP) - Yellow-brown, moist, fine-grained sand, (FILL, no hydrocarbon odor).
Hand dug to 4 feet below land surface (bls).

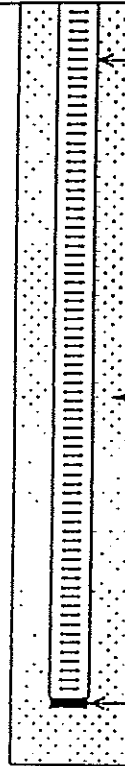
SILTY SAND (SM) - Brown, moist, dense, fine-to medium-grained sand, with silt, trace coarse gravel, cobbles, wood chips, (FILL, no hydrocarbon odor, PID = 0 ppm).

SILT with sand (ML) - Brown-black, moist, hard, silt, with fine-grained sand, root and branch fragments, (FILL, moderate hydrocarbon odor, PID = 3 ppm).

Grades to SILT (ML) - Grey, moist, hard, silt, few fine-grained sand (TILL, PID = 0.5 ppm).

Water encountered at 18.75 feet bls.

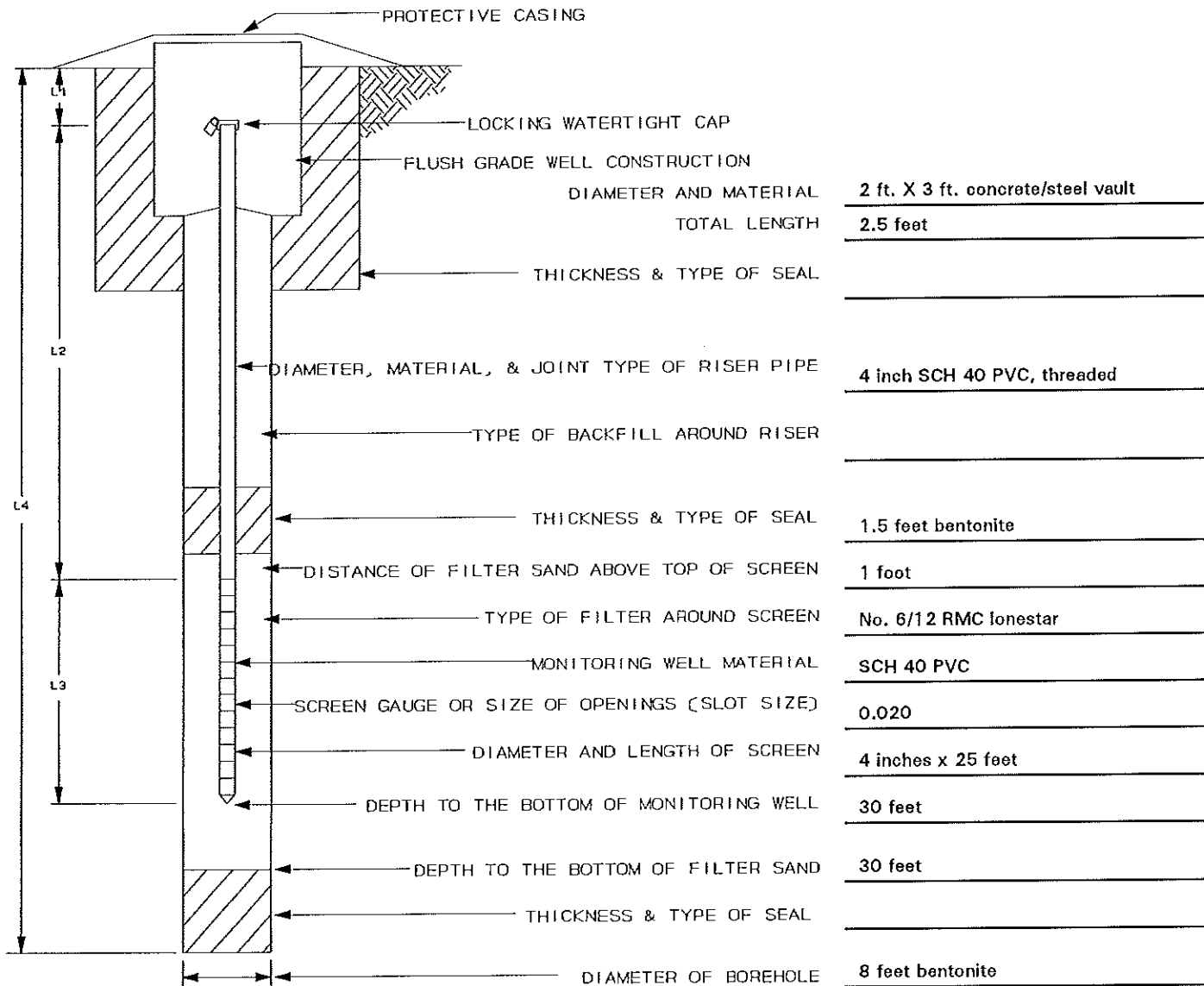
SILTY SAND (SM) - Grey-brown, moist, very dense, fine-grained sand, little silt (no hydrocarbon odor, PID = 0 ppm).
Rig chatter at 22 feet bls.

WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
 Well screen, 4 in. dia. 0.02-inch slot PVC Sand pack, 10-20 Colorado silica Threaded PVC end cap	28	50/6		WELL-GRADED SAND with gravel (SW) - Grey-brown, wet, very dense, fine- to coarse-grained sand, some fine to coarse subrounded gravel, few silt, (no hydrocarbon odor, PID = 0 ppm).
	31.5	15 50/6		WELL-GRADED SAND with gravel (SW) - Grey-brown, wet, very dense, fine- to coarse-grained sand, little fine to coarse gravel, (heaving sands, PID = 0 ppm).
	35	24 40 35		POORLY GRADED SAND (SP) - Grey-brown, wet, very dense, fine-grained, (no hydrocarbon odor, PID = 0 ppm).
	38.5			Borehole terminated at 38.0 feet bls. Ground water encountered during drilling at 18.75 feet bls. Note: Blow counts taken using a 2.5-inch diameter split-spoon sampler driven with a 140-pound hammer falling 30 inches. Blow counts are recorded for evaluating relative soil density only and should not be construed as appropriate for construction or structural design purposes.
	42			
	45.5			
	49			
	52.5			

INSTALLATION OF FLUSH GRADE MONITORING WELL

Project ARCO Facility No. 980
10822 Roosevelt Way
Seattle, Washington
Delta No. M094-509

Monitoring Well No. MW-5
Elevations:
Top of Riser: _____
Ground Level: _____



L1 = 1.0 FT
L2 = 4.0 FT
L3 = 25.0 FT
L4 = 30.0 FT

Installation Completed

Date: 02/27/96

Time: 4:15 p.m.

Monitoring Well Water Level Measurements		
Date	Time	Water Level*

* Measure Point _____

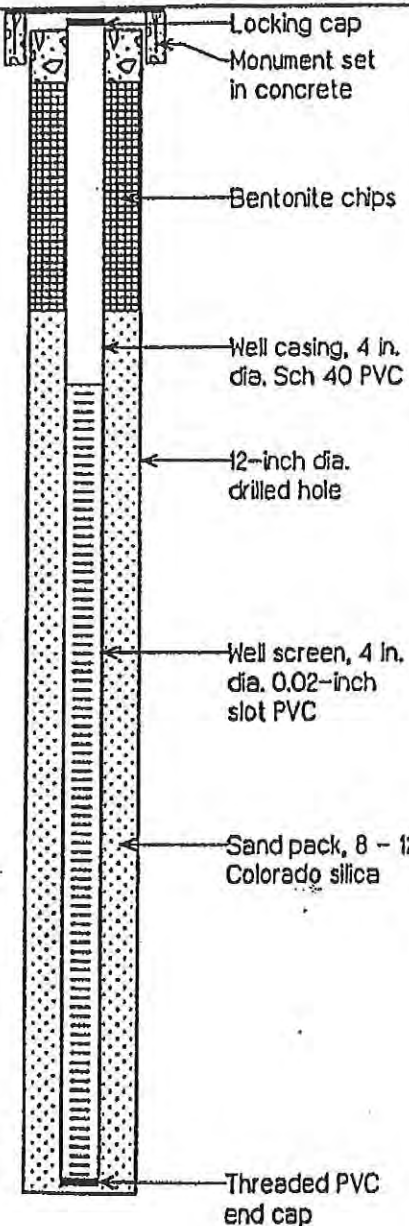


PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WA132.22

LOG OF MW-6
Page 1 of 1

CLIENT NAME: ARCO PRODUCTS COMPANY
PROJECT LOCATION: SEATTLE, WASHINGTON
DATE STARTED: 24-MAR-93
DATE COMPLETED: 24-MAR-93
LOGGED BY: A. AMR
CHECKED BY: J. SADLER

SURFACE ELEV: 262.05 feet
DATUM: CITY OF SEATTLE BOOK NO. 2627-5
DRILL COMPANY: CASCADE DRILLING, INC.
DRILLER: SCOTT KRUEGER
DRILL METHOD: HOLLOW-STEM AUGER
SAMPLING METHOD: SPLIT SPOON (140-lb. hammer)

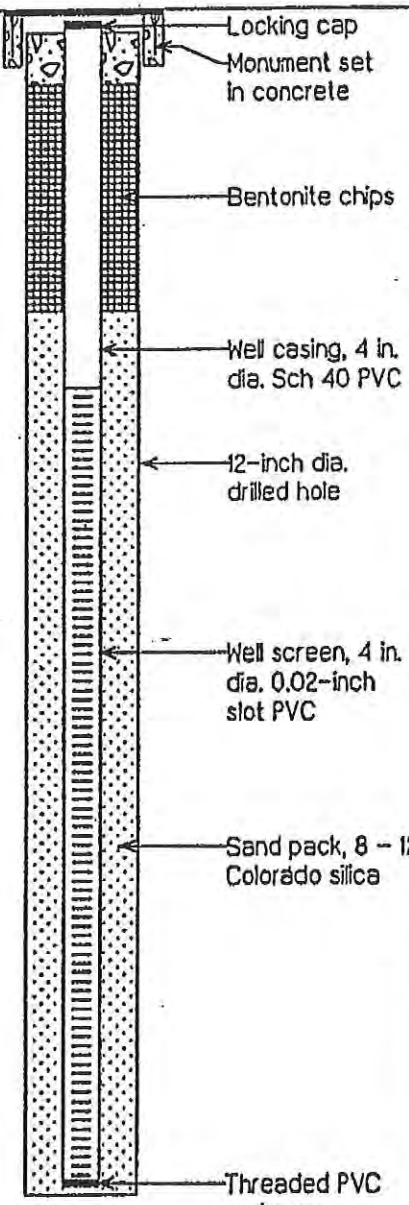
WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
				ASPHALT (3-inches) SILTY SAND with Gravel (SM) - Brown, moist, dense, fine- to medium-grained sand, little fine gravel, little silt, (Fill, no hydrocarbon odor). Hand dug to 5 feet below land surface (bls). As above, (no hydrocarbon odor, PID = 1 ppm).
	5	8 13 20		
	10	75/6		Difficult drilling due to coarse gravel and cobbles. As above, brown, moist, very dense, (moderate hydrocarbon odor, PID = 4 ppm). Two-inch gravel and 4-inch cobbles in soil cuttings.
	15	45 80/6		WELL-GRADED SAND with Gravel (SW) - Grey, moist, very dense, fine- to coarse-grained sand, with fine gravel to 1-inch diameter, few to little silt, (no hydrocarbon odor, PID = 20 ppm).
	20	90/6		Ground-water encountered at 16 feet bls during drilling. As above, light grey, wet. Poor sample recovery due to large gravels and heaving sand.
	25	45/6 50/2		As above; little fine gravel, very dense. Sample collected for grain-size analysis at 25 feet bls.
	30	75/6		As above, trace fine gravel.
	35			Borehole terminated at 30.5 feet bls. Ground water encountered at 16 feet bls during drilling. Blow counts taken using a 2.5-inch diameter split-spoon sampler driven with a 140-pound hammer falling 30 inches. Blow counts recorded for evaluating relative soil density only and should not be construed as appropriate for construction or structural design purposes.

PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WA132.22

LOG OF MW-7
Page 1 of 1

CLIENT NAME: ARCO PRODUCTS COMPANY
PROJECT LOCATION: SEATTLE, WASHINGTON
DATE STARTED: 24-MAR-93
DATE COMPLETED: 24-MAR-93
LOGGED BY: A. AMR
CHECKED BY: J. SADLER

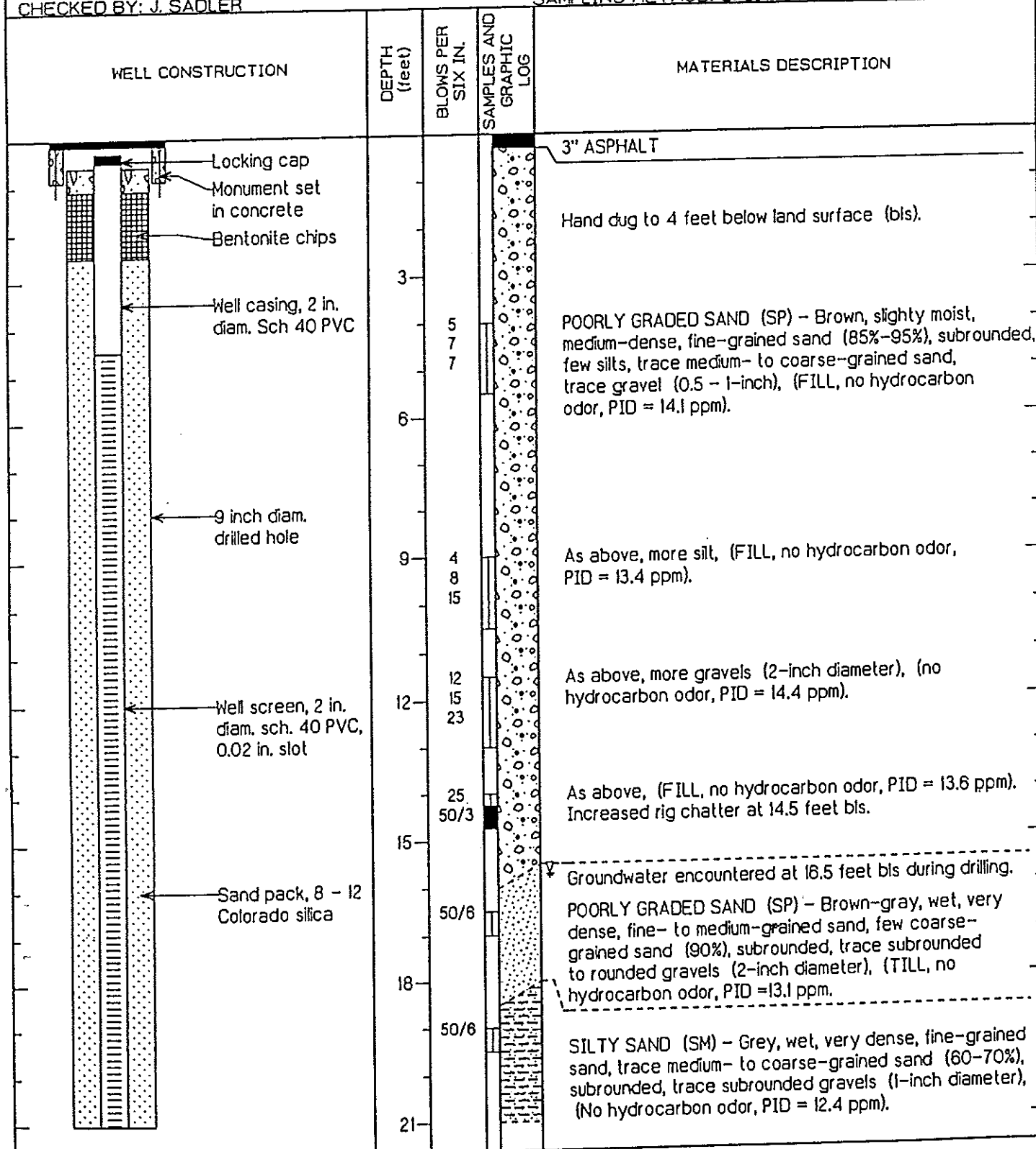
SURFACE ELEV: 261.55 feet
DATUM: CITY OF SEATTLE BOOK NO. 2627-5
DRILL COMPANY: CASCADE DRILLING, INC.
DRILLER: SCOTT KRUEGER
DRILL METHOD: HOLLOW-STEM AUGER
SAMPLING METHOD: SPLIT SPOON (140-lb. hammer)

WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
				ASPHALT (3-inches) SILTY SAND with Gravel (SM) - Grey to brown, moist, fine-to medium-grained sand, with fine to coarse gravel to 3-inch gravel, little silt, occasional cobbles to 4-inch diameter, (no hydrocarbon odor). Hand dug to 5 feet below land surface (bls). As above, dark brown, moist, very dense, subangular gravels, (Native soil, moderate hydrocarbon odor, PID = 13 ppm). Difficult drilling at 8 feet bls due to coarse gravel and cobbles. POORLY GRADED SAND with gravel (SP) - Grey to brown, moist, very dense, fine-grained sand, little fine gravel, (moderate hydrocarbon odor, PID = 14 ppm). WELL-GRADED SAND (SW) - Grey to brown, moist, trace fine gravel, very dense, (moderate hydrocarbon odor, PID = 9 ppm). Ground-water encountered at 20 feet bls during drilling. WELL-GRADED SAND with Gravel (SW) - Grey to brown, wet, very dense, little fine to coarse subangular gravel, (moderate hydrocarbon odor, PID = 3 ppm). Heaving sand at 25 feet bls. As above, light grey. Collected sample for grain-size analysis at 25 feet bls. As above, fine- to medium-grained sand. Collected sample for grain-size analysis at 30 feet bls. Borehole terminated at 30.5 feet bls. Ground water encountered at 20 feet bls during drilling. Blow counts taken using a 2.5-inch diameter split-spoon sampler driven with a 140-pound hammer falling 30 inches. Blow counts recorded for evaluating relative soil density only and should not be construed as appropriate for construction or structural design purposes.

PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WA0132.023

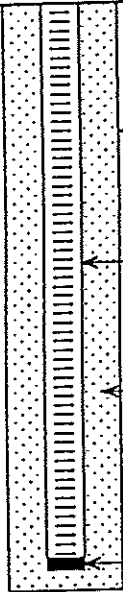
CLIENT NAME: ARCO PRODUCTS COMPANY
PROJECT LOCATION: SEATTLE, WASHINGTON
DATE STARTED: 28-APR-94
DATE COMPLETED: 28-APR-94
LOGGED BY: E. RADCLIFF
CHECKED BY: J. SADLER

SURFACE ELEV: 259.96 feet
DATUM: CITY OF SEATTLE
DRILL COMPANY: CASCADE DRILLING, INC.
DRILLER: RODNEY LABROSSE
DRILL METHOD: HOLLOW-STEM AUGER
SAMPLING METHOD: SPLIT SPOON (140-lb. hammer)



PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WAO132.023

LOG OF MW-8
Page 2 of 2

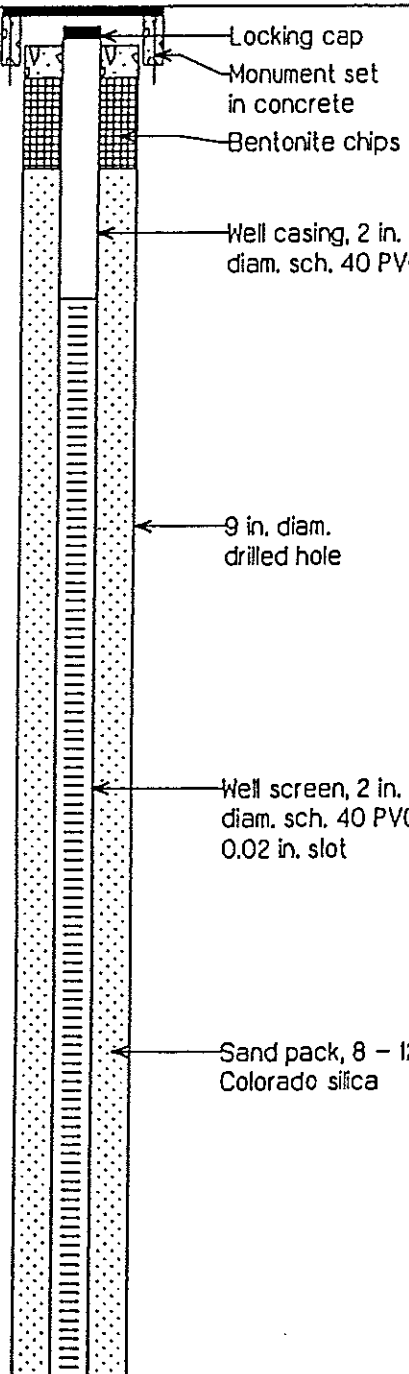
WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
 9 in. diam. drilled hole Well screen, 2 in. diam. sch. 40 PVC, 0.02 in. slot Sand pack, 8 - 12 Colorado silica PVC end cap				As above (No hydrocarbon odor, PID = 13.0 ppm).
	24	27 50/3		SILTY GRAVEL (GM) - Brown, wet, very dense, medium to coarse gravel (50-60%), angular to subangular, medium- to coarse-grained sand (25%), subangular, subrounded, silt (25-35%) (no hydrocarbon odor, PID = 13.1 ppm).
	27	50/5		As above, (no hydrocarbon odor). Increased drill rig chatter.
	30	60/6		SILT with Gravel (ML) - Gray, wet, very dense, silt (65%), medium to coarse gravel (35%), subangular, trace coarse-grained sand, small lenses of white clay, (No hydrocarbon odor, PID = 15.1 ppm).
				Borehole terminated at 30.0 feet bls. Groundwater encountered during drilling at 16.5 feet bls.
	33			Note: Blow counts taken using a 2.0-inch diameter split-spoon sampler driven with a 140-pound hammer falling 30 inches. Blow counts are recorded for evaluating relative soil density only and should not be construed as appropriate for construction or structural design purposes.
	36			
	39			
	42			
	45			

PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WAO132.023

LOG OF MW-9
Page 1 of 2

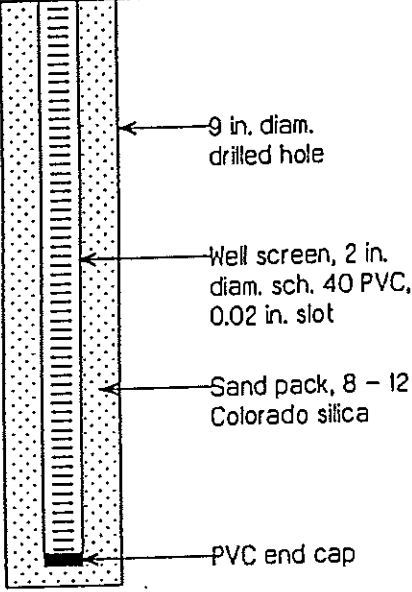
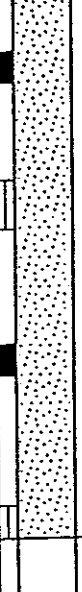
CLIENT NAME: ARCO PRODUCTS COMPANY
PROJECT LOCATION: SEATTLE, WASHINGTON
DATE STARTED: 29-APR-94
DATE COMPLETED: 29-APR-94
LOGGED BY: E. RADCLIFF
CHECKED BY: J. SADLER

SURFACE ELEV: 259.30feet
DATUM: CITY OF SEATTLE
DRILL COMPANY: CASCADE DRILLING, INC.
DRILLER: RODNEY LABROSSE
DRILL METHOD: HOLLOW-STEM AUGER
SAMPLING METHOD: SPLIT SPOON (140-lb. hammer)

WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
				3" ASPHALT
				Hand dug to 4 feet below land surface (bls).
	3	9 10 10		POORLY GRADED SAND (SP) - Brown, slightly moist, medium-dense, sand, (FILL, no hydrocarbon odor).
	6			
	9	4 12 21		As above, (FILL, no hydrocarbon odor).
	12	48 50/3		Rig chatter at 10 feet bls, 2- to 3-inch diameter rounded cobbles (logged from auger soil cuttings). SILTY SAND with Gravel (SM) - Gray, moist, very dense, fine-grained sand, trace coarse-grained sand (60 %), subrounded, silt (25-30%), gravel (1- to 2-inch gravel) (10-15 %), rounded, (TILL, no hydrocarbon odor, PID = 12.3 ppm).
	15	50/3		As above, with smaller gravels. (No hydrocarbon odor, PID = 13.5 ppm).
	18	50/3		POORLY GRADED SAND with Gravel (SP) - Brown, wet, very dense fine-grained sand, few medium- to coarse-grained sand (60-70%), subrounded-rounded, few silt, gravel (25-30%), rounded gravel to 1.5 inches diameter, (No hydrocarbon odor, PID = 9.5 ppm).
	21	50/6		As above, (no hydrocarbon odor, PID = 2.3 ppm).

PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WAO132.023

LOG OF MW-9
Page 2 of 2

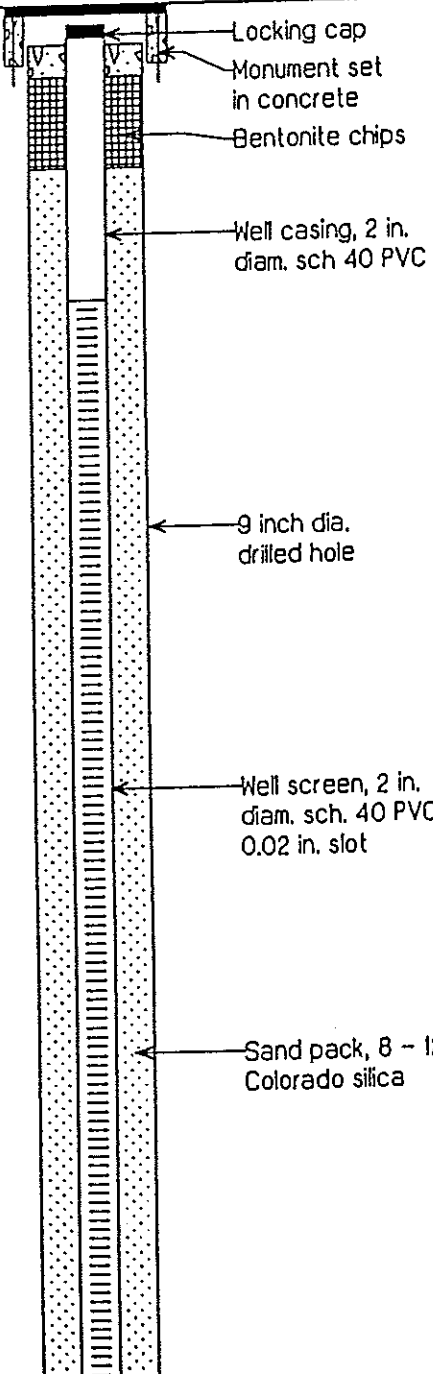
WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
 9 in. diam. drilled hole Well screen, 2 in. diam. sch. 40 PVC, 0.02 in. slot Sand pack, 8 - 12 Colorado silica PVC end cap	24 27 30 33 36 39 42 45	31 50/5 50/6 50/6 50/6		As above, (no hydrocarbon odor, PID = 2.0 ppm). As above, gray, moist to wet, very dense, fine- to medium-grained sand (65 %), gravel (25 to 30 %), silts, (No hydrocarbon odor, PID = 2.0 ppm). No recovery, slight drill rig chatter. As above, brown, wet, very dense, fine-grained sand, with trace coarse-grained sand (90 %), heaving sand, (PID = 2.0 ppm). Borehole terminated at 29.5 feet bls. Ground water encountered during drilling at 16.5 feet bls. Note: Blow counts taken using a 2.0-inch diameter split-spoon sampler driven with a 140-pound hammer falling 30 inches. Blow counts are recorded for evaluating relative soil density only and should not be construed as appropriate for construction or structural design purposes.

PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WAO132.023

LOG OF MW-10
Page 1 of 2

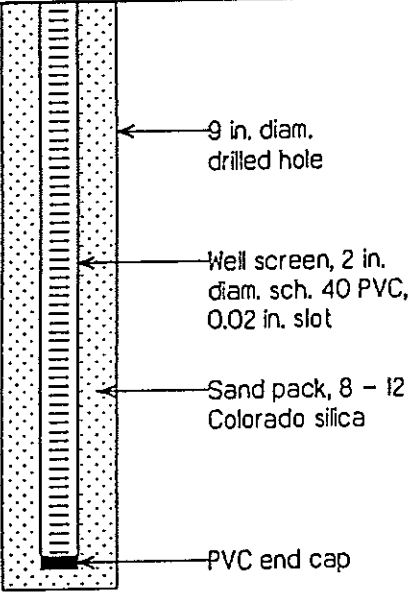
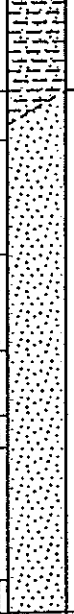
CLIENT NAME: ARCO PRODUCTS COMPANY
PROJECT LOCATION: SEATTLE, WASHINGTON
DATE STARTED: 27-APR-94
DATE COMPLETED: 27-APR-94
LOGGED BY: E. RADCLIFF
CHECKED BY: J. SADLER

SURFACE ELEV: 256.56feet
DATUM: CITY OF SEATTLE
DRILL COMPANY: CASCADE DRILLING, INC.
DRILLER: RODNEY LABROSSE
DRILL METHOD: HOLLOW-STEM AUGER
SAMPLING METHOD: SPLIT SPOON (14Q-lb, hammer)

WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
 Locking cap Monument set in concrete Bentonite chips Well casing, 2 in. diam. sch 40 PVC 9 inch dia. drilled hole Well screen, 2 in. diam. sch. 40 PVC, 0.02 in. slot Sand pack, 8 - 12 Colorado silica				3" ASPHALT SAND AND GRAVEL (Logged from soil cuttings). Hand dug to 4 feet below land surface (bls). POORLY GRADED SAND (SP) - Brown, moist, loose, fine- to medium-grained sand (85%), rounded, few silt, trace gravel, (FILL, no hydrocarbon odor, PID = 1.1 ppm). As above, brown, moist, very dense, little coarse-grained sand, subrounded, little fines, (FILL, no hydrocarbon odor, PID = 0 ppm). As above, light brown to gray, moist, very dense, fine- to medium-grained sand (80 %), few gravel, few silt, (FILL, no hydrocarbon odor, PID = 1.1 ppm). As above, brown, moist, very dense, fine- to medium-grained (75 %), subrounded, with lense of dark brown, fine-grained sand, little silt, trace gravel, subangular, (FILL, no hydrocarbon odor, PID = 1.1 ppm). SILTY SAND (SM) - Light brown, wet, very dense, fine-grained sand (80 %), rounded, little silt, (TILL, No hydrocarbon odor, PID = 6.0 ppm). Groundwater encountered at 16.8 feet bls during drilling. SILTY SAND (SM) - Light brown, wet, very dense, fine-grained sand (70 %), trace coarse-grained sand, sub-angular, some silt, (No hydrocarbon odor, PID = 0 ppm).

PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WAO132.023

LOG OF MW-10
Page 2 of 2

WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
 9 in. diam. drilled hole Well screen, 2 in. diam. sch. 40 PVC, 0.02 in. slot Sand pack, 8 - 12 Colorado silica PVC end cap	24 27 30 33 36 39 42 45	31 50/3 14 28 31 50/6 50/6		As above, light brown, wet, very dense, fine-grained sand, (80 %), rounded, little silt. POORLY GRADED SAND (SP) - Brown to dark brown, wet, very dense, fine-grained sand (80 %), little fines, (lense of dark brown to black, fine-grained sand), (No hydrocarbon odor, PID = 1.1 ppm). As above, (No hydrocarbon odor, PID = 0 ppm). As above, trace coarse-grained sand, (No hydrocarbon odor, PID = 0 ppm). As above, trace gravel, (No hydrocarbon odor, PID = 0 ppm). Borehole terminated at 30.5 feet bls. Groundwater encountered during drilling at 16.8 feet bls. Note: Blow counts taken using a 2.0-inch diameter split-spoon sampler driven with a 140-pound hammer falling 30 inches. Blow counts are recorded for evaluating relative soil density only and should not be construed as appropriate for construction or structural design purposes.

PROJECT NAME/LOCATION:					Project Number	M094-509	Boring Number	MW-11	
ARCO Facility No. 980 10822 Roosevelt Way Seattle, WA					Contractor	Cascade Drilling	Drilling Method	6½" ID HSA	
					Driller	Brian	Drilling Rig	CME-75	
					Start	1:20 p.m. 03/23/95	Completed	4:00 p.m. 03/23/95	
Landowner: ARCO Products Company					Surface Elev.	---	Logged By	Ron Bruce	
Sample		Blow Count	Sample		Depth Scale 1" = 4'	Descriptions of Materials and Conditions	Observations		
Type	No.		Interval (ft)	Recovery (in.)			Instrument: Units:	OVM ppm	Comments
SB	MW-11-5	19	5.0-6.5	18	0	3" ASPHALT			
					1				
					2				
					3				
					4				
SB	MW-11-10	50 for 6"	10.0-110.8	8	5	SILTY SAND; dark brown, moist, medium dense (SM) (Fill).		2.3	
					6				
					7				
					8				
					9				
SB	MW-11-15	50 for 4"	15.0-15.5	6	10	SILTY SAND; brown and gray, moist, very dense (SM).		0	
					11				
					12				
					13				
					14				
SB	MW-11-17	50 for 4"	17.5-18.0	6	15	SILTY SAND WITH GRAVEL; fine grained, gray brown, damp to moist, very dense (SP-SM).		0	
					16				
SB	MW-11-20	50 for 6"	20.0-20.5	6	17			654	
					18				
SB	MW-11-22	50 for 6"	22.5-23.0	0	19	Groundwater encountered at 19 feet.		441	
					20				
					21	SILTY SAND WITH GRAVEL; gray brown, saturated, very dense (SW-SM).			
					22				
					23				

BOREHOLE WATER LEVEL DATA			
Date			
Time			
GWL			
Casing Depth			



Delta
Environmental
Consultants, Inc.

Sheet 1 of 2

PROJECT NAME/LOCATION:					Project Number	M094-509	Boring Number	MW-11	
ARCO Facility No. 980 10822 Roosevelt Way Seattle, WA					Contractor	Cascade Drilling	Drilling Method	6½" ID HSA	
					Driller	Brian	Drilling Rig	CME-75	
					Start	1:20 p.m. 03/23/95	Completed	4:00 p.m. 03/23/95	
Landowner: ARCO Products Company					Surface Elev.	---	Logged By	Ron Bruce	
Sample		Blow Count	Sample		Depth Scale 1" = 4'	Descriptions of Materials and Conditions	Observations		
Type	No.		Interval (ft)	Recovery (in.)			Instrument: Units:	OVM ppm	Comments
SB	MW-11-25	50 for 6"	25.0-25.5	6	24	SILTY SAND WITH GRAVEL AND COBBLES; gray, saturated, very dense (SM).	7.5		
SB	MW-11-27	50 for 6"	27.5-28.0	6	25				
SB	MW-11-30	50 for 6"	30.0-30.5	6	26				
					27	SAND WITH SILT; very fine grained, gray-tan, saturated, very dense (SP).	6.2		
					28				
					29				
					30	Becomes medium grained.	39.8		
					31	Boring terminated at 30 ft.			
					32				
					33				
					34				
					35				
					36				
					37				
					38				
					39				
					40				
					41				
					42				
					43				
					44				
					45				
					46				
					47				

BOREHOLE WATER LEVEL DATA			
Date			
Time			
GWL			
Casing Depth			

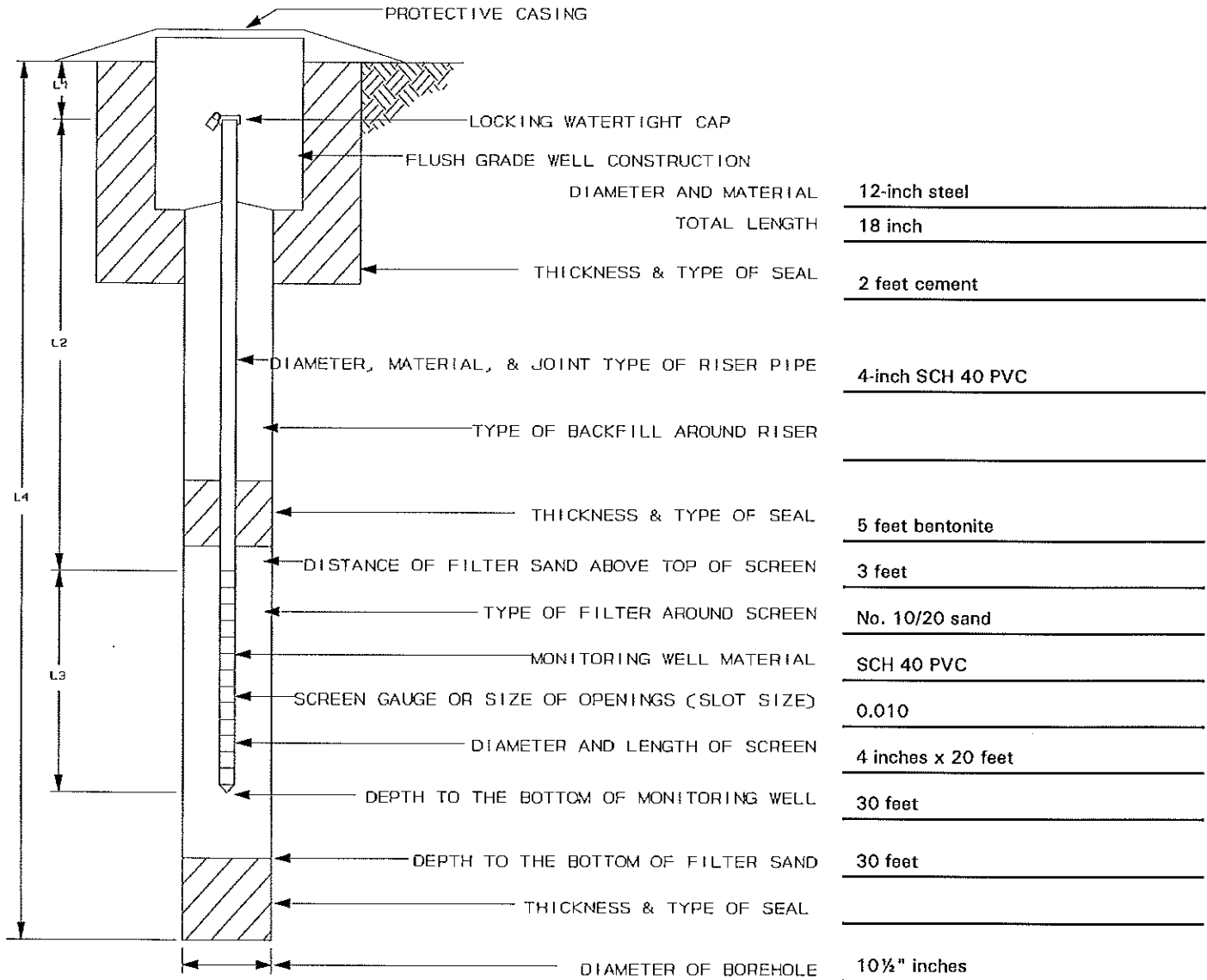

Delta
 Environmental Consultants, Inc.

Sheet 2 of 2

INSTALLATION OF FLUSH GRADE MONITORING WELL

Project ARCO Facility No. 980
10822 Roosevelt Way
Seattle, Washington
 Delta No. M094-509

Monitoring Well No. MW-11
 Elevations:
 Top of Riser: _____
 Ground Level: _____



L1 = _____ FT
 L2 = 9.75 FT
 L3 = 20.0 FT
 L4 = 30.0 FT

Installation Completed

Date: 03/23/95

Time: 4:00 p.m.



Monitoring Well Water Level Measurements		
Date	Time	Water Level*

* Measure Point _____



Delta
Environmental
Consultants, Inc.

Site Id: MW-12

Consulting Firm: Delta Environmental

Contractor: Cascade Drilling Inc

Purpose: Monitoring Well, Shallow

Logged By: Ron Bruce

Drilling Method: 6.25" ID Hollow Stem Auger CME-55

Location: 10822 Roosevelt Way NE Seattle WA

Date(s): 07/09/96 - 07/09/96

Project Name: ARCO Facility No. 980

Elevation: 258.16'

Project Number: M094-509

Datum: Mean Sea Level

Permit No.:

Permit Date: / /

Remarks: On adjacent property to the south: Carribbean
Apartment complex.

Blank Casing:

type: SCH 40 PVC dia: 4.00in fm: 0.2' to: 5.00'

Screens:

type: Slotted size: 0.010in dia: 4.00in fm: 5.00' to: 20.00'

Annular Fill:

type: Cement with Monument fm: 0.00' to: 1.50'

type: Bentonite fm: 1.50' to: 3.00'

type: Sand Filter fm: 3.00' to: 20.00'

Depth (ft)	Recovery	Sample No.	Blow Count	Graphic Log	Material Description	Well Construction MP. EL. 257.84	PO
0					ASPHALT 1.5"		
5		MW-12-5	65 R/4"		SILTY SAND (SM); tan, moist, very dense.		3.7 ppm
10		MW-12-10	55 R/4"		SANDY SILT (ML); tan, moist, very dense.		196 ppm
		MW-12-12	85 R/5"				151 ppm
		MW-12-15	70 R/4"		WELL GRADED SAND WITH SILT (SW-SM); grey, saturated, very dense.		3.7 ppm
20		MW-12-20	55				



WELL/BORING: MW-13

Unique Ecology Well ID: BLZ108

INSTALLATION DATE: 9/9/2019 – 9/13/2019

DRILLING METHOD: Sonic

PROJECT: ARCO 980

SAMPLING METHOD: Continuous Core

CLIENT: BP

BORING DIAMETER: 10"

LOCATION: 10822 Roosevelt Way NE

BORING DEPTH: 19'

CITY: Seattle

WELL CASING: SCH 40 PVC 2"

STATE: WA

WELL SCREEN: 7' – 19' (0.020")

DRILLER: Cascade Drilling, Inc.

SAND PACK: 5' – 19' (2 x 12)

WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	Temperature	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	258.01'	DTC:	5"
											SURVEY DATE:	10-10-19		
											DTW:	13.45'		
DESCRIPTION/LOGGED BY: Marissa Bernard														
Concrete						1					Surface = Asphalt			
Bentonite						2								
						3								
						4								
			DRY	0.2	-	5			ML		Sandy <u>SILT</u> with trace gravel; brown; 60% silt, 40% very fine to medium sand, trace gravel.			
						6			SM		@ 5.5': Silty <u>SAND</u> with gravel; brown; 30% silt, 60% very fine to medium sand, 10% gravel.			
						7			SM		@ 6.5': Same as above; gray.			
						8					@ 7.5' to 10': ODOR			
			DRY	396.0	90.8	9								
				1104	-	10			SM		Silty <u>SAND</u> ; gray; 40% silt, 60% very fine sand.			
						11			SM		Silty <u>SAND</u> -with cobbles; gray; 20% silt, 80% very fine to medium sand, trace large cobbles and gravel.			
						12								
			MST	107.2	105.9	13			SP		<u>SAND</u> with trace gravel; gray; 100% fine to medium sand, trace gravel. ODOR.			
						14			SM		@ 13' – 13.5': Silty <u>SAND</u> ; gray; 40% silt, 60% very fine to fine sand, trace gravel. ODOR.			
						15			SP		@ 13.5': <u>SAND</u> with trace gravel; gray; 100% fine to medium sand, trace gravel. ODOR.			
			MST	104.8	118.9	16			SM		Silty <u>SAND</u> with gravel; gray; 15% silt, 75% very fine to medium sand, 10% gravel. ODOR.			
						17								
	▽	▼	WET	9.8	90.1	18					Same as above; increasing gravel. No odor.			
						19								
			WET	6.7	81.0	20					Same as above; decreasing gravel.			
						21								
						22					Boring completed at 19' bgs as monitoring well			



WELL/BORING: MW-14

Unique Ecology Well ID: BLZ109

INSTALLATION DATE: 9/9/2019 – 9/13/2019

DRILLING METHOD: Sonic

PROJECT: ARCO 980

SAMPLING METHOD: Continuous Core

CLIENT: BP

BORING DIAMETER: 6"

LOCATION: 10822 Roosevelt Way NE

BORING DEPTH: 14'

CITY: Seattle

WELL CASING: SCH 40 PVC 2"

STATE: WA

WELL SCREEN: 4' – 14' (0.010")

DRILLER: Cascade Drilling, Inc.

SAND PACK: 2.5' – 14' (2 x 12)

WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	Temperature	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	258.27'	DTC:	6"
											SURVEY DATE:	10-10-19		
											DTW:	6.20'		
DESCRIPTION/LOGGED BY: Marissa Bernard														
Concrete Bentonite Sand	▽	▼	DRY	0.5	-	1					Surface = Asphalt			
						2								
						3								
						4								
						5			SM		Silty SAND with trace gravel; brown; 10% silt, 90% very fine to medium sand, trace gravel. @ 6': Same as above; gray.			
						6								
						7			SP		SAND with trace gravel; gray/brown; 100% very fine to medium sand, trace gravel.			
						8								
						9					Same as above; very fine sand, no gravel.			
						10			SW		Same as above; very fine to very coarse sand, trace gravel.			
						11					Same as above; very fine to medium sand.			
						12					Same as above; very fine to very coarse sand, increase in gravel.			
						13								
						14			SP		Same as above; gray with brown streaks; very fine to medium sand.			
						15								
						16			SM		Silty SAND with gravel; gray; 10% silt, 80% very fine to medium sand, 10% gravel.			
						17								
						18			SW		SAND; gray; 100% very fine to very coarse sand.			
						19					Boring completed at 14' bgs as monitoring well			
						20								
						21								
						22								



WELL/BORING: MW-15

Unique Ecology Well ID: BLZ110

INSTALLATION DATE: 9/9/2019 – 9/13/2019

DRILLING METHOD: Sonic

PROJECT: ARCO 980

SAMPLING METHOD: Continuous Core

CLIENT: BP

BORING DIAMETER: 10"

LOCATION: 10822 Roosevelt Way NE

BORING DEPTH: 25'

CITY: Seattle

WELL CASING: SCH 40 PVC 2"

STATE: WA

WELL SCREEN: 6' – 23' (0.020")

DRILLER: Cascade Drilling, Inc.

SAND PACK: 4' – 23' (2 x 12)

WELL/BORING COMPLETION	FIRST STABILIZED	MOISTURE	PID (ppm)	Temperature	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	258.25'	DTC:	5.5"
										SURVEY DATE:	10-10-19		
										DTW:	14.02'		
DESCRIPTION/LOGGED BY: Marissa Bernard													
Concrete					1					Surface = Asphalt			
Bentonite					2								
					3								
					4								
		DP	8.9	-	5			SM		Silty <u>SAND</u> trace gravel; dark gray and brown; 40% silt, 50% fine to medium sand, 10% gravel.			
		DRY	-	-	6								
		DRY	2.3	93.8	7			SM		Silty <u>SAND</u> with trace gravel; brownish gray; 40% silt, 60% fine to medium sand, trace gravel, trace large cobbles.			
					8								
		DRY	3.4	91.6	10			SM		Same as above.			
					11								
		MST	29.5	89.4	12			SM		Silty <u>SAND</u> ; gray; 10% silt, 90% fine to medium sand, trace large cobbles.			
					13								
		WET	-	-	14			SP		<u>SAND</u> ; brown; 100% fine to medium sand.			
		WET	2.9	96.0	15			SM		Silty <u>SAND</u> with gravel; brown; 30% silt, 60% very fine to coarse sand, 10% gravel.			
					16								
		WET	3.0	88.7	17			SM		Silty <u>SAND</u> with trace gravel; gray; 10% silt, 90% fine to very coarse sand, trace gravel.			
					18					@ 18': Same as above; 30% silt, 70% fine to medium sand.			
		DRY	-	-	19			ML		Sandy <u>SILT</u> with cobbles; gray; 60% silt, 30% very fine to fine sand, 10% small to medium sub-angular cobbles.			
		MST	2.0	93.5	20			SP		<u>SAND</u> ; gray; 100% fine to medium sand.			
					21								
					22								



WELL/BORING: MW-15

Unique Ecology Well ID: BLZ110

INSTALLATION DATE: 9/9/2019 – 9/13/2019

DRILLING METHOD: Sonic

PROJECT: ARCO 980

SAMPLING METHOD: Continuous Core

CLIENT: BP

BORING DIAMETER: 10"

LOCATION: 10822 Roosevelt Way NE

BORING DEPTH: 25'

CITY: Seattle

WELL CASING: SCH 40 PVC 2"

STATE: WA

WELL SCREEN: 6' – 23' (0.020")

DRILLER: Cascade Drilling, Inc.

SAND PACK: 4' – 23' (2 x 12)

WELL/BORING COMPLETION	FIRST STABILIZED	MOISTURE	PID (ppm)	Temperature	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	258.25'	DTC:	5.5"
										SURVEY DATE:	10-10-19		
										DTW:	14.02'		
DESCRIPTION/LOGGED BY: Marissa Bernard													
		MST	1.5	79.7	23			SP		Same as above; very fine to fine sand.			
					24			ML		Sandy <u>SILT</u> ; brown and gray; 80% silt, 20% very fine sand.			
		MST	1.0	80.9	25			SM		Silty <u>SAND</u> with gravel; gray; 30% silt, 60% very fine to medium sand, 10% gravel.			
					26					Boring completed at 25' bgs as monitoring well			
					27								
					28								
					29								
					30								
					31								
					32								
					33								
					34								
					35								
					36								
					37								
					38								
					39								
					40								
					41								
					42								
					43								
					44								

Sand



WELL/BORING: MW-16

Unique Ecology Well ID: BLZ111

INSTALLATION DATE: 9/9/2019 – 9/13/2019

DRILLING METHOD: Sonic

PROJECT: ARCO 980

SAMPLING METHOD: Continuous Core

CLIENT: BP

BORING DIAMETER: 6"

LOCATION: 10822 Roosevelt Way NE

BORING DEPTH: 20'

CITY: Seattle

WELL CASING: SCH 40 PVC 2"

STATE: WA

WELL SCREEN: 8' – 20' (0.010")

DRILLER: Cascade Drilling, Inc.

SAND PACK: 6' – 20' (2 x 12)

WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	Temperature	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	259.53'	DTC:	5"
											SURVEY DATE:	10-10-19		
											DTW:	16.47'		
DESCRIPTION/LOGGED BY: Marissa Bernard														
Concrete						1					Surface = Asphalt			
Bentonite						2								
						3								
						4								
			DRY	0.1	-	5			SM		Silty <u>SAND</u> with trace gravel; brown; 30% silt, 70% very fine to fine sand, trace gravel.			
						6			ML		@ 5.5': Sandy <u>SILT</u> with trace gravel; dark brown; 70% silt, 30% very fine sand, trace gravel.			
			Slightly DP	1.0	71.3	7			SM		Silty <u>SAND</u> with cobbles; light brown; 20% silt, 60% fine to very coarse sand, 10% small sub-rounded cobbles.			
						8								
			WET	2.6	83.0	9								
						10			SM		Same as above; fine to medium sand; sub-angular cobbles. Transitions to			
						11					Silty <u>SAND</u> with cobbles; light brown; 20% silt, 30% fine to medium sand, 50% small sub-rounded to sub-angular cobbles.			
			WET	4.0	83.2	12			SM		Same as above; trace gravel and cobbles; 45% silt, 65% very fine to medium sand.			
						13								
			WET	2.5	71.5	14								
						15					Same as above.			
						16								
			MST/ WET	2.5	70.2	17			SM		Same as above; gray; very fine to fine sand, trace gravel.			
						18								
						19								
			MST/ WET	5.6	73.0	20			SM		Silty <u>SAND</u> ; light brown; 20% silt, 80% very fine to medium sand.			
						21					Boring completed at 20' bgs as monitoring well			
						22								



WELL/BORING: MW-17

Unique Ecology Well ID: BLZ 445

INSTALLATION DATE: 11/17-18/20

DRILLING METHOD: Sonic

PROJECT: ARCO 980

SAMPLING METHOD: HA/Continuous Core

CLIENT: BP

BORING DIAMETER: 6"

LOCATION: 10822 Roosevelt Way NE

BORING DEPTH: 22'

CITY: Seattle

WELL CASING: SCH 40 PVC 2"

STATE: WA

WELL SCREEN: 7' - 22' (0.010")

DRILLER: Cascade Drilling, Inc.

SAND PACK: 5' - 22' (2 x 12)

WELL/BORING COMPLETION	FIRST STABILIZED	MOISTURE	PID (ppm)	Temperature	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	253.47'	DTC:	5.5"
										SURVEY DATE:	11/19/2020		
										DTW:	11.01		
DESCRIPTION/LOGGED BY: Marissa Bernard													
Concrete					1					Surface = Mulch			
Bentonite					2								
		DMP	0.0	-	3			SM		Silty SAND: brown; 10% silt; 90% fine to very coarse sand; trace gravel.			
		DMP	0.0	-	4								
					5			SM		Same as Above: very fine to medium sand; trace cobbles; trace organics.			
					6								
		DRY	0.0	-	7								
					8			SM		Same as Above: lighter in color; increased gravel.			
					9								
		-	0.1	-	10			SM		Same as Above: increased silt (2" lens)			
		MST	-	-	11			SP		SAND: brown; trace silt; 80% medium to very coarse sand; 20% gravel.			
		-	0.0	-	12			SM		Silty SAND: gray/brown; 20% silt; 80% very fine to fine sand.			
					13								
		-	0.1	-	14			SM		Same as Above: very fine to medium sand; trace gravel and cobbles.			
		WET	-	-	15								
		-	0.1	-	16			SM		Same as Above: very fine to very coarse sand.			
					17								
		MST	0.2	-	18			SP		SAND: grey iron staining; very fine to medium sand; trace gravel.			
					19								
		MST	0.5	-	20			SP		Same as Above: no iron staining; no trace gravel.			
					21					Boring completed at 22' bgs as monitoring well			
					22								



WELL/BORING: MW-18

Unique Ecology Well ID: BLZ 355

INSTALLATION DATE: 11/17-19/20

DRILLING METHOD: Sonic

PROJECT: ARCO 980

SAMPLING METHOD: HA/Continuous Core

CLIENT: BP

BORING DIAMETER: 6"

LOCATION: 10822 Roosevelt Way NE

BORING DEPTH: 20'

CITY: Seattle

WELL CASING: SCH 40 PVC 2"

STATE: WA

WELL SCREEN: 5' - 20' (0.010")

DRILLER: Cascade Drilling, Inc.

SAND PACK: 3' - 20' (2 x 12)

WELL/BORING COMPLETION	FIRST STABILIZED	MOISTURE	PID (ppm)	Temperature	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	249.67'	DTC:	3.25"
										SURVEY DATE:	11/19/2020		
										DTW:	8.42		
DESCRIPTION/LOGGED BY: Marissa Bernard													
Concrete					1					Surface = Asphalt			
Bentonite					2								
		DRY	0.0	-	3			SM		Silty SAND: brown; 10% silt; 80% very fine to medium sand; 10% gravel; trace organics.			
		DMP	0.0	-	4								
					5			SM		Same as Above: increased gravel; no trace organics.			
		DMP	-	-	6								
		DMP	-	-	7			SM		Same as Above: light brown; 90% very fine to medium sand; trace gravel.			
		-	0.3	-	8								
		DMP	-	-	9			SM		2" layer Same as Above: increased sand grain size (very fine to very coarse sand).			
		-	0.4	-	10			SM		Same as Above: decreased sand grain size (very fine to fine sand).			
					11								
		MST	0.4	-	12			SM		Same as Above: 90% very fine to medium sand; trace gravel and cobbles.			
		WET	-	-	13								
		-	0.2	-	14								
		WET	-	-	15					Same as Above: no cobbles.			
		-	0.6	-	16								
					17								
		MST	1.3	-	18			SM		Same as Above: more grey in color.			
					19								
		MST	1.5	-	20			SM		Same as Above.			
					21					Boring completed at 20' bgs as monitoring well			
					22								



WELL/BORING: MW-19

Unique Ecology Well ID: BLZ 444

INSTALLATION DATE: 11/17-18/20

DRILLING METHOD: Sonic

PROJECT: ARCO 980

SAMPLING METHOD: HA/Continuous Core

CLIENT: BP

BORING DIAMETER: 6"

LOCATION: 10822 Roosevelt Way NE

BORING DEPTH: 20'

CITY: Seattle

WELL CASING: SCH 40 PVC 2"

STATE: WA

WELL SCREEN: 5' - 20' (0.010")

DRILLER: Cascade Drilling, Inc.

SAND PACK: 3' - 20' (2 x 12)

WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	Temperature	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	249.21'	DTC:	4"
											SURVEY DATE:	11/19/2020		
											DTW:	8.07		
											DESCRIPTION/LOGGED BY: Marissa Bernard			
Concrete						1					Surface = Grass			
Bentonite						2								
			MST	0.0	-	3			SP		SAND: brown; trace silt; 40% fine to very coarse sand; 60% gravel and cobbles.			
						4					@4.0 - 4.5' gravel/cobble layer			
			WET	0.1	-	5			SP		SAND: greyish brown; fine to coarse sand; trace gravel.			
						6								
						7								
			DMP	0.3	-	8			SM		Silty SAND: light brown; 10% silt; 80% very fine to medium sand; 10% gravel and cobbles.			
						9								
			MST	0.6	-	10			SM		Silty SAND: grey; 20% silt; 80% very fine to medium sand; trace gravel.			
						11								
			-	0.6	-	12								
			WET	-	-	13			SM		Same as Above: increased (80%) subangular and rounded gravel and cobbles.			
			-	0.3	-	14								
						15								
			WET	0.3	-	16			SM		Silty SAND: brown; 10% silt; 60% fine to very coarse sand; 30% subangular gravel and cobbles.			
						17								
			-	0.7	-	18			SM		Same as Above: greyish brown; 90% very fine to medium sand; 10% gravel.			
						19			SM		Same as Above: brown; fine to very coarse sand; increased gravel.			
			WET	0.6	-	20					Boring completed at 20' bgs as monitoring well			
						21								
						22								



WELL/BORING: MW-20

Unique Ecology Well ID: BMM 880

INSTALLATION DATE: 9/9-9/10/21

DRILLING METHOD: Sonic

PROJECT: 00980SA211

SAMPLING METHOD: Continuous Core/HA

CLIENT: BP

BORING DIAMETER: 6"

LOCATION: 10822 Roosevelt Way NE

BORING DEPTH: 25'

CITY: Seattle

WELL CASING: SCH 40 PVC 2"

STATE: WA

WELL SCREEN: 10-25' (0.010")

DRILLER: Cascade Drilling, Inc.

SAND PACK: 8-25' (2 x 12)

WELL/BORING COMPLETION	FIRST STABILIZED	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	USCS SYMBOL	GRAPHIC	CASING ELEVATION	261.36'	DTC: -
									SURVEY DATE:	11/5/21	
									DTW:	10.83'	
DESCRIPTION/LOGGED BY: K. Younger/S. Hinze/N. Han											
Concrete					1				Surface = Concrete		
					2				Fill material		
Bentonite		-	0.0	-	3						
					4		SP		Gravelly SAND: brown; trace silt; 80% coarse sand; 15% fine to coarse gravel.		
					5				Large rock		
					6						
					7						
					8						
					9						
		-	0.0	-	10		SM		Silty SAND: grey; brown; silt/sand mixture with coarse gravel and cobbles.		
					11						
					12						
					13						
					14						
		-	0.0	-	15		SP		Gravelly SAND: green/gray; trace silt; majority poorly graded sand with some coarse gravel.		
					16				6' silt lens @~17'		
					17						
					18						
					19						
		-	0.0	-	20		SP		Gravelly SAND: green/grey; trace silt; majority poorly graded sand with some coarse gravel.		
					21				6" silt; lens @~22'		
					22						



WELL/BORING: MW-20

Unique Ecology Well ID: BMM 880

INSTALLATION DATE: 9/9-9/10/21

DRILLING METHOD: Sonic

PROJECT: 00980SA211

SAMPLING METHOD: Continuous Core/HA

CLIENT: BP

BORING DIAMETER: 6"

LOCATION: 10822 Roosevelt Way NE

BORING DEPTH: 25'

CITY: Seattle

WELL CASING: SCH 40 PVC 2"

STATE: WA

WELL SCREEN: 10-25' (0.010)

DRILLER: Cascade Drilling, Inc.

SAND PACK: 8-25' (10X20)

WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	261.36'	DTC: -
										SURVEY DATE:	11/5/21	
										DTW:	10.83'	
										DESCRIPTION/LOGGED BY: K. Younger/S. Hinze/N. Han		
Sand			-	0.0	-	23		SP		Gravelly SAND: green/grey; trace silt; majority poorly graded sand with some coarse gravel.		
						24						
						25						
						26						
						27						
						28						
						29						
						30						
						31						
						32						
						33						
						34						
						35						
						36						
						37						
						38						
						39						
						40						
						41						
						42						
						43						
						44						



WELL/BORING: MW-21

Unique Ecology Well ID: BMM 881

INSTALLATION DATE: 9/9-9/10/21

DRILLING METHOD: Sonic

PROJECT: 00980SA211

SAMPLING METHOD: Continuous Core/HA

CLIENT: BP

BORING DIAMETER: 6"

LOCATION: 10822 Roosevelt Way NE

BORING DEPTH: 25'

CITY: Seattle

WELL CASING: SCH 40 PVC 2"

STATE: WA

WELL SCREEN: 5-20' (0.010")

DRILLER: Cascade Drilling, Inc.

SAND PACK: 3-20' (2 x 12)

WELL/BORING COMPLETION	FIRST STABILIZED	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	261.26'	DTC: -
									SURVEY DATE:	11/5/21	
									DTW:	16.42'	
DESCRIPTION/LOGGED BY: K. Younger/S. Hinze/N. Han											
Concrete					1				Surface = Asphalt		
Bentonite					2				Fill material		
					3						
		-	0.0	-	4		SP		Gravelly SAND: brown; 90% medium to coarse sand; 10% gravel.		
		MST	-	-	5		SP		Same as Above: grey/brown.		
					6						
					7						
		MST			8		OL		SILT: organic silts and organic silty clays.		
					9						
		WET	0.1	-	10		SM		Silty SAND: with gravel; yellow/grey; silty sand mixture with coarse gravel.		
					11						
					12						
		WET	0.1	-	13						
					14						
		WET		-	15		SW		Gravelly SAND: green/grey; well graded sand with fine gravel.		
					16						
					17						
					18						
		WET	3.1	-	19						
					20		SP		Gravelly SAND: with silt; green/grey; trace silt; poorly graded/ gravelly sand.		
Bentonite					21						
					22						



WELL/BORING: MW-21

Unique Ecology Well ID: BMM 881

INSTALLATION DATE: 9/9-9/10/21

DRILLING METHOD: Sonic

PROJECT: 00980SA211

SAMPLING METHOD: Continuous Core/HA

CLIENT: BP

BORING DIAMETER: 6"

LOCATION: 10822 Roosevelt Way NE

BORING DEPTH: 25'

CITY: Seattle

WELL CASING: SCH 40 PVC 2"

STATE: WA

WELL SCREEN: 5-20' (0.010)

DRILLER: Cascade Drilling, Inc.

SAND PACK: 3-20' (10X20)

WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	261.26'	DTC:	-
										SURVEY DATE:	11/5/21		
										DTW:	16.42'		
										DESCRIPTION/LOGGED BY: K. Younger/S. Hinze/N. Han			
Bentonite			DMP	1.4	-	23		SC		Clayey SAND: with gravel and cobble; green/grey; 20% clay; 80% sand; trace coarse cobble and cobble.			
						24							
						25							
						26							
						27							
						28							
						29							
						30							
						31							
						32							
						33							
						34							
						35							
						36							
						37							
						38							
						39							
						40							
						41							
						42							
						43							
						44							

Project Name ARCO Facility No. 980		Monitoring Well Construction Log		Well Number MW-22 / BQK097	
Address 10822 Roosevelt Way Northeast Seattle Washington	Drilling Contractor/License Cascade Drilling, LP		Headspace Monitoring Device PID	Top of Casing Elevation: 271.26 ft	
	Drilling Method Hollow Stem Auger		Sampling Method Split Spoon	Well Screen Interval 5 - 15 ft.	Slot Size 0.010 in.
Logged By M. Holloway	Approved By B. Jackson	Drilling Equipment Hollow Stem Auger	Sampling Equipment Split Spoon	Well Depth 20 ft.	Well Casing Diameter 2 in.
Antea Group Project Number WA 980		Boring Depth 22.5 ft.	Boring Diameter 10 in.	Date Drilling Started 5/6/2025	Date Drilling Completed 5/8/2025

LITHOLOGY

SAMPLING DATA

Elevation	Depth	Graphic Log	Visual Description	USCS	Headspace (ppm)	Sample Interval (ft)	Sample Type	Sample Collected	Density	Blow Counts/6"	Water Level	Well Diagram	Well Details	Depth
0			Asphalt.										Concrete: 0 - 1.5 ft.	0
270			Fill, Asphalt and Concrete.										Bentonite: 1.5 - 4 ft.	
			Grey, Moist, Well Graded Sand with Gravel, 30% Coarse Sand, 30% Medium Sand, 20% Gravel, 20% Fine Sand.	SW	2.3								Sand Pack: 4 - 20 ft.	
5			Grey to Black, Moist, Silty Sand, 40% Fine Sand, 20% Medium Sand, 20% Silt, 10% Coarse Sand.	SM	1.4								Well Screen: 5 - 20 ft.	5
265			Grey, Moist, Poorly Graded Sand with Gravel, Very Dense, 50% Fine Sand, 30% Medium Sand, 20% Gravel, Slight Sheen.	SP	1.0									
10			Grey, Wet, Poorly Graded Sand with Gravel, Very Dense, 75% Fine Sand, 25% Medium Sand, Trace Gravel, Slight Sheen, Slight Petroleum Odor.	SP	67.5	10-10.5	SS		50/5					10
260			Grey, Wet, Poorly Graded Sand with Gravel, Very Dense, 75% Fine Sand, 25% Medium Sand, Trace Gravel, Moderate Sheen.	SP	41.2				50/6					
15			Brown, Wet, Poorly Graded Sand, Very Dense, 75% Medium Sand, 25% Fine Sand, Trace Gravel, Slight Petroleum Odor, Moderate Sheen.	SP	50.9				50/6					15
255			No Recovery.											
20			Grey, Wet, Poorly Graded Sand, Very Dense, 80% Medium Sand, 15% Fine Sand, 5% Gravel, Very Slight Sheen.	SP	0.0	19.5-20	SS		50/6					20
250			Grey, Wet, Poorly Graded Sand, Very Dense, 80% Medium Sand, 15% Fine Sand, 5% Gravel, Slight Sheen.	SP	0.4	22-22.5	SS		50/4				Bentonite: 20 - 22.5 ft.	
25			Boring Terminated at 22.5 ft. bgs.											25
245														
30														30

SS - Split Spoon



WELL/BORING: MW-23

Unique Ecology Well ID: BNE 896

INSTALLATION DATE: 11/3/22

DRILLING METHOD: Hollow Stem

PROJECT: WA – 00980 Seattle

DRILLING METHOD: Direct Push

CLIENT: BP

BORING DIAMETER: 8.25"

LOCATION: 10822 Roosevelt Way NE

BORING DEPTH: 22'

CITY: Seattle

WELL CASING: SCH 40 PVC 2"

STATE: WA

WELL SCREEN: 7-22' (0.010")

DRILLER: Cascade Drilling, Inc.

SAND PACK: 6-22' (10X20)

WELL/BORING COMPLETION	FIRST STABILIZED	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	DTC: -
	▽	▼								SURVEY DATE: -	
										DTW: -	
DESCRIPTION/LOGGED BY: Jonah Leurquin and Jesse Schewe											
Concrete					1						
Bentonite					2			SP			<u>SAND</u> : brown; 95% fine sand; 5% gravel.
					3						
					4						
					5			SW			<u>SAND</u> : brown; 90% fine to coarse sand; 10% gravel.
					6						
		-	0.0	7 12 20	7						
					8			SP			<u>SAND</u> with Silt: brown; 10% silt; 90% fine sand; trace gravel.
					9			SM			Silty <u>SAND</u> : brown; 30% silt; 70% fine sand.
					10						
		DMP	-	50/6"	11			SM			Same as Above.
					12						
					13						
					14						
					15			SM			Silty <u>SAND</u> : 25% silt; 70% fine to medium sand; 5% gravel.
					16						
					17						
					18						
					19						
	▽	WET	-	50/6"	20			SM			Same as Above.
					21						
					22						



WELL/BORING: MW-24

Unique Ecology Well ID: BNE 898

INSTALLATION DATE: 11/4/22

DRILLING METHOD: Hollow Stem

PROJECT: WA – 00980 Seattle

DRILLING METHOD: Direct Push

CLIENT: BP

BORING DIAMETER: 7"

LOCATION: 10822 Roosevelt Way NE

BORING DEPTH: 24.5'

CITY: Seattle

WELL CASING: SCH 40 PVC 2"

STATE: WA

WELL SCREEN: 9–24' (0.010")

DRILLER: Cascade Drilling, Inc.

SAND PACK: 7-24' (10X20)

WELL/BORING COMPLETION	FIRST STABILIZED	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	USCS SYMBOL	GRAPHIC	CASING ELEVATION	DTC: -
	▽	▼							SURVEY DATE: -	
									DTW: -	
DESCRIPTION/LOGGED BY: Jonah Leurquin and Jesse Schewe										
Concrete					1					
Bentonite					2					
					3					
					4					
		DRY	0.0	25	5					
				50/6"	6	■	ML			SILT with Sand: light brown/grey; 90% silt; 10% fine sand; trace gravel.
					7					
		DRY	0.0	50/6"	8					
					9	■	ML			Same as Above.
					10	■				
					11					
					12					
					13					
					14	■				
		MST	0.1	50/6"	15	■	SM			Silty SAND: dark brown; 30% silt; 60% fine sand; 10% gravel; tree roots.
					16					
					17					
					18					
					19					
	▽	WET	-	50/6"	20		SM			No Recovery: split spoon wet.
					21					
					22					



WELL/BORING: MW-24

Unique Ecology Well ID: BNE 898

INSTALLATION DATE: 11/4/22

DRILLING METHOD: Hollow Stem

PROJECT: WA – 00980 Seattle

DRILLING METHOD: Direct Push

CLIENT: BP

BORING DIAMETER: 7"

LOCATION: 10822 Roosevelt Way NE

BORING DEPTH: 24.5'

CITY: Seattle

WELL CASING: SCH 40 PVC 2"

STATE: WA

WELL SCREEN: 9-24' (0.010")

DRILLER: Cascade Drilling, Inc.

SAND PACK: 7-24' (10X20)

WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	-	DTC: -
										SURVEY DATE:	-	
										DTW:	-	
DESCRIPTION/LOGGED BY: Jonah Leurquin and Jesse Schewe												
Sand			WET	-	50/6"	23		SM		SAND with Silt: 10% silt; 80% fine to medium sand; 10% gravel.		
						24						
						25						
						26						
						27						
						28						
						29						
						30						
						31						
						32						
						33						
						34						
						35						
						36						
						37						
						38						
						39						
						40						
						41						
						42						
						43						
						44						

Project Name ARCO Facility No. 980			Monitoring Well Construction Log		Well Number MW-25 / BQK098	
Address 10822 Roosevelt Way Northeast Seattle Washington		Drilling Contractor/License Cascade Drilling, LP Drilling Method Hollow Stem Auger		Headspace Monitoring Device PID Sampling Method Split Spoon		Top of Casing Elevation: 269.50 ft
Logged By M. Holloway		Approved By B. Jackson		Drilling Equipment Hollow Stem Auger		Well Screen Interval 5 - 15 ft.
Antea Group Project Number WA 980		Boring Depth 22.5 ft.		Boring Diameter 10 in.		Slot Size 0.010 in.
				Sampling Equipment Split Spoon		Well Depth 20 ft.
				Date Drilling Started 5/7/2025		Well Casing Diameter 2 in.
				Date Drilling Completed 5/9/2025		

LITHOLOGY

SAMPLING DATA

Elevation	Depth	Graphic Log	Visual Description	USCS	Headspace (ppm)	Sample Interval (ft)	Sample Type	Sample Collected	Density	Blow Counts/6"	Water Level	Well Diagram	Well Details	Depth
0			Topsoil, Grass. Fill.										Concrete: 0 - 2.5 ft.	0
			Brown, Moist, Poorly Graded Sand with Silt, 50% Fine Sand, 30% Medium Sand, 20% Silt, Trace Gravel and Organics, Slight Sheen.	SP-SM	0.3								Bentonite: 2.5 - 4 ft.	
265	5		Grey, Brown, Moist, Silt with Sand, Loose, 85% Silt, 15% Fine Sand, Trace Gravel and Organics,	ML	13.1								Sand Pack: 4 - 20 ft.	5
			Grey, Brown, Moist, Silt with Sand, Loose, 85% Silt, 15% Fine Sand, Trace Gravel and Organics,	ML	1.2								Well Screen: 5 - 20 ft.	
260	10		Grey, Wet, Sandy Silt, Loose, Low Plasticity, Soft, 65% Silt, 25% Fine Sand, 10% Gravel, Slight Sheen.	ML	0.1	10-10.5	SS			5 8 9				10
			Grey, Wet, Sandy Silt, Low Plasticity, Soft, Very Dense, 70% Silt, 30% Fine Sand, Very Slight Sheen.	ML	0.1					5 6 7				
			Grey, Wet, Silty Sand, Low Plasticity, Soft, Very Dense, 70% Fine Sand, 30% Silt, Very Slight Sheen.	SM	0.0					25 50/6				
255	15		Grey, Wet, Silty Sand, Low Plasticity, Soft, Very Dense, 70% Fine Sand, 30% Silt, Very Slight Sheen.	SM	0.0					20 50/6				15
			Grey, Wet, Poorly Graded Sand, Very Dense, 50% Medium Sand, 50% Fine Sand, Trace Silt, Very Slight Sheen.	SP	0.0					20 50/6				
250	20		Grey, Wet, Poorly Graded Gravel with Sand, Very Dense, 70% Gravel, 10% Coarse Sand, 10% Medium Sand, 10% Fine Sand, Slight Sheen.	GP	0.1	19.5-20	SS			20 50/6			Bentonite: 20 - 22.5 ft.	20
			Grey, Wet, Poorly Graded Gravel with Sand, Very Dense, 70% Gravel, 10% Coarse Sand, 10% Medium Sand, 10% Fine Sand, Slight Sheen.	GP	0.0	22-22.5	SS			50/6				
245	25		Boring Terminated at 22.5 ft. bgs.											25
240	30													30

SS - Split Spoon

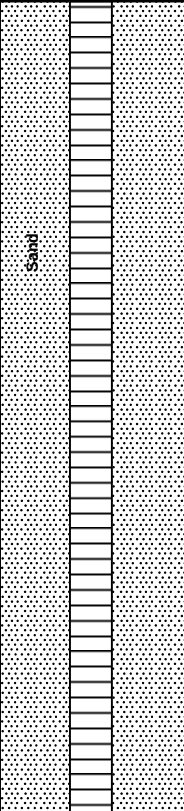
WELL/BORING LOCATION MAP		Delta Environmental Consultants, Inc.		WELL/BORING: EX-1										
INSTALLATION DATE: 10/25-26/05		DRILLING METHOD: Hollow Stem Auger												
PROJECT: G0BHK		SAMPLING METHOD: DM Split Spoon												
CLIENT: ARCO 980		BORING DIAMETER: 13"												
LOCATION: 18022 Roosevelt Way NE		BORING DEPTH: 33'												
CITY: Seattle		WELL CASING: SCH 40 PVC 6"												
STATE: WA		WELL SCREEN: 8-33' (0.020")												
DRILLER: Cascade Drilling, Inc.		SAND PACK: 6-33' (2 X12)												
WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	SURVEY DATE:	DTW:	DESCRIPTION/LOGGED BY: Sarah Milliken
Concrete						1								Asphalt
Bentonite						2								
						3								
						4								
			DP	0	11 11 13	5			SM					<u>SILTY SAND</u> : reddish brown; 10% fines; very fine to fine sand; trace medium to coarse sand; trace gravel; interbedded gray silt lens; medium dense.
						6								
						7								
						8								
			DP	0	50/6"	10			SM					<u>SILTY SAND</u> : grayish brown; 30-40% fines; trace medium to coarse sand; trace gravel; very dense.
						11								
						12								
						13								
						14								
	▽		WET	0	28 28 14	15			SM					<u>SAME AS ABOVE</u> : gray; increasing gravel; dense.
						16								
						17								
						18								
						19								
			WET	0	21 50/6"	20			SP					<u>SAND</u> : gray; <5% fines; very fine to fine sand; 10% medium to coarse sand; trace gravel; very dense.
						21								
						22								

WELL/BORING LOCATION MAP		Delta Environmental Consultants, Inc.				WELL/BORING: EX-1							
		INSTALLATION DATE: 10/25-26/05				DRILLING METHOD: Hollow Stem Auger							
		PROJECT: G0BHK				SAMPLING METHOD: DM Split Spoon							
		CLIENT: ARCO 980				BORING DIAMETER: 13"							
		LOCATION: 18022 Roosevelt Way NE				BORING DEPTH: 33'							
		CITY: Seattle				WELL CASING: SCH 40 PVC 6"							
		STATE: WA				WELL SCREEN: 8-33' (0.020")							
		DRILLER: Cascade Drilling, Inc.				SAND PACK: 6-33' (2 X12)							
WELL/BORING COMPLETION	FIRST	STABILIZED	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION		
	▼	▼									SURVEY DATE:		
											DTW:		
											DESCRIPTION/LOGGED BY: Sarah Milliken		
			WET	0	60/6"	23							
						24							
						25			SP				
						26							
						27							
						28							
						29							
			WET	0	10 26 33	30			SP				
						31							
						32							
						33							
						34							
			WET	0	50/6"	35			SP				
						36							
						37							
						38							
						39							
						40							
					41								
					42								
					43								
					44								

WELL/BORING LOCATION MAP		Delta Environmental Consultants, Inc.		WELL/BORING: EX-2										
INSTALLATION DATE: 10/25-26/05		DRILLING METHOD: Hollow Stem Auger												
PROJECT: G0BHK		SAMPLING METHOD: DM Split Spoon												
CLIENT: ARCO 980		BORING DIAMETER: 13"												
LOCATION: 18022 Roosevelt Way NE		BORING DEPTH: 34'												
CITY: Seattle		WELL CASING: SCH 40 PVC 6"												
STATE: WA		WELL SCREEN: 9-34' (0.020")												
DRILLER: Cascade Drilling, Inc.		SAND PACK: 7-34' (2 X12)												
WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	SURVEY DATE:	DTW:	DESCRIPTION/LOGGED BY: Sarah Milliken
Concrete						1								Asphalt
Bentonite						2								
						3								
						4								
			DRY	0	13 14 17	5			SM					SILTY SAND: grayish brown; 10-20% fines; very fine to fine sand; 10% medium to coarse sand; trace gravel; iron oxide staining, medium dense.
						6								
						7								
						8								
						9								
	▽		WET	66	9 20 20	10			SM					SILTY SAND: gray; 10% fines; very fine to medium sand; trace coarse sand; trace gravel; interbedded silt lens; dense.
						11								
						12								
						13								
						14								
			WET	0	5 13 30	15			SP					SAND: gray; <5% fines; very fine to fine sand; dense.
						16								
						17								
						18								
						19								
			WET	0	50/6"	20			ML					SILT: gray; low plasticity; trace very fine to fine sand; trace gravel; very dense.
						21								
						22								

WELL/BORING LOCATION MAP		Delta Environmental Consultants, Inc.				WELL/BORING: EX-2							
		INSTALLATION DATE: 10/25-26/05		DRILLING METHOD: Hollow Stem Auger									
		PROJECT: G0BHK		SAMPLING METHOD: DM Split Spoon									
		CLIENT: ARCO 980		BORING DIAMETER: 13"									
		LOCATION: 18022 Roosevelt Way NE		BORING DEPTH: 34'									
		CITY: Seattle		WELL CASING: SCH 40 PVC 6"									
		STATE: WA		WELL SCREEN: 9-34' (0.020")									
		DRILLER: Cascade Drilling, Inc.		SAND PACK: 7-34' (2 X12)									
WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	SURVEY DATE:	DTW:	DESCRIPTION/LOGGED BY: Sarah Milliken
			MST	0	7 14 22	23 24 25 26 27 28 29		SP					<u>SAND:</u> gray; <5% fines; very fine to fine sand; trace gravel; thin interbedded silt lens; dense. <u>SAME AS ABOVE:</u> <u>SAND:</u> gray; <5% fines; very fine to fine sand; trace medium to coarse sand; very dense.
			WET	0	23 50/6"	30 31 32 33		SP					
			WET	0	23 50/6"	34 35 36 37 38 39 40 41 42 43 44		SP					

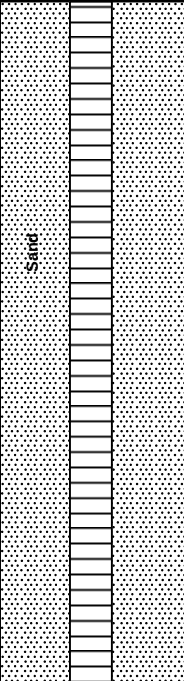
WELL/BORING LOCATION MAP		Delta Environmental Consultants, Inc.		WELL/BORING: EX-3										
INSTALLATION DATE: 10/25-26/05		DRILLING METHOD: Hollow Stem Auger												
PROJECT: G0BHK		SAMPLING METHOD: DM Split Spoon												
CLIENT: ARCO 980		BORING DIAMETER: 13"												
LOCATION: 18022 Roosevelt Way NE		BORING DEPTH: 35'												
CITY: Seattle		WELL CASING: SCH 40 PVC 6"												
STATE: WA		WELL SCREEN: 10-35' (0.020")												
DRILLER: Cascade Drilling, Inc.		SAND PACK: 8-35' (2 X12)												
WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	SURVEY DATE:	DTW:	DESCRIPTION/LOGGED BY: Sarah Milliken
Concrete						1					Concrete			
Bentonite						2								
						3								
						4								
			DP	0	2 2 7	5			ML					<u>SILT</u> : dark brown; moderate plasticity; 10-20% very fine to fine sand; trace medium to coarse sand; trace gravel; loose.
						6								
						7								
						8								
						9								
			DP	0	12 17 24	10			SM					<u>SILTY SAND</u> : grayish brown; 10-20% fines; very fine to fine sand; trace medium to coarse sand; trace gravel; iron oxide staining; medium dense.
						11								
						12								
						13								
						14								
			DP	6	27 50/6"	15			SM					<u>SILTY SAND</u> : gray; 20% fines; very fine to fine sand; trace medium to coarse sand; 10-20% gravel; trace cobble; odor; very dense.
						16								
						17								
						18								
						19								
			DP	0	50/6"	20			ML					<u>SILT</u> : gray; 5-10% very fine to fine sand; very dense.
						21								
						22								

WELL/BORING LOCATION MAP		Delta Environmental Consultants, Inc.		WELL/BORING: EX-3										
INSTALLATION DATE: 10/25-26/05		DRILLING METHOD: Hollow Stem Auger												
PROJECT: G0BHK		SAMPLING METHOD: DM Split Spoon												
CLIENT: ARCO 980		BORING DIAMETER: 13"												
LOCATION: 18022 Roosevelt Way NE		BORING DEPTH: 35'												
CITY: Seattle		WELL CASING: SCH 40 PVC 6"												
STATE: WA		WELL SCREEN: 10-35' (0.020")												
DRILLER: Cascade Drilling, Inc.		SAND PACK: 8-35' (2 X12)												
WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	SURVEY DATE:	DTW:	DESCRIPTION/LOGGED BY: Sarah Milliken
	▽		WET	0	50/6"	23			SW					SAND: gray; <5% fines; very fine to medium sand; trace coarse sand; 20% gravel; odor; very dense.
			WET	0	2 3 7	30			SW					SAND: gray; <5% fines; very fine to fine sand; 10-20% medium to coarse sand; 10% gravel; loose.
			WET	0	2 2 24	35			SM					SILTY SAND: gray; 10% fines; very fine to fine sand; 10% medium to coarse sand; trace gravel; medium dense.
						36								
						37								
						38								
						39								
						40								
						41								
						42								
						43								
						44								

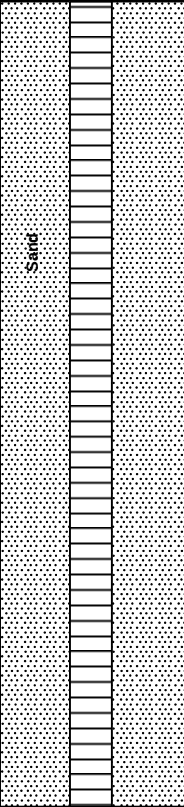
WELL/BORING LOCATION MAP		Delta Environmental Consultants, Inc.		WELL/BORING: EX-4										
INSTALLATION DATE: 10/25-26/05		DRILLING METHOD: Hollow Stem Auger												
PROJECT: G0BHK		SAMPLING METHOD: DM Split Spoon												
CLIENT: ARCO 980		BORING DIAMETER: 13"												
LOCATION: 18022 Roosevelt Way NE		BORING DEPTH: 33'												
CITY: Seattle		WELL CASING: SCH 40 PVC 6"												
STATE: WA		WELL SCREEN: 11-33' (0.020")												
DRILLER: Cascade Drilling, Inc.		SAND PACK: 9-33' (2 X12)												
WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	SURVEY DATE:	DTW:	DESCRIPTION/LOGGED BY: Sarah Milliken
Concrete						1					Concrete			
Bentonite						2								
						3								
						4								
					5 7 7	5	No Recovery		SM		No Recovery			
						6								
						7								
						8								
						9								
			DP	0	4 27 34	10			SM		<u>SILTY SAND</u> : dark brown with gray mottling; 10-20% fines; very fine to fine sand; 10% medium to coarse sand; trace gravel; dense.			
						11								
						12								
						13								
						14								
			DP	5	17 27 34	15			SM		<u>SILTY SAND</u> : gray; 10% fines; very fine to fine sand; trace medium to coarse sand; trace gravel; iron oxide staining; odor; dense.			
						16								
						17								
						18								
						19								
			DP	26	20 50/6"	20			SM		<u>SAME AS ABOVE</u> : increasing gravel.			
						21								
						22								

WELL/BORING LOCATION MAP		Delta Environmental Consultants, Inc.		WELL/BORING: EX-4										
INSTALLATION DATE: 10/25-26/05		DRILLING METHOD: Hollow Stem Auger												
PROJECT: G0BHK		SAMPLING METHOD: DM Split Spoon												
CLIENT: ARCO 980		BORING DIAMETER: 13"												
LOCATION: 18022 Roosevelt Way NE		BORING DEPTH: 33'												
CITY: Seattle		WELL CASING: SCH 40 PVC 6"												
STATE: WA		WELL SCREEN: 11-33' (0.020")												
DRILLER: Cascade Drilling, Inc.		SAND PACK: 9-33' (2 X12)												
WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	SURVEY DATE:	DTW:	DESCRIPTION/LOGGED BY: Sarah Milliken
	▽		WET	25	50/6"	23			SM					<u>SILTY SAND</u> : gray; 10% fines; very fine to fine sand; trace medium to coarse sand; trace gravel; iron oxide staining ; odor; very dense.
						24								
						25								
						26								
						27								
						28								
						29								
						30								
						31								
						32								
						33								
						34								
						35								
						36								
						37								
						38								
						39								
						40								
						41								
						42								
						43								
						44								
			WET	0	12 20 20	35			ML					<u>SILT</u> : gray; 10-20% very fine to fine sand; odor; dense.

WELL/BORING LOCATION MAP		Delta Environmental Consultants, Inc.		WELL/BORING: EX-5										
INSTALLATION DATE: 10/25-26/05		DRILLING METHOD: Hollow Stem Auger												
PROJECT: G0BHK		SAMPLING METHOD: DM Split Spoon												
CLIENT: ARCO 980		BORING DIAMETER: 13"												
LOCATION: 18022 Roosevelt Way NE		BORING DEPTH: 33'												
CITY: Seattle		WELL CASING: SCH 40 PVC 6"												
STATE: WA		WELL SCREEN: 11-33' (0.020")												
DRILLER: Cascade Drilling, Inc.		SAND PACK: 9-33' (2 X12)												
WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	SURVEY DATE:	DTW:	DESCRIPTION/LOGGED BY: Sarah Milliken
Concrete						1								Asphalt
Bentonite						2								
						3								
						4								
			DP	0	4 8 8	5			SM					<u>SILTY SAND</u> : grayish brown; 10-20% fines; very fine to fine sand; trace medium to coarse sand; trace gravel; iron oxide staining; medium dense.
						6								
						7								
						8								
						9								
						10								<u>@10' SAME AS ABOVE</u> : 30-40% fines.
			DP	0	28 50/6"	11			ML					<u>SILT</u> : gray; low plasticity; 10% very fine to fine sand; trace medium to coarse sand; trace gravel; very dense.
						12								
						13								
						14								
			MST	0	21 29 50/6"	15			SM					<u>SILTY SAND</u> : gray; 20-30% fines; very fine to fine sand; trace medium to coarse sand; trace gravel; iron oxide staining; dense.
						16								
						17								
						18								
						19								
						20			SM					<u>SAME AS ABOVE</u> :
			WET	0	17 27 50/6"	21								
						22								

WELL/BORING LOCATION MAP		Delta Environmental Consultants, Inc.		WELL/BORING: EX-5										
INSTALLATION DATE: 10/25-26/05		DRILLING METHOD: Hollow Stem Auger												
PROJECT: G0BHK		SAMPLING METHOD: DM Split Spoon												
CLIENT: ARCO 980		BORING DIAMETER: 13"												
LOCATION: 18022 Roosevelt Way NE		BORING DEPTH: 33'												
CITY: Seattle		WELL CASING: SCH 40 PVC 6"												
STATE: WA		WELL SCREEN: 11-33' (0.020")												
DRILLER: Cascade Drilling, Inc.		SAND PACK: 9-33' (2 X12)												
WELL/BORING COMPLETION	FIRST ✓	STABILIZED ▼	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	SURVEY DATE:	DTW:	DESCRIPTION/LOGGED BY: Sarah Milliken
			WET	0	19 27 39	23			ML					<u>SILT</u> : gray; 10% very fine to fine sand; trace medium to coarse sand; very dense.
						24								
						25								
						26								
						27								
						28								
						29								
						30								
						31								
						32								
			WET	0	9 31 27	31			SP					<u>SAND</u> : gray; <5% fines; very fine to fine sand; 10% medium to coarse sand; trace gravel; very dense.
						32								
						33								
						34								
						35								
						36								
						37								
						38								
						39								
						40								
			WET	0	12 12 14	35			SP					<u>SAME AS ABOVE</u> : 20% medium to coarse sand; medium dense.
						36								
						37								
						38								
						39								
						40								
						41								
						42								
						43								
						44								

WELL/BORING LOCATION MAP		Delta Environmental Consultants, Inc.		WELL/BORING: EX-6										
INSTALLATION DATE: 10/25-26/05		DRILLING METHOD: Hollow Stem Auger												
PROJECT: G0BHK		SAMPLING METHOD: DM Split Spoon												
CLIENT: ARCO 980		BORING DIAMETER: 13"												
LOCATION: 18022 Roosevelt Way NE		BORING DEPTH: 35'												
CITY: Seattle		WELL CASING: SCH 40 PVC 6"												
STATE: WA		WELL SCREEN: 13-35' (0.020")												
DRILLER: Cascade Drilling, Inc.		SAND PACK: 11-35' (2 X12)												
WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	SURVEY DATE:	DTW:	DESCRIPTION/LOGGED BY: Sarah Milliken
Concrete						1								Asphalt
Bentonite						2								
						3								
						4								
			DP	0	8 7 7	5			SM					<u>SILTY SAND</u> : grayish brown; 10-20% fines; very fine to fine sand; trace medium to coarse sand; trace gravel; medium dense.
						6								
						7								
						8								
						9								
			DP	0	16 50/6"	10			SM					<u>SAME AS ABOVE</u> : increasing gravel.
						11								
						12								
						13								
						14								
			MST	0	26 50/6"	15			SM					<u>SAME AS ABOVE</u> : 30-40% gravel
						16								
						17								
						18								
						19								
						20			SM					No Recovery
						21								
						22								

WELL/BORING LOCATION MAP		Delta Environmental Consultants, Inc.		WELL/BORING: EX-6										
INSTALLATION DATE: 10/25-26/05		DRILLING METHOD: Hollow Stem Auger												
PROJECT: G0BHK		SAMPLING METHOD: DM Split Spoon												
CLIENT: ARCO 980		BORING DIAMETER: 13"												
LOCATION: 18022 Roosevelt Way NE		BORING DEPTH: 35'												
CITY: Seattle		WELL CASING: SCH 40 PVC 6"												
STATE: WA		WELL SCREEN: 13-35' (0.020")												
DRILLER: Cascade Drilling, Inc.		SAND PACK: 11-35' (2 X12)												
WELL/BORING COMPLETION	FIRST ▽	STABILIZED ▼	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	SURVEY DATE:	DTW:	DESCRIPTION/LOGGED BY: Sarah Milliken
	▽		WET	0	12 20 30	23 24 25 26 27 28 29			SM					<u>SILTY SAND:</u> grayish brown; 10% fines; very fine to fine sand; trace medium to coarse sand; trace gravel; interbedded silt lens; dense.
			WET	0	26 50/5"	30 31 32 33 34			SM		<u>SILTY SAND:</u> grayish brown; 10-20% fines; very fine to fine sand; 20% medium to coarse sand; trace gravel; interbedded silt lens; very dense.			
			WET	0	26 50/6"	35 36 37 38 39 40 41 42 43 44			SM					<u>SAME AS ABOVE:</u> 5-10% medium to coarse sand.



Delta
Environmental
Consultants, Inc.

Site Id: B-4

Purpose: Soil Boring

Consulting Firm: Delta Environmental

Logged By: Ron Bruce

Contractor: Cascade Drilling Inc

Drilling Method: 4.25" ID Hollow Stem Auger CME-55

Location: 10822 Roosevelt Way NE Seattle WA

Date(s): 07/09/96 - 07/09/96

Project Name: ARCO Facility No. 980

Elevation: 0.00'

Project Number: M094-509

Datum: Not Surveyed

Permit No.:

Blank Casing:

Permit Date: / /

type: dia: 0.00in fm: 0.0' to:

Remarks: On adjacent property to the south: Carribbean Apartment complex.

Screens:
type: size: dia: fm: to:

Annular Fill:
type: Cement Cap fm: 0.00' to: 1.00'
type: Bentonite Pellets fm: 1.00' to: 25.50'
type: fm: to:

Depth (ft)	Recovery	Sample No.	Blow Count	Graphic Log	Material Description	Well Construction	PID
0					ASPHALT 1"		
					SILTY SAND WITH GRAVEL (SM); brown, damp to moist.		
		B-4-5	60 R/4"		5		
					SILTY SAND (SM); dark brown, moist, very dense.		
10		B-4-10	65		10		137 ppm
		B-4-12	75 R/3"		Becomes grey and wet. SANDY SILT (ML); grey-tan, moist to wet, very dense.		40 ppm
		B-4-15	55		15		11 ppm
					SILTY SAND (SM); grey, moist to wet, very dense.		
20		B-4-20	75		20		114 ppm
					POORLY GRADED SAND WITH SILT (SP-SM); grey, saturated, very dense, fine grained sand.		
		B-4-22	22		25		11 ppm
		B-4-25	55		SILTY SAND (SM); grey, saturated, very dense.		11 ppm



Delta
Environmental
Consultants, Inc.

Site Id: B-5

Consulting Firm: Delta Environmental

Contractor: Cascade Drilling Inc

Purpose: Soil Boring

Logged By: Ron Bruce

Drilling Method: 4.25" ID Hollow Stem Auger CME-55

Location: 10822 Roosevelt Way NE Seattle WA

Date(s): 07/09/96 - 07/09/96

Project Name: ARCO Facility No. 980

Elevation: 0.00'

Project Number: M094-509

Datum: Not Surveyed

Permit No.:

Blank Casing:

Permit Date: / /

type:

dia: 0.00in fm: 0.0'

to:

Screens:

type:

size:

dia:

fm:

to:

Remarks: On adjacent property to the south: Carribbean Apartment complex.

Annular Fill:

type: Cement Cap

fm: 0.00'

to: 1.00'

type: Bentonite

fm: 1.00'

to: 26.50'

type:

fm:

to:

Depth (ft)	Recovery	Sample No.	Blow Count	Graphic Log	Material Description	Well Construction	PID
0					ASPHALT 1.5"		
5		B-5-5	65 R/5"		SILTY SAND (SM); brown-grey, moist, very dense, trace gravel.		3.7 ppm
10		B-5-10	55 R/4"				3.7 ppm
15		B-5-15	85 R/5"				3.7 ppm
20		B-5-20	70		POORLY GRADED SAND WITH SILT (SP-SM); grey, saturated, very dense.		3.7 ppm
25		B-5-25	245				3.7 ppm



WELL/BORING: B-6	Unique Ecology Well ID: NA
INSTALLATION DATE: 11/4/22	DRILLING METHOD: Air Knife
PROJECT: WA – 00980 Seattle	DRILLING METHOD: Hand Auger
CLIENT: BP	BORING DIAMETER: 7"
LOCATION: 10822 Roosevelt Way NE	BORING DEPTH: 8'
CITY: Seattle	WELL CASING: NA
STATE: WA	WELL SCREEN: NA
DRILLER: Cascade Drilling, Inc.	SAND PACK: NA

WELL/BORING COMPLETION	FIRST STABILIZED	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	-	DTC: -
										SURVEY DATE:	-	
										DTW:	-	
DESCRIPTION/LOGGED BY: Jonah Leurquin and Jesse Schewe												
		DMP	196.0	-	1			SM		SAND with silt: dark brown; 10% silt; 75% fine to medium sand; 15% gravel.		
					2							
					3							
		DMP	1916	-	4			ML		Gravelly SILT with Sand: dark grey; 50% clay/silt; 20% fine sand; 30% gravel.		
					5							
					6							
		DMP	295.7	-	7			SM		Silty SAND with Gravel: dark grey; 15% silt; 70% fine to medium sand; 15% gravel.		
					8							
					9							
					10							
					11							
					12							
					13							
					14							
					15							
					16							
					17							
					18							
					19							
					20							
					21							
					22							



WELL/BORING: B-7

Unique Ecology Well ID: NA

INSTALLATION DATE: 11/3/22

DRILLING METHOD: Hand Auger

PROJECT: WA – 00980 Seattle

DRILLING METHOD: Hand Auger

CLIENT: BP

BORING DIAMETER: 8"

LOCATION: 10822 Roosevelt Way NE

BORING DEPTH: 6'

CITY: Seattle

WELL CASING: NA

STATE: WA

WELL SCREEN: NA

DRILLER: Cascade Drilling, Inc.

SAND PACK: NA

WELL/BORING COMPLETION	FIRST STABILIZED	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	-	DTC: -
										SURVEY DATE:	-	
										DTW:	-	
DESCRIPTION/LOGGED BY: Jonah Leurquin												
					1							
					2							
					3							
					4							
					5							
		DMP	0.3	-	6			SM				
					7							
					8							
					9							
					10							
					11							
					12							
					13							
					14							
					15							
					16							
					17							
					18							
					19							
					20							
					21							
					22							

Silty SAND: dark brown; 15% silt; 80% very fine to fine sand; 5% gravel.



WELL/BORING: B-8

Unique Ecology Well ID: NA

INSTALLATION DATE: 11/3/22

DRILLING METHOD: Hand Auger/Hollow Stem

PROJECT: WA – 00980 Seattle

DRILLING METHOD: Direct Push

CLIENT: BP

BORING DIAMETER: 8.25"

LOCATION: 10822 Roosevelt Way NE

BORING DEPTH: 15'

CITY: Seattle

WELL CASING: NA

STATE: WA

WELL SCREEN: NA

DRILLER: Cascade Drilling, Inc.

SAND PACK: NA

WELL/BORING COMPLETION	FIRST STABILIZED	MOISTURE	PID (ppm)	DENSITY BLOWS / 6"	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	USCS SYMBOL	GRAPHIC	CASING ELEVATION	DTC: -
										SURVEY DATE:	-
										DTW:	-
DESCRIPTION/LOGGED BY: Jonah Leurquin and Jesse Schewe											
		-	0.0	-	1			SC		Clayey SAND with Gravel: grey; 10% clay; 50% medium sand; 40% gravel.	
					2						
					3						
					4						
		-	0.0	-	5			SP		SAND with Gravel: brown; 80% medium sand; 20% gravel.	
					6						
					7						
					8						
		WET	0.0	15 50/6"	9			SW		SAND with Silt: grey; 20% silt; 80% fine to medium sand; trace gravel.	
					10						
					11						
					12						
		WET	0.0	17 50/6"	14			SW SW		SAND: 100% fine to medium sand; trace gravel.	
					15						
					16					SAND: 100% medium to coarse sand; trace gravel.	
					17						
					18						
					19						
					20						
					21						
					22						

Project Name ARCO Facility No. 980			Soil Boring Log		Soil Boring Number SB-9	
Address 10822 Roosevelt Way Northeast Seattle Washington		Drilling Contractor/License Cascade Drilling, LP		Headspace Monitoring Device PID		Boring Depth 18 ft.
		Drilling Method Hollow Stem Auger		Sampling Method Split Spoon / Hand Auger		Boring Diameter 10 in.
Logged By M. Holloway	Approved By B. Jackson	Drilling Equipment Hollow Stem Auger		Sampling Equipment Split Spoon / Hand Auger		Backfill Material / Surface Finish Bentonite / Concrete
Antea Group Project Number WA 980		Driller Name		Date Drilling Started 5/7/2025		Date Drilling Completed 5/9/2025

LITHOLOGY

SAMPLING DATA

Elevation	Depth	Water Level	Graphic Log	Visual Description	USCS	Headspace (ppm)	Sample Interval (ft)	Sample Type	Sample Collected	Blow Counts (blows/ft)	Depth
0	0			Asphalt.							0
				Brown, Moist, Poorly Graded Sand, 50% Medium Sand, 45% Fine Sand, 5% Gravel, Trace Roots, Strong Petroleum Odor.	SP	1,390					
-5	5			Brown, Moist, Poorly Graded Sand, 60% Coarse Sand, 30% Medium Sand, 10% Gravel, Trace Roots, Strong Petroleum Odor, Slight Sheen.	SP	493.5	5-5.5	HA			5
				Brown to Grey, Moist, Poorly Graded Sand with Silt, 45% Medium Sand, 45% Fine Sand, 10% Silt, Trace Gravel.	SP-SM	0.6	8-8.5	HA			
-10	10			Brown to Grey, Moist, Poorly Graded Sand with Silt, Very Dense, 45% Medium Sand, 45% Fine Sand, 10% Silt, Trace Gravel, Slight Petroleum Odor, Slight Sheen.	SP	48.2				75/5	10
				Brown to Grey, Moist, Poorly Graded Sand with Silt, Very Dense, 45% Medium Sand, 45% Fine Sand, 10% Silt, Trace Gravel, Slight Petroleum Odor, Slight Sheen.	SP	18.7	12.5-13	SS		75/5	
-15	15			Grey, Wet, Poorly Graded Sand, Very Dense, 85% Medium Sand, 15% Fine Sand, Slight Sheen.	SP	0.1	15-15.5	SS		50/6	15
				Grey, Wet, Well Graded Sand, Very Dense, 50% Medium Sand, 30% Coarse Sand, 20% Fine Sand, Trace Gravel, Very Slight Sheen.	SW	7.2	17.5-18	SS		50/6	
-20	20			Boring Terminated at 18 ft. bgs.							20
-25	25										25
-30	30										30

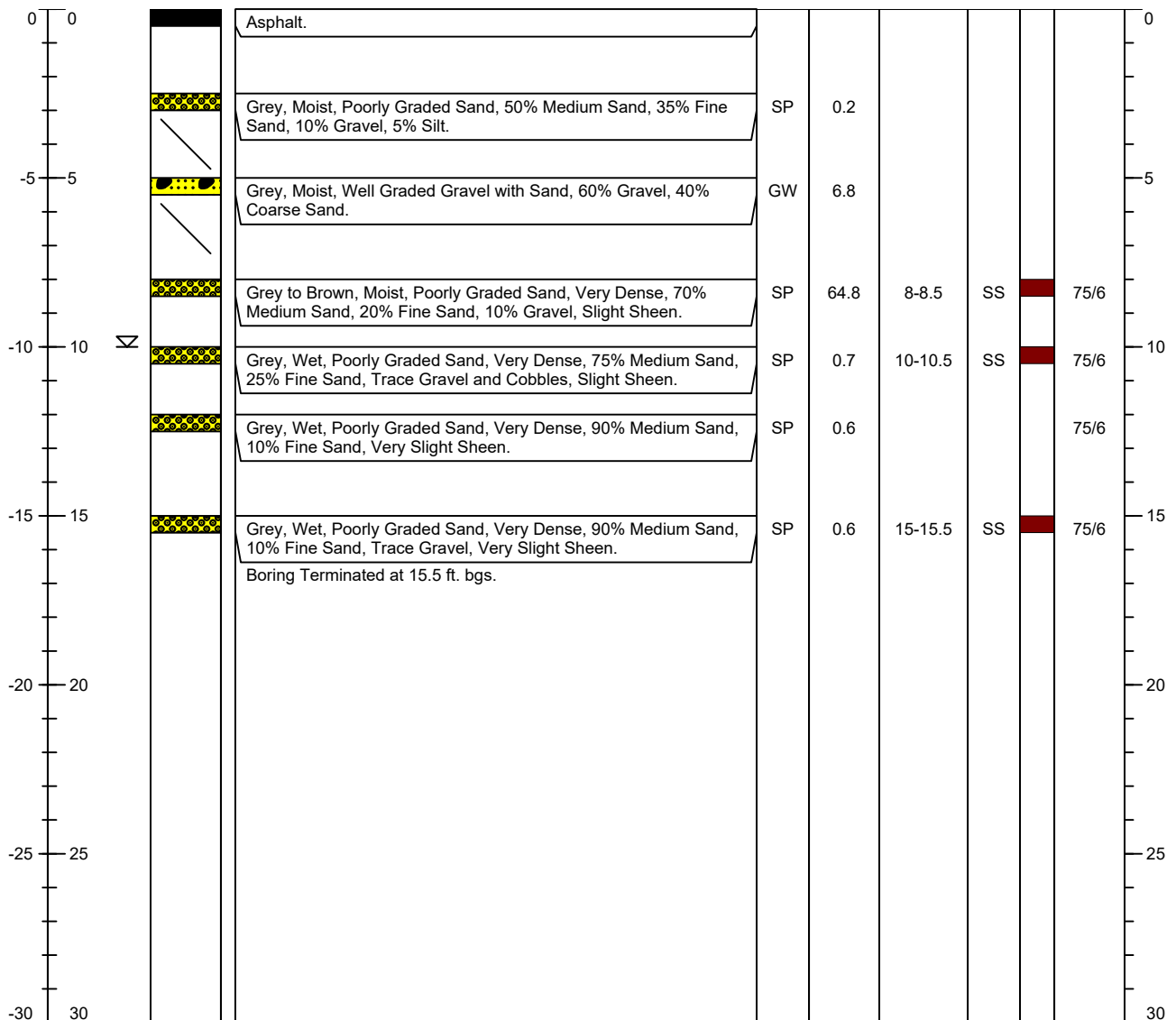
HA - Hand Auger
SS - Split Spoon

Project Name ARCO Facility No. 980			Soil Boring Log		Soil Boring Number SB-10
Address 10822 Roosevelt Way Northeast Seattle Washington		Drilling Contractor/License Cascade Drilling, LP	Headspace Monitoring Device PID	Boring Depth 15.5 ft.	
		Drilling Method Hollow Stem Auger	Sampling Method Split Spoon	Boring Diameter 10 in.	
Logged By M. Holloway	Approved By B. Jackson	Drilling Equipment Hollow Stem Auger	Sampling Equipment Split Spoon	Backfill Material / Surface Finish Bentonite / Concrete	
Antea Group Project Number WA 980		Driller Name	Date Drilling Started 5/6/2025	Date Drilling Completed 5/8/2025	

LITHOLOGY

SAMPLING DATA

Elevation	Depth	Water Level	Graphic Log	Visual Description	USCS	Headspace (ppm)	Sample Interval (ft)	Sample Type	Sample Collected	Blow Counts (blows/ft)	Depth



SS - Split Spoon

Project Name ARCO Facility No. 980			Soil Boring Log		Soil Boring Number SB-11	
Address 10822 Roosevelt Way Northeast Seattle Washington		Drilling Contractor/License Cascade Drilling, LP		Headspace Monitoring Device PID		Boring Depth 23 ft.
		Drilling Method Hollow Stem Auger		Sampling Method Split Spoon		Boring Diameter 10 in.
Logged By M. Holloway	Approved By B. Jackson	Drilling Equipment Hollow Stem Auger		Sampling Equipment Split Spoon		Backfill Material / Surface Finish Bentonite / Concrete
Antea Group Project Number WA 980		Driller Name		Date Drilling Started 5/6/2025		Date Drilling Completed 5/8/2025

LITHOLOGY

SAMPLING DATA

Elevation	Depth	Water Level	Graphic Log	Visual Description	USCS	Headspace (ppm)	Sample Interval (ft)	Sample Type	Sample Collected	Blow Counts (blows/ft)	Depth
0	0			Asphalt.							0
				Brown, Moist, Well Graded Sand, 30% Coarse Sand, 30% Medium Sand, 30% Fine Sand, 10% Gravel.	SW	0.2					
-5	5			Brown, Moist, Well Graded Sand, 40% Medium Sand, 30% Fine Sand, 20% Coarse Sand, 10% Gravel.	SW	0.2					5
				Brown, Moist, Poorly Graded Sand, Very Dense, 50% Medium Sand, 50% Fine Sand, Trace Gravel, Slight Sheen.	SP	0.6	6.5-7	SS		75/6	
-10	10			No Recovery.							10
				No Recovery, Mostly Coarse Gravel and Cobbles.							
-15	15			Brown to Grey, Wet, Well Graded Sand, Very Dense, 50% Medium Sand, 25% Fine Sand, 20% Coarse Sand, 5% Gravel, Trace Cobbles, Very Slight Sheen.	SW	0.3	15-15.5	SS		75/6	15
-20	20			Brown to Grey, Wet, Well Graded Sand, Very Dense, 50% Medium Sand, 25% Fine Sand, 20% Coarse Sand, 5% Gravel, Trace Cobbles.	SW	0.4	20-20.5	SS		75/4	20
				Brown to Grey, Wet, Poorly Graded Sand, Very Dense, 50% Medium Sand, 50% Fine Sand, Trace Gravel.	SP	0.1	22.5-23	SS		65/5	
-25	25			Boring Terminated at 23 ft. bgs.							25
-30	30										30

SS - Split Spoon

Project Name ARCO Facility No. 980			Soil Boring Log		Soil Boring Number SB-12	
Address 10822 Roosevelt Way Northeast Seattle Washington		Drilling Contractor/License Cascade Drilling, LP		Headspace Monitoring Device PID		Boring Depth 26 ft.
		Drilling Method Hollow Stem Auger		Sampling Method Split Spoon		Boring Diameter 10 in.
Logged By M. Holloway	Approved By B. Jackson	Drilling Equipment Hollow Stem Auger		Sampling Equipment Split Spoon		Backfill Material / Surface Finish Bentonite / Concrete
Antea Group Project Number WA 980		Driller Name		Date Drilling Started 5/5/2025		Date Drilling Completed 5/7/2025

LITHOLOGY

SAMPLING DATA

Elevation	Depth	Water Level	Graphic Log	Visual Description	USCS	Headspace (ppm)	Sample Interval (ft)	Sample Type	Sample Collected	Blow Counts (blows/ft)	Depth
0	0			Asphalt.							0
				Brown, Dry, Well Graded Sand, 50% Medium Sand, 25% Fine Sand, 20% Coarse Sand, 5% Gravel.	SW	0.0					
-5	5			Brown, Moist, Well Graded Sand, 50% Medium Sand, 25% Fine Sand, 20% Coarse Sand, 5% Gravel, Trace Coarse Cobbles.	SW	0.0					5
				Brown, Dry, Poorly Graded Sand with Silt, Very Dense, 75% Fine Sand, 15% Silt, 10% Medium Sand, Slight Sheen.	SP-SM	2.3	6.5-7	SS		50/6	
-10	10			Brown, Moist, Poorly Graded Sand with Silt, Very Dense, 75% Fine Sand, 15% Silt, 10% Medium Sand, Trace Gravel, Slight Sheen.	SP-SM	0.6	10-10.5	SS		75/5	10
-15	15			Brown, Wet, Silty Sand, Very Dense, 50% Fine Sand, 25% Medium Sand, 25% Silt, Slight Sheen.	SM	0.2	15-15.5	SS		50/4	15
-20	20			Grey, Moist, Poorly Graded Sand with Silt, Very Dense, 90% Fine Sand, 5% Medium Sand, 5% Silt, Trace Gravel, Slight Sheen.	SP	0.0	20-20.5	SS		50/6	20
				Grey, Wet, Poorly Graded Sand with Silt, Very Dense, 90% Fine Sand, 5% Medium Sand, 5% Silt, Very Slight Sheen.	SP	0.0	22.5-23	SS		50/6	
-25	25			Grey, Wet, Poorly Graded Sand with Silt, Very Dense, 90% Fine Sand, 5% Medium Sand, 5% Silt.	SP	0.0	25.5-26	SS		50/6	25
-30	30			Boring Terminated at 26 ft. bgs.							30

SS - Split Spoon

Project Name ARCO Facility No. 980			Soil Boring Log		Soil Boring Number SB-13
Address 10822 Roosevelt Way Northeast Seattle Washington		Drilling Contractor/License Cascade Drilling, LP	Headspace Monitoring Device PID	Boring Depth 27.5 ft.	
		Drilling Method Hollow Stem Auger	Sampling Method Split Spoon	Boring Diameter 10 in.	
Logged By M. Holloway	Approved By B. Jackson	Drilling Equipment Hollow Stem Auger	Sampling Equipment Split Spoon	Backfill Material / Surface Finish Bentonite / Concrete	
Antea Group Project Number WA 980		Driller Name	Date Drilling Started 5/6/2025	Date Drilling Completed 5/7/2025	

LITHOLOGY
SAMPLING DATA

Elevation	Depth	Water Level	Graphic Log	Visual Description	USCS	Headspace (ppm)	Sample Interval (ft)	Sample Type	Sample Collected	Blow Counts (blows/ft)	Depth
0	0			Asphalt.							0
				Grey, Moist, Poorly Graded Sand, 50% Medium Sand, 40% Fine Sand, 10% Gravel.	SP	1.8					
-5	5			Grey, Moist, Poorly Graded Sand, 50% Medium Sand, 40% Fine Sand, 10% Gravel.	SP	3.9					5
-10	10			Brown, Moist, Poorly Graded Sand, Very Dense, 75% Fine Sand, 25% Medium Sand, Trace Gravel, Slight Sheen.	SP	17	10-10.5	SS		75/6	10
-15	15			Brown to Grey, Moist, Silty Sand, Very Dense, 50% Medium Sand, 30% Fine Sand, 20% Silt, Slight Sheen.	SM	3.6	15-15.5	SS		75/5	15
-20	20			Brown to Grey, Moist, Silty Sand, Very Dense, 50% Medium Sand, 30% Fine Sand, 20% Silt, Slight Sheen.	SM	3.5	20-20.5	SS		75/5	20
-25	25			Grey, Wet, Poorly Graded Sand with Silt, Very Dense, 45% Coarse Sand, 45% Medium Sand, 10% Silt, Trace Gravel, Very Slight Sheen.	SP-SM	1.1	25-25.5	SS		50/6	25
				Grey, Wet, Poorly Graded Sand with Gravel, Very Dense, 40% Gravel, 30% Coarse Sand, 30% Medium Sand, Very Slight Sheen.	SP	0.2	27-27.5	SS		60/5	
-30	30			Boring Terminated at 27.5 ft. bgs.							30

SS - Split Spoon

Project Name ARCO Facility No. 980			Soil Boring Log		Soil Boring Number SB-14
Address 10822 Roosevelt Way Northeast Seattle Washington		Drilling Contractor/License Cascade Drilling, LP	Headspace Monitoring Device PID	Boring Depth 23 ft.	
		Drilling Method Hollow Stem Auger	Sampling Method Split Spoon	Boring Diameter 10 in.	
Logged By M. Holloway	Approved By B. Jackson	Drilling Equipment Hollow Stem Auger	Sampling Equipment Split Spoon	Backfill Material / Surface Finish Bentonite / Concrete	
Antea Group Project Number WA 980		Driller Name	Date Drilling Started 5/5/2025	Date Drilling Completed 5/7/2025	

LITHOLOGY

SAMPLING DATA

Elevation	Depth	Water Level	Graphic Log	Visual Description	USCS	Headspace (ppm)	Sample Interval (ft)	Sample Type	Sample Collected	Blow Counts (blows/ft)	Depth
0	0			Asphalt.							0
				Grey, Moist, Poorly Graded Sand, 50% Medium Sand, 25% Fine Sand, 20% Coarse Sand, 5% Gravel.	SW	5.4					
-5	5			Grey, Moist, Poorly Graded Sand, 50% Coarse Sand, 40% Medium Sand, 10% Gravel.	SP	3.5					5
				Grey, Dry, Poorly Graded Sand, Very Dense, 60% Coarse Sand, 30% Medium Sand, 10% Gravel, Slight Sheen.	SP	14.4	6.5-7	SS		15 50/6	
-10	10			Grey, Dry, Poorly Graded Sand with Silt, Very Dense, 50% Medium Sand, 30% Fine Sand, 10% Silt, Very Slight Sheen.	SP-SM	1.5	10-10.5	SS		50/4	10
-15	15			Grey to Brown, Wet, Silty Sand, Very Dense, 60% Fine Sand, 20% Medium Sand, 20% Silt, Slight Sheen.	SM	1.6	15-15.5	SS		50/6	15
-20	20			Grey, Wet, Poorly Graded Sand with Silt, Very Dense, 60% Medium Sand, 30% Fine Sand, 10% Silt, Trace Gravel, Slight Sheen.	SP-SM	0.0	20-20.5	SS		50/6	20
-25	25			Grey, Wet, Silty Sand, Very Dense, 70% Fine Sand, 20% Silt, 10% Medium Sand, Traced Gravel, Very Slight Sheen.	SM	0.0	22.5-23	SS		50/6	
-30	30			Boring Terminated at 23.5 ft. bgs.							30

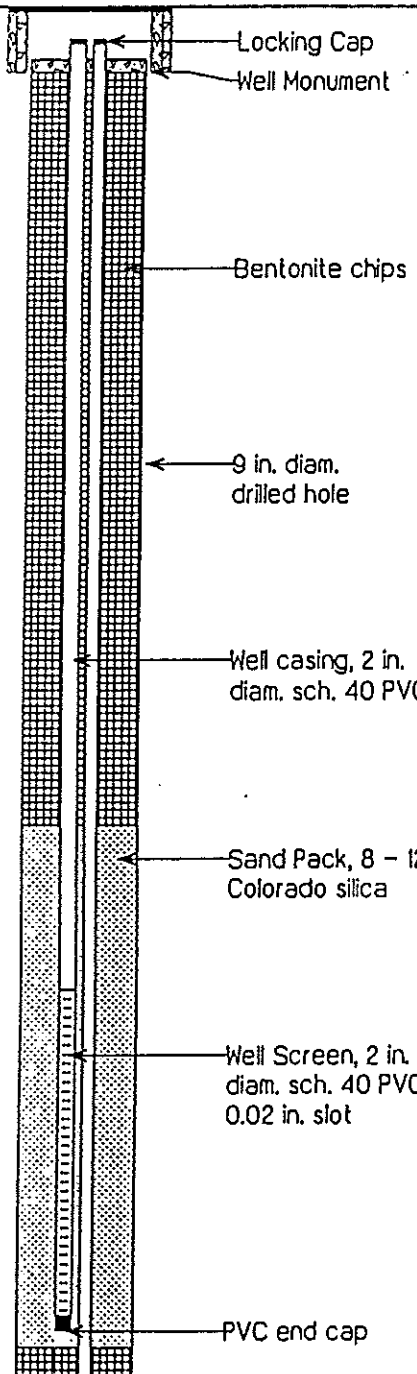
SS - Split Spoon

PROJECT NAME: STATION NO. 980
PROJECT NO: WAO132.023

LOG OF VP-1
Page 1 of 2

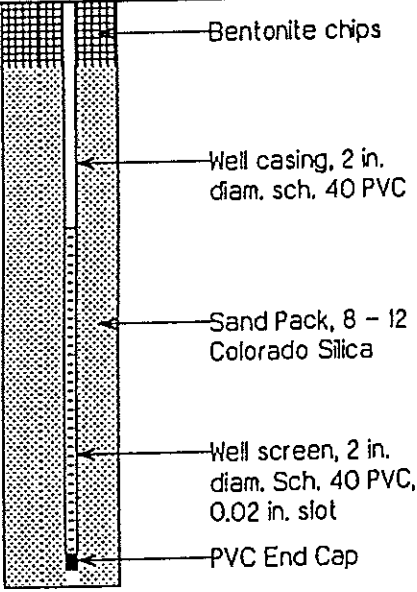
CLIENT NAME: ARCO PRODUCTS COMPANY
PROJECT LOCATION: SEATTLE, WASHINGTON
DATE STARTED: 27-APR-94
DATE COMPLETED: 27-APR-94
LOGGED BY: E. RADCLIFF
CHECKED BY: J. SADLER

SURFACE ELEV: 257.42feet
DATUM: CITY OF SEATTLE
DRILL COMPANY: CASCADE DRILLING, INC.
DRILLER: RODNEY LABROSSE
DRILL METHOD: HOLLOW-STEM AUGER
SAMPLING METHOD: SPLIT SPOON (140-lb. hammer)

WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
				ASPHALT (4-Inches). Cobbles, Sand and Gravel (FILL, Logged from soil cuttings). Hand augered to 4 feet below land surface (bls). POORLY GRADED SAND (SP) - Brown, moist, very dense, fine-grained sand (80 %), subrounded, few silt, trace gravel, (No hydrocarbon odor, PID = 6.1 ppm). Drill rig chatter at 7 feet bls. As above, (No hydrocarbon odor, PID = 5.9 ppm). As above, (No hydrocarbon odor, PID = 5.7 ppm). SILTY SAND (SM) - Gray, very dense, moist, (TILL, no hydrocarbon odor). Poor sample recovery. As above, very dense. As above, gray to brown, very dense, moist, fine-grained sand (60 to 70 %), subrounded, little to some silt, few gravel (2.5-inch diameter), (TILL, no hydrocarbon odor, PID = 6.4 ppm). Groundwater encountered at 21 feet bls during drilling.
	3			
	6	32 50/6		
	9	50/6		
	12	50/6		
	15	50/6		
	18	50/6		
	21	50/3		

PROJECT NAME: STATION NO. 980
PROJECT NO: WAO132.023

LOG OF VP-1
Page 2 of 2

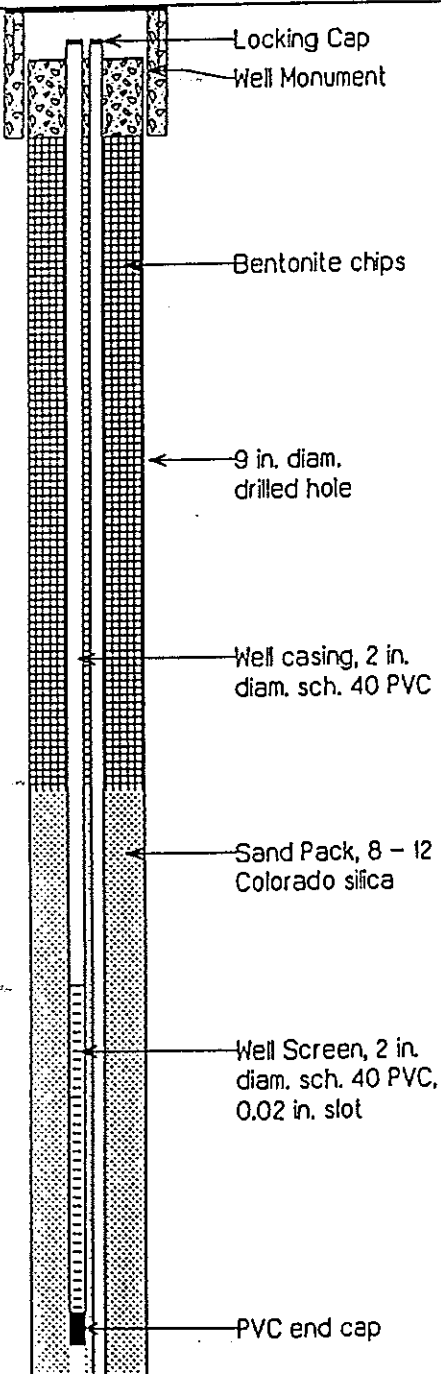
WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
				
	24	50/6		POORLY GRADED SAND (SP) - Gray to brown, moist, very dense, fine-grained sand (70 to 80 %), coarse-grained sand (10 %), few rounded gravels, (No hydrocarbon odor, PID = 7.2 ppm).
	27	30 50/3		As above, brown to gray, wet, very dense, gravel, round (No hydrocarbon odor, PID = 8.1 ppm).
	30	50/5		As above, fine-grained sand (80 %), coarse-grained sand, little silt, trace gravel, trace black organics, (No hydrocarbon odor, PID = 24.1 ppm).
	30	24 50/6		As above.
	33			Borehole terminated at 31 feet bls. Groundwater encountered during drilling at 21 feet bls. Note: Blow counts taken below 4 feet bls using a 2-inch diameter split-spoon sampler driven with a 140-pound hammer falling 30 inches. Blow counts recorded for evaluating relative soil density only and are not appropriate for construction or structural design purposes.
	36			
	39			
	42			
	45			

PROJECT NAME: STATION NO. 980
PROJECT NO: WAO132.023

LOG OF VP-2
Page 1 of 2

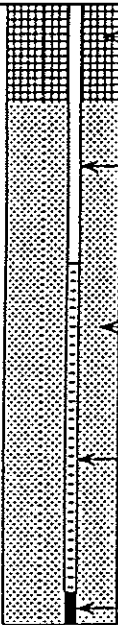
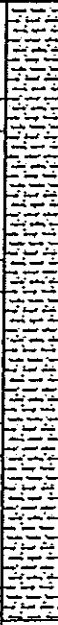
CLIENT NAME: ARCO PRODUCTS COMPANY
PROJECT LOCATION: SEATTLE, WASHINGTON
DATE STARTED: 27-APR-94
DATE COMPLETED: 27-APR-94
LOGGED BY: E. RADCLIFF
CHECKED BY: J. SADLER

SURFACE ELEV: 257.03feet
DATUM: CITY OF SEATTLE
DRILL COMPANY: CASCADE DRILLING, INC.
DRILLER: RODNEY LABROSSE
DRILL METHOD: HOLLOW-STEM AUGER
SAMPLING METHOD: SPLIT SPOON (140-lb. hammer)

WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
				ASPHALT (4-Inches). Sand and Gravel, with chunks of concrete (Logged from soil cuttings). Hand augered to 4 feet below land surface (bls). POORLY GRADED SAND (SP) - Brown, moist, very dense, chunk of concrete, (FILL, no hydrocarbon odor, PID = 0 ppm). As above, (No hydrocarbon odor, PID = 0 ppm). As above, brown, moist, very dense, fine-grained sand (85 to 90 %), trace coarse-grained sand, few silt, (No hydrocarbon odor, PID = 0 ppm). SILTY SAND (SM) - Brown to gray, very dense, moist, fine-grained sand (65 to 70 %), silt (30 %), trace gravel, (TILL, no hydrocarbon odor). Groundwater encountered at 17 feet bls during drilling. As above, very dense, increasing silt content. As above, (No hydrocarbon odor, PID = 3.3 ppm).

PROJECT NAME: STATION NO. 980
PROJECT NO: WAO132.023

LOG OF VP-2
Page 2 of 2

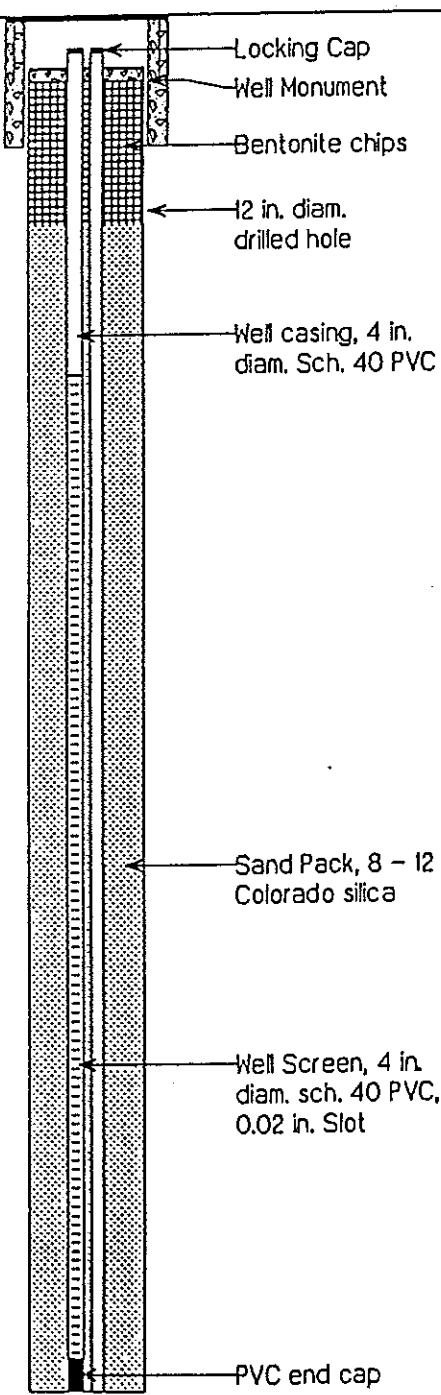
WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
 Bentonite chips Well casing, 2 in. diam. sch. 40 PVC Sand Pack, 8 - 12 Colorado Silica Well screen, 2 in. diam. sch. 40 PVC, 0.02 in. slot PVC End Cap	24	50/6		As above, brown, wet, very dense, fine-grained sand (65 %), few medium- to coarse-grained sand, rounded, little silt, (No hydrocarbon odor, PID = 1.1 ppm). No sample recovery. As above, less fines, more gravel, (PID = 0 ppm). As above, (No hydrocarbon odor, PID = 0 ppm).
	30	50/6		Borehole terminated at 30.5 feet bls. Groundwater encountered during drilling at 17 feet bls. Note: Blow counts taken below 4 feet bls using a 2-inch diameter split-spoon sampler driven with a 140-pound hammer falling 30 inches. Blow counts recorded for evaluating relative soil density only and are not appropriate for construction or structural design purposes.
	33			
	36			
	39			
	42			
	45			

PROJECT NAME: STATION NO. 980
PROJECT NO: WAO132.023

LOG OF SVE/AS-1
Page 1 of 2

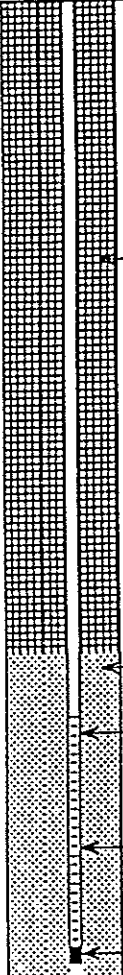
CLIENT NAME: ARCO PRODUCTS COMPANY
PROJECT LOCATION: SEATTLE, WASHINGTON
DATE STARTED: 28-APR-94
DATE COMPLETED: 28-APR-94
LOGGED BY: E. RADCLIFF
CHECKED BY: J. SADLER

SURFACE ELEV: 258.02feet
DATUM: CITY OF SEATTLE
DRILL COMPANY: CASCADE DRILLING, INC.
DRILLER: RODNEY LABROSSE
DRILL METHOD: HOLLOW-STEM AUGER
SAMPLING METHOD: SPLIT SPOON (140-lb. hammer)

WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
				ASPHALT (4-Inches). Sand and Gravel, (FILL, Logged from soil cuttings). Hand augered to 4 feet below land surface (bls). POORLY GRADED SAND (SP) - Black, slightly moist, medium dense, fine-grained sand (90 %), rounded, few silt, wood fragments, concrete, (FILL, no hydrocarbon odor, PID = 22.1 ppm). SILTY SAND (SM) - Gray with black lenses, slightly moist, very dense, very fine-grained sand (45 to 50%), silt, trace coarse-grained sand, subrounded, some wood fragments, (TILL, No hydrocarbon odor, PID = 13.8 ppm). As above, fine- to medium-grained sand, trace coarse-grained sand, some organics (peat), no gravel, (No hydrocarbon odor, PID = 8.9 ppm). As above - Brown to gray, moist, fine- to medium-grained sand (70 to 80%), trace coarse-grained sand, silt (25 to 30 %), trace fine gravel, (TILL, no hydrocarbon odor, PID = 3.0 ppm). Groundwater encountered at 15 feet bls during drilling. As above - Gray, fine-grained sand (60 to 70 %), silt (35- to 40 %), (TILL, no hydrocarbon odor, PID = 4.5 ppm). Drill rig chatter.

PROJECT NAME: STATION NO. 980
PROJECT NO: WAO132.023

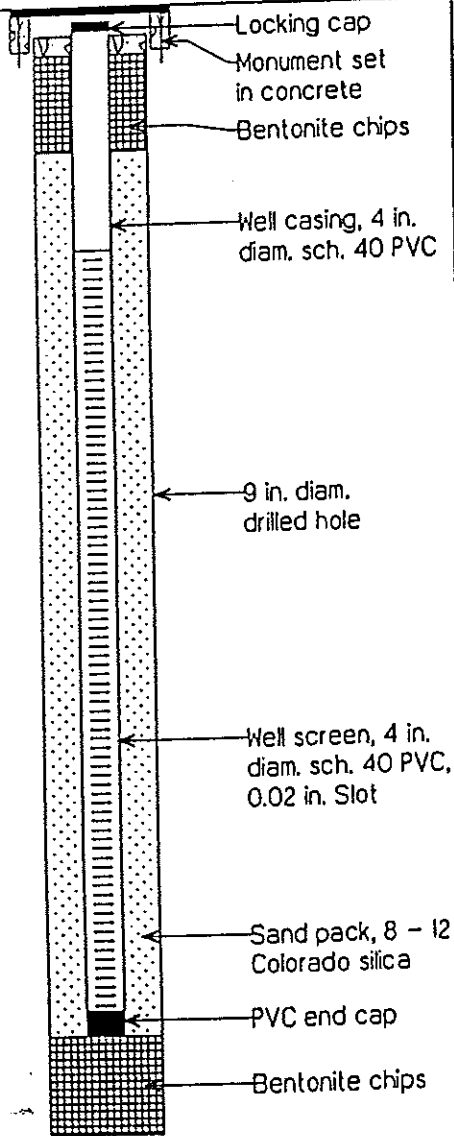
LOG OF SVE/AS-1
Page 2 of 2

PROJECT NO. WA0152.023						
WELL CONSTRUCTION		DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION	
 Bentonite chips Sand Pack, 8 - 12 Colorado Silica 1-1/4 in. diam. Stainless-Steel Casing Stainless Steel Screen, 1-1/4 in. diam. Steel End Cap						
			50/5		As above, (No hydrocarbon odor, PID = 3.0 ppm).	
		24				
			50/2		As above -Gray, wet, very dense, fine-to coarse-grained sand, with gravel, (PID = 8.8 ppm).	
		27				
			50/6		As above -Gray, wet, very dense, fine-grained sand, silt, fine gravel, (No hydrocarbon odor, PID = 8.4 ppm).	
		30				
			50/4		As above, increase in coarse gravel, silt (50 %), (PID = 6.9 ppm).	
		33				
			42 50/2		As above.	
	25 50/4		WELL-GRADED SAND with Gravel (SW) - Brown to gray, wet, very dense, fine- to coarse-grained sand (60 %), gravel (35 %), subrounded, few silt, (PID = 6.0 ppm).			
36					Borehole terminated at 36 feet bls. Groundwater encountered during drilling at 15 feet bls.	
					Note: Blow counts taken below 4 feet bls using a 2-inch diameter split-spoon sampler driven with a 140-pound hammer falling 30 inches. Blow counts recorded for evaluating relative soil density only and are not appropriate for construction or structural design purposes.	
39						
42						
45						

PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WAO132.023

CLIENT NAME: ARCO PRODUCTS COMPANY
PROJECT LOCATION: SEATTLE, WASHINGTON
DATE STARTED: 28-APR-94
DATE COMPLETED: 28-APR-94
LOGGED BY: E. RADCLIFF
CHECKED BY: J. SADLER

SURFACE ELEV: 259.31feet
DATUM: CITY OF SEATTLE
DRILL COMPANY: CASCADE DRILLING, INC.
DRILLER: RODNEY LABROSSE
DRILL METHOD: HOLLOW-STEM AUGER
SAMPLING METHOD: SPLIT SPOON (140-lb. hammer)

WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
				3" ASPHALT The following description is from Borehole AS-2, drilled 3 feet east of this borehole on 4/27/94: Sand and Gravel Fill (Logged from soil cuttings). Hand dug to 4 feet below land surface (bls). POORLY GRADED SAND (SP) - Brown, moist, dense, fine-grained sand (80 %), subrounded, few silt, trace gravel (FILL). As above, native, black, poor sample recovery. Groundwater encountered at 15 feet bls during drilling. As above, brown, wet, very dense, trace coarse-grained sand, trace gravel, rounded, few silt. SILTY SAND (SM) - Gray to brown, wet, very dense, fine-grained sand (60 to 70 %), subrounded, some silt, (TILL). As above, few gravel (1/2-inch diameter). POORLY GRADED SAND (SP) - Brown-gray, wet, very dense, fine-grained sand, less fines, less gravel. Borehole terminated at 23 feet bls. Groundwater encountered during drilling at 15 feet bls. Note: Blow counts taken using a 2.0-inch diameter split-spoon sampler driven with a 140-pound hammer falling 30 inches. Blow counts are recorded for evaluating relative soil density only and should not be construed as appropriate for construction or structural design purposes.
	4	17 20 23		
	8			
	12	50/6		
	16	37 50/4		
	20	50/3 50/6 50/6		
	24	35		
	28			

PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WAOI32.023

LOG OF SVE-2
Page 1 of 1

CLIENT NAME: ARCO PRODUCTS COMPANY
PROJECT LOCATION: SEATTLE, WASHINGTON
DATE STARTED: 28-APR-94
DATE COMPLETED: 28-APR-94
LOGGED BY: E. RADCLIFF
CHECKED BY: J. SADLER

SURFACE ELEV: 259.31feet
DATUM: CITY OF SEATTLE
DRILL COMPANY: CASCADE DRILLING, INC.
DRILLER: RODNEY LABROSSE
DRILL METHOD: HOLLOW-STEM AUGER
SAMPLING METHOD: SPLIT SPOON (140-lb. hammer)

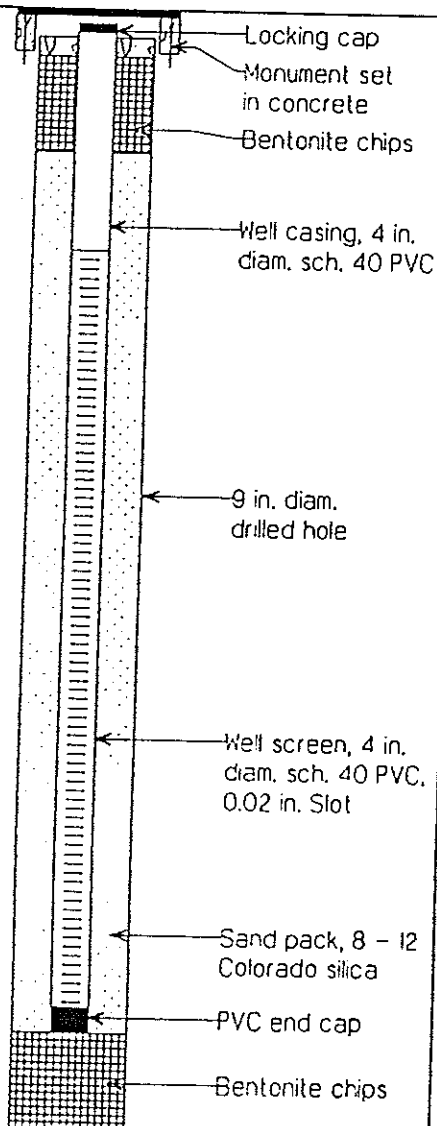
WELL CONSTRUCTION

DEPTH
(feet)

BLOWS PER
SIX IN.

SAMPLES AND
GRAPHIC LOG

MATERIALS DESCRIPTION



4	17	
	20	
	23	
8		
12	50/6	
16	37	
	50/4	
	50/3	
20	50/6	
	50/6	
	35	
24		
28		

3" ASPHALT

The following description is from Borehole AS-2, drilled 3 feet east of this borehole on 4/27/94:

Sand and Gravel Fill (Logged from soil cuttings). Hand dug to 4 feet below land surface (bls).

POORLY GRADED SAND (SP) - Brown, moist, dense, fine-grained sand (80 %), subrounded, few silt, trace gravel (FILL).

As above, native, black, poor sample recovery.

Groundwater encountered at 15 feet bls during drilling. As above, brown, wet, very dense, trace coarse-grained sand, trace gravel, rounded, few silt.

SILTY SAND (SM) - Gray to brown, wet, very dense, fine-grained sand (60 to 70 %), subrounded, some silt, (TILL).

As above, few gravel (1-inch diameter).

POORLY GRADED SAND (SP) - Brown-gray, wet, very dense, fine-grained sand, less fines, less gravel.

Borehole terminated at 23 feet bls. Groundwater encountered during drilling at 15 feet bls.

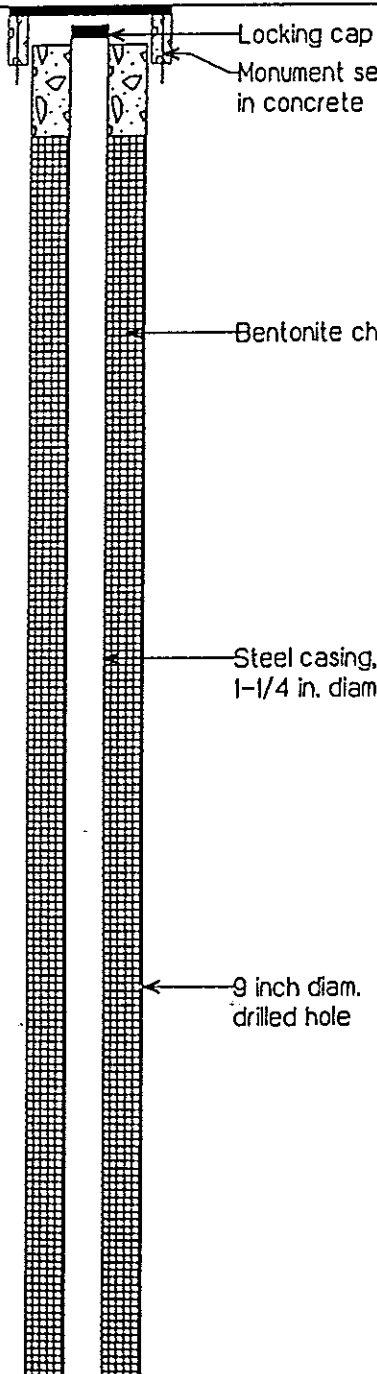
Note: Blow counts taken using a 2.0-inch diameter split-spoon sampler driven with a 140-pound hammer falling 30 inches. Blow counts are recorded for evaluating relative soil density only and should not be construed as appropriate for construction or structural design purposes.

PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WAO132.023

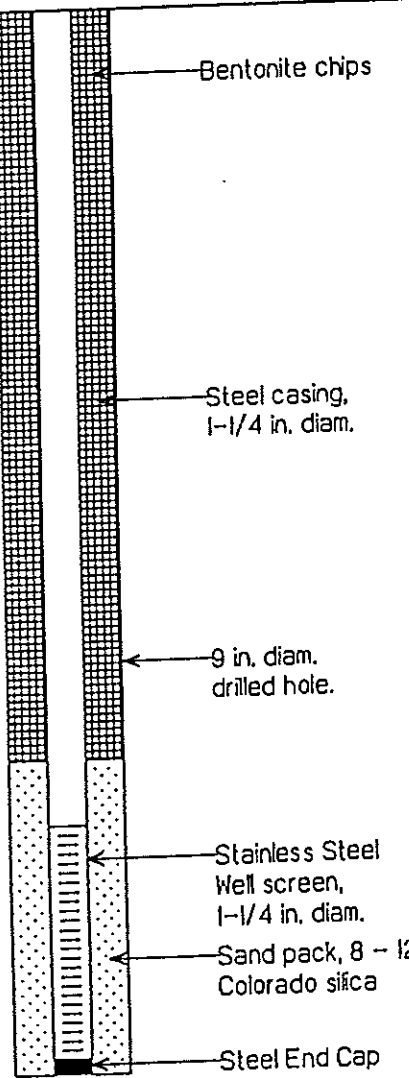
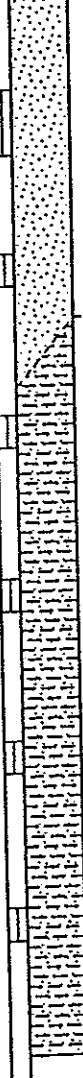
LOG OF AS-2
Page 1 of 2

CLIENT NAME: ARCO PRODUCTS COMPANY
PROJECT LOCATION: SEATTLE, WASHINGTON
DATE STARTED: 27-APR-94
DATE COMPLETED: 27-APR-94
LOGGED BY: E. RADCLIFF
CHECKED BY: J. SADLER

SURFACE ELEV: 259.39feet
DATUM: CITY OF SEATTLE
DRILL COMPANY: CASCADE DRILLING, INC.
DRILLER: RODNEY LABROSSE
DRILL METHOD: HOLLOW-STEM AUGER
SAMPLING METHOD: SPLIT SPOON (140-lb. hammer)

WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
 Locking cap Monument set in concrete Bentonite chips Steel casing, 1-1/4 in. diam. 9 inch diam. drilled hole				3" ASPHALT Sand and Gravel Fill (Logged from soil cuttings). Hand dug to 4 feet below land surface (bls). POORLY GRADED SAND (SP) - Brown, moist, dense, fine-grained sand (80 %), subrounded, few silt, trace gravel (FILL, PID = 7.8 ppm). As above, black, poor sample recovery. Groundwater encountered at 14.5 feet bls during drilling. As above, brown, wet, very dense, trace coarse-grained sand, trace gravel, rounded, few silt, (no hydrocarbon odor, PID = 8.8 ppm). SILTY SAND (SM) - Gray to brown, wet, very dense, fine-grained sand (60 to 70 %), subrounded, some silt, (TILL, no hydrocarbon odor, PID = 8.1 ppm). As above, few gravel (1-inch diameter), (PID = 8.1 ppm).
	3			
	6	17 20 23		
	9			
	12	50/6		
	15	37 50/4		
	18	50/3		
	21	50/6 50/6		

PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WAO132.023

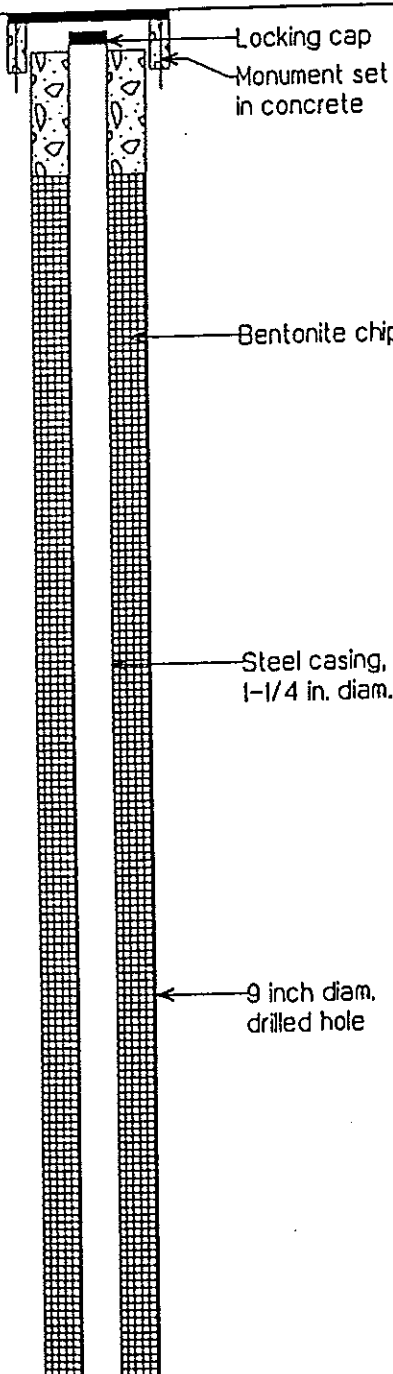
WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
 Bentonite chips Steel casing, 1-1/4 in. diam. 9 in. diam. drilled hole. Stainless Steel Well screen, 1-1/4 in. diam. Sand pack, 8 - 12 Colorado silica Steel End Cap	35 24 27 30 33 36 39 42 45	50/4 50/5 50/6 50/5 50/5 50/5		POORLY GRADED SAND (SP) - Brown-gray, wet, very dense, fine-grained sand, less fines, less gravel, (No hydrocarbon odor, PID = 8.5 ppm). As above, (PID = 7.1 ppm). SILTY SAND (SM) - Gray, wet, very dense, fine-grained sand (60 to 70 %), some silt, trace gravel (TILL, no hydrocarbon odor, PID = 14.7 ppm). As above, (No hydrocarbon odor, PID = 16.7 ppm). As above, (No hydrocarbon odor, PID = 27.1 ppm). As above, more fine-grained sand. Borehole terminated at 37.0 feet bls. Groundwater encountered during drilling at 14.5 feet bls. Note: Blow counts taken using a 2.0-inch diameter split-spoon sampler driven with a 140-pound hammer falling 30 inches. Blow counts are recorded for evaluating relative soil density only and should not be construed as appropriate for construction or structural design purposes.

PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WAO132.023

LOG OF AS-3
Page 1 of 2

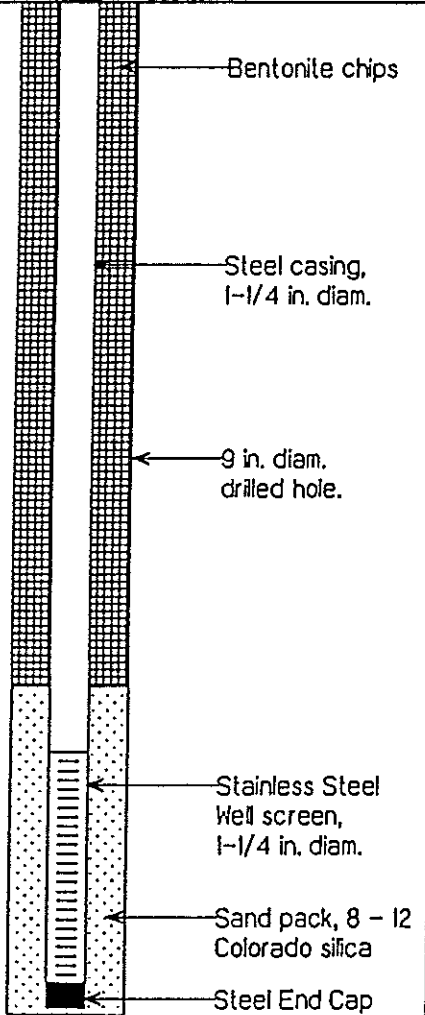
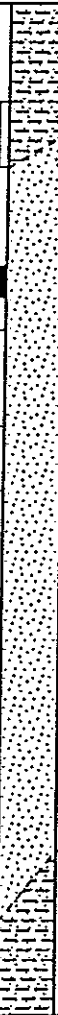
CLIENT NAME: ARCO PRODUCTS COMPANY
PROJECT LOCATION: SEATTLE, WASHINGTON
DATE STARTED: 28-APR-94
DATE COMPLETED: 28-APR-94
LOGGED BY: E. RADCLIFF
CHECKED BY: J. SADLER

SURFACE ELEV: 258.16 feet
DATUM: CITY OF SEATTLE
DRILL COMPANY: CASCADE DRILLING, INC.
DRILLER: RODNEY LABROSSE
DRILL METHOD: HOLLOW-STEM AUGER
SAMPLING METHOD: SPLIT SPOON (140-lb. hammer)

WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
 Locking cap Monument set in concrete Bentonite chips Steel casing, 1-1/4 in. diam. 9 inch diam. drilled hole				3" ASPHALT
				Sand and Gravel Fill (Logged from soil cuttings). Hand dug to 4 feet below land surface (bls).
	3			
	4			
	7			
	6	10		POORLY GRADED SAND with Gravel (SP) - Dark brown, moist, medium-dense, fine-grained sand (80 %), subrounded, few silt, trace gravel (1.5-inch diameter), subrounded, some wood fragments, (FILL, no hydrocarbon odor, PID = 11.9 ppm). Slight drill rig chatter.
	9			
	30	50/4		As above, gray, very dense, mostly fine- to medium-grained sand, little silt, (No hydrocarbon odor, PID = 12.3 ppm).
	12	28 30 33		SILTY SAND (SM) - Gray, moist, very dense, medium-grained sand (65 to 70 %), subrounded, little coarse-grained sand, silt (35 %), trace gravel (1-inch diameter), subrounded, (NATIVE, No hydrocarbon odor, PID = 12.5 ppm). ▽ Groundwater encountered at 14 feet bls during drilling.
	15	50/8		As above, brown, wet, very dense, fine-grained sand, (55 to 65 %), silt (35 to 40 %), few gravel (1-inch diameter), subrounded, few silt, (TILL, no hydrocarbon odor, PID = 11.7 ppm).
	18	50/5		As above, moist, very dense, fine-grained sand (65 to 70 %), subrounded, few medium- to coarse-grained sand, silt (35 %), (No hydrocarbon odor, PID = 12.1 ppm).
		50/6		As above, very dense, increase in fine-grained sand, few gravel, (No hydrocarbon odor, PID = 12.1 ppm).
	21			

PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WA0132.023

LOG OF AS-3
Page 2 of 2

WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
 Bentonite chips Steel casing, 1-1/4 in. diam. 9 in. diam. drilled hole. Stainless Steel well screen, 1-1/4 in. diam. Sand pack, 8 - 12 Colorado silica Steel End Cap	27	50/6		As above, less sand, more silt, (No hydrocarbon odor, PID = 10.7 ppm). 24 POORLY GRADED SAND (SP) - Gray, wet, very dense, fine-grained sand, few silt, (No hydrocarbon odor, PID = 13.9 ppm). 27 As above, very dense, (No hydrocarbon odor, PID = 9.3 ppm). 30 As above, very dense, drill rig chatter, (No hydrocarbon odor, PID = 10.3 ppm). 33 As above, very dense. 36 SILTY GRAVEL (GM) - Brown, wet, very dense, fine gravel (35 %), little fine-grained sand (30 %), little silt (30 to 35 %), (No hydrocarbon odor, PID = 18.4 ppm).
	39			Borehole terminated at 35.5 feet bls. Groundwater encountered during drilling at 14 feet bls. Note: Blow counts taken using a 2.0-inch diameter split-spoon sampler driven with a 140-pound hammer falling 30 inches. Blow counts are recorded for evaluating relative soil density only and should not be construed as appropriate for construction or structural design purposes.
	42			
	45			

PROJECT NAME/LOCATION:			Project Number	M094-509	Boring Number	AS-4		
ARCO Facility No. 980 10822 Roosevelt Way Seattle, WA			Contractor	Cascade Drilling	Drilling Method	4 1/4" ID HSA		
			Driller	Brian	Drilling Rig	CME-75		
			Start	11:00 a.m. 03/24/95	Completed	2:00 p.m. 03/24/95		
Landowner: ARCO Products Company			Surface Elev.	---	Logged By	Ron Bruce		
Sample		Blow Count	Sample		Depth Scale (1" = 4')	Descriptions of Materials and Conditions	Observations	
Type	No.		Interval (ft)	Recovery (in.)			Instrument: Units	OVM ppm
SB	AS-4-5	40	5.0-6.5	18	0	3" ASPHALT		
					1			
					2			
					3			
					4			
SB	AS-4-10	50 for 4"	10.0-10.5	6	5	SILTY SAND WITH ORGANICS; brown, damp, dense (SM).	12	
					6			
					7			
					8			
					9			
SB	AS-4-12	55 for 6"	12.5-13.25	8	10	SILTY SAND WITH GRAVEL AND COBBLES; gray, moist to wet, very dense (SM).	0	
					11			
					12			
SB	AS-4-15	75 for 6"	15.0-15.75	8	13	Groundwater encountered at 13 feet. ▼	19	
					14			
					15			
SB	AS-4-17	60 for 6"	17.5-18.0	6	16	SILTY SAND; brown and gray, saturated, very dense (SM).	27	
					17			
					18			
SB	AS-4-20	50 for 6"	20.0-20.75	8	19	Contains some gravel.	15	
					20			
					21			
					22			
					23			
BOREHOLE WATER LEVEL DATA								
Date								
Time								
GWL								
Casing Depth								

PROJECT NAME/LOCATION:			Project Number	M094-509	Boring Number	AS-4		
ARCO Facility No. 980 10822 Roosevelt Way Seattle, WA			Contractor	Cascade Drilling	Drilling Method	4 1/4" ID HSA		
			Driller	Brian	Drilling Rig	CME-75		
			Start	11:00 a.m. 03/24/95	Completed	2:00 p.m. 03/24/95		
Landowner: ARCO Products Company			Surface Elev.	---	Logged By	Ron Bruce		
Sample		Blow Count	Sample		Depth Scale 1" = 4'	Descriptions of Materials and Conditions	Observations	
Type	No.		Interval (ft)	Recovery (in.)			Instrument: Units	OVM ppm
SB	AS-4-25	50 for 6"	25.0-25.5	6	24	SAND WITH SILT; medium grained, gray, saturated, very dense (SP-SM).	30	
SB	AS-4-27	50 for 6"	27.0-27.5	6	25			
					26			
					27	SILTY SAND WITH TRACE GRAVEL; gray, saturated, very dense (SM).	19	
					28			
					29	Boring terminated at 27 ft.		
					30			
					31			
					32			
					33			
					34			
					35			
					36			
					37			
					38			
					39			
					40			
					41			
					42			
					43			
					44			
					45			
					46			
					47			

BOREHOLE WATER LEVEL DATA			
Date			
Time			
GWL			
Casing Depth			


Delta
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Sheet 2 of 2

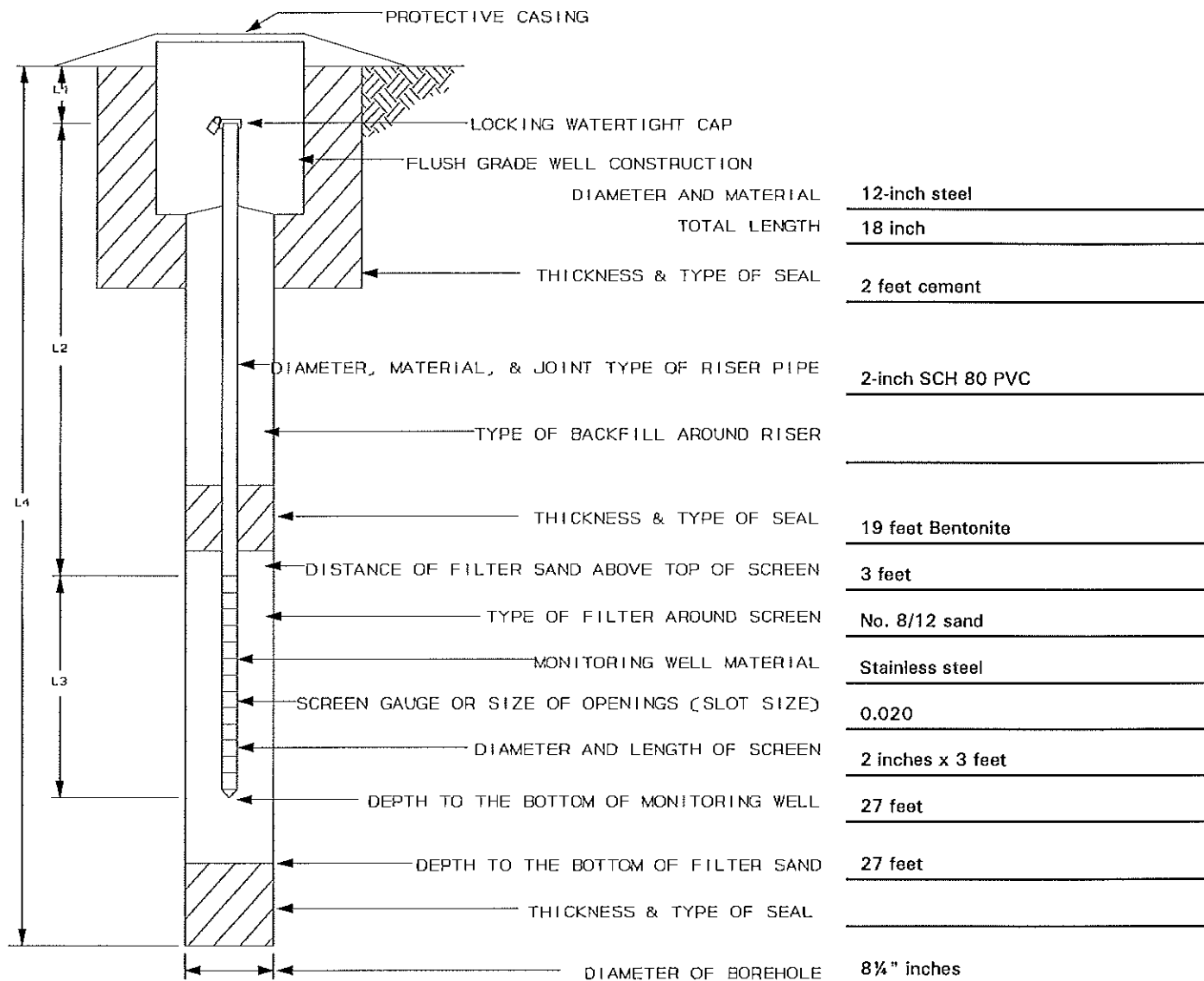
INSTALLATION OF FLUSH GRADE MONITORING WELL

Project ARCO Facility No. 980
10822 Roosevelt Way
Seattle, Washington

Delta No. M094-509

Monitoring Well No. AS-4

Elevations:
 Top of Riser: _____
 Ground Level: _____



L1 = _____ FT
 L2 = 23.75 FT
 L3 = 3.0 FT
 L4 = 27.0 FT

Installation Completed

Date: 03/24/95

Time: 2:00 p.m.



Monitoring Well Water Level Measurements		
Date	Time	Water Level*

* Measure Point _____

PROJECT NAME/LOCATION:				Project Number	M094-509	Boring Number	AS-5	
ARCO Facility No. 980 10822 Roosevelt Way Seattle, WA				Contractor	Cascade Drilling	Drilling Method	4 1/4" ID HSA	
				Driller	Brian	Drilling Rig	CME-75	
				Start	8:15 a.m. 03/24/95	Completed	10:45 a.m. 03/24/95	
Landowner: ARCO Products Company				Surface Elev.	---	Logged By	Ron Bruce	
Sample		Blow Count	Sample		Depth Scale 1" = 4'	Descriptions of Materials and Conditions	Observations	
Type	No.		Interval (ft)	Recovery (in.)			Instrument: Units	OVM ppm
SB	AS-5-5	28	5.0-6.5	18	0	3" ASPHALT		
					1			
					2			
					3			
					4			
SB	AS-5-5	28	5.0-6.5	18	5	SILTY SAND WITH GRAVEL; fine grained, gray and brown, damp, medium dense (SM).	19	
					6			
					7			
					8			
					9			
SB	AS-5-10	50 for 6"	10.0-10.5	6	10	SILTY SAND WITH GRAVEL AND SOME CLAY; fine grained, gray, wet, very dense (SM).	403	
					11			
					12			
SB	AS-5-12	50 for 3"	12.5-13.0	5	13	Groundwater encountered at 13.5 feet. ▼	504	
					14			
SB	AS-5-15	50 for 6"	15.0-15.5	6	15		545	
					16			
					17			
SB	AS-5-17	50 for 5"	17.5-18.0	6	18		105	
					19			
					20			
SB	AS-5-20	50 for 5"	20.0-20.5	6	21		2.1	
					22			
					23			
SB	AS-5-22	50 for 6"	22.5-23.5	12			0	
BOREHOLE WATER LEVEL DATA								
Date								
Time								
GWL								
Casing Depth								

PROJECT NAME/LOCATION:				Project Number	M094-509	Boring Number	AS-5	
ARCO Facility No. 980 10822 Roosevelt Way Seattle, WA				Contractor	Cascade Drilling	Drilling Method	4 1/4" ID HSA	
				Driller	Brian	Drilling Rig	CME-75	
				Start	8:15 a.m. 03/24/95	Completed	10:45 a.m. 03/24/95	
Landowner: ARCO Products Company				Surface Elev.	---	Logged By	Ron Bruce	
Sample		Blow Count	Sample		Depth Scale 1" = 4'	Descriptions of Materials and Conditions	Observations	
Type	No.		Interval (ft)	Recovery (in.)			Instrument: Units	OVM ppm
SB	AS-5-25	50 for 6"	25.0-26.0	12	24	SILTY SAND WITH SOME GRAVEL; medium grained, gray, saturated, very dense (SP-SM)	6.0	
SB	AS-5-27	50 for 6"	27.0-28.0	12	25		Boring terminated at 27 ft.	
					26			
					27			
					28			
					29			
					30			
					31			
					32			
					33			
					34			
					35			
					36			
					37			
					38			
					39			
					40			
					41			
					42			
					43			
					44			
					45			
					46			
					47			

BOREHOLE WATER LEVEL DATA			
Date			
Time			
GWL			
Casing Depth			



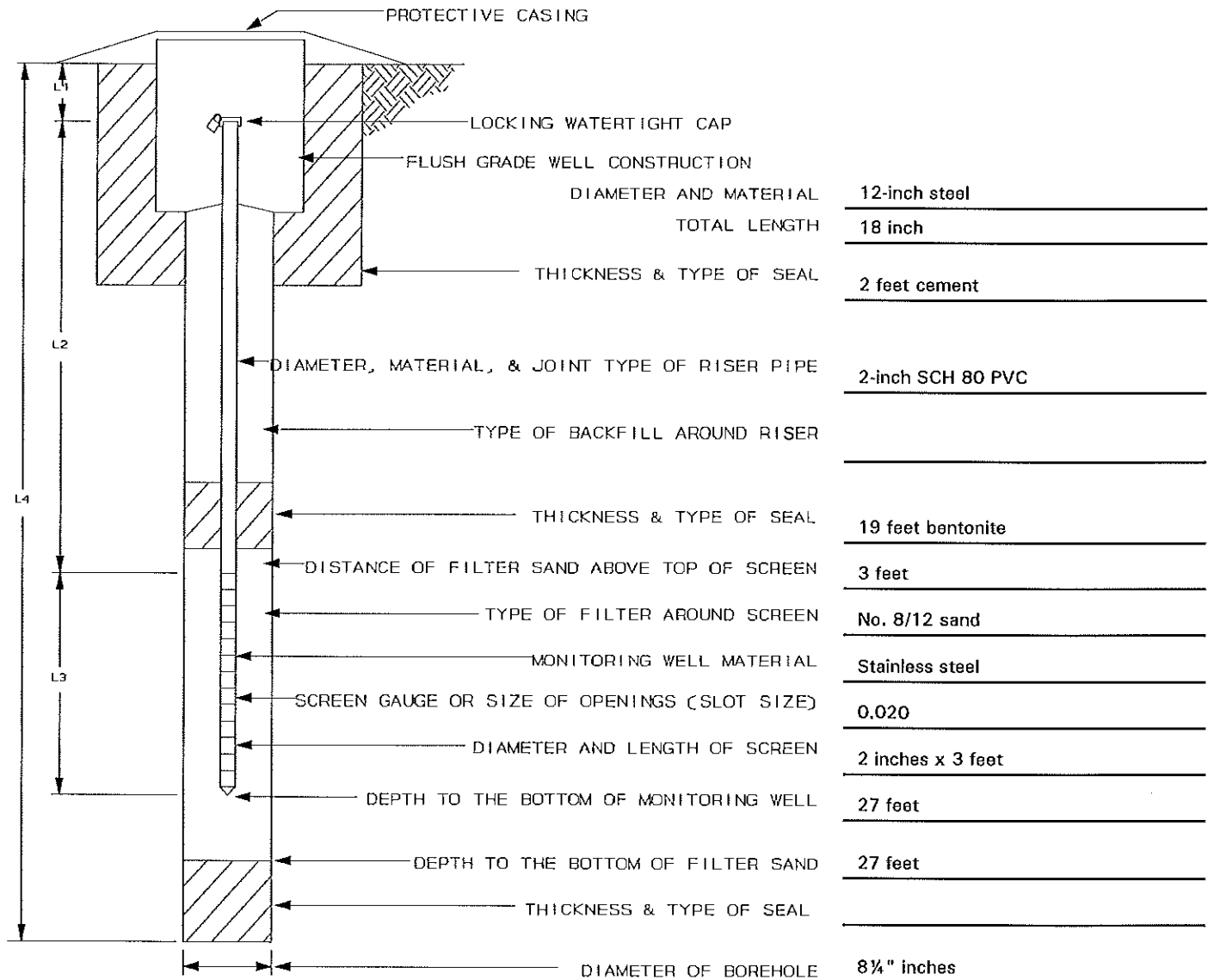
Delta
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Consultants, Inc.

Sheet 2 of 2

INSTALLATION OF FLUSH GRADE MONITORING WELL

Project ARCO Facility No. 980
10822 Roosevelt Way
Seattle, Washington
 Delta No. M094-509

Monitoring Well No. AS-5
 Elevations:
 Top of Riser: _____
 Ground Level: _____



L1 = _____ FT
 L2 = 23.75 FT
 L3 = 3.0 FT
 L4 = 27.0 FT

Installation Completed

Date: 03/24/95

Time: 10:45 a.m.



Monitoring Well Water Level Measurements		
Date	Time	Water Level*

* Measure Point _____

PROJECT NAME/LOCATION:					Project Number	M094-509	Boring Number	AS-6
ARCO Facility No. 980 10822 Roosevelt Way NE Seattle, Washington					Contractor	Cascade Drilling	Drilling Method	4 1/4" ID HSA
					Driller	Scott	Drilling Rig	CME-75
					Start	9:10 a.m. 02/27/96	Completed	10:45 a.m. 02/27/96
Landowner: ARCO Products Company					Surface Elev.	---	Logged By	Ron Bruce
Sample		Blow Count	Sample		Depth Scale 1" = 4'	Descriptions of Materials and Conditions	Observations	
Type	No.		Interval (ft)	Recovery (in.)			Instrument: Units	hNu ppm
SB	AS-6-5	53	5.0-6.5	18	0	ASPHALT 3"		
					1			
					2			
SB	AS-6-7	100 for 6"	7.5-8.2	8	3	SILTY SAND WITH GRAVEL (SM); tan, moist, trace cobbles.		
					4			
					5	SILTY SAND WITH GRAVEL (SM); tan-brown, moist, very dense, trace organics.	5.0	
SB	AS-6-10	100 for 6"	10.0-10.7	8	6			
					7			
					8		1.0	
SB	AS-6-12	110 for 6"	12.5-13.0	0	9			
					10	SILTY SAND (SM); grey, wet, very dense, trace gravel.	0	
					11			
SB	AS-6-15	130 for 6"	15.0-15.5	0	12	No sample recovered.	--	
					13			
					14			
SB	AS-6-17	120 for 6"	17.5-18.0	0	15	No sample recovered.	--	
					16			
					17	No sample recovered.	--	
					18	No samples attempted after 17.5 feet.		
					19			
					20			
					21			
					22			
					23			

BOREHOLE WATER LEVEL DATA			
Date			
Time			
GWL			
Casing Depth			



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Sheet 1 of 2

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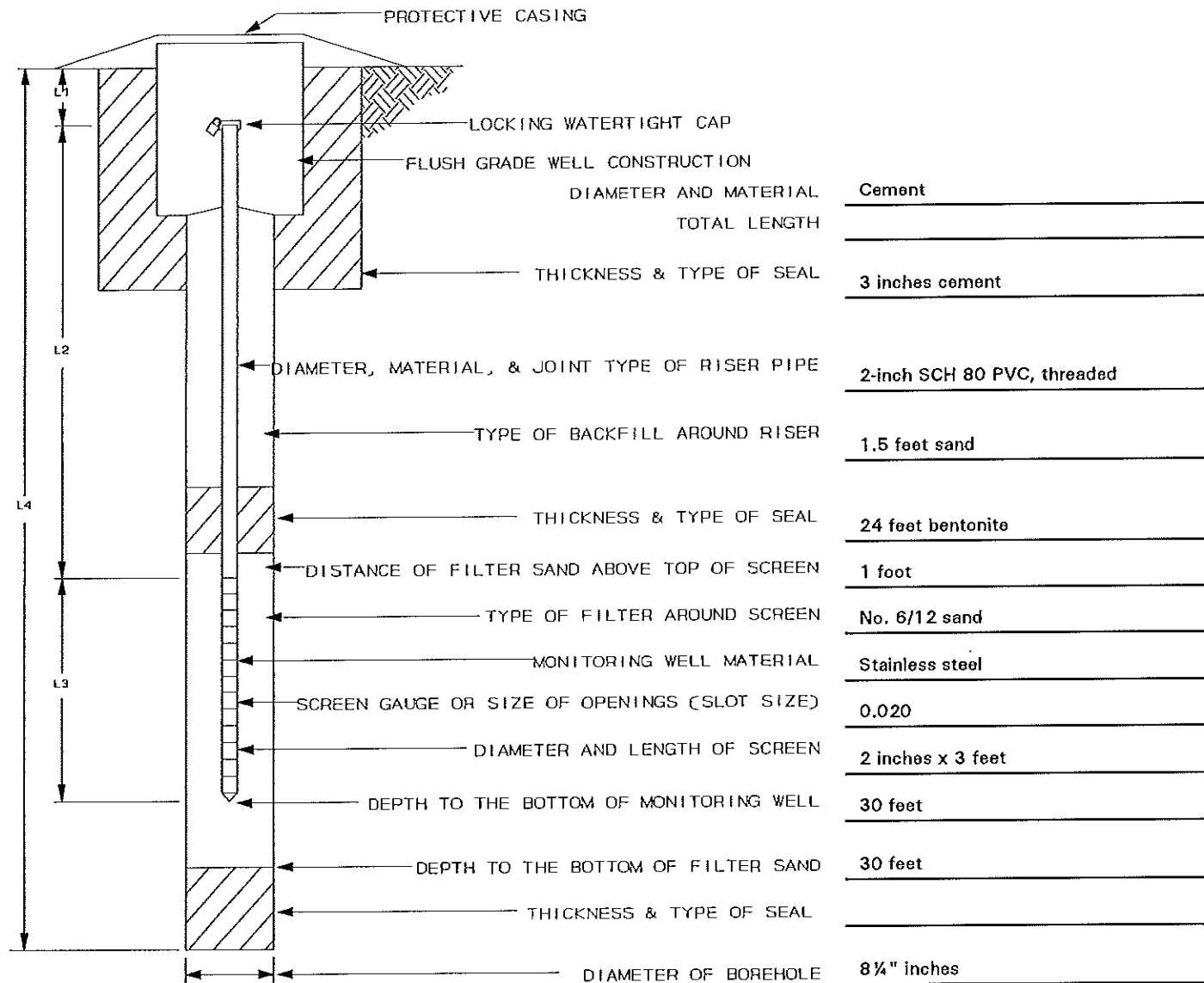
INSTALLATION OF FLUSH GRADE MONITORING WELL

Project ARCO Facility No. 980
10822 Roosevelt Way
Seattle, Washington

Delta No. M094-509

Monitoring Well No. AS-6

Elevations:
 Top of Riser: _____
 Ground Level: _____



L1 = 0.5 FT
 L2 = 26.5 FT
 L3 = 3.0 FT
 L4 = 30.0 FT

Installation Completed

Date: 02/27/96

Time: 10:45 a.m.



Monitoring Well Water Level Measurements		
Date	Time	Water Level*

* Measure Point _____

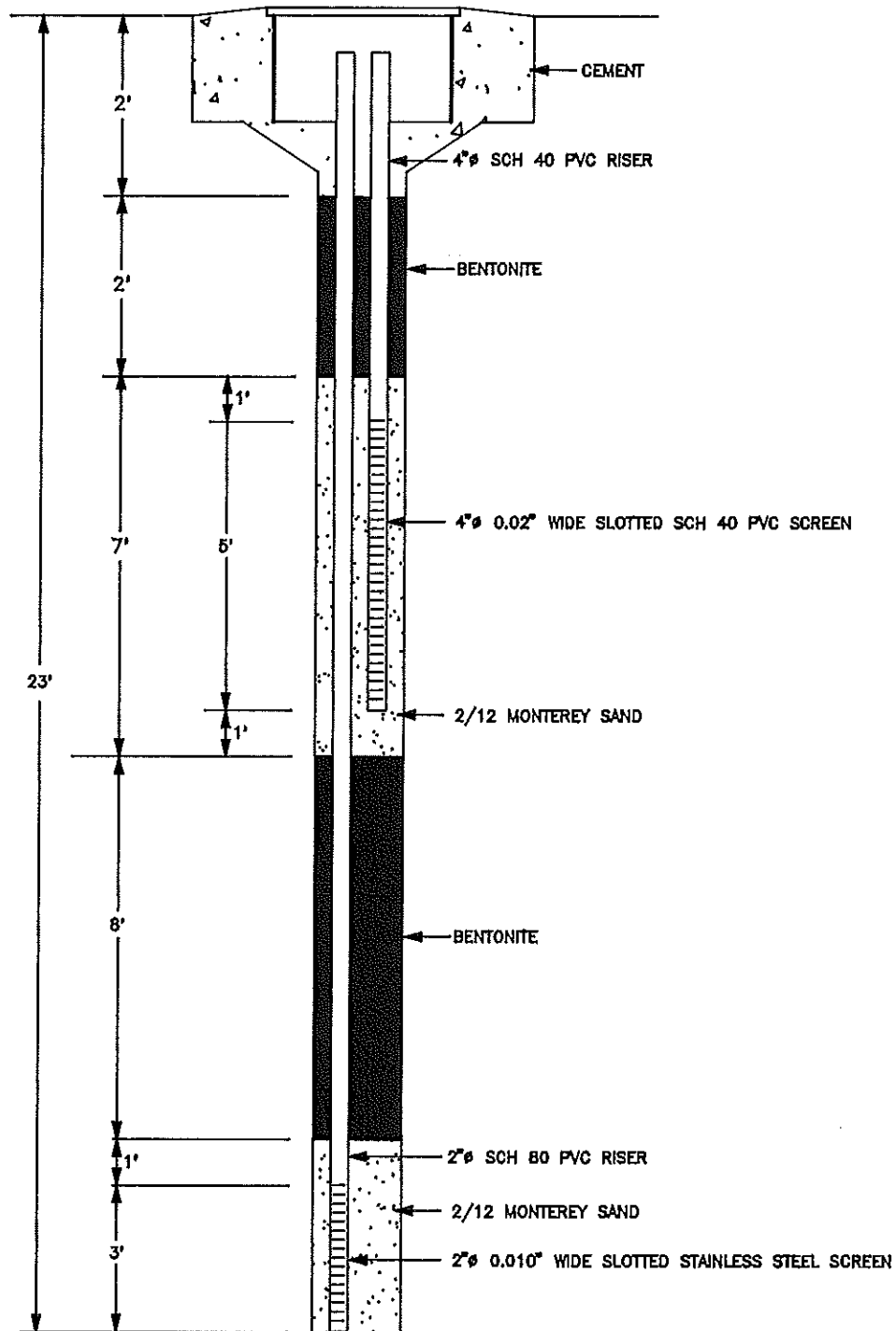
PROJECT NAME/LOCATION:					Project Number	M094-509	Boring Number	AS-7
ARCO Facility No. 980 10822 Roosevelt Way NE Seattle, Washington					Contractor	Cascade Drilling	Drilling Method	6 1/4" ID HSA
					Driller	Scott	Drilling Rig	CME-75
					Start	7:10 a.m. 02/27/96	Completed	8:45 a.m. 02/27/96
Landowner: ARCO Products Company					Surface Elev.	---	Logged By	Ron Bruce
Sample		Blow Count	Sample		Depth Scale 1" = 4'	Descriptions of Materials and Conditions	Observations	
Type	No.		Interval (ft)	Recovery (in.)			Instrument: Units	hNu ppm
SB	AS-7-5	50 for 5"	5.0	12	0	ASPHALT 3"		
					1			
					2			
					3			
					4			
SB	AS-7-7	70 for 6"	7.5-8.0	6	5	SILTY SAND WITH GRAVEL (SM); grey, damp, very dense.	200	
					6			
					7			
SB	AS-7-10	100 for 6"	10.0-10.25	3	8	SILTY SAND (SM); grey, damp, very dense	--	
					9			
					10			
SB	AS-7-12	90 for 6"	12.5-13.0	6	11	SANDY SILT WITH GRAVEL (ML); grey, wet, very dense.	--	
					12			
					13			
SB	AS-7-15	50 for 3"	15.0-15.6	8	14			
					15	SANDY SILT (ML); grey, saturated, very dense.	0	
					16			
SB	AS-7-17	55	17.5-19.0	18	17			
					18	SILTY SAND WITH GRAVEL (SM); grey, saturated, very dense.	0	
					19			
SB	AS-7-20	59	20.0-21.5	18	20	POORLY GRADED SAND WITH SILT (SP-SM); grey, saturated, very dense.	0	
					21			
					22			
SB	AS-7-23	44	23.0-24.5	0	23	Boring terminated at 23 feet.	--	

BOREHOLE WATER LEVEL DATA			
Date			
Time			
GWL			
Casing Depth			



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Sheet 1 of 1



NOT TO SCALE

NESTED AIR SPARGING/VAPOR EXTRACTION WELL CONSTRUCTION AS-7/SVE-3

ARCO FACILITY NO. 980
10822 ROOSEVELT WAY NE
SEATTLE, WA.

PROJECT NO. M094-509	DRAWN BY I.H. 5/16/96
FILE NO. M094509F	PREPARED BY R.B.
REVISION NO. 1	REVIEWED BY



PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WA132.21

LOG OF BV-1

Page 1 of 1

CLIENT NAME: ARCO PRODUCTS COMPANY
PROJECT LOCATION: SEATTLE, WASHINGTON
DATE STARTED: 21-AUG-92
DATE COMPLETED: 21-AUG-92
LOGGED BY: A. AMR
CHECKED BY: J. SADLER

SURFACE ELEV: 262.21feet
DATUM: CITY OF SEATTLE BOOK NO. 2627-5
DRILL COMPANY: HOLT TESTING, INC.
DRILLER: CHARLES RICHARD
DRILL METHOD: HOLLOW-STEM AUGER
SAMPLING METHOD: SPLIT SPOON (140-lb. hammer)

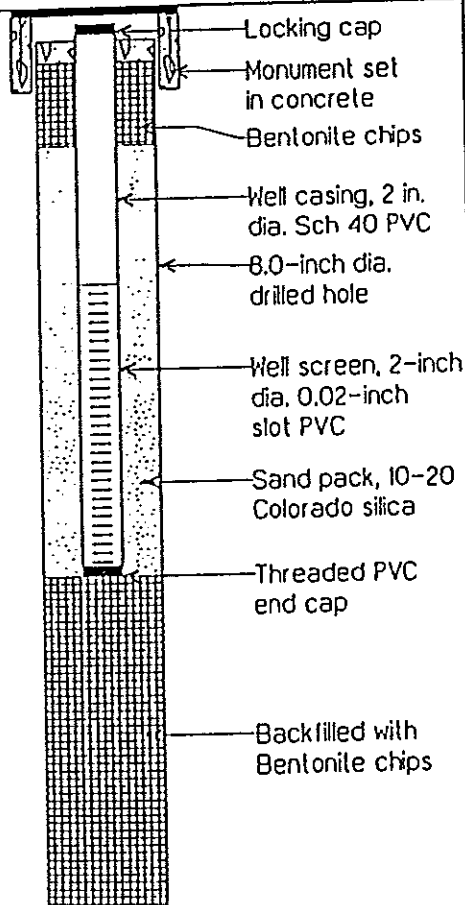
WELL CONSTRUCTION

DEPTH
(feet)

BLOWS PER
SIX IN.

SAMPLES AND
GRAPHIC
LOG

MATERIALS DESCRIPTION



3.5

28
40
42

7

10.5

50/6

14

50/5

17.5

21

24.5

5" ASPHALT

WELL-GRADED SAND with gravel (SW) - Brown, moist, fine- to coarse-grained sand, some fine to coarse gravel, brick and cobble fragments (FILL, slight to moderate hydrocarbon odor).

Hand dug to 4 feet below land surface (bls).

SILTY SAND (SM) - Grey, moist, very dense, fine-grained sand, little silt, trace fine to coarse gravel, (moderate hydrocarbon odor, PID = 2 ppm).

SILTY SAND (SM) - Grey, moist, very dense, fine-grained sand, little silt, trace fine to coarse gravel, (no hydrocarbon odor, PID = 1 ppm).
Poor sample recovery (3 inches)

Water encountered at 15 feet bls.

SILTY SAND (SM) - Grey, wet, very dense, fine-grained sand, little silt, trace fine gravel, (no hydrocarbon odor, PID = 0 ppm).

Borehole terminated at 16.0 feet bls. Ground water encountered during drilling at 15 feet bls.

Note: Blow counts taken using a 2.5-inch diameter split-spoon sampler driven with a 140-pound hammer falling 30 inches.

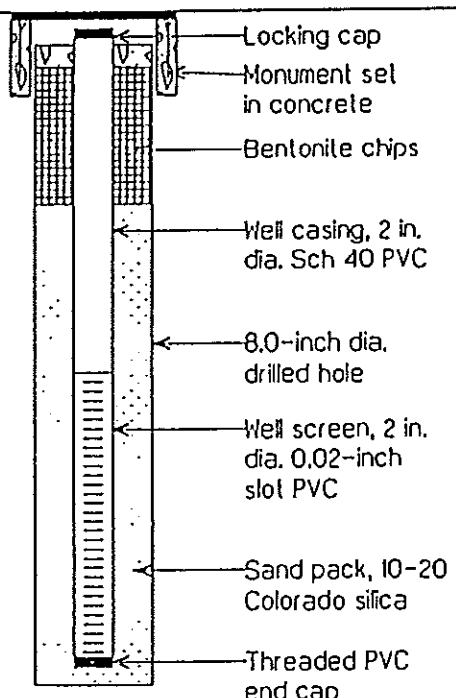
Blow counts are recorded for evaluating relative soil density only and should not be construed as appropriate for construction or structural design purposes.

PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WA132.21

LOG OF BV-2
Page 1 of 1

CLIENT NAME: ARCO PRODUCTS COMPANY
PROJECT LOCATION: SEATTLE, WASHINGTON
DATE STARTED: 21-AUG-92
DATE COMPLETED: 21-AUG-92
LOGGED BY: A. AMR
CHECKED BY: J. SADLER

SURFACE ELEV: 261.60 feet
DATUM: CITY OF SEATTLE BOOK NO. 2627-5
DRILL COMPANY: HOLT TESTING, INC.
DRILLER: CHARLES RICHARD
DRILL METHOD: HOLLOW-STEM AUGER
SAMPLING METHOD: SPLIT SPOON (140-lb. hammer)

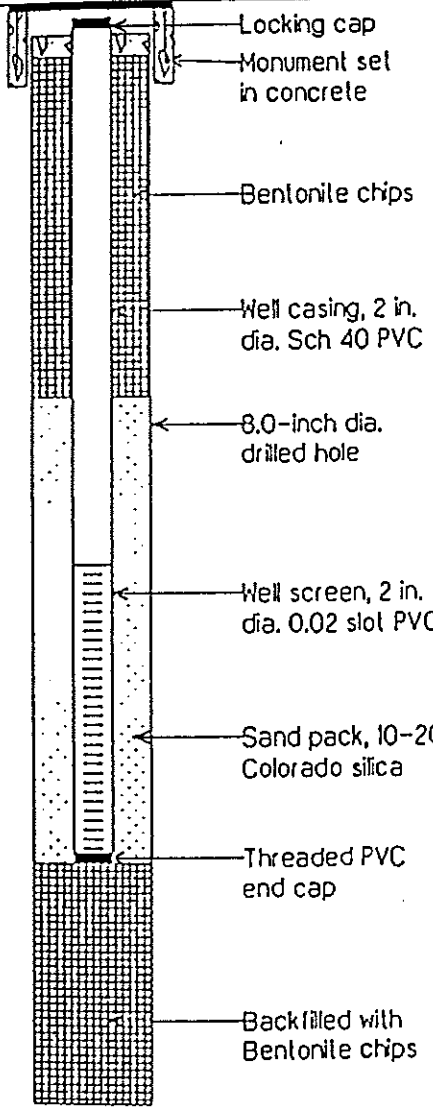
WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
	3.5			5" ASPHALT
				WELL-GRADED SAND with gravel (SW) - Brown, moist, fine- to medium-grained sand, little fine to coarse gravel, trace cobbles, wood chips, (FILL, no hydrocarbon odor).
				Hand dug to 4 feet below land surface (bls).
	7	46 50/6		SILTY SAND (SM) - Brown, moist, very dense, fine- to coarse-grained sand, little silt, trace fine gravel, (slight hydrocarbon odor, PID = 190 ppm).
	10.5	50/6 50/4		SILTY SAND (SM) - Brown, moist, very dense, fine- to coarse-grained sand, little silt, trace fine gravel, (no hydrocarbon odor, PID = 10 ppm).
	14			Borehole terminated at 12.0 feet bls. No ground water encountered during drilling.
	17.5			Note: Blow counts taken using a 2.5-inch diameter split-spoon sampler driven with a 140-pound hammer falling 30 inches.
	21			Blow counts are recorded for evaluating relative soil density only and should not be construed as appropriate for construction or structural design purposes.
	24.5			

PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WA132.21

LOG OF BV-3
Page 1 of 1

CLIENT NAME: ARCO PRODUCTS COMPANY
PROJECT LOCATION: SEATTLE, WASHINGTON
DATE STARTED: 19-AUG-92
DATE COMPLETED: 19-AUG-92
LOGGED BY: A. AMR
CHECKED BY: J. SADLER

SURFACE ELEV: 262.02 feet
DATUM: CITY OF SEATTLE BOOK NO. 2627-5
DRILL COMPANY: HOLT TESTING, INC.
DRILLER: CHARLES RICHARD
DRILL METHOD: HOLLOW-STEM AUGER
SAMPLING METHOD: SPLIT SPOON (140-lb. hammer)

WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
				5" ASPHALT WELL-GRADED SAND with gravel (SW) - Dark-brown, moist, fine- to coarse-grained sand, some fine to coarse gravel, (FILL, slight hydrocarbon odor). Hand dug to 4 feet below land surface (b/s). SILTY SAND (SM) - Black, moist, dense, fine-grained sand, little silt, rootlets, (strong hydrocarbon odor, PID = 44 ppm). POORLY GRADED SAND (SP) - Light brown, moist, very dense, fine-grained sand, trace silt, (slight hydrocarbon odor, PID = 2 ppm). SILTY SAND (SM) - Grey, moist, very dense, fine- to medium-grained sand, little silt, trace fine gravel (TILL, strong hydrocarbon odor, PID = 128 ppm). Water encountered at 17.5 feet b/s. POORLY GRADED SAND (SP) - Grey, wet, fine-grained sand, trace silt, (moderate hydrocarbon odor, PID = 11 ppm). Borehole terminated at 19.5 feet b/s. Ground water encountered during drilling at 17.5 feet b/s. Note: Blow counts taken using a 2.5-inch-diameter split-spoon sampler driven with a 140-pound hammer falling 30 inches. Blow counts are recorded for evaluating relative soil density only and should not be construed as appropriate for construction or structural design purposes.
	3.5	7		
	7	16		
	10.5	33		
	14	50/4		
	17.5	50/3		
	21	40		
	24.5	42		
		50/4		

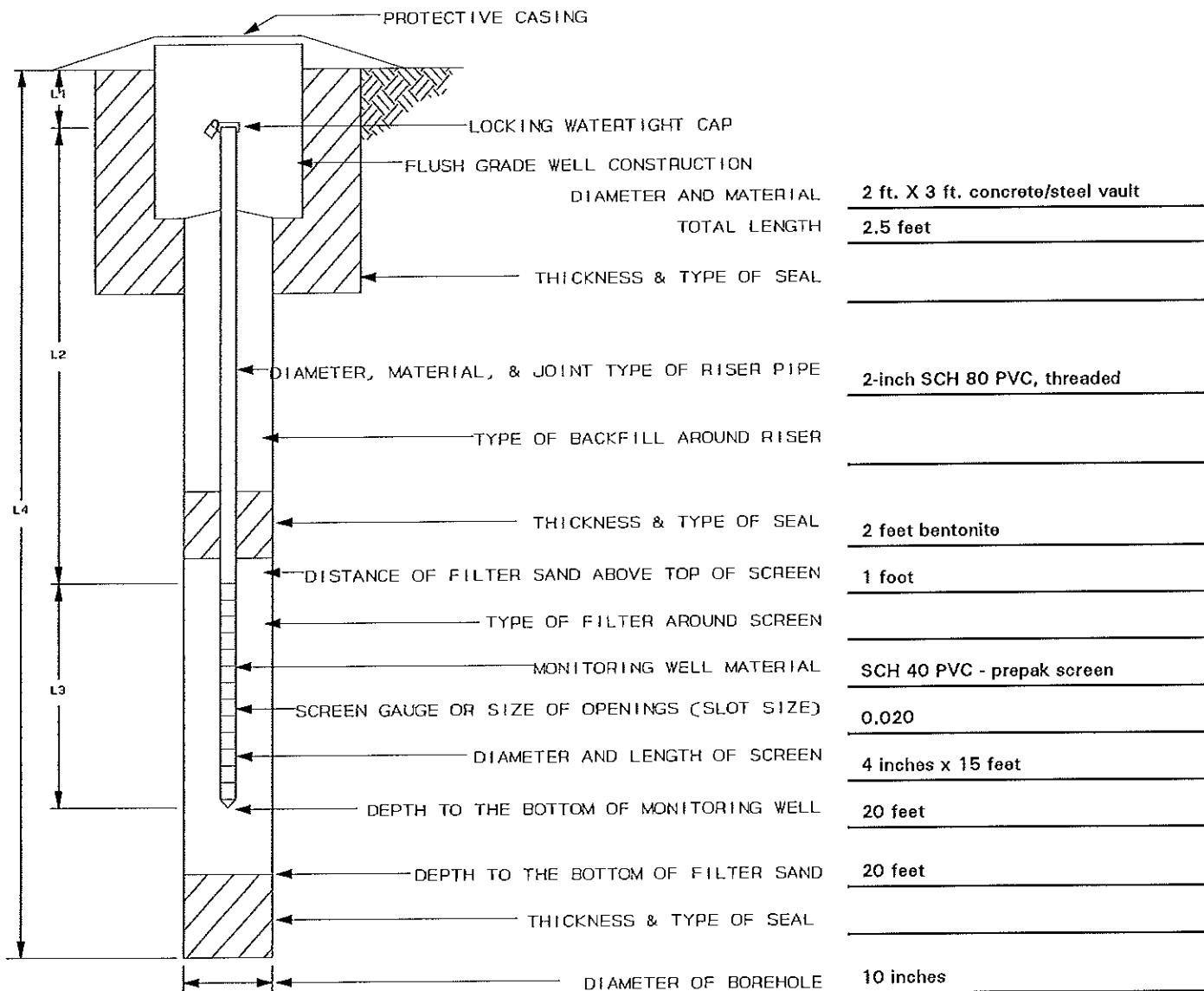
INSTALLATION OF FLUSH GRADE MONITORING WELL

Project ARCO Facility No. 980
10822 Roosevelt Way
Seattle, Washington

Delta No. M094-509

Monitoring Well No. BV-3

Elevations:
 Top of Riser: _____
 Ground Level: _____



L1 = 1.25 FT
 L2 = 3.75 FT
 L3 = 15.0 FT
 L4 = 20.0 FT

Installation Completed

Date: 02/27/96

Time: 2:20 p.m.



Monitoring Well Water Level Measurements		
Date	Time	Water Level*

* Measure Point _____

PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WA132.21

LOG OF BV-4
Page 1 of 1

CLIENT NAME: ARCO PRODUCTS COMPANY
PROJECT LOCATION: SEATTLE, WASHINGTON
DATE STARTED: 19-AUG-92
DATE COMPLETED: 19-AUG-92
LOGGED BY: A. AMR
CHECKED BY: J. SADLER

SURFACE ELEV: 261.73feet
DATUM: CITY OF SEATTLE BOOK NO. 2627-5
DRILL COMPANY: HOLT TESTING, INC.
DRILLER: CHARLES RICHARD
DRILL METHOD: HOLLOW-STEM AUGER
SAMPLING METHOD: SPLIT SPOON (140-lb. hammer)

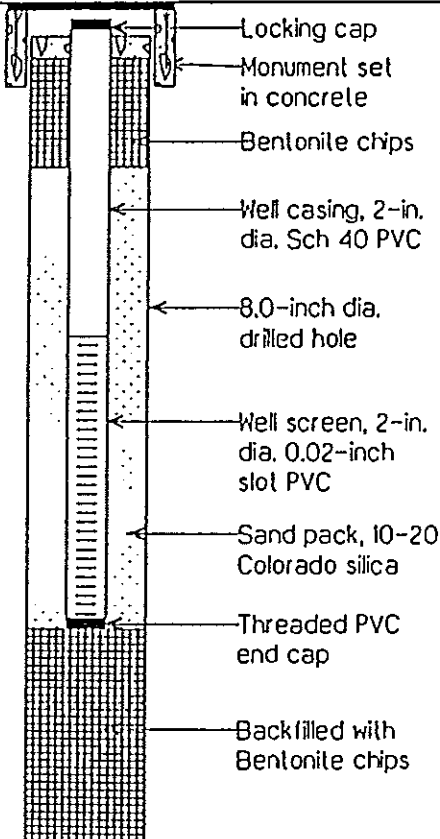
WELL CONSTRUCTION

DEPTH
(feet)

BLOWS
PER
SIX IN.

SAMPLES AND
GRAPHIC
LOG

MATERIALS DESCRIPTION



5" ASPHALT

WELL-GRADED SAND with gravel (SW) - Brown, moist, fine- to medium-grained sand, some fine to coarse gravel, (no hydrocarbon odor).

Hand dug to 4 feet below land surface (bls).

SILTY SAND (SM) - Grey-brown, moist, dense, fine- to coarse-grained sand, some silt, (mottled with iron staining, strong hydrocarbon odor, PID = 17 ppm).

POORLY GRADED SAND with gravel (SP) - Light brown, moist, very dense, fine-grained sand, little fine gravel, (slight hydrocarbon odor, PID = 0 ppm).

Water encountered at 15 feet bls.

POORLY GRADED SAND with gravel (SP) - Light brown, wet, very dense, fine-grained sand, little fine gravel, (no hydrocarbon odor, PID = 0 ppm).

Borehole terminated at 15.2 feet bls. Ground water encountered during drilling at 15 feet bls.

Note: Blow counts taken using a 2.5-inch diameter split-spoon sampler driven with a 140-pound hammer falling 30 inches.

Blow counts are recorded for evaluating relative soil density only and should not be construed as appropriate for construction or structural design purposes.

PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WA132.21

LOG OF BV-5
Page 1 of 1

CLIENT NAME: ARCO PRODUCTS COMPANY
PROJECT LOCATION: SEATTLE, WASHINGTON
DATE STARTED: 21-AUG-92
DATE COMPLETED: 21-AUG-92
LOGGED BY: A. AMR
CHECKED BY: J. SADLER

SURFACE ELEV: 262.06feet
DATUM: CITY OF SEATTLE BOOK NO. 2627-5
DRILL COMPANY: HOLT TESTING, INC.
DRILLER: CHARLES RICHARD
DRILL METHOD: HOLLOW-STEM AUGER
SAMPLING METHOD: SPLIT SPOON (140-lb. hammer)

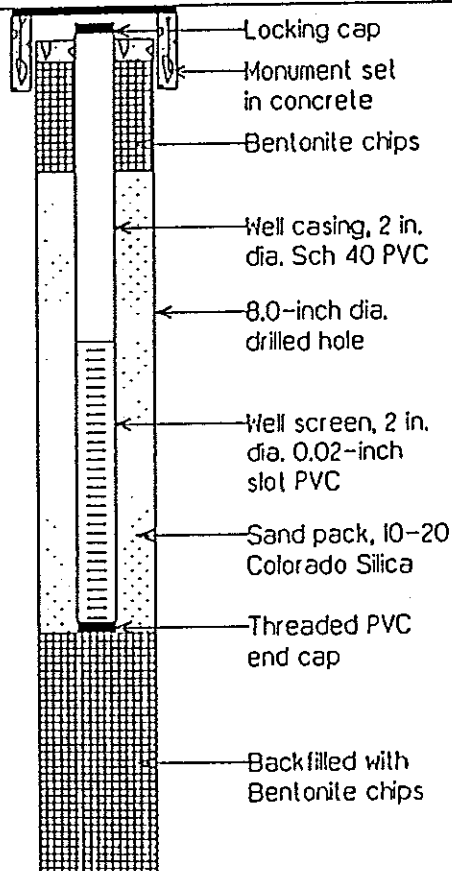
WELL CONSTRUCTION

DEPTH
(feet)

BLOWS PER
SIX IN.

SAMPLES AND
GRAPHIC
LOG

MATERIALS DESCRIPTION



5" ASPHALT

WELL-GRADED SAND with gravel (SW) - Brown, moist, fine- to medium-grained sand, some coarse gravel, (FILL, no hydrocarbon odor).

Hand dug to 4 feet below land surface (bls).

POORLY GRADED SAND (SP) - Light brown, moist, very dense, fine-grained sand, trace fine gravel, trace silt, (strong hydrocarbon odor, PID = 560 ppm).

SILTY SAND (SM) - Grey, moist, very dense, fine-grained sand, little silt, (slight hydrocarbon odor, PID = 69 ppm).

Water encountered at 14 feet bls.

WELL-GRADED SAND (SW) - Grey, wet, very dense, fine- to medium-grained sand, trace silt, (mild hydrocarbon odor, PID = 45 ppm).

Borehole terminated at 15.5 feet bls. Ground water encountered during drilling at 14 feet bls.

Note: Blow counts taken using a 2.5-inch diameter split-spoon sampler driven with a 140-pound hammer falling 30 inches.

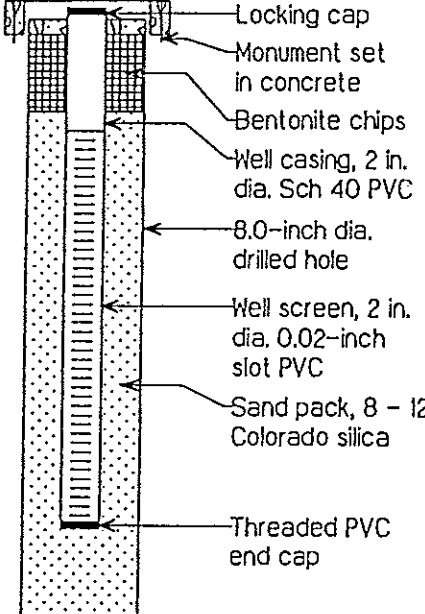
Blow counts are recorded for evaluating relative soil density only and should not be construed as appropriate for construction or structural design purposes.

PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WA132.22

LOG OF BV-6
Page 1 of 1

CLIENT NAME: ARCO PRODUCTS COMPANY
PROJECT LOCATION: SEATTLE, WASHINGTON
DATE STARTED: 24-MAR-93
DATE COMPLETED: 24-MAR-93
LOGGED BY: A. AMR
CHECKED BY: J. SADLER

SURFACE ELEV: 262.07 feet
DATUM: CITY OF SEATTLE BOOK NO. 2627-5
DRILL COMPANY: CASCADE DRILLING
DRILLER: SCOTT KRUEGER
DRILL METHOD: HOLLOW-STEM AUGER
SAMPLING METHOD: SPLIT SPOON (140-lb. hammer)

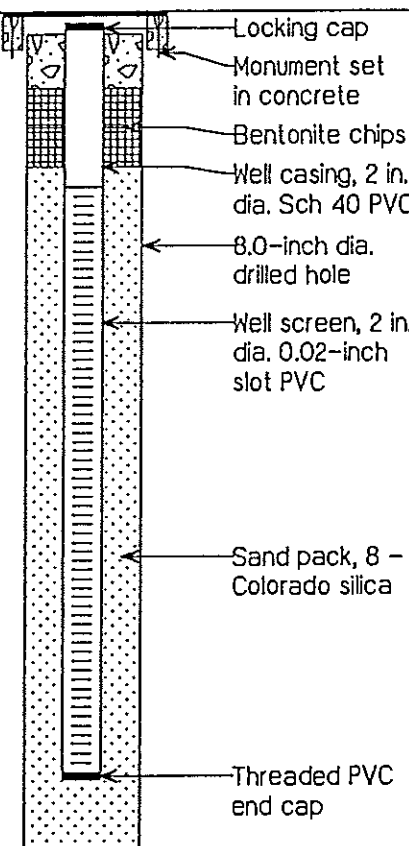
WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
	5	35 43 49		ASPHALT (4-inches) SILTY SAND with gravel (SM) - Brown, moist, fine- to medium-grained sand, little silt, little fine gravel, little silt, (FILL, no hydrocarbon odor). Hand dug to 4 feet below land surface (bls). As above, very dense, (PID = 5 ppm).
	10	35 40 50-2"		As above, brown to grey, fine- to coarse-grained sand, very dense. Sample collected for grain-size analysis at 10 feet bls, (no hydrocarbon odor, PID = 3 ppm). Ground-water encountered at 12 feet bls.
	15	45 50-6"		As above, light grey, wet, (no hydrocarbon odor).
	20			Borehole terminated at 16 feet bls. Ground water encountered at 12 feet bls during drilling.
				Blow counts taken using a 2.5-inch diameter split-spoon sampler driven with a 140-pound hammer falling 30 inches. Blow counts are recorded for evaluating relative soil density only and are not appropriate for construction or structural design purposes.

PROJECT NAME: ARCO SERVICE STATION NO. 980
PROJECT NO: WA132.22

LOG OF BV-7
Page 1 of 1

CLIENT NAME: ARCO PRODUCTS COMPANY
PROJECT LOCATION: SEATTLE, WASHINGTON
DATE STARTED: 24-MAR-93
DATE COMPLETED: 24-MAR-93
LOGGED BY: A. AMR
CHECKED BY: J. SADLER

SURFACE ELEV: 262.49feet
DATUM: CITY OF SEATTLE BOOK NO. 2627-5
DRILL COMPANY: CASCADE DRILLING, INC.
DRILLER: SCOTT KRUEGER
DRILL METHOD: HOLLOW-STEM AUGER
SAMPLING METHOD: SPLIT SPOON (140-lb. hammer)

WELL CONSTRUCTION	DEPTH (feet)	BLOWS PER SIX IN.	SAMPLES AND GRAPHIC LOG	MATERIALS DESCRIPTION
				ASPHALT (4-inches)
	5	14 14 14		WELL-GRADED SAND with Gravel (SW) - Brown, moist, fine-to medium-grained sand, little fine to coarse gravel to 3-inch diameter, wood debris, (FILL, no hydrocarbon odor). Hand dug to 4 feet below land surface (bls). As above, grey, medium-dense, (moderate hydrocarbon odor, PID = 5 ppm).
	10	70 70		SILTY SAND with Gravel (SM) - Light brown, moist, very dense, (PID = 1 ppm). Collected sample for grain-size analysis at 11 feet bls.
	15	65 90		No sample recovery due to large gravels.
	20	200/6 55 74 100		SILT with Sand and Gravel (ML) - Grey, moist, hard, silt, little fine rounded gravel, little fine-grained sand, (slight hydrocarbon odor, PID = 110 ppm). Collected biotreatability sample at 17 feet bls. Ground-water encountered at 18 feet bls.
	25			WELL-GRADED SAND with Gravel (SW) - Grey to brown wet, very dense, fine- to medium-grained sand, little fine gravel, (strong hydrocarbon odor). Collected sample for biotreatability analysis at 20 feet bls.
	30			Borehole terminated at 21.5 feet bls. Ground water encountered at 18 feet bls during drilling.
	35			Blow counts taken using a 2.5-inch diameter split-spoon sampler driven with a 140-pound hammer falling 30 inches. Blow counts are recorded for evaluating relative soil density only and are not appropriate for construction or structural design purposes.

Appendix C – RI Laboratory Analytical Reports – Soil



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Monday, June 9, 2025

Don Wyll

Antea Group

205 SE Spokane Street, Suite 300

Portland, OR 97202

RE: A5E1159 - WA-980 Seattle - BP Site 0980

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A5E1159, which was received by the laboratory on 5/9/2025 at 11:08:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: mpoquiz@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information			
<u>Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.</u>			
(See Cooler Receipt Form for details)			
Cooler #1	1.1	degC	Cooler #2 1.6 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.

All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.



Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist

**ANALYTICAL REPORT****Apex Laboratories, LLC**6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323

ORELAP ID: OR100062

Antea Group205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyl****Report ID:****A5E1159 - 06 09 25 1358****ANALYTICAL REPORT FOR SAMPLES****SAMPLE INFORMATION**

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-9-5-20250507	A5E1159-01	Soil	05/07/25 08:40	05/09/25 11:08
SB-13-10-10.5-20250507	A5E1159-02	Soil	05/07/25 09:00	05/09/25 11:08
SB-13-15-15.5-20250507	A5E1159-03	Soil	05/07/25 09:10	05/09/25 11:08
SB-13-20-20.5-20250507	A5E1159-04	Soil	05/07/25 09:20	05/09/25 11:08
SB-9-8-20250507	A5E1159-05	Soil	05/07/25 09:30	05/09/25 11:08
SB-13-25-25.5-20250507	A5E1159-06	Soil	05/07/25 09:40	05/09/25 11:08
SB-11-6.5-7-20250507	A5E1159-08	Soil	05/07/25 10:50	05/09/25 11:08
SB-11-15-15.5-20250507	A5E1159-09	Soil	05/07/25 11:10	05/09/25 11:08
SB-11-20-20.5-20250507	A5E1159-10	Soil	05/07/25 11:25	05/09/25 11:08
SB-12-6.5-7.0-20250507	A5E1159-12	Soil	05/07/25 13:20	05/09/25 11:08
SB-12-15.0-15.5-20250507	A5E1159-14	Soil	05/07/25 13:35	05/09/25 11:08
SB-12-20.0-20.5-20250507	A5E1159-15	Soil	05/07/25 13:45	05/09/25 11:08
SB-14-10.0-10.5-20250507	A5E1159-19	Soil	05/07/25 14:55	05/09/25 11:08
SB-14-15.0-15.5-20250507	A5E1159-20	Soil	05/07/25 15:00	05/09/25 11:08
SB-14-20.0-20.5-20250507	A5E1159-21	Soil	05/07/25 15:10	05/09/25 11:08

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist

Page 2 of 37

**ANALYTICAL REPORT****Apex Laboratories, LLC**6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323

ORELAP ID: OR100062

Antea Group205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:****A5E1159 - 06 09 25 1358****ANALYTICAL SAMPLE RESULTS****Diesel and/or Oil Hydrocarbons by NWTPH-Dx**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-9-5-20250507 (A5E1159-01RE1)				Matrix: Soil		Batch: 25E0421		
Diesel	28.6	---	19.2	mg/kg dry	1	05/14/25 08:17	NWTPH-Dx	Q-42
Oil	52.8	---	38.3	mg/kg dry	1	05/14/25 08:17	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 78 %		Limits: 50-150 %	1	05/14/25 08:17	NWTPH-Dx	
SB-13-10-10.5-20250507 (A5E1159-02RE1)				Matrix: Soil		Batch: 25E0421		
Diesel	30.9	---	19.1	mg/kg dry	1	05/14/25 09:41	NWTPH-Dx	
Oil	103	---	38.1	mg/kg dry	1	05/14/25 09:41	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 81 %		Limits: 50-150 %	1	05/14/25 09:41	NWTPH-Dx	
SB-13-15-15.5-20250507 (A5E1159-03RE1)				Matrix: Soil		Batch: 25E0421		
Diesel	ND	---	18.8	mg/kg dry	1	05/14/25 08:38	NWTPH-Dx	
Oil	60.7	---	37.7	mg/kg dry	1	05/14/25 08:38	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 85 %		Limits: 50-150 %	1	05/14/25 08:38	NWTPH-Dx	
SB-13-20-20.5-20250507 (A5E1159-04RE1)				Matrix: Soil		Batch: 25E0421		
Diesel	ND	---	19.0	mg/kg dry	1	05/14/25 09:20	NWTPH-Dx	
Oil	57.8	---	38.1	mg/kg dry	1	05/14/25 09:20	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 83 %		Limits: 50-150 %	1	05/14/25 09:20	NWTPH-Dx	
SB-9-8-20250507 (A5E1159-05RE1)				Matrix: Soil		Batch: 25E0421		
Diesel	ND	---	19.1	mg/kg dry	1	05/14/25 10:03	NWTPH-Dx	
Oil	46.5	---	38.1	mg/kg dry	1	05/14/25 10:03	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 79 %		Limits: 50-150 %	1	05/14/25 10:03	NWTPH-Dx	
SB-13-25-25.5-20250507 (A5E1159-06)				Matrix: Soil		Batch: 25E0421		
Diesel	ND	---	19.7	mg/kg dry	1	05/13/25 19:29	NWTPH-Dx	
Oil	ND	---	39.4	mg/kg dry	1	05/13/25 19:29	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 83 %		Limits: 50-150 %	1	05/13/25 19:29	NWTPH-Dx	
SB-11-6.5-7-20250507 (A5E1159-08RE1)				Matrix: Soil		Batch: 25E0421		
Diesel	ND	---	19.5	mg/kg dry	1	05/14/25 10:45	NWTPH-Dx	
Oil	52.1	---	39.1	mg/kg dry	1	05/14/25 10:45	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 84 %		Limits: 50-150 %	1	05/14/25 10:45	NWTPH-Dx	

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300

Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:****A5E1159 - 06 09 25 1358**

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-11-15.15.5-20250507 (A5E1159-09)				Matrix: Soil		Batch: 25E0421		
Diesel	ND	---	19.4	mg/kg dry	1	05/13/25 19:50	NWTPH-Dx	
Oil	ND	---	38.7	mg/kg dry	1	05/13/25 19:50	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery:	86 %	Limits:	50-150 %	1	05/13/25 19:50	NWTPH-Dx
SB-11-20.20.5-20250507 (A5E1159-10)				Matrix: Soil		Batch: 25E0421		
Diesel	ND	---	18.5	mg/kg dry	1	05/13/25 20:11	NWTPH-Dx	
Oil	ND	---	37.0	mg/kg dry	1	05/13/25 20:11	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery:	76 %	Limits:	50-150 %	1	05/13/25 20:11	NWTPH-Dx
SB-12-6.5-7.0-20250507 (A5E1159-12)				Matrix: Soil		Batch: 25E0421		
Diesel	259	---	195	mg/kg dry	10	05/13/25 22:17	NWTPH-Dx	
Oil	544	---	391	mg/kg dry	10	05/13/25 22:17	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery:	85 %	Limits:	50-150 %	10	05/13/25 22:17	NWTPH-Dx S-05
SB-12-15.0-15.5-20250507 (A5E1159-14)				Matrix: Soil		Batch: 25E0421		
Diesel	ND	---	18.9	mg/kg dry	1	05/13/25 20:32	NWTPH-Dx	
Oil	ND	---	37.7	mg/kg dry	1	05/13/25 20:32	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery:	77 %	Limits:	50-150 %	1	05/13/25 20:32	NWTPH-Dx
SB-12-20.0-20.5-20250507 (A5E1159-15)				Matrix: Soil		Batch: 25E0421		
Diesel	ND	---	21.2	mg/kg dry	1	05/13/25 20:53	NWTPH-Dx	
Oil	ND	---	42.5	mg/kg dry	1	05/13/25 20:53	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery:	77 %	Limits:	50-150 %	1	05/13/25 20:53	NWTPH-Dx
SB-14-15.0-15.5-20250507 (A5E1159-20)				Matrix: Soil		Batch: 25E0421		
Diesel	ND	---	20.5	mg/kg dry	1	05/13/25 21:14	NWTPH-Dx	
Oil	ND	---	41.1	mg/kg dry	1	05/13/25 21:14	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery:	82 %	Limits:	50-150 %	1	05/13/25 21:14	NWTPH-Dx
SB-14-20.0-20.5-20250507 (A5E1159-21RE1)				Matrix: Soil		Batch: 25E0421		
Diesel	51.0	---	20.4	mg/kg dry	1	05/14/25 10:24	NWTPH-Dx	
Oil	ND	---	40.7	mg/kg dry	1	05/14/25 10:24	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery:	89 %	Limits:	50-150 %	1	05/14/25 10:24	NWTPH-Dx

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323

ORELAP ID: OR100062

Antea Group205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:****A5E1159 - 06 09 25 1358**

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-9-5-20250507 (A5E1159-01)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	104	---	5.48	mg/kg dry	50	05/12/25 15:57	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	106 %	Limits: 50-150 %	1	05/12/25 15:57	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			95 %	50-150 %	1	05/12/25 15:57	NWTPH-Gx (MS)	
SB-13-10-10.5-20250507 (A5E1159-02RE1)				Matrix: Soil		Batch: 25E0397		
Gasoline Range Organics	5.97	---	5.19	mg/kg dry	50	05/13/25 12:14	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	105 %	Limits: 50-150 %	1	05/13/25 12:14	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			100 %	50-150 %	1	05/13/25 12:14	NWTPH-Gx (MS)	
SB-13-15-15.5-20250507 (A5E1159-03)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	ND	---	4.56	mg/kg dry	50	05/12/25 16:51	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	104 %	Limits: 50-150 %	1	05/12/25 16:51	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			95 %	50-150 %	1	05/12/25 16:51	NWTPH-Gx (MS)	
SB-13-20-20.5-20250507 (A5E1159-04)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	ND	---	5.35	mg/kg dry	50	05/12/25 17:19	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	105 %	Limits: 50-150 %	1	05/12/25 17:19	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			95 %	50-150 %	1	05/12/25 17:19	NWTPH-Gx (MS)	
SB-9-8-20250507 (A5E1159-05)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	10.1	---	5.01	mg/kg dry	50	05/12/25 17:46	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	107 %	Limits: 50-150 %	1	05/12/25 17:46	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			97 %	50-150 %	1	05/12/25 17:46	NWTPH-Gx (MS)	
SB-13-25-25.5-20250507 (A5E1159-06)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	ND	---	5.92	mg/kg dry	50	05/12/25 18:13	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	104 %	Limits: 50-150 %	1	05/12/25 18:13	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			97 %	50-150 %	1	05/12/25 18:13	NWTPH-Gx (MS)	
SB-11-6.5-7-20250507 (A5E1159-08)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	9.66	---	5.36	mg/kg dry	50	05/12/25 18:40	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	101 %	Limits: 50-150 %	1	05/12/25 18:40	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			96 %	50-150 %	1	05/12/25 18:40	NWTPH-Gx (MS)	

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323

ORELAP ID: OR100062

Antea Group205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:****A5E1159 - 06 09 25 1358**

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-11-15.5-20250507 (A5E1159-09)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	ND	---	4.76	mg/kg dry	50	05/12/25 19:08	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	104 %	Limits: 50-150 %	1	05/12/25 19:08	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			98 %	50-150 %	1	05/12/25 19:08	NWTPH-Gx (MS)	
SB-11-20.5-20250507 (A5E1159-10)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	ND	---	4.27	mg/kg dry	50	05/12/25 19:35	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	102 %	Limits: 50-150 %	1	05/12/25 19:35	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			96 %	50-150 %	1	05/12/25 19:35	NWTPH-Gx (MS)	
SB-12-6.5-7.0-20250507 (A5E1159-12)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	20.3	---	6.05	mg/kg dry	50	05/12/25 20:03	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	101 %	Limits: 50-150 %	1	05/12/25 20:03	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			97 %	50-150 %	1	05/12/25 20:03	NWTPH-Gx (MS)	
SB-12-15.0-15.5-20250507 (A5E1159-14)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	ND	---	4.66	mg/kg dry	50	05/12/25 20:30	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	102 %	Limits: 50-150 %	1	05/12/25 20:30	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			96 %	50-150 %	1	05/12/25 20:30	NWTPH-Gx (MS)	
SB-12-20.0-20.5-20250507 (A5E1159-15)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	ND	---	5.84	mg/kg dry	50	05/12/25 20:57	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	100 %	Limits: 50-150 %	1	05/12/25 20:57	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			96 %	50-150 %	1	05/12/25 20:57	NWTPH-Gx (MS)	
SB-14-10.0-10.5-20250507 (A5E1159-19)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	5.54	---	3.88	mg/kg wet	50	05/12/25 21:25	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	101 %	Limits: 50-150 %	1	05/12/25 21:25	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			97 %	50-150 %	1	05/12/25 21:25	NWTPH-Gx (MS)	
SB-14-15.0-15.5-20250507 (A5E1159-20)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	13.1	---	5.93	mg/kg dry	50	05/12/25 21:52	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	103 %	Limits: 50-150 %	1	05/12/25 21:52	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			98 %	50-150 %	1	05/12/25 21:52	NWTPH-Gx (MS)	

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323

ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300
Portland, OR 97202

Project: **WA-980 Seattle**

Project Number: **BP Site 0980**

Project Manager: **Don Wyll**

Report ID:

A5E1159 - 06 09 25 1358

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-14-20.0-20.5-20250507 (A5E1159-21)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	ND	---	6.19	mg/kg dry	50	05/12/25 22:19	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	104 %	Limits: 50-150 %	1	05/12/25 22:19	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			97 %	50-150 %	1	05/12/25 22:19	NWTPH-Gx (MS)	

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Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:****A5E1159 - 06 09 25 1358**

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes	
SB-9-5-20250507 (A5E1159-01)				Matrix: Soil		Batch: 25E0344			
Benzene	ND	---	0.0110	mg/kg dry	50	05/12/25 15:57	5035A/8260D		
Toluene	ND	---	0.0548	mg/kg dry	50	05/12/25 15:57	5035A/8260D		
Ethylbenzene	ND	---	0.0274	mg/kg dry	50	05/12/25 15:57	5035A/8260D		
Xylenes, total	0.133	---	0.0823	mg/kg dry	50	05/12/25 15:57	5035A/8260D		
Methyl tert-butyl ether (MTBE)	ND	---	0.0548	mg/kg dry	50	05/12/25 15:57	5035A/8260D		
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:		99 %	Limits:	80-120 %	1	05/12/25 15:57	5035A/8260D
Toluene-d8 (Surr)				95 %		80-120 %	1	05/12/25 15:57	5035A/8260D
4-Bromofluorobenzene (Surr)				99 %		79-120 %	1	05/12/25 15:57	5035A/8260D
SB-13-10-10.5-20250507 (A5E1159-02)				Matrix: Soil		Batch: 25E0344			
Benzene	ND	---	0.0104	mg/kg dry	50	05/12/25 16:24	5035A/8260D		
Toluene	ND	---	0.0519	mg/kg dry	50	05/12/25 16:24	5035A/8260D		
Ethylbenzene	ND	---	0.0259	mg/kg dry	50	05/12/25 16:24	5035A/8260D		
Xylenes, total	ND	---	0.0778	mg/kg dry	50	05/12/25 16:24	5035A/8260D		
Methyl tert-butyl ether (MTBE)	ND	---	0.0519	mg/kg dry	50	05/12/25 16:24	5035A/8260D		
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:		100 %	Limits:	80-120 %	1	05/12/25 16:24	5035A/8260D
Toluene-d8 (Surr)				95 %		80-120 %	1	05/12/25 16:24	5035A/8260D
4-Bromofluorobenzene (Surr)				99 %		79-120 %	1	05/12/25 16:24	5035A/8260D
SB-13-15-15.5-20250507 (A5E1159-03)				Matrix: Soil		Batch: 25E0344			
Benzene	ND	---	0.00913	mg/kg dry	50	05/12/25 16:51	5035A/8260D		
Toluene	ND	---	0.0456	mg/kg dry	50	05/12/25 16:51	5035A/8260D		
Ethylbenzene	ND	---	0.0228	mg/kg dry	50	05/12/25 16:51	5035A/8260D		
Xylenes, total	ND	---	0.0684	mg/kg dry	50	05/12/25 16:51	5035A/8260D		
Methyl tert-butyl ether (MTBE)	ND	---	0.0456	mg/kg dry	50	05/12/25 16:51	5035A/8260D		
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:		99 %	Limits:	80-120 %	1	05/12/25 16:51	5035A/8260D
Toluene-d8 (Surr)				96 %		80-120 %	1	05/12/25 16:51	5035A/8260D
4-Bromofluorobenzene (Surr)				98 %		79-120 %	1	05/12/25 16:51	5035A/8260D
SB-13-20-20.5-20250507 (A5E1159-04)				Matrix: Soil		Batch: 25E0344			
Benzene	ND	---	0.0107	mg/kg dry	50	05/12/25 17:19	5035A/8260D		
Toluene	ND	---	0.0535	mg/kg dry	50	05/12/25 17:19	5035A/8260D		
Ethylbenzene	ND	---	0.0267	mg/kg dry	50	05/12/25 17:19	5035A/8260D		
Xylenes, total	ND	---	0.0802	mg/kg dry	50	05/12/25 17:19	5035A/8260D		
Methyl tert-butyl ether (MTBE)	ND	---	0.0535	mg/kg dry	50	05/12/25 17:19	5035A/8260D		
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:		99 %	Limits:	80-120 %	1	05/12/25 17:19	5035A/8260D

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ANALYTICAL REPORT

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ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300

Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:****A5E1159 - 06 09 25 1358**

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-13-20-20.5-20250507 (A5E1159-04)				Matrix: Soil		Batch: 25E0344		
Toluene-d8 (Surr)			96 %	80-120 %	1	05/12/25 17:19	5035A/8260D	
4-Bromofluorobenzene (Surr)			98 %	79-120 %	1	05/12/25 17:19	5035A/8260D	
SB-9-8-20250507 (A5E1159-05)				Matrix: Soil		Batch: 25E0344		
Benzene	ND	---	0.0100	mg/kg dry	50	05/12/25 17:46	5035A/8260D	
Toluene	ND	---	0.0501	mg/kg dry	50	05/12/25 17:46	5035A/8260D	
Ethylbenzene	ND	---	0.0251	mg/kg dry	50	05/12/25 17:46	5035A/8260D	
Xylenes, total	ND	---	0.0752	mg/kg dry	50	05/12/25 17:46	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0501	mg/kg dry	50	05/12/25 17:46	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:	100 %	Limits: 80-120 %	1	05/12/25 17:46	5035A/8260D	
Toluene-d8 (Surr)			96 %	80-120 %	1	05/12/25 17:46	5035A/8260D	
4-Bromofluorobenzene (Surr)			97 %	79-120 %	1	05/12/25 17:46	5035A/8260D	
SB-13-25-25.5-20250507 (A5E1159-06)				Matrix: Soil		Batch: 25E0344		
Benzene	ND	---	0.0118	mg/kg dry	50	05/12/25 18:13	5035A/8260D	
Toluene	ND	---	0.0592	mg/kg dry	50	05/12/25 18:13	5035A/8260D	
Ethylbenzene	ND	---	0.0296	mg/kg dry	50	05/12/25 18:13	5035A/8260D	
Xylenes, total	ND	---	0.0888	mg/kg dry	50	05/12/25 18:13	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0592	mg/kg dry	50	05/12/25 18:13	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:	100 %	Limits: 80-120 %	1	05/12/25 18:13	5035A/8260D	
Toluene-d8 (Surr)			96 %	80-120 %	1	05/12/25 18:13	5035A/8260D	
4-Bromofluorobenzene (Surr)			98 %	79-120 %	1	05/12/25 18:13	5035A/8260D	
SB-11-6.5-7-20250507 (A5E1159-08)				Matrix: Soil		Batch: 25E0344		
Benzene	ND	---	0.0107	mg/kg dry	50	05/12/25 18:40	5035A/8260D	
Toluene	ND	---	0.0536	mg/kg dry	50	05/12/25 18:40	5035A/8260D	
Ethylbenzene	ND	---	0.0268	mg/kg dry	50	05/12/25 18:40	5035A/8260D	
Xylenes, total	ND	---	0.0804	mg/kg dry	50	05/12/25 18:40	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0536	mg/kg dry	50	05/12/25 18:40	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:	100 %	Limits: 80-120 %	1	05/12/25 18:40	5035A/8260D	
Toluene-d8 (Surr)			97 %	80-120 %	1	05/12/25 18:40	5035A/8260D	
4-Bromofluorobenzene (Surr)			97 %	79-120 %	1	05/12/25 18:40	5035A/8260D	
SB-11-15-15.5-20250507 (A5E1159-09)				Matrix: Soil		Batch: 25E0344		
Benzene	ND	---	0.00953	mg/kg dry	50	05/12/25 19:08	5035A/8260D	
Toluene	ND	---	0.0476	mg/kg dry	50	05/12/25 19:08	5035A/8260D	

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323

ORELAP ID: OR100062

Antea Group205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:****A5E1159 - 06 09 25 1358**

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-11-15-15.5-20250507 (A5E1159-09)				Matrix: Soil		Batch: 25E0344		
Ethylbenzene	ND	---	0.0238	mg/kg dry	50	05/12/25 19:08	5035A/8260D	
Xylenes, total	ND	---	0.0714	mg/kg dry	50	05/12/25 19:08	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0476	mg/kg dry	50	05/12/25 19:08	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	100 %	<i>Limits:</i>	80-120 %	1	05/12/25 19:08	5035A/8260D
<i>Toluene-d8 (Surr)</i>			96 %		80-120 %	1	05/12/25 19:08	5035A/8260D
<i>4-Bromofluorobenzene (Surr)</i>			96 %		79-120 %	1	05/12/25 19:08	5035A/8260D
SB-11-20-20.5-20250507 (A5E1159-10)				Matrix: Soil		Batch: 25E0344		
Benzene	ND	---	0.00854	mg/kg dry	50	05/12/25 19:35	5035A/8260D	
Toluene	ND	---	0.0427	mg/kg dry	50	05/12/25 19:35	5035A/8260D	
Ethylbenzene	ND	---	0.0213	mg/kg dry	50	05/12/25 19:35	5035A/8260D	
Xylenes, total	ND	---	0.0640	mg/kg dry	50	05/12/25 19:35	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0427	mg/kg dry	50	05/12/25 19:35	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	100 %	<i>Limits:</i>	80-120 %	1	05/12/25 19:35	5035A/8260D
<i>Toluene-d8 (Surr)</i>			96 %		80-120 %	1	05/12/25 19:35	5035A/8260D
<i>4-Bromofluorobenzene (Surr)</i>			97 %		79-120 %	1	05/12/25 19:35	5035A/8260D
SB-12-6.5-7.0-20250507 (A5E1159-12)				Matrix: Soil		Batch: 25E0344		
Benzene	ND	---	0.0121	mg/kg dry	50	05/12/25 20:03	5035A/8260D	
Toluene	ND	---	0.0605	mg/kg dry	50	05/12/25 20:03	5035A/8260D	
Ethylbenzene	ND	---	0.0303	mg/kg dry	50	05/12/25 20:03	5035A/8260D	
Xylenes, total	ND	---	0.0908	mg/kg dry	50	05/12/25 20:03	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0605	mg/kg dry	50	05/12/25 20:03	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	100 %	<i>Limits:</i>	80-120 %	1	05/12/25 20:03	5035A/8260D
<i>Toluene-d8 (Surr)</i>			97 %		80-120 %	1	05/12/25 20:03	5035A/8260D
<i>4-Bromofluorobenzene (Surr)</i>			96 %		79-120 %	1	05/12/25 20:03	5035A/8260D
SB-12-15.0-15.5-20250507 (A5E1159-14)				Matrix: Soil		Batch: 25E0344		
Benzene	ND	---	0.00932	mg/kg dry	50	05/12/25 20:30	5035A/8260D	
Toluene	ND	---	0.0466	mg/kg dry	50	05/12/25 20:30	5035A/8260D	
Ethylbenzene	ND	---	0.0233	mg/kg dry	50	05/12/25 20:30	5035A/8260D	
Xylenes, total	ND	---	0.0699	mg/kg dry	50	05/12/25 20:30	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0466	mg/kg dry	50	05/12/25 20:30	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	101 %	<i>Limits:</i>	80-120 %	1	05/12/25 20:30	5035A/8260D
<i>Toluene-d8 (Surr)</i>			96 %		80-120 %	1	05/12/25 20:30	5035A/8260D
<i>4-Bromofluorobenzene (Surr)</i>			97 %		79-120 %	1	05/12/25 20:30	5035A/8260D

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ORELAP ID: OR100062

Antea Group205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyl****Report ID:****A5E1159 - 06 09 25 1358**

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-12-15.0-15.5-20250507 (A5E1159-14)				Matrix: Soil		Batch: 25E0344		
Benzene	ND	---	0.0117	mg/kg dry	50	05/12/25 20:57	5035A/8260D	
Toluene	ND	---	0.0584	mg/kg dry	50	05/12/25 20:57	5035A/8260D	
Ethylbenzene	ND	---	0.0292	mg/kg dry	50	05/12/25 20:57	5035A/8260D	
Xylenes, total	ND	---	0.0876	mg/kg dry	50	05/12/25 20:57	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0584	mg/kg dry	50	05/12/25 20:57	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	101 %	<i>Limits:</i>	80-120 %	1	05/12/25 20:57	5035A/8260D
<i>Toluene-d8 (Surr)</i>			96 %		80-120 %	1	05/12/25 20:57	5035A/8260D
<i>4-Bromofluorobenzene (Surr)</i>			97 %		79-120 %	1	05/12/25 20:57	5035A/8260D
SB-14-10.0-10.5-20250507 (A5E1159-19)				Matrix: Soil		Batch: 25E0344		
Benzene	ND	---	0.00775	mg/kg wet	50	05/12/25 21:25	5035A/8260D	
Toluene	ND	---	0.0388	mg/kg wet	50	05/12/25 21:25	5035A/8260D	
Ethylbenzene	ND	---	0.0194	mg/kg wet	50	05/12/25 21:25	5035A/8260D	
Xylenes, total	ND	---	0.0581	mg/kg wet	50	05/12/25 21:25	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0388	mg/kg wet	50	05/12/25 21:25	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	100 %	<i>Limits:</i>	80-120 %	1	05/12/25 21:25	5035A/8260D
<i>Toluene-d8 (Surr)</i>			97 %		80-120 %	1	05/12/25 21:25	5035A/8260D
<i>4-Bromofluorobenzene (Surr)</i>			96 %		79-120 %	1	05/12/25 21:25	5035A/8260D
SB-14-15.0-15.5-20250507 (A5E1159-20)				Matrix: Soil		Batch: 25E0344		
Benzene	ND	---	0.0119	mg/kg dry	50	05/12/25 21:52	5035A/8260D	
Toluene	ND	---	0.0593	mg/kg dry	50	05/12/25 21:52	5035A/8260D	
Ethylbenzene	ND	---	0.0297	mg/kg dry	50	05/12/25 21:52	5035A/8260D	
Xylenes, total	ND	---	0.0890	mg/kg dry	50	05/12/25 21:52	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0593	mg/kg dry	50	05/12/25 21:52	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	100 %	<i>Limits:</i>	80-120 %	1	05/12/25 21:52	5035A/8260D
<i>Toluene-d8 (Surr)</i>			97 %		80-120 %	1	05/12/25 21:52	5035A/8260D
<i>4-Bromofluorobenzene (Surr)</i>			96 %		79-120 %	1	05/12/25 21:52	5035A/8260D
SB-14-20.0-20.5-20250507 (A5E1159-21)				Matrix: Soil		Batch: 25E0344		
Benzene	ND	---	0.0124	mg/kg dry	50	05/12/25 22:19	5035A/8260D	
Toluene	ND	---	0.0619	mg/kg dry	50	05/12/25 22:19	5035A/8260D	
Ethylbenzene	ND	---	0.0309	mg/kg dry	50	05/12/25 22:19	5035A/8260D	
Xylenes, total	ND	---	0.0928	mg/kg dry	50	05/12/25 22:19	5035A/8260D	

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503-718-2323

ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300
Portland, OR 97202

Project: WA-980 Seattle

Project Number: **BP Site 0980**

Project Manager: **Don Wyll**

Report ID:

A5E1159 - 06 09 25 1358

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-14-20.0-20.5-20250507 (A5E1159-21)				Matrix: Soil		Batch: 25E0344		
Methyl tert-butyl ether (MTBE)	ND	---	0.0619	mg/kg dry	50	05/12/25 22:19	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:	101 %	Limits: 80-120 %	1	05/12/25 22:19	5035A/8260D	
Toluene-d8 (Surr)			96 %	80-120 %	1	05/12/25 22:19	5035A/8260D	
4-Bromofluorobenzene (Surr)			97 %	79-120 %	1	05/12/25 22:19	5035A/8260D	

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Michele Poquiz For Kurt Johnson, Senior Chemist



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323

ORELAP ID: OR100062

Antea Group205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyl****Report ID:****A5E1159 - 06 09 25 1358**

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-9-5-20250507 (A5E1159-01)				Matrix: Soil		Batch: 25E0421		
1-Methylnaphthalene	0.287	---	0.0479	mg/kg dry	10	05/14/25 10:44	EPA 8270E (HV)	Q-42
2-Methylnaphthalene	0.681	---	0.0479	mg/kg dry	10	05/14/25 10:44	EPA 8270E (HV)	Q-42
Naphthalene	0.521	---	0.0479	mg/kg dry	10	05/14/25 10:44	EPA 8270E (HV)	Q-42
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery:	94 %	Limits: 44-120 %	10	05/14/25 10:44	EPA 8270E (HV)	
p-Terphenyl-d14 (Surr)			93 %	54-127 %	10	05/14/25 10:44	EPA 8270E (HV)	
SB-13-10-10.5-20250507 (A5E1159-02RE1)				Matrix: Soil		Batch: 25E0421		R-04
1-Methylnaphthalene	ND	---	0.0191	mg/kg dry	4	05/14/25 20:32	EPA 8270E (HV)	
2-Methylnaphthalene	ND	---	0.0191	mg/kg dry	4	05/14/25 20:32	EPA 8270E (HV)	
Naphthalene	ND	---	0.0191	mg/kg dry	4	05/14/25 20:32	EPA 8270E (HV)	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery:	89 %	Limits: 44-120 %	4	05/14/25 20:32	EPA 8270E (HV)	
p-Terphenyl-d14 (Surr)			87 %	54-127 %	4	05/14/25 20:32	EPA 8270E (HV)	
SB-13-15-15.5-20250507 (A5E1159-03)				Matrix: Soil		Batch: 25E0421		R-04
1-Methylnaphthalene	ND	---	0.0235	mg/kg dry	5	05/14/25 15:29	EPA 8270E (HV)	
2-Methylnaphthalene	ND	---	0.0235	mg/kg dry	5	05/14/25 15:29	EPA 8270E (HV)	
Naphthalene	ND	---	0.0235	mg/kg dry	5	05/14/25 15:29	EPA 8270E (HV)	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery:	97 %	Limits: 44-120 %	5	05/14/25 15:29	EPA 8270E (HV)	
p-Terphenyl-d14 (Surr)			99 %	54-127 %	5	05/14/25 15:29	EPA 8270E (HV)	
SB-13-20-20.5-20250507 (A5E1159-04)				Matrix: Soil		Batch: 25E0421		R-04
1-Methylnaphthalene	ND	---	0.0238	mg/kg dry	5	05/14/25 15:59	EPA 8270E (HV)	
2-Methylnaphthalene	ND	---	0.0238	mg/kg dry	5	05/14/25 15:59	EPA 8270E (HV)	
Naphthalene	ND	---	0.0238	mg/kg dry	5	05/14/25 15:59	EPA 8270E (HV)	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery:	94 %	Limits: 44-120 %	5	05/14/25 15:59	EPA 8270E (HV)	
p-Terphenyl-d14 (Surr)			97 %	54-127 %	5	05/14/25 15:59	EPA 8270E (HV)	
SB-9-8-20250507 (A5E1159-05)				Matrix: Soil		Batch: 25E0421		
1-Methylnaphthalene	ND	---	0.0238	mg/kg dry	5	05/14/25 16:30	EPA 8270E (HV)	
2-Methylnaphthalene	0.0382	---	0.0238	mg/kg dry	5	05/14/25 16:30	EPA 8270E (HV)	
Naphthalene	0.0439	---	0.0238	mg/kg dry	5	05/14/25 16:30	EPA 8270E (HV)	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery:	93 %	Limits: 44-120 %	5	05/14/25 16:30	EPA 8270E (HV)	
p-Terphenyl-d14 (Surr)			91 %	54-127 %	5	05/14/25 16:30	EPA 8270E (HV)	
SB-13-25-25.5-20250507 (A5E1159-06)				Matrix: Soil		Batch: 25E0421		

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323

ORELAP ID: OR100062

Antea Group205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyl****Report ID:****A5E1159 - 06 09 25 1358**

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-13-25-25.5-20250507 (A5E1159-06)				Matrix: Soil		Batch: 25E0421		
1-Methylnaphthalene	ND	---	0.00492	mg/kg dry	1	05/14/25 18:00	EPA 8270E (HV)	
2-Methylnaphthalene	ND	---	0.00492	mg/kg dry	1	05/14/25 18:00	EPA 8270E (HV)	
Naphthalene	ND	---	0.00492	mg/kg dry	1	05/14/25 18:00	EPA 8270E (HV)	
<i>Surrogate: 2-Fluorobiphenyl (Surr)</i>		<i>Recovery:</i>	<i>95 %</i>	<i>Limits: 44-120 %</i>	<i>1</i>	<i>05/14/25 18:00</i>	<i>EPA 8270E (HV)</i>	
<i>p-Terphenyl-d14 (Surr)</i>			<i>98 %</i>	<i>54-127 %</i>	<i>1</i>	<i>05/14/25 18:00</i>	<i>EPA 8270E (HV)</i>	
SB-11-6.5-7-20250507 (A5E1159-08RE1)				Matrix: Soil		Batch: 25E0421		R-04
1-Methylnaphthalene	ND	---	0.0195	mg/kg dry	4	05/15/25 18:49	EPA 8270E (HV)	
2-Methylnaphthalene	ND	---	0.0195	mg/kg dry	4	05/15/25 18:49	EPA 8270E (HV)	
Naphthalene	ND	---	0.0195	mg/kg dry	4	05/15/25 18:49	EPA 8270E (HV)	
<i>Surrogate: 2-Fluorobiphenyl (Surr)</i>		<i>Recovery:</i>	<i>71 %</i>	<i>Limits: 44-120 %</i>	<i>4</i>	<i>05/15/25 18:49</i>	<i>EPA 8270E (HV)</i>	
<i>p-Terphenyl-d14 (Surr)</i>			<i>92 %</i>	<i>54-127 %</i>	<i>4</i>	<i>05/15/25 18:49</i>	<i>EPA 8270E (HV)</i>	
SB-11-15-15.5-20250507 (A5E1159-09)				Matrix: Soil		Batch: 25E0421		
1-Methylnaphthalene	ND	---	0.00484	mg/kg dry	1	05/14/25 18:31	EPA 8270E (HV)	
2-Methylnaphthalene	ND	---	0.00484	mg/kg dry	1	05/14/25 18:31	EPA 8270E (HV)	
Naphthalene	ND	---	0.00484	mg/kg dry	1	05/14/25 18:31	EPA 8270E (HV)	
<i>Surrogate: 2-Fluorobiphenyl (Surr)</i>		<i>Recovery:</i>	<i>95 %</i>	<i>Limits: 44-120 %</i>	<i>1</i>	<i>05/14/25 18:31</i>	<i>EPA 8270E (HV)</i>	
<i>p-Terphenyl-d14 (Surr)</i>			<i>97 %</i>	<i>54-127 %</i>	<i>1</i>	<i>05/14/25 18:31</i>	<i>EPA 8270E (HV)</i>	
SB-11-20-20.5-20250507 (A5E1159-10)				Matrix: Soil		Batch: 25E0421		
1-Methylnaphthalene	ND	---	0.00462	mg/kg dry	1	05/14/25 19:01	EPA 8270E (HV)	
2-Methylnaphthalene	ND	---	0.00462	mg/kg dry	1	05/14/25 19:01	EPA 8270E (HV)	
Naphthalene	ND	---	0.00462	mg/kg dry	1	05/14/25 19:01	EPA 8270E (HV)	
<i>Surrogate: 2-Fluorobiphenyl (Surr)</i>		<i>Recovery:</i>	<i>89 %</i>	<i>Limits: 44-120 %</i>	<i>1</i>	<i>05/14/25 19:01</i>	<i>EPA 8270E (HV)</i>	
<i>p-Terphenyl-d14 (Surr)</i>			<i>89 %</i>	<i>54-127 %</i>	<i>1</i>	<i>05/14/25 19:01</i>	<i>EPA 8270E (HV)</i>	
SB-12-6.5-7.0-20250507 (A5E1159-12RE1)				Matrix: Soil		Batch: 25E0421		
1-Methylnaphthalene	ND	---	0.0976	mg/kg dry	20	05/14/25 20:01	EPA 8270E (HV)	
2-Methylnaphthalene	0.139	---	0.0976	mg/kg dry	20	05/14/25 20:01	EPA 8270E (HV)	
Naphthalene	ND	---	0.0976	mg/kg dry	20	05/14/25 20:01	EPA 8270E (HV)	
<i>Surrogate: 2-Fluorobiphenyl (Surr)</i>		<i>Recovery:</i>	<i>112 %</i>	<i>Limits: 44-120 %</i>	<i>20</i>	<i>05/14/25 20:01</i>	<i>EPA 8270E (HV)</i>	<i>S-05</i>
<i>p-Terphenyl-d14 (Surr)</i>			<i>129 %</i>	<i>54-127 %</i>	<i>20</i>	<i>05/14/25 20:01</i>	<i>EPA 8270E (HV)</i>	<i>S-05</i>
SB-12-15.0-15.5-20250507 (A5E1159-14RE1)				Matrix: Soil		Batch: 25E0421		

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Michele Poquiz For Kurt Johnson, Senior Chemist



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300

Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:****A5E1159 - 06 09 25 1358**

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-12-15.0-15.5-20250507 (A5E1159-14RE1)				Matrix: Soil		Batch: 25E0421		
1-Methylnaphthalene	ND	---	0.00471	mg/kg dry	1	05/15/25 19:20	EPA 8270E (HV)	
2-Methylnaphthalene	ND	---	0.00471	mg/kg dry	1	05/15/25 19:20	EPA 8270E (HV)	
Naphthalene	ND	---	0.00471	mg/kg dry	1	05/15/25 19:20	EPA 8270E (HV)	
<i>Surrogate: 2-Fluorobiphenyl (Surr)</i>		<i>Recovery:</i>	<i>68 %</i>	<i>Limits: 44-120 %</i>	<i>1</i>	<i>05/15/25 19:20</i>	<i>EPA 8270E (HV)</i>	
<i>p-Terphenyl-d14 (Surr)</i>			<i>89 %</i>	<i>54-127 %</i>	<i>1</i>	<i>05/15/25 19:20</i>	<i>EPA 8270E (HV)</i>	
SB-12-20.0-20.5-20250507 (A5E1159-15)				Matrix: Soil		Batch: 25E0421		
1-Methylnaphthalene	ND	---	0.00531	mg/kg dry	1	05/14/25 19:31	EPA 8270E (HV)	
2-Methylnaphthalene	ND	---	0.00531	mg/kg dry	1	05/14/25 19:31	EPA 8270E (HV)	
Naphthalene	0.00673	---	0.00531	mg/kg dry	1	05/14/25 19:31	EPA 8270E (HV)	
<i>Surrogate: 2-Fluorobiphenyl (Surr)</i>		<i>Recovery:</i>	<i>92 %</i>	<i>Limits: 44-120 %</i>	<i>1</i>	<i>05/14/25 19:31</i>	<i>EPA 8270E (HV)</i>	
<i>p-Terphenyl-d14 (Surr)</i>			<i>90 %</i>	<i>54-127 %</i>	<i>1</i>	<i>05/14/25 19:31</i>	<i>EPA 8270E (HV)</i>	
SB-14-15.0-15.5-20250507 (A5E1159-20)				Matrix: Soil		Batch: 25E0421		R-04
1-Methylnaphthalene	ND	---	0.0205	mg/kg dry	4	05/14/25 17:30	EPA 8270E (HV)	
2-Methylnaphthalene	ND	---	0.0205	mg/kg dry	4	05/14/25 17:30	EPA 8270E (HV)	
Naphthalene	ND	---	0.0205	mg/kg dry	4	05/14/25 17:30	EPA 8270E (HV)	
<i>Surrogate: 2-Fluorobiphenyl (Surr)</i>		<i>Recovery:</i>	<i>94 %</i>	<i>Limits: 44-120 %</i>	<i>4</i>	<i>05/14/25 17:30</i>	<i>EPA 8270E (HV)</i>	
<i>p-Terphenyl-d14 (Surr)</i>			<i>93 %</i>	<i>54-127 %</i>	<i>4</i>	<i>05/14/25 17:30</i>	<i>EPA 8270E (HV)</i>	
SB-14-20.0-20.5-20250507 (A5E1159-21RE1)				Matrix: Soil		Batch: 25E0421		
1-Methylnaphthalene	ND	---	0.0204	mg/kg dry	4	05/14/25 12:27	EPA 8270E (HV)	
2-Methylnaphthalene	0.0250	---	0.0204	mg/kg dry	4	05/14/25 12:27	EPA 8270E (HV)	
Naphthalene	ND	---	0.0204	mg/kg dry	4	05/14/25 12:27	EPA 8270E (HV)	
<i>Surrogate: 2-Fluorobiphenyl (Surr)</i>		<i>Recovery:</i>	<i>92 %</i>	<i>Limits: 44-120 %</i>	<i>4</i>	<i>05/14/25 12:27</i>	<i>EPA 8270E (HV)</i>	
<i>p-Terphenyl-d14 (Surr)</i>			<i>97 %</i>	<i>54-127 %</i>	<i>4</i>	<i>05/14/25 12:27</i>	<i>EPA 8270E (HV)</i>	

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Project: WA-980 SeattleProject Number: **BP Site 0980**Project Manager: **Don Wyll**Report ID:

A5E1159 - 06 09 25 1358

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-9-5-20250507 (A5E1159-01)				Matrix: Soil		Batch: 25E0365		
% Solids	91.8	---	1.00	%	1	05/13/25 05:37	EPA 8000D	
SB-13-10-10.5-20250507 (A5E1159-02)				Matrix: Soil		Batch: 25E0365		
% Solids	92.1	---	1.00	%	1	05/13/25 05:37	EPA 8000D	
SB-13-15-15.5-20250507 (A5E1159-03)				Matrix: Soil		Batch: 25E0365		
% Solids	92.8	---	1.00	%	1	05/13/25 05:37	EPA 8000D	
SB-13-20-20.5-20250507 (A5E1159-04)				Matrix: Soil		Batch: 25E0365		
% Solids	91.9	---	1.00	%	1	05/13/25 05:37	EPA 8000D	
SB-9-8-20250507 (A5E1159-05)				Matrix: Soil		Batch: 25E0365		
% Solids	90.7	---	1.00	%	1	05/13/25 05:37	EPA 8000D	
SB-13-25-25.5-20250507 (A5E1159-06)				Matrix: Soil		Batch: 25E0365		
% Solids	92.2	---	1.00	%	1	05/13/25 05:37	EPA 8000D	
SB-11-6.5-7-20250507 (A5E1159-08)				Matrix: Soil		Batch: 25E0365		
% Solids	87.7	---	1.00	%	1	05/13/25 05:37	EPA 8000D	
SB-11-15-15.5-20250507 (A5E1159-09)				Matrix: Soil		Batch: 25E0365		
% Solids	88.8	---	1.00	%	1	05/13/25 05:37	EPA 8000D	
SB-11-20-20.5-20250507 (A5E1159-10)				Matrix: Soil		Batch: 25E0365		
% Solids	90.5	---	1.00	%	1	05/13/25 05:37	EPA 8000D	
SB-12-6.5-7.0-20250507 (A5E1159-12)				Matrix: Soil		Batch: 25E0365		
% Solids	91.7	---	1.00	%	1	05/13/25 05:37	EPA 8000D	
SB-12-15.0-15.5-20250507 (A5E1159-14)				Matrix: Soil		Batch: 25E0365		
% Solids	89.8	---	1.00	%	1	05/13/25 05:37	EPA 8000D	
SB-12-20.0-20.5-20250507 (A5E1159-15)				Matrix: Soil		Batch: 25E0365		
% Solids	84.8	---	1.00	%	1	05/13/25 05:37	EPA 8000D	
SB-14-15.0-15.5-20250507 (A5E1159-20)				Matrix: Soil		Batch: 25E0365		

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Project: **WA-980 Seattle**

Project Number: **BP Site 0980**

Project Manager: **Don Wyl**

Report ID:

A5E1159 - 06 09 25 1358

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-14-15.0-15.5-20250507 (A5E1159-20)				Matrix: Soil		Batch: 25E0365		
% Solids	87.8	---	1.00	%	1	05/13/25 05:37	EPA 8000D	
SB-14-20.0-20.5-20250507 (A5E1159-21)				Matrix: Soil		Batch: 25E0365		
% Solids	84.0	---	1.00	%	1	05/13/25 05:37	EPA 8000D	

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Antea Group
205 SE Spokane Street, Suite 300
Portland, OR 97202Project: WA-980 Seattle
Project Number: **BP Site 0980**
Project Manager: **Don Wyll****Report ID:**
A5E1159 - 06 09 25 1358

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25E0421 - EPA 3546						Soil						
Blank (25E0421-BLK1)		Prepared: 05/13/25 13:33 Analyzed: 05/13/25 19:29										
NWTPH-Dx												
Diesel	ND	---	20.0	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	---	40.0	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 84 %		Limits: 50-150 %		Dilution: 1x						
LCS (25E0421-BS2)		Prepared: 05/13/25 13:33 Analyzed: 05/13/25 19:50										
NWTPH-Dx												
Diesel	106	---	20.0	mg/kg wet	1	125	---	85	38 - 132%	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 92 %		Limits: 50-150 %		Dilution: 1x						
Duplicate (25E0421-DUP3)		Prepared: 05/13/25 13:33 Analyzed: 05/14/25 08:59										
QC Source Sample: SB-9-5-20250507 (A5E1159-01RE1)												
NWTPH-Dx												
Diesel	64.2	---	18.3	mg/kg dry	1	---	28.6	---	---	77	30%	Q-05
Oil	256	---	36.5	mg/kg dry	1	---	52.8	---	---	132	30%	Q-04
Surr: o-Terphenyl (Surr)		Recovery: 84 %		Limits: 50-150 %		Dilution: 1x						
Duplicate (25E0421-DUP4)		Prepared: 05/13/25 13:33 Analyzed: 05/14/25 11:06										
QC Source Sample: SB-14-20.0-20.5-20250507 (A5E1159-21RE1)												
NWTPH-Dx												
Diesel	25.2	---	21.3	mg/kg dry	1	---	51.0	---	---	68	30%	Q-05
Oil	ND	---	42.6	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		Recovery: 91 %		Limits: 50-150 %		Dilution: 1x						

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ANALYTICAL REPORT

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503-718-2323

ORELAP ID: OR100062

Antea Group
205 SE Spokane Street, Suite 300
Portland, OR 97202Project: WA-980 Seattle
Project Number: **BP Site 0980**
Project Manager: **Don Wyll****Report ID:**
A5E1159 - 06 09 25 1358

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25E0344 - EPA 5035A						Soil						
Blank (25E0344-BLK1)		Prepared: 05/12/25 10:00 Analyzed: 05/12/25 12:18										
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	5.00	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 104 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		99 %		50-150 %		"						
LCS (25E0344-BS2)		Prepared: 05/12/25 10:00 Analyzed: 05/12/25 11:50										
NWTPH-Gx (MS)												
Gasoline Range Organics	27.2	---	5.00	mg/kg wet	50	25.0	---	109	80 - 120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 102 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		98 %		50-150 %		"						

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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Michele Poquiz For Kurt Johnson, Senior Chemist



ANALYTICAL REPORT

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300

Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyl****Report ID:**

A5E1159 - 06 09 25 1358

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25E0397 - EPA 5035A						Soil						
Blank (25E0397-BLK1)		Prepared: 05/13/25 09:00 Analyzed: 05/13/25 11:47										
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	5.00	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 99 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		99 %		50-150 %		"						
LCS (25E0397-BS2)		Prepared: 05/13/25 09:00 Analyzed: 05/13/25 11:20										
NWTPH-Gx (MS)												
Gasoline Range Organics	24.7	---	5.00	mg/kg wet	50	25.0	---	99	80 - 120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 99 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		99 %		50-150 %		"						

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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ORELAP ID: OR100062

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205 SE Spokane Street, Suite 300

Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:**

A5E1159 - 06 09 25 1358

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25E0344 - EPA 5035A						Soil						
Blank (25E0344-BLK1)		Prepared: 05/12/25 10:00 Analyzed: 05/12/25 12:18										
5035A/8260D												
Benzene	ND	---	0.0100	mg/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.0250	mg/kg wet	50	---	---	---	---	---	---	
Xylenes, total	ND	---	0.0750	mg/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	---	0.100	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.0250	mg/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 101 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		96 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		96 %		79-120 %		"						
LCS (25E0344-BS1)		Prepared: 05/12/25 10:00 Analyzed: 05/12/25 11:23										
5035A/8260D												
Benzene	1.06	---	0.0100	mg/kg wet	50	1.00	---	106	80 - 120%	---	---	
Toluene	0.978	---	0.0500	mg/kg wet	50	1.00	---	98	80 - 120%	---	---	
Ethylbenzene	1.04	---	0.0250	mg/kg wet	50	1.00	---	104	80 - 120%	---	---	
Xylenes, total	3.10	---	0.0750	mg/kg wet	50	3.00	---	103	80 - 120%	---	---	
Methyl tert-butyl ether (MTBE)	1.01	---	0.0500	mg/kg wet	50	1.00	---	101	80 - 120%	---	---	
Naphthalene	0.856	---	0.100	mg/kg wet	50	1.00	---	86	80 - 120%	---	---	
1,2-Dibromoethane (EDB)	1.06	---	0.0500	mg/kg wet	50	1.00	---	106	80 - 120%	---	---	
1,2-Dichloroethane (EDC)	1.09	---	0.0250	mg/kg wet	50	1.00	---	109	80 - 120%	---	---	
Isopropylbenzene	1.04	---	0.0500	mg/kg wet	50	1.00	---	104	80 - 120%	---	---	
1,2,4-Trimethylbenzene	0.986	---	0.0500	mg/kg wet	50	1.00	---	99	80 - 120%	---	---	
1,3,5-Trimethylbenzene	1.01	---	0.0500	mg/kg wet	50	1.00	---	101	80 - 120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 101 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		97 %		79-120 %		"						
Matrix Spike (25E0344-MS1)		Prepared: 05/07/25 15:10 Analyzved: 05/12/25 22:47										

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ANALYTICAL REPORT

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6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300

Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyl****Report ID:**

A5E1159 - 06 09 25 1358

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25E0344 - EPA 5035A						Soil						
Matrix Spike (25E0344-MS1)		Prepared: 05/07/25 15:10 Analyzed: 05/12/25 22:47										
QC Source Sample: SB-14-20.0-20.5-20250507 (A5E1159-21)												
5035A/8260D												
Benzene	1.36	---	0.0124	mg/kg dry	50	1.24	ND	110	77 - 121%	---	---	
Toluene	1.27	---	0.0619	mg/kg dry	50	1.24	ND	102	77 - 121%	---	---	
Ethylbenzene	1.32	---	0.0309	mg/kg dry	50	1.24	ND	107	76 - 122%	---	---	
Xylenes, total	3.96	---	0.0928	mg/kg dry	50	3.71	ND	107	78 - 124%	---	---	
Methyl tert-butyl ether (MTBE)	1.27	---	0.0619	mg/kg dry	50	1.24	ND	103	73 - 125%	---	---	
Naphthalene	1.11	---	0.124	mg/kg dry	50	1.24	ND	89	62 - 129%	---	---	
1,2-Dibromoethane (EDB)	1.33	---	0.0619	mg/kg dry	50	1.24	ND	107	78 - 122%	---	---	
1,2-Dichloroethane (EDC)	1.37	---	0.0309	mg/kg dry	50	1.24	ND	111	73 - 128%	---	---	
Isopropylbenzene	1.35	---	0.0619	mg/kg dry	50	1.24	ND	109	68 - 134%	---	---	
1,2,4-Trimethylbenzene	1.27	---	0.0619	mg/kg dry	50	1.24	ND	103	75 - 123%	---	---	
1,3,5-Trimethylbenzene	1.28	---	0.0619	mg/kg dry	50	1.24	ND	103	73 - 124%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 101 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		97 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		96 %		79-120 %		"						

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ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300

Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:**

A5E1159 - 06 09 25 1358

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25E0421 - EPA 3546												
Soil												
Blank (25E0421-BLK3)												
Prepared: 05/13/25 13:33 Analyzed: 05/15/25 18:19												
EPA 8270E (HV)												
1-Methylnaphthalene	ND	---	0.00500	mg/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	---	0.00500	mg/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	---	0.00500	mg/kg wet	1	---	---	---	---	---	---	
<i>Surr: 2-Fluorobiphenyl (Surr)</i>												
<i>p-Terphenyl-d14 (Surr)</i>												
<i>Recovery: 91 % Limits: 44-120 % Dilution: 1x</i>												
<i>99 % 54-127 % "</i>												
LCS (25E0421-BS1)												
Prepared: 05/13/25 13:33 Analyzed: 05/14/25 10:14												
EPA 8270E (HV)												
1-Methylnaphthalene	0.0153	---	0.00500	mg/kg wet	1	0.0200	---	76	40 - 120%	---	---	
2-Methylnaphthalene	0.0154	---	0.00500	mg/kg wet	1	0.0200	---	77	38 - 122%	---	---	
Naphthalene	0.0183	---	0.00500	mg/kg wet	1	0.0200	---	92	35 - 123%	---	---	
<i>Surr: 2-Fluorobiphenyl (Surr)</i>												
<i>p-Terphenyl-d14 (Surr)</i>												
<i>Recovery: 101 % Limits: 44-120 % Dilution: 1x</i>												
<i>103 % 54-127 % "</i>												
Duplicate (25E0421-DUP5)												
Prepared: 05/13/25 13:33 Analyzed: 05/14/25 11:21												
QC Source Sample: SB-9-5-20250507 (A5E1159-01)												
EPA 8270E (HV)												
1-Methylnaphthalene	0.462	---	0.0456	mg/kg dry	10	---	0.287	---	---	47	30%	Q-04
2-Methylnaphthalene	1.17	---	0.0456	mg/kg dry	10	---	0.681	---	---	52	30%	Q-04
Naphthalene	1.06	---	0.0456	mg/kg dry	10	---	0.521	---	---	68	30%	Q-04
<i>Surr: 2-Fluorobiphenyl (Surr)</i>												
<i>p-Terphenyl-d14 (Surr)</i>												
<i>Recovery: 101 % Limits: 44-120 % Dilution: 10x</i>												
<i>98 % 54-127 % "</i>												
Duplicate (25E0421-DUP6)												
Prepared: 05/13/25 13:33 Analyzed: 05/14/25 12:57												
QC Source Sample: SB-14-20.0-20.5-20250507 (A5E1159-21RE1)												
EPA 8270E (HV)												
1-Methylnaphthalene	ND	---	0.0213	mg/kg dry	4	---	0.0147	---	---	***	30%	Q-05
2-Methylnaphthalene	ND	---	0.0213	mg/kg dry	4	---	0.0250	---	---	***	30%	Q-05
Naphthalene	ND	---	0.0213	mg/kg dry	4	---	ND	---	---	---	30%	
<i>Surr: 2-Fluorobiphenyl (Surr)</i>												
<i>p-Terphenyl-d14 (Surr)</i>												
<i>Recovery: 87 % Limits: 44-120 % Dilution: 4x</i>												
<i>98 % 54-127 % "</i>												

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ORELAP ID: OR100062

Antea Group205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:**

A5E1159 - 06 09 25 1358

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25E0421 - EPA 3546						Soil						
Matrix Spike (25E0421-MS1)		Prepared: 05/13/25 13:33				Analyzed: 05/14/25 13:27						
QC Source Sample: SB-14-20.0-20.5-20250507 (A5E1159-21RE1)												
EPA 8270E (HV)												
1-Methylnaphthalene	0.0270	---	0.0205	mg/kg dry	4	0.0205	0.0147	60	40 - 120%	---	---	
2-Methylnaphthalene	0.0333	---	0.0205	mg/kg dry	4	0.0205	0.0250	40	38 - 122%	---	---	
Naphthalene	0.0247	---	0.0205	mg/kg dry	4	0.0205	ND	120	35 - 123%	---	---	
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 95 %		Limits: 44-120 %		Dilution: 4x						
p-Terphenyl-d14 (Surr)		100 %		54-127 %		"						

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Project Number: **BP Site 0980**

Project Manager: **Don Wyl**

Report ID:

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QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25E0365 - Dry Weight Prep (EPA 8000D)							Soil					
Duplicate (25E0365-DUP1)		Prepared: 05/12/25 12:18 Analyzed: 05/13/25 05:37										
<u>QC Source Sample: SB-9-5-20250507 (A5E1159-01)</u>												
<u>EPA 8000D</u>												
% Solids	89.9	---	1.00	%	1	---	91.8	---	---	2	10%	

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Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyl****Report ID:****A5E1159 - 06 09 25 1358**

SAMPLE PREPARATION INFORMATION

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 25E0421</u>							
A5E1159-01RE1	Soil	NWTPH-Dx	05/07/25 08:40	05/13/25 13:33	11.38g/5mL	10g/5mL	0.88
A5E1159-02RE1	Soil	NWTPH-Dx	05/07/25 09:00	05/13/25 13:33	11.4g/5mL	10g/5mL	0.88
A5E1159-03RE1	Soil	NWTPH-Dx	05/07/25 09:10	05/13/25 13:33	11.44g/5mL	10g/5mL	0.87
A5E1159-04RE1	Soil	NWTPH-Dx	05/07/25 09:20	05/13/25 13:33	11.43g/5mL	10g/5mL	0.88
A5E1159-05RE1	Soil	NWTPH-Dx	05/07/25 09:30	05/13/25 13:33	11.57g/5mL	10g/5mL	0.86
A5E1159-06	Soil	NWTPH-Dx	05/07/25 09:40	05/13/25 13:33	11.02g/5mL	10g/5mL	0.91
A5E1159-08RE1	Soil	NWTPH-Dx	05/07/25 10:50	05/13/25 13:33	11.68g/5mL	10g/5mL	0.86
A5E1159-09	Soil	NWTPH-Dx	05/07/25 11:10	05/13/25 13:33	11.63g/5mL	10g/5mL	0.86
A5E1159-10	Soil	NWTPH-Dx	05/07/25 11:25	05/13/25 13:33	11.95g/5mL	10g/5mL	0.84
A5E1159-12	Soil	NWTPH-Dx	05/07/25 13:20	05/13/25 13:33	11.17g/5mL	10g/5mL	0.90
A5E1159-14	Soil	NWTPH-Dx	05/07/25 13:35	05/13/25 13:33	11.82g/5mL	10g/5mL	0.85
A5E1159-15	Soil	NWTPH-Dx	05/07/25 13:45	05/13/25 13:33	11.1g/5mL	10g/5mL	0.90
A5E1159-20	Soil	NWTPH-Dx	05/07/25 15:00	05/13/25 13:33	11.1g/5mL	10g/5mL	0.90
A5E1159-21RE1	Soil	NWTPH-Dx	05/07/25 15:10	05/13/25 13:33	11.69g/5mL	10g/5mL	0.86

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 25E0344</u>							
A5E1159-01	Soil	NWTPH-Gx (MS)	05/07/25 08:40	05/07/25 08:40	5.41g/5mL	5g/5mL	0.92
A5E1159-03	Soil	NWTPH-Gx (MS)	05/07/25 09:10	05/07/25 09:10	6.45g/5mL	5g/5mL	0.78
A5E1159-04	Soil	NWTPH-Gx (MS)	05/07/25 09:20	05/07/25 09:20	5.54g/5mL	5g/5mL	0.90
A5E1159-05	Soil	NWTPH-Gx (MS)	05/07/25 09:30	05/07/25 09:30	6.13g/5mL	5g/5mL	0.82
A5E1159-06	Soil	NWTPH-Gx (MS)	05/07/25 09:40	05/07/25 09:40	8.38g/8.5mL	5g/5mL	1.01
A5E1159-08	Soil	NWTPH-Gx (MS)	05/07/25 10:50	05/07/25 10:50	6.12g/5mL	5g/5mL	0.82
A5E1159-09	Soil	NWTPH-Gx (MS)	05/07/25 11:10	05/07/25 11:10	6.81g/5mL	5g/5mL	0.73
A5E1159-10	Soil	NWTPH-Gx (MS)	05/07/25 11:25	05/07/25 11:25	7.38g/5mL	5g/5mL	0.68
A5E1159-12	Soil	NWTPH-Gx (MS)	05/07/25 13:20	05/07/25 13:20	4.87g/5mL	5g/5mL	1.03
A5E1159-14	Soil	NWTPH-Gx (MS)	05/07/25 13:35	05/07/25 13:35	6.81g/5mL	5g/5mL	0.73
A5E1159-15	Soil	NWTPH-Gx (MS)	05/07/25 13:45	05/07/25 13:45	5.96g/5mL	5g/5mL	0.84
A5E1159-19	Soil	NWTPH-Gx (MS)	05/07/25 14:55	05/07/25 14:55	6.45g/5mL	5g/5mL	0.78
A5E1159-20	Soil	NWTPH-Gx (MS)	05/07/25 15:00	05/07/25 15:00	5.44g/5mL	5g/5mL	0.92
A5E1159-21	Soil	NWTPH-Gx (MS)	05/07/25 15:10	05/07/25 15:10	5.68g/5mL	5g/5mL	0.88
<u>Batch: 25E0397</u>							
A5E1159-02RE1	Soil	NWTPH-Gx (MS)	05/07/25 09:00	05/07/25 09:00	5.71g/5mL	5g/5mL	0.88

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ORELAP ID: OR100062

Antea Group205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyl****Report ID:****A5E1159 - 06 09 25 1358****SAMPLE PREPARATION INFORMATION****Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx****Prep: EPA 5035A**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor

Selected Volatile Organic Compounds by EPA 5035A/8260D**Prep: EPA 5035A**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 25E0344							
A5E1159-01	Soil	5035A/8260D	05/07/25 08:40	05/07/25 08:40	5.41g/5mL	5g/5mL	0.92
A5E1159-02	Soil	5035A/8260D	05/07/25 09:00	05/07/25 09:00	5.71g/5mL	5g/5mL	0.88
A5E1159-03	Soil	5035A/8260D	05/07/25 09:10	05/07/25 09:10	6.45g/5mL	5g/5mL	0.78
A5E1159-04	Soil	5035A/8260D	05/07/25 09:20	05/07/25 09:20	5.54g/5mL	5g/5mL	0.90
A5E1159-05	Soil	5035A/8260D	05/07/25 09:30	05/07/25 09:30	6.13g/5mL	5g/5mL	0.82
A5E1159-06	Soil	5035A/8260D	05/07/25 09:40	05/07/25 09:40	8.38g/8.5mL	5g/5mL	1.01
A5E1159-08	Soil	5035A/8260D	05/07/25 10:50	05/07/25 10:50	6.12g/5mL	5g/5mL	0.82
A5E1159-09	Soil	5035A/8260D	05/07/25 11:10	05/07/25 11:10	6.81g/5mL	5g/5mL	0.73
A5E1159-10	Soil	5035A/8260D	05/07/25 11:25	05/07/25 11:25	7.38g/5mL	5g/5mL	0.68
A5E1159-12	Soil	5035A/8260D	05/07/25 13:20	05/07/25 13:20	4.87g/5mL	5g/5mL	1.03
A5E1159-14	Soil	5035A/8260D	05/07/25 13:35	05/07/25 13:35	6.81g/5mL	5g/5mL	0.73
A5E1159-15	Soil	5035A/8260D	05/07/25 13:45	05/07/25 13:45	5.96g/5mL	5g/5mL	0.84
A5E1159-19	Soil	5035A/8260D	05/07/25 14:55	05/07/25 14:55	6.45g/5mL	5g/5mL	0.78
A5E1159-20	Soil	5035A/8260D	05/07/25 15:00	05/07/25 15:00	5.44g/5mL	5g/5mL	0.92
A5E1159-21	Soil	5035A/8260D	05/07/25 15:10	05/07/25 15:10	5.68g/5mL	5g/5mL	0.88

Selected Semivolatile Organic Compounds by EPA 8270E**Prep: EPA 3546**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 25E0421							
A5E1159-01	Soil	EPA 8270E (HV)	05/07/25 08:40	05/13/25 13:33	11.38g/5mL	10g/5mL	0.88
A5E1159-02RE1	Soil	EPA 8270E (HV)	05/07/25 09:00	05/13/25 13:33	11.4g/5mL	10g/5mL	0.88
A5E1159-03	Soil	EPA 8270E (HV)	05/07/25 09:10	05/13/25 13:33	11.44g/5mL	10g/5mL	0.87
A5E1159-04	Soil	EPA 8270E (HV)	05/07/25 09:20	05/13/25 13:33	11.43g/5mL	10g/5mL	0.88
A5E1159-05	Soil	EPA 8270E (HV)	05/07/25 09:30	05/13/25 13:33	11.57g/5mL	10g/5mL	0.86
A5E1159-06	Soil	EPA 8270E (HV)	05/07/25 09:40	05/13/25 13:33	11.02g/5mL	10g/5mL	0.91
A5E1159-08RE1	Soil	EPA 8270E (HV)	05/07/25 10:50	05/13/25 13:33	11.68g/5mL	10g/5mL	0.86
A5E1159-09	Soil	EPA 8270E (HV)	05/07/25 11:10	05/13/25 13:33	11.63g/5mL	10g/5mL	0.86
A5E1159-10	Soil	EPA 8270E (HV)	05/07/25 11:25	05/13/25 13:33	11.95g/5mL	10g/5mL	0.84
A5E1159-12RE1	Soil	EPA 8270E (HV)	05/07/25 13:20	05/13/25 13:33	11.17g/5mL	10g/5mL	0.90

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist

**ANALYTICAL REPORT****Apex Laboratories, LLC**6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323

ORELAP ID: OR100062

Antea Group205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyl****Report ID:****A5E1159 - 06 09 25 1358****SAMPLE PREPARATION INFORMATION****Selected Semivolatile Organic Compounds by EPA 8270E****Prep: EPA 3546**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A5E1159-14RE1	Soil	EPA 8270E (HV)	05/07/25 13:35	05/13/25 13:33	11.82g/5mL	10g/5mL	0.85
A5E1159-15	Soil	EPA 8270E (HV)	05/07/25 13:45	05/13/25 13:33	11.1g/5mL	10g/5mL	0.90
A5E1159-20	Soil	EPA 8270E (HV)	05/07/25 15:00	05/13/25 13:33	11.1g/5mL	10g/5mL	0.90
A5E1159-21RE1	Soil	EPA 8270E (HV)	05/07/25 15:10	05/13/25 13:33	11.69g/5mL	10g/5mL	0.86

Percent Dry Weight**Prep: Dry Weight Prep (EPA 8000D)**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 25E0365							
A5E1159-01	Soil	EPA 8000D	05/07/25 08:40	05/12/25 12:18	1g	1g	1.00
A5E1159-02	Soil	EPA 8000D	05/07/25 09:00	05/12/25 12:18	1g	1g	1.00
A5E1159-03	Soil	EPA 8000D	05/07/25 09:10	05/12/25 12:18	1g	1g	1.00
A5E1159-04	Soil	EPA 8000D	05/07/25 09:20	05/12/25 12:18	1g	1g	1.00
A5E1159-05	Soil	EPA 8000D	05/07/25 09:30	05/12/25 12:18	1g	1g	1.00
A5E1159-06	Soil	EPA 8000D	05/07/25 09:40	05/12/25 12:18	1g	1g	1.00
A5E1159-08	Soil	EPA 8000D	05/07/25 10:50	05/12/25 12:18	1g	1g	1.00
A5E1159-09	Soil	EPA 8000D	05/07/25 11:10	05/12/25 12:18	1g	1g	1.00
A5E1159-10	Soil	EPA 8000D	05/07/25 11:25	05/12/25 12:18	1g	1g	1.00
A5E1159-12	Soil	EPA 8000D	05/07/25 13:20	05/12/25 12:18	1g	1g	1.00
A5E1159-14	Soil	EPA 8000D	05/07/25 13:35	05/12/25 12:18	1g	1g	1.00
A5E1159-15	Soil	EPA 8000D	05/07/25 13:45	05/12/25 12:18	1g	1g	1.00
A5E1159-20	Soil	EPA 8000D	05/07/25 15:00	05/12/25 12:18	1g	1g	1.00
A5E1159-21	Soil	EPA 8000D	05/07/25 15:10	05/12/25 12:18	1g	1g	1.00

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
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503-718-2323

ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300
Portland, OR 97202

Project: **WA-980 Seattle**

Project Number: **BP Site 0980**

Project Manager: **Don Wyl**

Report ID:

A5E1159 - 06 09 25 1358

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

- Q-04** Spike recovery and/or RPD is outside control limits due to a non-homogeneous sample matrix.
- Q-05** Analyses are not controlled on RPD values from sample and duplicate concentrations that are below 5 times the reporting level.
- Q-16** Reanalysis of an original Batch QC sample.
- Q-42** Matrix Spike and/or Duplicate analysis was performed on this sample. % Recovery or RPD for this analyte is outside laboratory control limits. (Refer to the QC Section of Analytical Report.)
- R-04** Reporting levels elevated due to preparation and/or analytical dilution necessary for analysis.
- S-05** Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.

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ANALYTICAL REPORT

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ORELAP ID: OR100062

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205 SE Spokane Street, Suite 300
Portland, OR 97202

Project: **WA-980 Seattle**

Project Number: **BP Site 0980**

Project Manager: **Don Wyll**

Report ID:

A5E1159 - 06 09 25 1358

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.
ND Analyte NOT DETECTED at or above the detection or reporting limit.
NR Result Not Reported.
RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting and Detection Limits: Default Limits

Default Reporting and Detection Limits are based on 100% dry weight with the minimum dilution for the analysis. Reporting and Detection Limits are raised due to moisture content, additional dilutions required for analysis, matrix interferences and in other cases, as necessary.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as "dry", "wet", or "" (blank) designation.
"dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.
"wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.
"" Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) are not included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories

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ANALYTICAL REPORT

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205 SE Spokane Street, Suite 300
Portland, OR 97202

Project: **WA-980 Seattle**

Project Number: **BP Site 0980**

Project Manager: **Don Wyl**

Report ID:

A5E1159 - 06 09 25 1358

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to one half of the Reporting Limit (RL).

Blank results for gravimetric analyses are evaluated to the Reporting Level, not to half of the Reporting Level.

-For Blank hits falling between $\frac{1}{2}$ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.

-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.

For further details, please request a copy of this document.

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

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ANALYTICAL REPORT

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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323

ORELAP ID: OR100062

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205 SE Spokane Street, Suite 300
Portland, OR 97202

Project: WA-980 Seattle

Project Number: **BP Site 0980**

Project Manager: **Don Wyl**

Report ID:

A5E1159 - 06 09 25 1358

Decanted Samples:

Soils/Sediments:

Unless TCLP analysis is required or there is notification otherwise for a specific project, all Soil and Sediments containing excess water are decanted prior to analysis in order to provide the most representative sample for analysis.

Water Samples:

Water samples containing solids and sediment may need to be decanted in order to eliminate these particulates from the water extractions. In the case of organics extractions, a solvent rinse of the container will not be performed.

Volatiles Soils (5035s)

Samples that are field preserved by 5035 for volatiles are dry weight corrected using the same dry weight correction as for normal analyses.

In the case of decanted samples, the dry weight may be performed on a decanted sample, while the aliquot for 5035 may not have been treated the same way. If this is a concern, please submit separate containers for dry weight analysis for volatiles can be provided.

All samples decanted in the laboratory are noted in this report with the DCNT qualifier indicating the sample was decanted.

Apex Laboratories

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323

ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300
Portland, OR 97202

Project: WA-980 Seattle

Project Number: **BP Site 0980**

Project Manager: **Don Wyl**

Report ID:

A5E1159 - 06 09 25 1358

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation)

EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.

Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provided by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

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ANALYTICAL REPORT

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORLAP ID: ORI00062

Antea Group
205 SE Spokane Street, Suite 300
Portland, OR 97202

Project: WA-980 Seattle
Project Number: BP Site 0980
Project Manager: Don Wyl

Report ID:
ASE1159 - 06/09/25 1358

APEX LABS		CHAIN OF CUSTODY		Lab # DSE115A		COC 1 of 3																				
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323																										
Company: Antea Group		Project Mgr: Don Wyl		Project Name: WA-980 Seattle		Project #: BP Site 0980																				
Address: 19378-B Redmond Way, Redmond WA		Phone: 425-820-2807		Email: Don.Wyl@antegroup.us		PO #																				
Sampled by: D. Lindelof, S. Nachimuthu		ANALYSIS REQUEST																								
State Sampled: OR (WA)																										
Other																										
County:																										
SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx (Low d+H)	NWTPH-Gx	8260D BTEX	8260D RBDM VOC's	8260D Halo VOC's	8260D VOC's Full List	8270E PAHs	8270E Semi-Vols Full List	8082A PCBs	8081B Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Cu, Fe, Pb, Hg, Mn, Mo, Ni, K, Se, Ag, Na, Th, V, Zn	TOTAL DISS	TCLP	TCLP Metals (8)	Total hydrocarbons by distillation	TLWM DO0618	TLWM DO0618 by distillation	HOLD	Archive - Frozen
1 SB-9-5-202507	5/7/25	840	S	3	X	X	X															X	X			
2 SB-13-10-10-5-202507	5/7/25	900	S	3	X	X	X															X	X			
3 SB-13-15-15-5-202507	5/7/25	910	S	3	X	X	X															X	X			
4 SB-13-20-20-5-202507	5/7/25	920	S	3	X	X	X															X	X			
5 SB-9-8-202507	5/7/25	930	S	3	X	X	X															X	X			
6 SB-13-25-25-5-202507	5/7/25	940	S	3	X	X	X															X	X			
7 SB-13-27-27-5-202507	5/7/25	1000	S	3	X	X	X															X	X			X
8 SB-11-6-5-7-202507	5/7/25	1050	S	3	X	X	X															X	X			
9 SB-11-15-15-5-202507	5/7/25	1110	S	3	X	X	X															X	X			
10 SB-11-20-20-5-202507	5/7/25	1125	S	3	X	X	X															X	X			

Normal Turn Around Time (TAT) = 10 Business Days --->

*** RUSH - Request ---> Indicate Date Needed:

***Rush TAT requests may incur additional cost

For TAT calculations, samples received after 3pm will be considered received the next business day.

Data will be reported by 6pm. Samples with <72 hrs of hold time may be surcharged.

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: [Signature] Date: 5/8/25	Signature: [Signature] Date: 5/8/25	Signature: Date:	Signature: Date:
Printed Name: Dennis Lindelof Time: 1330	Printed Name: [Signature] Time: 1108	Printed Name: Time:	Printed Name: Time:
Company: Antea Group	Company: Apex	Company:	Company:

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Michele Poquiz

Michele Poquiz For Kurt Johnson, Senior Chemist



ANALYTICAL REPORT

Apex Laboratories, LLC
6700 S.W. Sandburg Street
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503-718-2323
ORLAP ID: ORI00062

Antea Group
205 SE Spokane Street, Suite 300
Portland, OR 97202

Project: WA-980 Seattle
Project Number: BP Site 0980
Project Manager: Don Wylly

Report ID:
ASE1159 - 06/09/25 1358

APEX LABS		CHAIN OF CUSTODY		Lab # ASE1159		COC 2 of 3																						
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323																												
Company: Antea Group		Project Mgr: Don Wylly		Project Name: WA-980 Seattle		Project #: BP Site 0980																						
Address: 18378-B Redmond Way, Redmond, WA		Phone: 925-820-2007		Email: Don.Wylly@anteagroup.com		PO #																						
Sampled by: D. Lindelof / S. Nachimuthu		ANALYSIS REQUEST																										
State Sampled: (OR) (WA)																												
Other																												
County:																												
SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260D BTX	8260D RBDM VOCs	8260D Halo VOCs	8260D VOCs Full List	8270E PAHs	8270E Semi-Vols Full List	8082A PCBs	8081B Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Ti, V, Zn	TOTAL	DISS.	TCLP	TCLP Metals (8)	38LW 0928	WIS 0928	38LW 0928	WIS 0928	HOLD	Archive - Frozen
1 SB-11-22.5-23-20250507	5/7/25	1150	S	3	X	X	X	X															X	X				
2 SB-12-6.5-7.0-20250507	5/7/25	1320	S	3	X	X	X	X															X	X				
3 SB-12-10.0-10.5-20250507	5/7/25	1325	S	3	X	X	X	X															X	X				
4 SB-12-15.0-15.5-20250507	5/7/25	1335	S	3	X	X	X	X															X	X				
5 SB-12-20.0-20.5-20250507	5/7/25	1345	S	3	X	X	X	X															X	X				
6 SB-12-22.5-23.0-20250507	5/7/25	1400	S	3	X	X	X	X															X	X				
7 SB-12-25.5-26.0-20250507	5/7/25	1425	S	3	X	X	X	X															X	X				
8 SB-14-6.5-7.0-20250507	5/7/25	1450	S	3	X	X	X	X															X	X				
9 SB-14-10.0-10.5-20250507	5/7/25	1455	S	2			X	X																X				
10 SB-14-15.0-15.5-20250507	5/7/25	1500	S	3		X	X	X															X	X				

Normal Turn Around Time (TAT) = 10 Business Days --->

*** RUSH - Request ---> Indicate Date Needed:

***Rush TAT requests may incur additional cost

For TAT calculations, samples received after 3pm will be considered received the next business day.

Data will be reported by 6pm. Samples with <72 hrs of hold time may be surcharged.

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: [Signature] Date: 5/8/25	Signature: [Signature] Date: 5/9/25	Signature: [Signature] Date: [Signature]	Signature: [Signature] Date: [Signature]
Printed Name: Dennis Lindelof Time: 1330	Printed Name: [Signature] Time: 1108	Printed Name: [Signature] Time: [Signature]	Printed Name: [Signature] Time: [Signature]
Company: Antea Group	Company: Apex	Company: [Signature]	Company: [Signature]

Apex Laboratories
Michele Poquiz

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Michele Poquiz For Kurt Johnson, Senior Chemist



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

503-718-2323

ORCLAP ID: OR100062

Antea Group

**205 SE Spokane Street, Suite 300
Portland, OR 97202**

Project: **WA-980 Seattle**

Project Number: **BP Site 0980**

Project Manager: Don Wyll

Report ID:

A5E1159 - 06 09 25 1358

APEX LABS 6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323				CHAIN OF CUSTODY				Lab # <u>APE11594</u> COC <u>3</u> of <u>3</u>																				
Company: <u>Antea Group</u>			Project Mgr: <u>Don Wyl</u>		Project Name: <u>WTA-980 Seattle</u>			Project #: <u>BP Site 0980</u>																				
Address: <u>18378-B Redmond Way, Redmond WA</u>				Phone: <u>425-830-2007</u>		Email: <u>Don.Wyl@anteagroup.us</u>		PO #																				
Sampled by: <u>D. Lindelof, S. Nachimuthu</u>				ANALYSIS REQUEST																								
State Sampled: <u>OR</u> <u>(WA)</u>		DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-DX <u>(T1+T2+T3+T4+T5+T6+T7+T8+T9+T10)</u>	NWTPH-GX	8260D BTEX	8260D RBDM VOCs	8260D Halo VOCs	8260D VOCs Full List	8270E PAHs	8270E Semi-Volat Full List	8082A PCBs	8081B Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sh, As, Ba, Be, Cd, Cr, Cu, Fe, Pb, Hg, Mn, Mo, Ni, K, Se, Ag, Na, Th, V, Zn	TOTAL DISS	ICLCP	TCCLP Metals (8)	Total naphthalenes by 8260ESIM	8260D WTB	HOLD	Archive - Frozen		
Other _____																											County: _____	
SAMPLE ID																												
1	<u>SB-14-204-2A5-20250507</u>	<u>5/7/25</u>	<u>1510</u>	<u>S</u>	<u>3</u>	<u>X</u>	<u>X</u>	<u>X</u>															<u>X</u>	<u>X</u>				
2	<u>SB-14-225-230-20250507</u>	<u>5/7/25</u>	<u>1530</u>	<u>S</u>	<u>3</u>	<u>X</u>	<u>X</u>	<u>X</u>														<u>X</u>	<u>X</u>				<u>X</u>	
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												

Normal Turn Around Time (TAT) = 10 Business Days --->

***** RUSH - Request ---> Indicate Date Needed:**

***Rush TAT requests may incur additional cost

For TAT calculations, samples received after 3pm will be considered received the next business day.

Data will be reported by 6pm. Samples with <72 hrs of hold time may be surcharged.

SAMPLES ARE HELD FOR 30 DAYS

SPECIAL INSTRUCTIONS:

RELINQUISHED BY: Signature: <u>[Signature]</u> Date: <u>5/8/25</u>		RECEIVED BY: Signature: <u>[Signature]</u> Date: <u>5/9/25</u>		RELINQUISHED BY: Signature: _____ Date: _____		RECEIVED BY: Signature: _____ Date: _____	
Printed Name: <u>Dennis Lindelof</u> Time: <u>1330</u>		Printed Name: <u>[Signature]</u> Time: <u>1108</u>		Printed Name: _____ Time: _____		Printed Name: _____ Time: _____	
Company: <u>Antea Group</u>		Company: <u>Apex</u>		Company: _____		Company: _____	

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300

Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:**

A5E1159 - 06 09 25 1358

APEX LABS COOLER RECEIPT FORMClient: Antea Group Element WO#: A5E1159Project/Project #: WA-980 Seattle / BP Site 0980**Delivery Info:**Date/time received: 5/4/25 @ 1108 By: KRSDelivered by: Apex ☐ Client ☐ ESS ☐ FedEx ☒ UPS ☐ Radio ☐ Morgan ☐ SDS ☐ Evergreen ☐ Other ☐From USDA Regulated Origin? Yes ☐ No ☒**Cooler Inspection** Date/time inspected: 5/4/25 @ 1108 By: KRSChain of Custody included? Yes ☒ No ☐Signed/dated by client? Yes ☒ No ☐Contains USDA Reg. Soils? Yes ☐ No ☒ Unsure (email RegSoils) ☐

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	<u>1.1</u>	<u>1.6</u>					
Custody seals? (Y/N)	<u>N</u>	<u>→</u>					
Received on ice? (Y/N)	<u>Y</u>	<u>→</u>					
Temp. blanks? (Y/N)	<u>Y</u>	<u>→</u>					
Ice type: (Gel/Real/Other)	<u>Real</u>	<u>→</u>					
Condition (In/Out):	<u>In</u>	<u>→</u>					

Cooler out of temp? (Y/N) Possible reason why: →Green dots applied to out of temperature samples? Yes ☒ No ☐Out of temperature samples form initiated? Yes ☒ No ☐**Sample Inspection:** Date/time inspected: 5/4/25 @ 1238 By: KRSAll samples intact? Yes ☒ No ☐ Comments: →Bottle labels/COCs agree? Yes ☒ No ☐ Comments: →COC/container discrepancies form initiated? Yes ☐ No ☒Containers/volumes received appropriate for analysis? Yes ☒ No ☐ Comments: →Do VOA vials have visible headspace? Yes ☐ No ☐ NA ☒Comments: →Water samples: pH checked: Yes ☐ No ☐ NA ☒ pH appropriate? Yes ☐ No ☐ NA ☒ pH ID: →Comments: →8811 2346 3222Labeled by: AWWitness: →Cooler Inspected by: →

Form Y-003 R-02

Apex Laboratories

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Thursday, May 15, 2025

Don Wyll

Antea Group

205 SE Spokane Street, Suite 300

Portland, OR 97202

RE: A5E1159 - WA-980 Seattle - BP Site 0980

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A5E1159, which was received by the laboratory on 5/9/2025 at 11:08:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: cobrien@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.

(See Cooler Receipt Form for details)

Cooler #1 1.1 degC

Cooler #2 1.6 degC



DRAFT REPORT

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**ANALYTICAL REPORT****Apex Laboratories, LLC**6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Antea Group**205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyl****Report ID:**

A5E1159 - 05 15 25 1458

ANALYTICAL REPORT FOR SAMPLES**SAMPLE INFORMATION**

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-9-5-20250507	A5E1159-01	Soil	05/07/25 08:40	05/09/25 11:08
SB-13-10-10.5-20250507	A5E1159-02	Soil	05/07/25 09:00	05/09/25 11:08
SB-13-15-15.5-20250507	A5E1159-03	Soil	05/07/25 09:10	05/09/25 11:08
SB-13-20-20.5-20250507	A5E1159-04	Soil	05/07/25 09:20	05/09/25 11:08
SB-9-8-20250507	A5E1159-05	Soil	05/07/25 09:30	05/09/25 11:08
SB-13-25-25.5-20250507	A5E1159-06	Soil	05/07/25 09:40	05/09/25 11:08
SB-13-27-27.5-20250507	A5E1159-07	Soil	05/07/25 10:00	05/09/25 11:08
SB-11-6.5-7-20250507	A5E1159-08	Soil	05/07/25 10:50	05/09/25 11:08
SB-11-15-15.5-20250507	A5E1159-09	Soil	05/07/25 11:10	05/09/25 11:08
SB-11-20-20.5-20250507	A5E1159-10	Soil	05/07/25 11:25	05/09/25 11:08
SB-11-22.5-23-20250507	A5E1159-11	Soil	05/07/25 11:50	05/09/25 11:08
SB-12-6.5-7.0-20250507	A5E1159-12	Soil	05/07/25 13:20	05/09/25 11:08
SB-12-10.0-10.5-20250507	A5E1159-13	Soil	05/07/25 13:25	05/09/25 11:08
SB-12-15.0-15.5-20250507	A5E1159-14	Soil	05/07/25 13:35	05/09/25 11:08
SB-12-20.0-20.5-20250507	A5E1159-15	Soil	05/07/25 13:45	05/09/25 11:08
SB-12-22.5-23.0-20250507	A5E1159-16	Soil	05/07/25 14:00	05/09/25 11:08
SB-12-25.5-26.0-20250507	A5E1159-17	Soil	05/07/25 14:25	05/09/25 11:08
SB-14-6.5-7.0-20250507	A5E1159-18	Soil	05/07/25 14:50	05/09/25 11:08
SB-14-10.0-10.5-20250507	A5E1159-19	Soil	05/07/25 14:55	05/09/25 11:08
SB-14-15.0-15.5-20250507	A5E1159-20	Soil	05/07/25 15:00	05/09/25 11:08
SB-14-20.0-20.5-20250507	A5E1159-21	Soil	05/07/25 15:10	05/09/25 11:08
SB-14-22.5-23.0-20250507	A5E1159-22	Soil	05/07/25 15:30	05/09/25 11:08

DRAFT REPORT

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300

Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyl****Report ID:****A5E1159 - 05 15 25 1458**

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-9-5-20250507 (A5E1159-01RE1)				Matrix: Soil		Batch: 25E0421		
Diesel	28.6	---	19.2	mg/kg dry	1	05/14/25 08:17	NWTPH-Dx	Q-42
Oil	52.8	---	38.3	mg/kg dry	1	05/14/25 08:17	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 78 %		Limits: 50-150 %	1	05/14/25 08:17	NWTPH-Dx	
SB-13-10-10.5-20250507 (A5E1159-02RE1)				Matrix: Soil		Batch: 25E0421		
Diesel	30.9	---	19.1	mg/kg dry	1	05/14/25 09:41	NWTPH-Dx	
Oil	103	---	38.1	mg/kg dry	1	05/14/25 09:41	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 81 %		Limits: 50-150 %	1	05/14/25 09:41	NWTPH-Dx	
SB-13-15-15.5-20250507 (A5E1159-03RE1)				Matrix: Soil		Batch: 25E0421		
Diesel	ND	---	18.8	mg/kg dry	1	05/14/25 08:38	NWTPH-Dx	
Oil	60.7	---	37.7	mg/kg dry	1	05/14/25 08:38	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 85 %		Limits: 50-150 %	1	05/14/25 08:38	NWTPH-Dx	
SB-13-20-20.5-20250507 (A5E1159-04RE1)				Matrix: Soil		Batch: 25E0421		
Diesel	ND	---	19.0	mg/kg dry	1	05/14/25 09:20	NWTPH-Dx	
Oil	57.8	---	38.1	mg/kg dry	1	05/14/25 09:20	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 83 %		Limits: 50-150 %	1	05/14/25 09:20	NWTPH-Dx	
SB-9-8-20250507 (A5E1159-05RE1)				Matrix: Soil		Batch: 25E0421		
Diesel	ND	---	19.1	mg/kg dry	1	05/14/25 10:03	NWTPH-Dx	
Oil	46.5	---	38.1	mg/kg dry	1	05/14/25 10:03	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 79 %		Limits: 50-150 %	1	05/14/25 10:03	NWTPH-Dx	
SB-13-25-25.5-20250507 (A5E1159-06)				Matrix: Soil		Batch: 25E0421		
Diesel	ND	---	19.7	mg/kg dry	1	05/13/25 19:29	NWTPH-Dx	
Oil	ND	---	39.4	mg/kg dry	1	05/13/25 19:29	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 83 %		Limits: 50-150 %	1	05/13/25 19:29	NWTPH-Dx	
SB-11-6.5-7-20250507 (A5E1159-08RE1)				Matrix: Soil		Batch: 25E0421		
Diesel	ND	---	19.5	mg/kg dry	1	05/14/25 10:45	NWTPH-Dx	
Oil	52.1	---	39.1	mg/kg dry	1	05/14/25 10:45	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 84 %		Limits: 50-150 %	1	05/14/25 10:45	NWTPH-Dx	

DRAFT REPORT

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300

Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:****A5E1159 - 05 15 25 1458**

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-11-15-15.5-20250507 (A5E1159-09)				Matrix: Soil		Batch: 25E0421		
Diesel	ND	---	19.4	mg/kg dry	1	05/13/25 19:50	NWTPH-Dx	
Oil	ND	---	38.7	mg/kg dry	1	05/13/25 19:50	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery:</i>	<i>86 %</i>	<i>Limits: 50-150 %</i>	<i>1</i>	<i>05/13/25 19:50</i>	<i>NWTPH-Dx</i>	
SB-11-20-20.5-20250507 (A5E1159-10)				Matrix: Soil		Batch: 25E0421		
Diesel	ND	---	18.5	mg/kg dry	1	05/13/25 20:11	NWTPH-Dx	
Oil	ND	---	37.0	mg/kg dry	1	05/13/25 20:11	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery:</i>	<i>76 %</i>	<i>Limits: 50-150 %</i>	<i>1</i>	<i>05/13/25 20:11</i>	<i>NWTPH-Dx</i>	
SB-12-6.5-7.0-20250507 (A5E1159-12)				Matrix: Soil		Batch: 25E0421		
Diesel	259	---	195	mg/kg dry	10	05/13/25 22:17	NWTPH-Dx	
Oil	544	---	391	mg/kg dry	10	05/13/25 22:17	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery:</i>	<i>85 %</i>	<i>Limits: 50-150 %</i>	<i>10</i>	<i>05/13/25 22:17</i>	<i>NWTPH-Dx</i>	<i>S-05</i>
SB-12-15.0-15.5-20250507 (A5E1159-14)				Matrix: Soil		Batch: 25E0421		
Diesel	ND	---	18.9	mg/kg dry	1	05/13/25 20:32	NWTPH-Dx	
Oil	ND	---	37.7	mg/kg dry	1	05/13/25 20:32	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery:</i>	<i>77 %</i>	<i>Limits: 50-150 %</i>	<i>1</i>	<i>05/13/25 20:32</i>	<i>NWTPH-Dx</i>	
SB-12-20.0-20.5-20250507 (A5E1159-15)				Matrix: Soil		Batch: 25E0421		
Diesel	ND	---	21.2	mg/kg dry	1	05/13/25 20:53	NWTPH-Dx	
Oil	ND	---	42.5	mg/kg dry	1	05/13/25 20:53	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery:</i>	<i>77 %</i>	<i>Limits: 50-150 %</i>	<i>1</i>	<i>05/13/25 20:53</i>	<i>NWTPH-Dx</i>	
SB-14-15.0-15.5-20250507 (A5E1159-20)				Matrix: Soil		Batch: 25E0421		
Diesel	ND	---	20.5	mg/kg dry	1	05/13/25 21:14	NWTPH-Dx	
Oil	ND	---	41.1	mg/kg dry	1	05/13/25 21:14	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery:</i>	<i>82 %</i>	<i>Limits: 50-150 %</i>	<i>1</i>	<i>05/13/25 21:14</i>	<i>NWTPH-Dx</i>	
SB-14-20.0-20.5-20250507 (A5E1159-21RE1)				Matrix: Soil		Batch: 25E0421		
Diesel	51.0	---	20.4	mg/kg dry	1	05/14/25 10:24	NWTPH-Dx	
Oil	ND	---	40.7	mg/kg dry	1	05/14/25 10:24	NWTPH-Dx	
<i>Surrogate: o-Terphenyl (Surr)</i>		<i>Recovery:</i>	<i>89 %</i>	<i>Limits: 50-150 %</i>	<i>1</i>	<i>05/14/25 10:24</i>	<i>NWTPH-Dx</i>	

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ANALYTICAL REPORT

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6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062**Antea Group**205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:****A5E1159 - 05 15 25 1458**

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-9-5-20250507 (A5E1159-01)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	104	---	5.48	mg/kg dry	50	05/12/25 15:57	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	106 %	Limits: 50-150 %	1	05/12/25 15:57	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			95 %	50-150 %	1	05/12/25 15:57	NWTPH-Gx (MS)	
SB-13-10-10.5-20250507 (A5E1159-02RE1)				Matrix: Soil		Batch: 25E0397		
Gasoline Range Organics	5.97	---	5.19	mg/kg dry	50	05/13/25 12:14	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	105 %	Limits: 50-150 %	1	05/13/25 12:14	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			100 %	50-150 %	1	05/13/25 12:14	NWTPH-Gx (MS)	
SB-13-15-15.5-20250507 (A5E1159-03)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	ND	---	4.56	mg/kg dry	50	05/12/25 16:51	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	104 %	Limits: 50-150 %	1	05/12/25 16:51	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			95 %	50-150 %	1	05/12/25 16:51	NWTPH-Gx (MS)	
SB-13-20-20.5-20250507 (A5E1159-04)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	ND	---	5.35	mg/kg dry	50	05/12/25 17:19	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	105 %	Limits: 50-150 %	1	05/12/25 17:19	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			95 %	50-150 %	1	05/12/25 17:19	NWTPH-Gx (MS)	
SB-9-8-20250507 (A5E1159-05)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	10.1	---	5.01	mg/kg dry	50	05/12/25 17:46	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	107 %	Limits: 50-150 %	1	05/12/25 17:46	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			97 %	50-150 %	1	05/12/25 17:46	NWTPH-Gx (MS)	
SB-13-25-25.5-20250507 (A5E1159-06)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	ND	---	5.92	mg/kg dry	50	05/12/25 18:13	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	104 %	Limits: 50-150 %	1	05/12/25 18:13	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			97 %	50-150 %	1	05/12/25 18:13	NWTPH-Gx (MS)	
SB-11-6.5-7-20250507 (A5E1159-08)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	9.66	---	5.36	mg/kg dry	50	05/12/25 18:40	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	101 %	Limits: 50-150 %	1	05/12/25 18:40	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			96 %	50-150 %	1	05/12/25 18:40	NWTPH-Gx (MS)	

DRAFT REPORT

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300

Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:****A5E1159 - 05 15 25 1458**

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-11-15.15.5-20250507 (A5E1159-09)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	ND	---	4.76	mg/kg dry	50	05/12/25 19:08	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	104 %	Limits: 50-150 %	1	05/12/25 19:08	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			98 %	50-150 %	1	05/12/25 19:08	NWTPH-Gx (MS)	
SB-11-20.20.5-20250507 (A5E1159-10)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	ND	---	4.27	mg/kg dry	50	05/12/25 19:35	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	102 %	Limits: 50-150 %	1	05/12/25 19:35	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			96 %	50-150 %	1	05/12/25 19:35	NWTPH-Gx (MS)	
SB-12-6.5-7.0-20250507 (A5E1159-12)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	20.3	---	6.05	mg/kg dry	50	05/12/25 20:03	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	101 %	Limits: 50-150 %	1	05/12/25 20:03	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			97 %	50-150 %	1	05/12/25 20:03	NWTPH-Gx (MS)	
SB-12-15.0-15.5-20250507 (A5E1159-14)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	ND	---	4.66	mg/kg dry	50	05/12/25 20:30	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	102 %	Limits: 50-150 %	1	05/12/25 20:30	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			96 %	50-150 %	1	05/12/25 20:30	NWTPH-Gx (MS)	
SB-12-20.0-20.5-20250507 (A5E1159-15)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	ND	---	5.84	mg/kg dry	50	05/12/25 20:57	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	100 %	Limits: 50-150 %	1	05/12/25 20:57	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			96 %	50-150 %	1	05/12/25 20:57	NWTPH-Gx (MS)	
SB-14-10.0-10.5-20250507 (A5E1159-19)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	5.54	---	3.88	mg/kg wet	50	05/12/25 21:25	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	101 %	Limits: 50-150 %	1	05/12/25 21:25	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			97 %	50-150 %	1	05/12/25 21:25	NWTPH-Gx (MS)	
SB-14-15.0-15.5-20250507 (A5E1159-20)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	13.1	---	5.93	mg/kg dry	50	05/12/25 21:52	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	103 %	Limits: 50-150 %	1	05/12/25 21:52	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			98 %	50-150 %	1	05/12/25 21:52	NWTPH-Gx (MS)	

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ANALYTICAL REPORT

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ORELAP ID: OR100062**Antea Group**
205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**
Project Number: **BP Site 0980**
Project Manager: **Don Wyll****Report ID:**
A5E1159 - 05 15 25 1458

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-14-20.0-20.5-20250507 (A5E1159-21)				Matrix: Soil		Batch: 25E0344		
Gasoline Range Organics	ND	---	6.19	mg/kg dry	50	05/12/25 22:19	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	104 %	Limits: 50-150 %	1	05/12/25 22:19	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			97 %	50-150 %	1	05/12/25 22:19	NWTPH-Gx (MS)	

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DRAFT REPORT, DATA SUBJECT TO CHANGE



ANALYTICAL REPORT

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Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:****A5E1159 - 05 15 25 1458**

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-9-5-20250507 (A5E1159-01)				Matrix: Soil		Batch: 25E0344		
Benzene	ND	---	0.0110	mg/kg dry	50	05/12/25 15:57	5035A/8260D	
Toluene	ND	---	0.0548	mg/kg dry	50	05/12/25 15:57	5035A/8260D	
Ethylbenzene	ND	---	0.0274	mg/kg dry	50	05/12/25 15:57	5035A/8260D	
Xylenes, total	0.133	---	0.0823	mg/kg dry	50	05/12/25 15:57	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0548	mg/kg dry	50	05/12/25 15:57	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:		99 %	Limits: 80-120 %	1	05/12/25 15:57	5035A/8260D
Toluene-d8 (Surr)				95 %	80-120 %	1	05/12/25 15:57	5035A/8260D
4-Bromofluorobenzene (Surr)				99 %	79-120 %	1	05/12/25 15:57	5035A/8260D
SB-13-15-15.5-20250507 (A5E1159-03)				Matrix: Soil		Batch: 25E0344		
Benzene	ND	---	0.00913	mg/kg dry	50	05/12/25 16:51	5035A/8260D	
Toluene	ND	---	0.0456	mg/kg dry	50	05/12/25 16:51	5035A/8260D	
Ethylbenzene	ND	---	0.0228	mg/kg dry	50	05/12/25 16:51	5035A/8260D	
Xylenes, total	ND	---	0.0684	mg/kg dry	50	05/12/25 16:51	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0456	mg/kg dry	50	05/12/25 16:51	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:		99 %	Limits: 80-120 %	1	05/12/25 16:51	5035A/8260D
Toluene-d8 (Surr)				96 %	80-120 %	1	05/12/25 16:51	5035A/8260D
4-Bromofluorobenzene (Surr)				98 %	79-120 %	1	05/12/25 16:51	5035A/8260D
SB-13-20-20.5-20250507 (A5E1159-04)				Matrix: Soil		Batch: 25E0344		
Benzene	ND	---	0.0107	mg/kg dry	50	05/12/25 17:19	5035A/8260D	
Toluene	ND	---	0.0535	mg/kg dry	50	05/12/25 17:19	5035A/8260D	
Ethylbenzene	ND	---	0.0267	mg/kg dry	50	05/12/25 17:19	5035A/8260D	
Xylenes, total	ND	---	0.0802	mg/kg dry	50	05/12/25 17:19	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0535	mg/kg dry	50	05/12/25 17:19	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:		99 %	Limits: 80-120 %	1	05/12/25 17:19	5035A/8260D
Toluene-d8 (Surr)				96 %	80-120 %	1	05/12/25 17:19	5035A/8260D
4-Bromofluorobenzene (Surr)				98 %	79-120 %	1	05/12/25 17:19	5035A/8260D
SB-9-8-20250507 (A5E1159-05)				Matrix: Soil		Batch: 25E0344		
Benzene	ND	---	0.0100	mg/kg dry	50	05/12/25 17:46	5035A/8260D	
Toluene	ND	---	0.0501	mg/kg dry	50	05/12/25 17:46	5035A/8260D	
Ethylbenzene	ND	---	0.0251	mg/kg dry	50	05/12/25 17:46	5035A/8260D	
Xylenes, total	ND	---	0.0752	mg/kg dry	50	05/12/25 17:46	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0501	mg/kg dry	50	05/12/25 17:46	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:		100 %	Limits: 80-120 %	1	05/12/25 17:46	5035A/8260D

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Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:****A5E1159 - 05 15 25 1458**

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-9-8-20250507 (A5E1159-05)				Matrix: Soil		Batch: 25E0344		
Toluene-d8 (Surr)			96 %	80-120 %	1	05/12/25 17:46	5035A/8260D	
4-Bromofluorobenzene (Surr)			97 %	79-120 %	1	05/12/25 17:46	5035A/8260D	
SB-13-25-25.5-20250507 (A5E1159-06)				Matrix: Soil		Batch: 25E0344		
Benzene	ND	---	0.0118	mg/kg dry	50	05/12/25 18:13	5035A/8260D	
Toluene	ND	---	0.0592	mg/kg dry	50	05/12/25 18:13	5035A/8260D	
Ethylbenzene	ND	---	0.0296	mg/kg dry	50	05/12/25 18:13	5035A/8260D	
Xylenes, total	ND	---	0.0888	mg/kg dry	50	05/12/25 18:13	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0592	mg/kg dry	50	05/12/25 18:13	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:	100 %	Limits: 80-120 %	1	05/12/25 18:13	5035A/8260D	
Toluene-d8 (Surr)			96 %	80-120 %	1	05/12/25 18:13	5035A/8260D	
4-Bromofluorobenzene (Surr)			98 %	79-120 %	1	05/12/25 18:13	5035A/8260D	
SB-11-6.5-7-20250507 (A5E1159-08)				Matrix: Soil		Batch: 25E0344		
Benzene	ND	---	0.0107	mg/kg dry	50	05/12/25 18:40	5035A/8260D	
Toluene	ND	---	0.0536	mg/kg dry	50	05/12/25 18:40	5035A/8260D	
Ethylbenzene	ND	---	0.0268	mg/kg dry	50	05/12/25 18:40	5035A/8260D	
Xylenes, total	ND	---	0.0804	mg/kg dry	50	05/12/25 18:40	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0536	mg/kg dry	50	05/12/25 18:40	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:	100 %	Limits: 80-120 %	1	05/12/25 18:40	5035A/8260D	
Toluene-d8 (Surr)			97 %	80-120 %	1	05/12/25 18:40	5035A/8260D	
4-Bromofluorobenzene (Surr)			97 %	79-120 %	1	05/12/25 18:40	5035A/8260D	
SB-11-15-15.5-20250507 (A5E1159-09)				Matrix: Soil		Batch: 25E0344		
Benzene	ND	---	0.00953	mg/kg dry	50	05/12/25 19:08	5035A/8260D	
Toluene	ND	---	0.0476	mg/kg dry	50	05/12/25 19:08	5035A/8260D	
Ethylbenzene	ND	---	0.0238	mg/kg dry	50	05/12/25 19:08	5035A/8260D	
Xylenes, total	ND	---	0.0714	mg/kg dry	50	05/12/25 19:08	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0476	mg/kg dry	50	05/12/25 19:08	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		Recovery:	100 %	Limits: 80-120 %	1	05/12/25 19:08	5035A/8260D	
Toluene-d8 (Surr)			96 %	80-120 %	1	05/12/25 19:08	5035A/8260D	
4-Bromofluorobenzene (Surr)			96 %	79-120 %	1	05/12/25 19:08	5035A/8260D	
SB-11-20-20.5-20250507 (A5E1159-10)				Matrix: Soil		Batch: 25E0344		
Benzene	ND	---	0.00854	mg/kg dry	50	05/12/25 19:35	5035A/8260D	
Toluene	ND	---	0.0427	mg/kg dry	50	05/12/25 19:35	5035A/8260D	

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Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:****A5E1159 - 05 15 25 1458**

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-11-20-20.5-20250507 (A5E1159-10)				Matrix: Soil		Batch: 25E0344		
Ethylbenzene	ND	---	0.0213	mg/kg dry	50	05/12/25 19:35	5035A/8260D	
Xylenes, total	ND	---	0.0640	mg/kg dry	50	05/12/25 19:35	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0427	mg/kg dry	50	05/12/25 19:35	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	100 %	<i>Limits:</i>	80-120 %	1	05/12/25 19:35	5035A/8260D
<i>Toluene-d8 (Surr)</i>			96 %		80-120 %	1	05/12/25 19:35	5035A/8260D
<i>4-Bromofluorobenzene (Surr)</i>			97 %		79-120 %	1	05/12/25 19:35	5035A/8260D
SB-12-6.5-7.0-20250507 (A5E1159-12)				Matrix: Soil		Batch: 25E0344		
Benzene	ND	---	0.0121	mg/kg dry	50	05/12/25 20:03	5035A/8260D	
Toluene	ND	---	0.0605	mg/kg dry	50	05/12/25 20:03	5035A/8260D	
Ethylbenzene	ND	---	0.0303	mg/kg dry	50	05/12/25 20:03	5035A/8260D	
Xylenes, total	ND	---	0.0908	mg/kg dry	50	05/12/25 20:03	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0605	mg/kg dry	50	05/12/25 20:03	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	100 %	<i>Limits:</i>	80-120 %	1	05/12/25 20:03	5035A/8260D
<i>Toluene-d8 (Surr)</i>			97 %		80-120 %	1	05/12/25 20:03	5035A/8260D
<i>4-Bromofluorobenzene (Surr)</i>			96 %		79-120 %	1	05/12/25 20:03	5035A/8260D
SB-12-15.0-15.5-20250507 (A5E1159-14)				Matrix: Soil		Batch: 25E0344		
Benzene	ND	---	0.00932	mg/kg dry	50	05/12/25 20:30	5035A/8260D	
Toluene	ND	---	0.0466	mg/kg dry	50	05/12/25 20:30	5035A/8260D	
Ethylbenzene	ND	---	0.0233	mg/kg dry	50	05/12/25 20:30	5035A/8260D	
Xylenes, total	ND	---	0.0699	mg/kg dry	50	05/12/25 20:30	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0466	mg/kg dry	50	05/12/25 20:30	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	101 %	<i>Limits:</i>	80-120 %	1	05/12/25 20:30	5035A/8260D
<i>Toluene-d8 (Surr)</i>			96 %		80-120 %	1	05/12/25 20:30	5035A/8260D
<i>4-Bromofluorobenzene (Surr)</i>			97 %		79-120 %	1	05/12/25 20:30	5035A/8260D
SB-12-20.0-20.5-20250507 (A5E1159-15)				Matrix: Soil		Batch: 25E0344		
Benzene	ND	---	0.0117	mg/kg dry	50	05/12/25 20:57	5035A/8260D	
Toluene	ND	---	0.0584	mg/kg dry	50	05/12/25 20:57	5035A/8260D	
Ethylbenzene	ND	---	0.0292	mg/kg dry	50	05/12/25 20:57	5035A/8260D	
Xylenes, total	ND	---	0.0876	mg/kg dry	50	05/12/25 20:57	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0584	mg/kg dry	50	05/12/25 20:57	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	101 %	<i>Limits:</i>	80-120 %	1	05/12/25 20:57	5035A/8260D
<i>Toluene-d8 (Surr)</i>			96 %		80-120 %	1	05/12/25 20:57	5035A/8260D
<i>4-Bromofluorobenzene (Surr)</i>			97 %		79-120 %	1	05/12/25 20:57	5035A/8260D

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Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyl****Report ID:****A5E1159 - 05 15 25 1458**

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-12-20.0-20.5-20250507 (A5E1159-15)				Matrix: Soil		Batch: 25E0344		
SB-14-10.0-10.5-20250507 (A5E1159-19)				Matrix: Soil		Batch: 25E0344		
Benzene	ND	---	0.00775	mg/kg wet	50	05/12/25 21:25	5035A/8260D	
Toluene	ND	---	0.0388	mg/kg wet	50	05/12/25 21:25	5035A/8260D	
Ethylbenzene	ND	---	0.0194	mg/kg wet	50	05/12/25 21:25	5035A/8260D	
Xylenes, total	ND	---	0.0581	mg/kg wet	50	05/12/25 21:25	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0388	mg/kg wet	50	05/12/25 21:25	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	100 %	<i>Limits:</i>	80-120 %	1	05/12/25 21:25	5035A/8260D
<i>Toluene-d8 (Surr)</i>			97 %		80-120 %	1	05/12/25 21:25	5035A/8260D
<i>4-Bromofluorobenzene (Surr)</i>			96 %		79-120 %	1	05/12/25 21:25	5035A/8260D
SB-14-15.0-15.5-20250507 (A5E1159-20)				Matrix: Soil		Batch: 25E0344		
Benzene	ND	---	0.0119	mg/kg dry	50	05/12/25 21:52	5035A/8260D	
Toluene	ND	---	0.0593	mg/kg dry	50	05/12/25 21:52	5035A/8260D	
Ethylbenzene	ND	---	0.0297	mg/kg dry	50	05/12/25 21:52	5035A/8260D	
Xylenes, total	ND	---	0.0890	mg/kg dry	50	05/12/25 21:52	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0593	mg/kg dry	50	05/12/25 21:52	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	100 %	<i>Limits:</i>	80-120 %	1	05/12/25 21:52	5035A/8260D
<i>Toluene-d8 (Surr)</i>			97 %		80-120 %	1	05/12/25 21:52	5035A/8260D
<i>4-Bromofluorobenzene (Surr)</i>			96 %		79-120 %	1	05/12/25 21:52	5035A/8260D
SB-14-20.0-20.5-20250507 (A5E1159-21)				Matrix: Soil		Batch: 25E0344		
Benzene	ND	---	0.0124	mg/kg dry	50	05/12/25 22:19	5035A/8260D	
Toluene	ND	---	0.0619	mg/kg dry	50	05/12/25 22:19	5035A/8260D	
Ethylbenzene	ND	---	0.0309	mg/kg dry	50	05/12/25 22:19	5035A/8260D	
Xylenes, total	ND	---	0.0928	mg/kg dry	50	05/12/25 22:19	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0619	mg/kg dry	50	05/12/25 22:19	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	101 %	<i>Limits:</i>	80-120 %	1	05/12/25 22:19	5035A/8260D
<i>Toluene-d8 (Surr)</i>			96 %		80-120 %	1	05/12/25 22:19	5035A/8260D
<i>4-Bromofluorobenzene (Surr)</i>			97 %		79-120 %	1	05/12/25 22:19	5035A/8260D

DRAFT REPORT

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300

Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyl****Report ID:**

A5E1159 - 05 15 25 1458

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-9-5-20250507 (A5E1159-01)				Matrix: Soil		Batch: 25E0365		
% Solids	91.8	---	1.00	%	1	05/13/25 05:37	EPA 8000D	
SB-13-10-10.5-20250507 (A5E1159-02)				Matrix: Soil		Batch: 25E0365		
% Solids	92.1	---	1.00	%	1	05/13/25 05:37	EPA 8000D	
SB-13-15-15.5-20250507 (A5E1159-03)				Matrix: Soil		Batch: 25E0365		
% Solids	92.8	---	1.00	%	1	05/13/25 05:37	EPA 8000D	
SB-13-20-20.5-20250507 (A5E1159-04)				Matrix: Soil		Batch: 25E0365		
% Solids	91.9	---	1.00	%	1	05/13/25 05:37	EPA 8000D	
SB-9-8-20250507 (A5E1159-05)				Matrix: Soil		Batch: 25E0365		
% Solids	90.7	---	1.00	%	1	05/13/25 05:37	EPA 8000D	
SB-13-25-25.5-20250507 (A5E1159-06)				Matrix: Soil		Batch: 25E0365		
% Solids	92.2	---	1.00	%	1	05/13/25 05:37	EPA 8000D	
SB-11-6.5-7-20250507 (A5E1159-08)				Matrix: Soil		Batch: 25E0365		
% Solids	87.7	---	1.00	%	1	05/13/25 05:37	EPA 8000D	
SB-11-15-15.5-20250507 (A5E1159-09)				Matrix: Soil		Batch: 25E0365		
% Solids	88.8	---	1.00	%	1	05/13/25 05:37	EPA 8000D	
SB-11-20-20.5-20250507 (A5E1159-10)				Matrix: Soil		Batch: 25E0365		
% Solids	90.5	---	1.00	%	1	05/13/25 05:37	EPA 8000D	
SB-12-6.5-7.0-20250507 (A5E1159-12)				Matrix: Soil		Batch: 25E0365		
% Solids	91.7	---	1.00	%	1	05/13/25 05:37	EPA 8000D	
SB-12-15.0-15.5-20250507 (A5E1159-14)				Matrix: Soil		Batch: 25E0365		
% Solids	89.8	---	1.00	%	1	05/13/25 05:37	EPA 8000D	
SB-12-20.0-20.5-20250507 (A5E1159-15)				Matrix: Soil		Batch: 25E0365		
% Solids	84.8	---	1.00	%	1	05/13/25 05:37	EPA 8000D	
SB-14-15.0-15.5-20250507 (A5E1159-20)				Matrix: Soil		Batch: 25E0365		

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ORELAP ID: OR100062

Antea Group
205 SE Spokane Street, Suite 300
Portland, OR 97202

Project: **WA-980 Seattle**
Project Number: **BP Site 0980**
Project Manager: **Don Wyl**

Report ID:
A5E1159 - 05 15 25 1458

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-14-15.0-15.5-20250507 (A5E1159-20)				Matrix: Soil		Batch: 25E0365		
% Solids	87.8	---	1.00	%	1	05/13/25 05:37	EPA 8000D	
SB-14-20.0-20.5-20250507 (A5E1159-21)				Matrix: Soil		Batch: 25E0365		
% Solids	84.0	---	1.00	%	1	05/13/25 05:37	EPA 8000D	

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ORELAP ID: OR100062Antea Group
205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**
Project Number: **BP Site 0980**
Project Manager: **Don Wyl****Report ID:**
A5E1159 - 05 15 25 1458

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25E0421 - EPA 3546						Soil						
Blank (25E0421-BLK1)		Prepared: 05/13/25 13:33 Analyzed: 05/13/25 19:29										
NWTPH-Dx												
Diesel	ND	---	20.0	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	---	40.0	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 84 %		Limits: 50-150 %		Dilution: 1x						
LCS (25E0421-BS2)		Prepared: 05/13/25 13:33 Analyzed: 05/13/25 19:50										
NWTPH-Dx												
Diesel	106	---	20.0	mg/kg wet	1	125	---	85	38 - 132%	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 92 %		Limits: 50-150 %		Dilution: 1x						
Duplicate (25E0421-DUP3)		Prepared: 05/13/25 13:33 Analyzed: 05/14/25 08:59										
QC Source Sample: SB-9-5-20250507 (A5E1159-01RE1)												
NWTPH-Dx												
Diesel	64.2	---	18.3	mg/kg dry	1	---	28.6	---	---	77	30%	Q-05
Oil	256	---	36.5	mg/kg dry	1	---	52.8	---	---	132	30%	Q-04
Surr: o-Terphenyl (Surr)		Recovery: 84 %		Limits: 50-150 %		Dilution: 1x						
Duplicate (25E0421-DUP4)		Prepared: 05/13/25 13:33 Analyzed: 05/14/25 11:06										
QC Source Sample: SB-14-20.0-20.5-20250507 (A5E1159-21RE1)												
NWTPH-Dx												
Diesel	25.2	---	21.3	mg/kg dry	1	---	51.0	---	---	68	30%	Q-05
Oil	ND	---	42.6	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		Recovery: 91 %		Limits: 50-150 %		Dilution: 1x						

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Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyl****Report ID:**

A5E1159 - 05 15 25 1458

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPL-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25E0344 - EPA 5035A						Soil						
Blank (25E0344-BLK1)		Prepared: 05/12/25 10:00 Analyzed: 05/12/25 12:18										
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	5.00	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery:	104 %	Limits:	50-150 %	Dilution: 1x						
1,4-Difluorobenzene (Sur)			99 %		50-150 %	"						
LCS (25E0344-BS2)		Prepared: 05/12/25 10:00 Analyzed: 05/12/25 11:50										
NWTPH-Gx (MS)												
Gasoline Range Organics	27.2	---	5.00	mg/kg wet	50	25.0	---	109	80 - 120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery:	102 %	Limits:	50-150 %	Dilution: 1x						
1,4-Difluorobenzene (Sur)			98 %		50-150 %	"						

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

DRAFT REPORT

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Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyl****Report ID:**

A5E1159 - 05 15 25 1458

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPL-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25E0397 - EPA 5035A						Soil						
Blank (25E0397-BLK1)		Prepared: 05/13/25 09:00 Analyzed: 05/13/25 11:47										
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	5.00	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery:	99 %	Limits:	50-150 %	Dilution: 1x						
1,4-Difluorobenzene (Sur)			99 %		50-150 %	"						
LCS (25E0397-BS2)		Prepared: 05/13/25 09:00 Analyzed: 05/13/25 11:20										
NWTPH-Gx (MS)												
Gasoline Range Organics	24.7	---	5.00	mg/kg wet	50	25.0	---	99	80 - 120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery:	99 %	Limits:	50-150 %	Dilution: 1x						
1,4-Difluorobenzene (Sur)			99 %		50-150 %	"						

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

DRAFT REPORT

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ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300

Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:**

A5E1159 - 05 15 25 1458

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25E0344 - EPA 5035A												
Soil												
Blank (25E0344-BLK1)												
Prepared: 05/12/25 10:00 Analyzed: 05/12/25 12:18												
5035A/8260D												
Benzene	ND	---	0.0100	mg/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.0250	mg/kg wet	50	---	---	---	---	---	---	
Xylenes, total	ND	---	0.0750	mg/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	---	0.100	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.0250	mg/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)												
			Recovery:	101 %	Limits:	80-120 %	Dilution: 1x					
Toluene-d8 (Surr)				96 %		80-120 %	"					
4-Bromofluorobenzene (Surr)				96 %		79-120 %	"					
LCS (25E0344-BS1)												
Prepared: 05/12/25 10:00 Analyzed: 05/12/25 11:23												
5035A/8260D												
Benzene	1.06	---	0.0100	mg/kg wet	50	1.00	---	106	80 - 120%	---	---	
Toluene	0.978	---	0.0500	mg/kg wet	50	1.00	---	98	80 - 120%	---	---	
Ethylbenzene	1.04	---	0.0250	mg/kg wet	50	1.00	---	104	80 - 120%	---	---	
Xylenes, total	3.10	---	0.0750	mg/kg wet	50	3.00	---	103	80 - 120%	---	---	
Methyl tert-butyl ether (MTBE)	1.01	---	0.0500	mg/kg wet	50	1.00	---	101	80 - 120%	---	---	
Naphthalene	0.856	---	0.100	mg/kg wet	50	1.00	---	86	80 - 120%	---	---	
1,2-Dibromoethane (EDB)	1.06	---	0.0500	mg/kg wet	50	1.00	---	106	80 - 120%	---	---	
1,2-Dichloroethane (EDC)	1.09	---	0.0250	mg/kg wet	50	1.00	---	109	80 - 120%	---	---	
Isopropylbenzene	1.04	---	0.0500	mg/kg wet	50	1.00	---	104	80 - 120%	---	---	
1,2,4-Trimethylbenzene	0.986	---	0.0500	mg/kg wet	50	1.00	---	99	80 - 120%	---	---	
1,3,5-Trimethylbenzene	1.01	---	0.0500	mg/kg wet	50	1.00	---	101	80 - 120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)												
			Recovery:	101 %	Limits:	80-120 %	Dilution: 1x					
Toluene-d8 (Surr)				98 %		80-120 %	"					
4-Bromofluorobenzene (Surr)				97 %		79-120 %	"					
Matrix Spike (25E0344-MS1)												
Prepared: 05/07/25 15:10 Analyzved: 05/12/25 22:47												

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ANALYTICAL REPORT

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Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300

Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyl****Report ID:**

A5E1159 - 05 15 25 1458

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25E0344 - EPA 5035A						Soil						
Matrix Spike (25E0344-MS1)		Prepared: 05/07/25 15:10 Analyzed: 05/12/25 22:47										
QC Source Sample: SB-14-20.0-20.5-20250507 (A5E1159-21)												
5035A/8260D												
Benzene	1.36	---	0.0124	mg/kg dry	50	1.24	ND	110	77 - 121%	---	---	
Toluene	1.27	---	0.0619	mg/kg dry	50	1.24	ND	102	77 - 121%	---	---	
Ethylbenzene	1.32	---	0.0309	mg/kg dry	50	1.24	ND	107	76 - 122%	---	---	
Xylenes, total	3.96	---	0.0928	mg/kg dry	50	3.71	ND	107	78 - 124%	---	---	
Methyl tert-butyl ether (MTBE)	1.27	---	0.0619	mg/kg dry	50	1.24	ND	103	73 - 125%	---	---	
Naphthalene	1.11	---	0.124	mg/kg dry	50	1.24	ND	89	62 - 129%	---	---	
1,2-Dibromoethane (EDB)	1.33	---	0.0619	mg/kg dry	50	1.24	ND	107	78 - 122%	---	---	
1,2-Dichloroethane (EDC)	1.37	---	0.0309	mg/kg dry	50	1.24	ND	111	73 - 128%	---	---	
Isopropylbenzene	1.35	---	0.0619	mg/kg dry	50	1.24	ND	109	68 - 134%	---	---	
1,2,4-Trimethylbenzene	1.27	---	0.0619	mg/kg dry	50	1.24	ND	103	75 - 123%	---	---	
1,3,5-Trimethylbenzene	1.28	---	0.0619	mg/kg dry	50	1.24	ND	103	73 - 124%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 101 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		97 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		96 %		79-120 %		"						

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205 SE Spokane Street, Suite 300
Portland, OR 97202

Project: **WA-980 Seattle**
Project Number: **BP Site 0980**
Project Manager: **Don Wyl**

Report ID:
A5E1159 - 05 15 25 1458

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25E0365 - Dry Weight Prep (EPA 8000D)							Soil					
Duplicate (25E0365-DUP1)		Prepared: 05/12/25 12:18 Analyzed: 05/13/25 05:37										
QC Source Sample: SB-9-5-20250507 (A5E1159-01)												
EPA 8000D												
% Solids	89.9	---	1.00	%	1	---	91.8	---	---	2	10%	

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**ANALYTICAL REPORT****Apex Laboratories, LLC**

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205 SE Spokane Street, Suite 300

Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:****A5E1159 - 05 15 25 1458****SAMPLE PREPARATION INFORMATION****Diesel and/or Oil Hydrocarbons by NWTPH-Dx****Prep: EPA 3546**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 25E0421							
A5E1159-01RE1	Soil	NWTPH-Dx	05/07/25 08:40	05/13/25 13:33	11.38g/5mL	10g/5mL	0.88
A5E1159-02RE1	Soil	NWTPH-Dx	05/07/25 09:00	05/13/25 13:33	11.4g/5mL	10g/5mL	0.88
A5E1159-03RE1	Soil	NWTPH-Dx	05/07/25 09:10	05/13/25 13:33	11.44g/5mL	10g/5mL	0.87
A5E1159-04RE1	Soil	NWTPH-Dx	05/07/25 09:20	05/13/25 13:33	11.43g/5mL	10g/5mL	0.88
A5E1159-05RE1	Soil	NWTPH-Dx	05/07/25 09:30	05/13/25 13:33	11.57g/5mL	10g/5mL	0.86
A5E1159-06	Soil	NWTPH-Dx	05/07/25 09:40	05/13/25 13:33	11.02g/5mL	10g/5mL	0.91
A5E1159-08RE1	Soil	NWTPH-Dx	05/07/25 10:50	05/13/25 13:33	11.68g/5mL	10g/5mL	0.86
A5E1159-09	Soil	NWTPH-Dx	05/07/25 11:10	05/13/25 13:33	11.63g/5mL	10g/5mL	0.86
A5E1159-10	Soil	NWTPH-Dx	05/07/25 11:25	05/13/25 13:33	11.95g/5mL	10g/5mL	0.84
A5E1159-12	Soil	NWTPH-Dx	05/07/25 13:20	05/13/25 13:33	11.17g/5mL	10g/5mL	0.90
A5E1159-14	Soil	NWTPH-Dx	05/07/25 13:35	05/13/25 13:33	11.82g/5mL	10g/5mL	0.85
A5E1159-15	Soil	NWTPH-Dx	05/07/25 13:45	05/13/25 13:33	11.1g/5mL	10g/5mL	0.90
A5E1159-20	Soil	NWTPH-Dx	05/07/25 15:00	05/13/25 13:33	11.1g/5mL	10g/5mL	0.90
A5E1159-21RE1	Soil	NWTPH-Dx	05/07/25 15:10	05/13/25 13:33	11.69g/5mL	10g/5mL	0.86

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx**Prep: EPA 5035A**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 25E0344							
A5E1159-01	Soil	NWTPH-Gx (MS)	05/07/25 08:40	05/07/25 08:40	5.41g/5mL	5g/5mL	0.92
A5E1159-03	Soil	NWTPH-Gx (MS)	05/07/25 09:10	05/07/25 09:10	6.45g/5mL	5g/5mL	0.78
A5E1159-04	Soil	NWTPH-Gx (MS)	05/07/25 09:20	05/07/25 09:20	5.54g/5mL	5g/5mL	0.90
A5E1159-05	Soil	NWTPH-Gx (MS)	05/07/25 09:30	05/07/25 09:30	6.13g/5mL	5g/5mL	0.82
A5E1159-06	Soil	NWTPH-Gx (MS)	05/07/25 09:40	05/07/25 09:40	8.38g/8.5mL	5g/5mL	1.01
A5E1159-08	Soil	NWTPH-Gx (MS)	05/07/25 10:50	05/07/25 10:50	6.12g/5mL	5g/5mL	0.82
A5E1159-09	Soil	NWTPH-Gx (MS)	05/07/25 11:10	05/07/25 11:10	6.81g/5mL	5g/5mL	0.73
A5E1159-10	Soil	NWTPH-Gx (MS)	05/07/25 11:25	05/07/25 11:25	7.38g/5mL	5g/5mL	0.68
A5E1159-12	Soil	NWTPH-Gx (MS)	05/07/25 13:20	05/07/25 13:20	4.87g/5mL	5g/5mL	1.03
A5E1159-14	Soil	NWTPH-Gx (MS)	05/07/25 13:35	05/07/25 13:35	6.81g/5mL	5g/5mL	0.73
A5E1159-15	Soil	NWTPH-Gx (MS)	05/07/25 13:45	05/07/25 13:45	5.96g/5mL	5g/5mL	0.84
A5E1159-19	Soil	NWTPH-Gx (MS)	05/07/25 14:55	05/07/25 14:55	6.45g/5mL	5g/5mL	0.78
A5E1159-20	Soil	NWTPH-Gx (MS)	05/07/25 15:00	05/07/25 15:00	5.44g/5mL	5g/5mL	0.92
A5E1159-21	Soil	NWTPH-Gx (MS)	05/07/25 15:10	05/07/25 15:10	5.68g/5mL	5g/5mL	0.88
Batch: 25E0397							
A5E1159-02RE1	Soil	NWTPH-Gx (MS)	05/07/25 09:00	05/07/25 09:00	5.71g/5mL	5g/5mL	0.88

DRAFT REPORT

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300

Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyl****Report ID:****A5E1159 - 05 15 25 1458**

SAMPLE PREPARATION INFORMATION

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor

Selected Volatile Organic Compounds by EPA 5035A/8260D

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 25E0344							
A5E1159-01	Soil	5035A/8260D	05/07/25 08:40	05/07/25 08:40	5.41g/5mL	5g/5mL	0.92
A5E1159-03	Soil	5035A/8260D	05/07/25 09:10	05/07/25 09:10	6.45g/5mL	5g/5mL	0.78
A5E1159-04	Soil	5035A/8260D	05/07/25 09:20	05/07/25 09:20	5.54g/5mL	5g/5mL	0.90
A5E1159-05	Soil	5035A/8260D	05/07/25 09:30	05/07/25 09:30	6.13g/5mL	5g/5mL	0.82
A5E1159-06	Soil	5035A/8260D	05/07/25 09:40	05/07/25 09:40	8.38g/8.5mL	5g/5mL	1.01
A5E1159-08	Soil	5035A/8260D	05/07/25 10:50	05/07/25 10:50	6.12g/5mL	5g/5mL	0.82
A5E1159-09	Soil	5035A/8260D	05/07/25 11:10	05/07/25 11:10	6.81g/5mL	5g/5mL	0.73
A5E1159-10	Soil	5035A/8260D	05/07/25 11:25	05/07/25 11:25	7.38g/5mL	5g/5mL	0.68
A5E1159-12	Soil	5035A/8260D	05/07/25 13:20	05/07/25 13:20	4.87g/5mL	5g/5mL	1.03
A5E1159-14	Soil	5035A/8260D	05/07/25 13:35	05/07/25 13:35	6.81g/5mL	5g/5mL	0.73
A5E1159-15	Soil	5035A/8260D	05/07/25 13:45	05/07/25 13:45	5.96g/5mL	5g/5mL	0.84
A5E1159-19	Soil	5035A/8260D	05/07/25 14:55	05/07/25 14:55	6.45g/5mL	5g/5mL	0.78
A5E1159-20	Soil	5035A/8260D	05/07/25 15:00	05/07/25 15:00	5.44g/5mL	5g/5mL	0.92
A5E1159-21	Soil	5035A/8260D	05/07/25 15:10	05/07/25 15:10	5.68g/5mL	5g/5mL	0.88

Percent Dry Weight

Prep: Dry Weight Prep (EPA 8000D)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 25E0365							
A5E1159-01	Soil	EPA 8000D	05/07/25 08:40	05/12/25 12:18	1g	1g	1.00
A5E1159-02	Soil	EPA 8000D	05/07/25 09:00	05/12/25 12:18	1g	1g	1.00
A5E1159-03	Soil	EPA 8000D	05/07/25 09:10	05/12/25 12:18	1g	1g	1.00
A5E1159-04	Soil	EPA 8000D	05/07/25 09:20	05/12/25 12:18	1g	1g	1.00
A5E1159-05	Soil	EPA 8000D	05/07/25 09:30	05/12/25 12:18	1g	1g	1.00
A5E1159-06	Soil	EPA 8000D	05/07/25 09:40	05/12/25 12:18	1g	1g	1.00
A5E1159-08	Soil	EPA 8000D	05/07/25 10:50	05/12/25 12:18	1g	1g	1.00
A5E1159-09	Soil	EPA 8000D	05/07/25 11:10	05/12/25 12:18	1g	1g	1.00
A5E1159-10	Soil	EPA 8000D	05/07/25 11:25	05/12/25 12:18	1g	1g	1.00
A5E1159-12	Soil	EPA 8000D	05/07/25 13:20	05/12/25 12:18	1g	1g	1.00
A5E1159-14	Soil	EPA 8000D	05/07/25 13:35	05/12/25 12:18	1g	1g	1.00

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ANALYTICAL REPORT

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503-718-2323
ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300
Portland, OR 97202

Project: **WA-980 Seattle**

Project Number: **BP Site 0980**

Project Manager: **Don Wyl**

Report ID:

A5E1159 - 05 15 25 1458

SAMPLE PREPARATION INFORMATION

Percent Dry Weight

Prep: Dry Weight Prep (EPA 8000D)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A5E1159-15	Soil	EPA 8000D	05/07/25 13:45	05/12/25 12:18	1g	1g	1.00
A5E1159-20	Soil	EPA 8000D	05/07/25 15:00	05/12/25 12:18	1g	1g	1.00
A5E1159-21	Soil	EPA 8000D	05/07/25 15:10	05/12/25 12:18	1g	1g	1.00

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QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

- Q-04** Spike recovery and/or RPD is outside control limits due to a non-homogeneous sample matrix.
- Q-05** Analyses are not controlled on RPD values from sample and duplicate concentrations that are below 5 times the reporting level.
- Q-42** Matrix Spike and/or Duplicate analysis was performed on this sample. % Recovery or RPD for this analyte is outside laboratory control limits. (Refer to the QC Section of Analytical Report.)
- S-05** Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.

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Project: **WA-980 Seattle**
Project Number: **BP Site 0980**
Project Manager: **Don Wyll**

Report ID:
A5E1159 - 05 15 25 1458

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.
ND Analyte NOT DETECTED at or above the detection or reporting limit.
NR Result Not Reported.
RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting and Detection Limits: Default Limits

Default Reporting and Detection Limits are based on 100% dry weight with the minimum dilution for the analysis. Reporting and Detection Limits are raised due to moisture content, additional dilutions required for analysis, matrix interferences and in other cases, as necessary.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as "dry", "wet", or " " (blank) designation.

"dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

"wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) are not included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

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Project Manager: **Don Wyll**

Report ID:

A5E1159 - 05 15 25 1458

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to one half of the Reporting Limit (RL).

Blank results for gravimetric analyses are evaluated to the Reporting Level, not to half of the Reporting Level.

-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.

-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.

For further details, please request a copy of this document.

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

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Project: **WA-980 Seattle**

Project Number: **BP Site 0980**

Project Manager: **Don Wyl**

Report ID:

A5E1159 - 05 15 25 1458

Decanted Samples:

Soils/Sediments:

Unless TCLP analysis is required or there is notification otherwise for a specific project, all Soil and Sediments containing excess water are decanted prior to analysis in order to provide the most representative sample for analysis.

Water Samples:

Water samples containing solids and sediment may need to be decanted in order to eliminate these particulates from the water extractions. In the case of organics extractions, a solvent rinse of the container will not be performed.

Volatiles Soils (5035s)

Samples that are field preserved by 5035 for volatiles are dry weight corrected using the same dry weight correction as for normal analyses.

In the case of decanted samples, the dry weight may be performed on a decanted sample, while the aliquot for 5035 may not have been treated the same way. If this is a concern, please submit separate containers for dry weight analysis for volatiles can be provided.

All samples decanted in the laboratory are noted in this report with the DCNT qualifier indicating the sample was decanted.

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Portland, OR 97202

Project: **WA-980 Seattle**

Project Number: **BP Site 0980**

Project Manager: **Don Wyll**

Report ID:

A5E1159 - 05 15 25 1458

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation)

EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.

Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provided by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

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DRAFT REPORT, DATA SUBJECT TO CHANGE

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ORELAP ID: OR100062

A5E1159 - 05 15 25 1458

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ORELAP ID: OR100062

Antea Group
205 SE Spokane Street, Suite 300
Portland, OR 97202

Project: WA-980 Seattle
Project Number: BP Site 0980
Project Manager: Don Wylle

Report ID:
ASE1159 - 05 15 25 1458

APEX LABS		CHAIN OF CUSTODY		Lab # ASE1159		COC 2 of 3																					
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323																											
Company: Antea Group		Project Mgr: Don Wylle		Project Name: WA-980 Seattle		Project #: BP Site 0980																					
Address: 18378-B Redmond Way, Redmond, WA		Phone: 925-820-2007		Email: Don.Wylle@antegroup.com		PO #																					
Sampled by: D. Lindelof / S. Nachimuthu		ANALYSIS REQUEST																									
State Sampled: (OR) (WA)																											
Other																											
County:																											
SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260D BTEX	8260D RBDM VOCs	8260D Halo VOCs	8260D VOCs Full List	8270E PAHs	8270E Semi-Vols Full List	8082A PCBs	8081B Pest	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Cu, Cr, Co, Pb, Fe, Hg, Mg, Mn, Ni, K, Se, Ag, Na, Ti, Zn	TOTAL DISS.	TCLP	TCLP Metals (8)	38LW 0928	WIS 0928	4x sample 1901	HOLD	Archive - Frozen	
1 SB-11-22.5-23-20250507	5/7/25	1150	S	3	X	X	X	X														X	X			X	
2 SB-12-6.5-7.0-20250507	5/7/25	1320	S	3	X	X	X	X														X	X				
3 SB-12-10.0-10.5-20250507	5/7/25	1325	S	3	X	X	X	X														X	X			X	
4 SB-12-15.0-15.5-20250507	5/7/25	1335	S	3	X	X	X	X														X	X				
5 SB-12-20.0-20.5-20250507	5/7/25	1345	S	3	X	X	X	X														X	X				
6 SB-12-22.5-23.0-20250507	5/7/25	1400	S	3	X	X	X	X														X	X			X	
7 SB-12-25.5-26.0-20250507	5/7/25	1425	S	3	X	X	X	X														X	X			X	
8 SB-14-6.5-7.0-20250507	5/7/25	1450	S	3	X	X	X	X														X	X			X	
9 SB-14-10.0-10.5-20250507	5/7/25	1455	S	2			X	X															X				
10 SB-14-15.0-15.5-20250507	5/7/25	1500	S	3		X	X	X														X	X				

Normal Turn Around Time (TAT) = 10 Business Days --->

*** RUSH - Request ---> Indicate Date Needed:

***Rush TAT requests may incur additional cost

For TAT calculations, samples received after 3pm will be considered received the next business day.

Data will be reported by 6pm. Samples with <72 hrs of hold time may be surcharged.

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: [Signature] Date: 5/8/25	Signature: [Signature] Date: 5/9/25	Signature: [Signature] Date:	Signature: [Signature] Date:
Printed Name: Dennis Lindelof Time: 1330	Printed Name: [Signature] Time: 1108	Printed Name: [Signature] Time:	Printed Name: [Signature] Time:
Company: Antea Group	Company: Apex	Company:	Company:

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000 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Project: **WA-980 Seattle**
Project Number: **BP Site 0980**
Project Manager: **Don Wyll**

Report ID:
A5E1159 - 05 15 25 1458

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ANALYTICAL REPORT

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503-718-2323

ORELAP ID: OR100062

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205 SE Spokane Street, Suite 300

Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:**

A5E1159 - 05 15 25 1458

APEX LABS COOLER RECEIPT FORMClient: Antea Group Element WO#: A5E1159Project/Project #: WA-980 Seattle / BP Site 0980**Delivery Info:**Date/time received: 5/4/25 @ 1108 By: KRSDelivered by: Apex ☐ Client ☐ ESS ☐ FedEx ☒ UPS ☐ Radio ☐ Morgan ☐ SDS ☐ Evergreen ☐ Other ☐From USDA Regulated Origin? Yes ☐ No ☒**Cooler Inspection** Date/time inspected: 5/4/25 @ 1108 By: KRSChain of Custody included? Yes ☒ No ☐Signed/dated by client? Yes ☒ No ☐Contains USDA Reg. Soils? Yes ☐ No ☒ Unsure (email RegSoils) ☐

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	<u>1.1</u>	<u>1.6</u>					
Custody seals? (Y/N)	<u>N</u>	<u>→</u>					
Received on ice? (Y/N)	<u>Y</u>	<u>→</u>					
Temp. blanks? (Y/N)	<u>Y</u>	<u>→</u>					
Ice type: (Gel/Real/Other)	<u>Real</u>	<u>→</u>					
Condition (In/Out):	<u>In</u>	<u>→</u>					

Cooler out of temp? (Y/N) Possible reason why: →Green dots applied to out of temperature samples? Yes ☒ No ☐Out of temperature samples form initiated? Yes ☒ No ☐**Sample Inspection:** Date/time inspected: 5/4/25 @ 1238 By: KRSAll samples intact? Yes ☒ No ☐ Comments: →Bottle labels/COCs agree? Yes ☒ No ☐ Comments: →COC/container discrepancies form initiated? Yes ☐ No ☒Containers/volumes received appropriate for analysis? Yes ☒ No ☐ Comments: →Do VOA vials have visible headspace? Yes ☐ No ☐ NA ☒Comments: →Water samples: pH checked: Yes ☐ No ☐ NA ☒ pH appropriate? Yes ☐ No ☐ NA ☒ pH ID: →Comments: →8811 2346 3222Labeled by: AWWitness: →Cooler Inspected by: →

Form Y-003 R-02

DRAFT REPORT

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Tuesday, May 20, 2025

Don Wyll

Antea Group

205 SE Spokane Street, Suite 300

Portland, OR 97202

RE: A5E1268 - WA-980 Seattle - BP Site 0980

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A5E1268, which was received by the laboratory on 5/13/2025 at 12:53:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: DAuvil@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.

(See Cooler Receipt Form for details)

Default Cooler 5.4 degC



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**ANALYTICAL REPORT****Apex Laboratories, LLC**

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300
Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyl****Report ID:****A5E1268 - 05 20 25 1247****ANALYTICAL REPORT FOR SAMPLES****SAMPLE INFORMATION**

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-10-8.0-8.5-20250508	A5E1268-01	Soil	05/08/25 09:45	05/13/25 12:53
SB-10-10.0-10.5-20250508	A5E1268-02	Soil	05/08/25 09:50	05/13/25 12:53
SB-10-15.0-15.5-20250508	A5E1268-03	Soil	05/08/25 10:20	05/13/25 12:53
MW-22-10.0-10.5-20250508	A5E1268-04	Soil	05/08/25 11:40	05/13/25 12:53
MW-22-19.5-20.0-20250508	A5E1268-05	Soil	05/08/25 12:20	05/13/25 12:53
MW-22-22.0-22.5-20250508	A5E1268-06	Soil	05/08/25 12:40	05/13/25 12:53
SB-9-12.5-13.0-20250509	A5E1268-07	Soil	05/09/25 08:35	05/13/25 12:53
SB-9-17.5-18.0-20250509	A5E1268-08	Soil	05/09/25 09:00	05/13/25 12:53
SB-9-15.0-15.5-20250509	A5E1268-09	Soil	05/09/25 09:05	05/13/25 12:53
MW-25-10.5-11.0-20250509	A5E1268-10	Soil	05/09/25 10:00	05/13/25 12:53
MW-25-19.5-20.0-20250509	A5E1268-11	Soil	05/09/25 10:15	05/13/25 12:53
MW-25-22.0-22.5-20250509	A5E1268-12	Soil	05/09/25 10:35	05/13/25 12:53
Dispose	A5E1268-13	Soil	05/09/25 00:00	05/13/25 12:53

DRAFT REPORT

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ORELAP ID: OR100062**Antea Group**205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:**

A5E1268 - 05 20 25 1247

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-10-8.0-8.5-20250508 (A5E1268-01RE1)				Matrix: Soil		Batch: 25E0530		
Diesel	100	---	18.6	mg/kg dry	1	05/16/25 08:14	NWTPH-Dx	
Oil	66.4	---	37.2	mg/kg dry	1	05/16/25 08:14	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery:	88 %	Limits:	50-150 %	1	05/16/25 08:14	NWTPH-Dx
SB-10-10.0-10.5-20250508 (A5E1268-02)				Matrix: Soil		Batch: 25E0530		
Diesel	ND	---	19.9	mg/kg dry	1	05/15/25 22:08	NWTPH-Dx	
Oil	ND	---	39.8	mg/kg dry	1	05/15/25 22:08	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery:	96 %	Limits:	50-150 %	1	05/15/25 22:08	NWTPH-Dx
SB-10-15.0-15.5-20250508 (A5E1268-03)				Matrix: Soil		Batch: 25E0530		
Diesel	ND	---	19.5	mg/kg dry	1	05/15/25 22:29	NWTPH-Dx	
Oil	ND	---	39.1	mg/kg dry	1	05/15/25 22:29	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery:	94 %	Limits:	50-150 %	1	05/15/25 22:29	NWTPH-Dx
MW-22-10.0-10.5-20250508 (A5E1268-04)				Matrix: Soil		Batch: 25E0530		
Diesel	321	---	91.8	mg/kg dry	5	05/15/25 23:10	NWTPH-Dx	F-11
Oil	ND	---	184	mg/kg dry	5	05/15/25 23:10	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery:	91 %	Limits:	50-150 %	5	05/15/25 23:10	NWTPH-Dx S-05
MW-22-19.5-20.0-20250508 (A5E1268-05)				Matrix: Soil		Batch: 25E0530		
Diesel	ND	---	22.8	mg/kg dry	1	05/15/25 23:51	NWTPH-Dx	
Oil	ND	---	45.6	mg/kg dry	1	05/15/25 23:51	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery:	93 %	Limits:	50-150 %	1	05/15/25 23:51	NWTPH-Dx
SB-9-12.5-13.0-20250509 (A5E1268-07RE1)				Matrix: Soil		Batch: 25E0530		
Diesel	ND	---	19.6	mg/kg dry	1	05/16/25 09:53	NWTPH-Dx	
Oil	47.7	---	39.2	mg/kg dry	1	05/16/25 09:53	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery:	89 %	Limits:	50-150 %	1	05/16/25 09:53	NWTPH-Dx
SB-9-15.0-15.5-20250509 (A5E1268-09)				Matrix: Soil		Batch: 25E0530		
Diesel	ND	---	22.2	mg/kg dry	1	05/16/25 00:52	NWTPH-Dx	
Oil	ND	---	44.4	mg/kg dry	1	05/16/25 00:52	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery:	94 %	Limits:	50-150 %	1	05/16/25 00:52	NWTPH-Dx

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**ANALYTICAL REPORT****Apex Laboratories, LLC****6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062****Antea Group**
205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**
Project Number: **BP Site 0980**
Project Manager: **Don Wyll****Report ID:**
A5E1268 - 05 20 25 1247**ANALYTICAL SAMPLE RESULTS****Diesel and/or Oil Hydrocarbons by NWTPH-Dx**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-25-10.5-11.0-20250509 (A5E1268-10)				Matrix: Soil	Batch: 25E0530			
Diesel	ND	---	26.2	mg/kg dry	1	05/16/25 01:13	NWTPH-Dx	
Oil	ND	---	52.3	mg/kg dry	1	05/16/25 01:13	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 84 %		Limits: 50-150 %	1	05/16/25 01:13	NWTPH-Dx	
MW-25-19.5-20.0-20250509 (A5E1268-11)				Matrix: Soil	Batch: 25E0530			
Diesel	ND	---	19.7	mg/kg dry	1	05/16/25 01:34	NWTPH-Dx	
Oil	ND	---	39.4	mg/kg dry	1	05/16/25 01:34	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		Recovery: 93 %		Limits: 50-150 %	1	05/16/25 01:34	NWTPH-Dx	

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ANALYTICAL REPORT

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ORELAP ID: OR100062**Antea Group**205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:****A5E1268 - 05 20 25 1247**

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-10-8.0-8.5-20250508 (A5E1268-01)				Matrix: Soil		Batch: 25E0502		
Gasoline Range Organics	ND	---	5.52	mg/kg dry	50	05/15/25 18:20	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	102 %	Limits: 50-150 %	1	05/15/25 18:20	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			99 %	50-150 %	1	05/15/25 18:20	NWTPH-Gx (MS)	
SB-10-10.0-10.5-20250508 (A5E1268-02)				Matrix: Soil		Batch: 25E0502		
Gasoline Range Organics	ND	---	4.77	mg/kg dry	50	05/15/25 18:47	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	103 %	Limits: 50-150 %	1	05/15/25 18:47	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			99 %	50-150 %	1	05/15/25 18:47	NWTPH-Gx (MS)	
SB-10-15.0-15.5-20250508 (A5E1268-03)				Matrix: Soil		Batch: 25E0502		
Gasoline Range Organics	ND	---	5.50	mg/kg dry	50	05/15/25 19:15	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	102 %	Limits: 50-150 %	1	05/15/25 19:15	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			101 %	50-150 %	1	05/15/25 19:15	NWTPH-Gx (MS)	
MW-22-10.0-10.5-20250508 (A5E1268-04)				Matrix: Soil		Batch: 25E0502		
Gasoline Range Organics	ND	---	4.93	mg/kg dry	50	05/15/25 19:42	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	100 %	Limits: 50-150 %	1	05/15/25 19:42	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			100 %	50-150 %	1	05/15/25 19:42	NWTPH-Gx (MS)	
MW-22-19.5-20.0-20250508 (A5E1268-05)				Matrix: Soil		Batch: 25E0502		
Gasoline Range Organics	ND	---	7.44	mg/kg dry	50	05/15/25 20:09	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	104 %	Limits: 50-150 %	1	05/15/25 20:09	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			101 %	50-150 %	1	05/15/25 20:09	NWTPH-Gx (MS)	
SB-9-12.5-13.0-20250509 (A5E1268-07)				Matrix: Soil		Batch: 25E0502		
Gasoline Range Organics	95.8	---	6.10	mg/kg dry	50	05/15/25 20:37	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	108 %	Limits: 50-150 %	1	05/15/25 20:37	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			100 %	50-150 %	1	05/15/25 20:37	NWTPH-Gx (MS)	
SB-9-15.0-15.5-20250509 (A5E1268-09)				Matrix: Soil		Batch: 25E0502		
Gasoline Range Organics	ND	---	6.97	mg/kg dry	50	05/15/25 21:04	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	102 %	Limits: 50-150 %	1	05/15/25 21:04	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			99 %	50-150 %	1	05/15/25 21:04	NWTPH-Gx (MS)	

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ANALYTICAL REPORT

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6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: OR100062**Antea Group**
205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**
Project Number: **BP Site 0980**
Project Manager: **Don Wyll****Report ID:**
A5E1268 - 05 20 25 1247

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-25-10.5-11.0-20250509 (A5E1268-10)				Matrix: Soil		Batch: 25E0502		
Gasoline Range Organics	ND	---	10.0	mg/kg dry	50	05/15/25 21:31	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	102 %	Limits: 50-150 %	1	05/15/25 21:31	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			99 %	50-150 %	1	05/15/25 21:31	NWTPH-Gx (MS)	
MW-25-19.5-20.0-20250509 (A5E1268-11)				Matrix: Soil		Batch: 25E0502		
Gasoline Range Organics	ND	---	5.78	mg/kg dry	50	05/15/25 21:58	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	101 %	Limits: 50-150 %	1	05/15/25 21:58	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			100 %	50-150 %	1	05/15/25 21:58	NWTPH-Gx (MS)	

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Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:****A5E1268 - 05 20 25 1247**

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-10-8.0-8.5-20250508 (A5E1268-01)				Matrix: Soil		Batch: 25E0502		
Benzene	ND	---	0.0110	mg/kg dry	50	05/15/25 18:20	5035A/8260D	
Toluene	ND	---	0.0552	mg/kg dry	50	05/15/25 18:20	5035A/8260D	
Ethylbenzene	ND	---	0.0276	mg/kg dry	50	05/15/25 18:20	5035A/8260D	
Xylenes, total	ND	---	0.0827	mg/kg dry	50	05/15/25 18:20	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0552	mg/kg dry	50	05/15/25 18:20	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	103 %	<i>Limits:</i>	80-120 %	1	05/15/25 18:20	5035A/8260D
<i>Toluene-d8 (Surr)</i>			97 %		80-120 %	1	05/15/25 18:20	5035A/8260D
<i>4-Bromofluorobenzene (Surr)</i>			94 %		79-120 %	1	05/15/25 18:20	5035A/8260D
SB-10-10.0-10.5-20250508 (A5E1268-02)				Matrix: Soil		Batch: 25E0502		
Benzene	ND	---	0.00955	mg/kg dry	50	05/15/25 18:47	5035A/8260D	
Toluene	ND	---	0.0477	mg/kg dry	50	05/15/25 18:47	5035A/8260D	
Ethylbenzene	ND	---	0.0239	mg/kg dry	50	05/15/25 18:47	5035A/8260D	
Xylenes, total	ND	---	0.0716	mg/kg dry	50	05/15/25 18:47	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0477	mg/kg dry	50	05/15/25 18:47	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	103 %	<i>Limits:</i>	80-120 %	1	05/15/25 18:47	5035A/8260D
<i>Toluene-d8 (Surr)</i>			97 %		80-120 %	1	05/15/25 18:47	5035A/8260D
<i>4-Bromofluorobenzene (Surr)</i>			95 %		79-120 %	1	05/15/25 18:47	5035A/8260D
SB-10-15.0-15.5-20250508 (A5E1268-03)				Matrix: Soil		Batch: 25E0502		
Benzene	ND	---	0.0110	mg/kg dry	50	05/15/25 19:15	5035A/8260D	
Toluene	ND	---	0.0550	mg/kg dry	50	05/15/25 19:15	5035A/8260D	
Ethylbenzene	ND	---	0.0275	mg/kg dry	50	05/15/25 19:15	5035A/8260D	
Xylenes, total	ND	---	0.0825	mg/kg dry	50	05/15/25 19:15	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0550	mg/kg dry	50	05/15/25 19:15	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	105 %	<i>Limits:</i>	80-120 %	1	05/15/25 19:15	5035A/8260D
<i>Toluene-d8 (Surr)</i>			97 %		80-120 %	1	05/15/25 19:15	5035A/8260D
<i>4-Bromofluorobenzene (Surr)</i>			96 %		79-120 %	1	05/15/25 19:15	5035A/8260D
MW-22-10.0-10.5-20250508 (A5E1268-04)				Matrix: Soil		Batch: 25E0502		
Benzene	ND	---	0.00987	mg/kg dry	50	05/15/25 19:42	5035A/8260D	
Toluene	ND	---	0.0493	mg/kg dry	50	05/15/25 19:42	5035A/8260D	
Ethylbenzene	ND	---	0.0247	mg/kg dry	50	05/15/25 19:42	5035A/8260D	
Xylenes, total	ND	---	0.0740	mg/kg dry	50	05/15/25 19:42	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0493	mg/kg dry	50	05/15/25 19:42	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	104 %	<i>Limits:</i>	80-120 %	1	05/15/25 19:42	5035A/8260D

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ANALYTICAL REPORT

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503-718-2323
ORELAP ID: OR100062**Antea Group**205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:****A5E1268 - 05 20 25 1247**

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-22-10.0-10.5-20250508 (A5E1268-04)				Matrix: Soil		Batch: 25E0502		
<i>Toluene-d8 (Surr)</i>			98 %	80-120 %	1	05/15/25 19:42	5035A/8260D	
<i>4-Bromofluorobenzene (Surr)</i>			93 %	79-120 %	1	05/15/25 19:42	5035A/8260D	
MW-22-19.5-20.0-20250508 (A5E1268-05)				Matrix: Soil		Batch: 25E0502		
Benzene	ND	---	0.0149	mg/kg dry	50	05/15/25 20:09	5035A/8260D	
Toluene	ND	---	0.0744	mg/kg dry	50	05/15/25 20:09	5035A/8260D	
Ethylbenzene	ND	---	0.0372	mg/kg dry	50	05/15/25 20:09	5035A/8260D	
Xylenes, total	ND	---	0.112	mg/kg dry	50	05/15/25 20:09	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0744	mg/kg dry	50	05/15/25 20:09	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	102 %	<i>Limits:</i> 80-120 %	1	05/15/25 20:09	5035A/8260D	
<i>Toluene-d8 (Surr)</i>			97 %	80-120 %	1	05/15/25 20:09	5035A/8260D	
<i>4-Bromofluorobenzene (Surr)</i>			95 %	79-120 %	1	05/15/25 20:09	5035A/8260D	
SB-9-12.5-13.0-20250509 (A5E1268-07)				Matrix: Soil		Batch: 25E0502		
Benzene	ND	---	0.0122	mg/kg dry	50	05/15/25 20:37	5035A/8260D	
Toluene	ND	---	0.0610	mg/kg dry	50	05/15/25 20:37	5035A/8260D	
Ethylbenzene	ND	---	0.0305	mg/kg dry	50	05/15/25 20:37	5035A/8260D	
Xylenes, total	0.173	---	0.0916	mg/kg dry	50	05/15/25 20:37	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0610	mg/kg dry	50	05/15/25 20:37	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	102 %	<i>Limits:</i> 80-120 %	1	05/15/25 20:37	5035A/8260D	
<i>Toluene-d8 (Surr)</i>			94 %	80-120 %	1	05/15/25 20:37	5035A/8260D	
<i>4-Bromofluorobenzene (Surr)</i>			96 %	79-120 %	1	05/15/25 20:37	5035A/8260D	
SB-9-15.0-15.5-20250509 (A5E1268-09)				Matrix: Soil		Batch: 25E0502		
Benzene	ND	---	0.0139	mg/kg dry	50	05/15/25 21:04	5035A/8260D	
Toluene	ND	---	0.0697	mg/kg dry	50	05/15/25 21:04	5035A/8260D	
Ethylbenzene	ND	---	0.0349	mg/kg dry	50	05/15/25 21:04	5035A/8260D	
Xylenes, total	ND	---	0.105	mg/kg dry	50	05/15/25 21:04	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0697	mg/kg dry	50	05/15/25 21:04	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	102 %	<i>Limits:</i> 80-120 %	1	05/15/25 21:04	5035A/8260D	
<i>Toluene-d8 (Surr)</i>			98 %	80-120 %	1	05/15/25 21:04	5035A/8260D	
<i>4-Bromofluorobenzene (Surr)</i>			95 %	79-120 %	1	05/15/25 21:04	5035A/8260D	
MW-25-10.5-11.0-20250509 (A5E1268-10)				Matrix: Soil		Batch: 25E0502		
Benzene	ND	---	0.0201	mg/kg dry	50	05/15/25 21:31	5035A/8260D	
Toluene	ND	---	0.100	mg/kg dry	50	05/15/25 21:31	5035A/8260D	

DRAFT REPORT

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
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503-718-2323
ORELAP ID: OR100062Antea Group
205 SE Spokane Street, Suite 300
Portland, OR 97202Project: WA-980 Seattle
Project Number: **BP Site 0980**
Project Manager: **Don Wyl****Report ID:**
A5E1268 - 05 20 25 1247

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-25-10.5-11.0-20250509 (A5E1268-10)				Matrix: Soil		Batch: 25E0502		
Ethylbenzene	ND	---	0.0502	mg/kg dry	50	05/15/25 21:31	5035A/8260D	
Xylenes, total	ND	---	0.151	mg/kg dry	50	05/15/25 21:31	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.100	mg/kg dry	50	05/15/25 21:31	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>104 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>05/15/25 21:31</i>	<i>5035A/8260D</i>
<i>Toluene-d8 (Surr)</i>			<i>96 %</i>		<i>80-120 %</i>	<i>1</i>	<i>05/15/25 21:31</i>	<i>5035A/8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>94 %</i>		<i>79-120 %</i>	<i>1</i>	<i>05/15/25 21:31</i>	<i>5035A/8260D</i>
MW-25-19.5-20.0-20250509 (A5E1268-11)				Matrix: Soil		Batch: 25E0502		
Benzene	ND	---	0.0116	mg/kg dry	50	05/15/25 21:58	5035A/8260D	
Toluene	ND	---	0.0578	mg/kg dry	50	05/15/25 21:58	5035A/8260D	
Ethylbenzene	ND	---	0.0289	mg/kg dry	50	05/15/25 21:58	5035A/8260D	
Xylenes, total	ND	---	0.0866	mg/kg dry	50	05/15/25 21:58	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	---	0.0578	mg/kg dry	50	05/15/25 21:58	5035A/8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery:</i>	<i>104 %</i>	<i>Limits:</i>	<i>80-120 %</i>	<i>1</i>	<i>05/15/25 21:58</i>	<i>5035A/8260D</i>
<i>Toluene-d8 (Surr)</i>			<i>97 %</i>		<i>80-120 %</i>	<i>1</i>	<i>05/15/25 21:58</i>	<i>5035A/8260D</i>
<i>4-Bromofluorobenzene (Surr)</i>			<i>95 %</i>		<i>79-120 %</i>	<i>1</i>	<i>05/15/25 21:58</i>	<i>5035A/8260D</i>

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ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyl**

Report ID:

A5E1268 - 05 20 25 1247

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-10-8.0-8.5-20250508 (A5E1268-01)				Matrix: Soil		Batch: 25E0530		
1-Methylnaphthalene	ND	---	0.0464	mg/kg dry	10	05/15/25 20:50	EPA 8270E (HV)	Q-42
2-Methylnaphthalene	0.0481	---	0.0464	mg/kg dry	10	05/15/25 20:50	EPA 8270E (HV)	Q-42
Naphthalene	ND	---	0.0464	mg/kg dry	10	05/15/25 20:50	EPA 8270E (HV)	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery:	88 %	Limits: 44-120 %	10	05/15/25 20:50	EPA 8270E (HV)	
p-Terphenyl-d14 (Surr)			104 %	54-127 %	10	05/15/25 20:50	EPA 8270E (HV)	
SB-10-10.0-10.5-20250508 (A5E1268-02)				Matrix: Soil		Batch: 25E0530		
1-Methylnaphthalene	ND	---	0.00497	mg/kg dry	1	05/16/25 00:21	EPA 8270E (HV)	
2-Methylnaphthalene	ND	---	0.00497	mg/kg dry	1	05/16/25 00:21	EPA 8270E (HV)	
Naphthalene	ND	---	0.00497	mg/kg dry	1	05/16/25 00:21	EPA 8270E (HV)	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery:	103 %	Limits: 44-120 %	1	05/16/25 00:21	EPA 8270E (HV)	
p-Terphenyl-d14 (Surr)			109 %	54-127 %	1	05/16/25 00:21	EPA 8270E (HV)	
SB-10-15.0-15.5-20250508 (A5E1268-03)				Matrix: Soil		Batch: 25E0530		
1-Methylnaphthalene	ND	---	0.00488	mg/kg dry	1	05/16/25 00:51	EPA 8270E (HV)	
2-Methylnaphthalene	ND	---	0.00488	mg/kg dry	1	05/16/25 00:51	EPA 8270E (HV)	
Naphthalene	ND	---	0.00488	mg/kg dry	1	05/16/25 00:51	EPA 8270E (HV)	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery:	95 %	Limits: 44-120 %	1	05/16/25 00:51	EPA 8270E (HV)	
p-Terphenyl-d14 (Surr)			109 %	54-127 %	1	05/16/25 00:51	EPA 8270E (HV)	
MW-22-10.0-10.5-20250508 (A5E1268-04)				Matrix: Soil		Batch: 25E0530		R-04
1-Methylnaphthalene	ND	---	0.0184	mg/kg dry	4	05/15/25 23:21	EPA 8270E (HV)	
2-Methylnaphthalene	ND	---	0.0184	mg/kg dry	4	05/15/25 23:21	EPA 8270E (HV)	
Naphthalene	ND	---	0.0184	mg/kg dry	4	05/15/25 23:21	EPA 8270E (HV)	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery:	104 %	Limits: 44-120 %	4	05/15/25 23:21	EPA 8270E (HV)	
p-Terphenyl-d14 (Surr)			110 %	54-127 %	4	05/15/25 23:21	EPA 8270E (HV)	
MW-22-19.5-20.0-20250508 (A5E1268-05)				Matrix: Soil		Batch: 25E0530		
1-Methylnaphthalene	ND	---	0.00570	mg/kg dry	1	05/16/25 01:21	EPA 8270E (HV)	
2-Methylnaphthalene	ND	---	0.00570	mg/kg dry	1	05/16/25 01:21	EPA 8270E (HV)	
Naphthalene	ND	---	0.00570	mg/kg dry	1	05/16/25 01:21	EPA 8270E (HV)	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery:	96 %	Limits: 44-120 %	1	05/16/25 01:21	EPA 8270E (HV)	
p-Terphenyl-d14 (Surr)			113 %	54-127 %	1	05/16/25 01:21	EPA 8270E (HV)	
SB-9-12.5-13.0-20250509 (A5E1268-07)				Matrix: Soil		Batch: 25E0530		

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ANALYTICAL REPORT

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ORELAP ID: OR100062**Antea Group**205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:****A5E1268 - 05 20 25 1247**

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-9-12.5-13.0-20250509 (A5E1268-07)				Matrix: Soil		Batch: 25E0530		
1-Methylnaphthalene	0.0660	---	0.0196	mg/kg dry	4	05/15/25 23:51	EPA 8270E (HV)	
2-Methylnaphthalene	0.167	---	0.0196	mg/kg dry	4	05/15/25 23:51	EPA 8270E (HV)	
Naphthalene	0.201	---	0.0196	mg/kg dry	4	05/15/25 23:51	EPA 8270E (HV)	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery:	109 %	Limits: 44-120 %	4	05/15/25 23:51	EPA 8270E (HV)	
p-Terphenyl-d14 (Surr)			108 %	54-127 %	4	05/15/25 23:51	EPA 8270E (HV)	
SB-9-15.0-15.5-20250509 (A5E1268-09)				Matrix: Soil		Batch: 25E0530		
1-Methylnaphthalene	ND	---	0.00555	mg/kg dry	1	05/16/25 01:51	EPA 8270E (HV)	
2-Methylnaphthalene	ND	---	0.00555	mg/kg dry	1	05/16/25 01:51	EPA 8270E (HV)	
Naphthalene	ND	---	0.00555	mg/kg dry	1	05/16/25 01:51	EPA 8270E (HV)	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery:	96 %	Limits: 44-120 %	1	05/16/25 01:51	EPA 8270E (HV)	
p-Terphenyl-d14 (Surr)			114 %	54-127 %	1	05/16/25 01:51	EPA 8270E (HV)	
MW-25-10.5-11.0-20250509 (A5E1268-10)				Matrix: Soil		Batch: 25E0530		
1-Methylnaphthalene	ND	---	0.00654	mg/kg dry	1	05/16/25 02:21	EPA 8270E (HV)	
2-Methylnaphthalene	ND	---	0.00654	mg/kg dry	1	05/16/25 02:21	EPA 8270E (HV)	
Naphthalene	ND	---	0.00654	mg/kg dry	1	05/16/25 02:21	EPA 8270E (HV)	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery:	102 %	Limits: 44-120 %	1	05/16/25 02:21	EPA 8270E (HV)	
p-Terphenyl-d14 (Surr)			101 %	54-127 %	1	05/16/25 02:21	EPA 8270E (HV)	
MW-25-19.5-20.0-20250509 (A5E1268-11)				Matrix: Soil		Batch: 25E0530		
1-Methylnaphthalene	ND	---	0.00492	mg/kg dry	1	05/15/25 22:21	EPA 8270E (HV)	
2-Methylnaphthalene	ND	---	0.00492	mg/kg dry	1	05/15/25 22:21	EPA 8270E (HV)	
Naphthalene	ND	---	0.00492	mg/kg dry	1	05/15/25 22:21	EPA 8270E (HV)	
Surrogate: 2-Fluorobiphenyl (Surr)		Recovery:	93 %	Limits: 44-120 %	1	05/15/25 22:21	EPA 8270E (HV)	
p-Terphenyl-d14 (Surr)			112 %	54-127 %	1	05/15/25 22:21	EPA 8270E (HV)	

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Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyl****Report ID:**

A5E1268 - 05 20 25 1247

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
SB-10-8.0-8.5-20250508 (A5E1268-01)				Matrix: Soil		Batch: 25E0471		
% Solids	93.7	---	1.00	%	1	05/15/25 04:59	EPA 8000D	
SB-10-10.0-10.5-20250508 (A5E1268-02)				Matrix: Soil		Batch: 25E0471		
% Solids	88.6	---	1.00	%	1	05/15/25 04:59	EPA 8000D	
SB-10-15.0-15.5-20250508 (A5E1268-03)				Matrix: Soil		Batch: 25E0471		
% Solids	88.8	---	1.00	%	1	05/15/25 04:59	EPA 8000D	
MW-22-10.0-10.5-20250508 (A5E1268-04)				Matrix: Soil		Batch: 25E0471		
% Solids	91.8	---	1.00	%	1	05/15/25 04:59	EPA 8000D	
MW-22-19.5-20.0-20250508 (A5E1268-05)				Matrix: Soil		Batch: 25E0471		
% Solids	79.5	---	1.00	%	1	05/15/25 04:59	EPA 8000D	
SB-9-12.5-13.0-20250509 (A5E1268-07)				Matrix: Soil		Batch: 25E0471		
% Solids	90.1	---	1.00	%	1	05/15/25 04:59	EPA 8000D	
SB-9-15.0-15.5-20250509 (A5E1268-09)				Matrix: Soil		Batch: 25E0471		
% Solids	81.6	---	1.00	%	1	05/15/25 04:59	EPA 8000D	
MW-25-10.5-11.0-20250509 (A5E1268-10)				Matrix: Soil		Batch: 25E0471		
% Solids	66.4	---	1.00	%	1	05/15/25 04:59	EPA 8000D	
MW-25-19.5-20.0-20250509 (A5E1268-11)				Matrix: Soil		Batch: 25E0471		
% Solids	87.2	---	1.00	%	1	05/15/25 04:59	EPA 8000D	

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Portland, OR 97202Project: **WA-980 Seattle**
Project Number: **BP Site 0980**
Project Manager: **Don Wyll****Report ID:**
A5E1268 - 05 20 25 1247

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25E0530 - EPA 3546						Soil						
Blank (25E0530-BLK1)		Prepared: 05/15/25 13:43 Analyzed: 05/15/25 20:25										
NWTPH-Dx												
Diesel	ND	---	20.0	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	---	40.0	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 92 %		Limits: 50-150 %		Dilution: 1x						
LCS (25E0530-BS2)		Prepared: 05/15/25 13:43 Analyzed: 05/15/25 20:46										
NWTPH-Dx												
Diesel	114	---	20.0	mg/kg wet	1	125	---	91	38 - 132%	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 97 %		Limits: 50-150 %		Dilution: 1x						
Duplicate (25E0530-DUP2)		Prepared: 05/15/25 13:43 Analyzed: 05/16/25 01:54										
QC Source Sample: MW-25-19.5-20.0-20250509 (A5E1268-11)												
NWTPH-Dx												
Diesel	ND	---	20.5	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	ND	---	40.9	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)		Recovery: 94 %		Limits: 50-150 %		Dilution: 1x						
Duplicate (25E0530-DUP3)		Prepared: 05/15/25 13:43 Analyzed: 05/16/25 08:55										
QC Source Sample: SB-10-8.0-8.5-20250508 (A5E1268-01RE1)												
NWTPH-Dx												
Diesel	31.6	---	19.2	mg/kg dry	1	---	100	---	---	104	30%	Q-05
Oil	99.7	---	38.4	mg/kg dry	1	---	66.4	---	---	40	30%	Q-05
Surr: o-Terphenyl (Surr)		Recovery: 96 %		Limits: 50-150 %		Dilution: 1x						

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ORELAP ID: OR100062

Antea Group

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Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyl****Report ID:**

A5E1268 - 05 20 25 1247

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25E0502 - EPA 5035A						Soil						
Blank (25E0502-BLK1)		Prepared: 05/15/25 10:00 Analyzed: 05/15/25 12:24										
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	5.00	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery:	102 %	Limits:	50-150 %	Dilution: 1x						
1,4-Difluorobenzene (Sur)			101 %		50-150 %	"						
LCS (25E0502-BS2)		Prepared: 05/15/25 10:00 Analyzed: 05/15/25 11:57										
NWTPH-Gx (MS)												
Gasoline Range Organics	26.3	---	5.00	mg/kg wet	50	25.0	---	105	80 - 120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery:	104 %	Limits:	50-150 %	Dilution: 1x						
1,4-Difluorobenzene (Sur)			101 %		50-150 %	"						

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyl****Report ID:**

A5E1268 - 05 20 25 1247

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25E0502 - EPA 5035A												
Soil												
Blank (25E0502-BLK1) Prepared: 05/15/25 10:00 Analyzed: 05/15/25 12:24												
5035A/8260D												
Benzene	ND	---	0.0100	mg/kg wet	50	---	---	---	---	---	---	
Toluene	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.0250	mg/kg wet	50	---	---	---	---	---	---	
Xylenes, total	ND	---	0.0750	mg/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	---	0.100	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.0250	mg/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	---	0.0500	mg/kg wet	50	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr) Recovery: 103 % Limits: 80-120 % Dilution: 1x												
Toluene-d8 (Surr) 97 % 80-120 % "												
4-Bromofluorobenzene (Surr) 94 % 79-120 % "												
LCS (25E0502-BS1) Prepared: 05/15/25 10:00 Analyzed: 05/15/25 11:30												
5035A/8260D												
Benzene	1.09	---	0.0100	mg/kg wet	50	1.00	---	109	80 - 120%	---	---	
Toluene	1.01	---	0.0500	mg/kg wet	50	1.00	---	101	80 - 120%	---	---	
Ethylbenzene	1.04	---	0.0250	mg/kg wet	50	1.00	---	104	80 - 120%	---	---	
Xylenes, total	3.09	---	0.0750	mg/kg wet	50	3.00	---	103	80 - 120%	---	---	
Methyl tert-butyl ether (MTBE)	1.02	---	0.0500	mg/kg wet	50	1.00	---	102	80 - 120%	---	---	
Naphthalene	0.826	---	0.100	mg/kg wet	50	1.00	---	83	80 - 120%	---	---	
1,2-Dibromoethane (EDB)	1.10	---	0.0500	mg/kg wet	50	1.00	---	110	80 - 120%	---	---	
1,2-Dichloroethane (EDC)	1.14	---	0.0250	mg/kg wet	50	1.00	---	114	80 - 120%	---	---	
Isopropylbenzene	1.01	---	0.0500	mg/kg wet	50	1.00	---	101	80 - 120%	---	---	
1,2,4-Trimethylbenzene	0.992	---	0.0500	mg/kg wet	50	1.00	---	99	80 - 120%	---	---	
1,3,5-Trimethylbenzene	0.994	---	0.0500	mg/kg wet	50	1.00	---	99	80 - 120%	---	---	
Surr: 1,4-Difluorobenzene (Surr) Recovery: 102 % Limits: 80-120 % Dilution: 1x												
Toluene-d8 (Surr) 98 % 80-120 % "												
4-Bromofluorobenzene (Surr) 92 % 79-120 % "												
Matrix Spike (25E0502-MS1) Prepared: 05/09/25 10:15 Analyzed: 05/15/25 22:26												

DRAFT REPORT

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062Antea Group
205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**
Project Number: **BP Site 0980**
Project Manager: **Don Wyl****Report ID:**
A5E1268 - 05 20 25 1247

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 5035A/8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25E0502 - EPA 5035A						Soil						
Matrix Spike (25E0502-MS1)		Prepared: 05/09/25 10:15 Analyzed: 05/15/25 22:26										
QC Source Sample: MW-25-19.5-20.0-20250509 (A5E1268-11)												
5035A/8260D												
Benzene	1.32	---	0.0116	mg/kg dry	50	1.15	ND	115	77 - 121%	---	---	
Toluene	1.17	---	0.0578	mg/kg dry	50	1.15	ND	102	77 - 121%	---	---	
Ethylbenzene	1.20	---	0.0289	mg/kg dry	50	1.15	ND	104	76 - 122%	---	---	
Xylenes, total	3.51	---	0.0866	mg/kg dry	50	3.46	ND	101	78 - 124%	---	---	
Methyl tert-butyl ether (MTBE)	1.20	---	0.0578	mg/kg dry	50	1.15	ND	104	73 - 125%	---	---	
Naphthalene	0.914	---	0.116	mg/kg dry	50	1.15	ND	79	62 - 129%	---	---	
1,2-Dibromoethane (EDB)	1.27	---	0.0578	mg/kg dry	50	1.15	ND	110	78 - 122%	---	---	
1,2-Dichloroethane (EDC)	1.31	---	0.0289	mg/kg dry	50	1.15	ND	113	73 - 128%	---	---	
Isopropylbenzene	1.15	---	0.0578	mg/kg dry	50	1.15	ND	100	68 - 134%	---	---	
1,2,4-Trimethylbenzene	1.14	---	0.0578	mg/kg dry	50	1.15	ND	99	75 - 123%	---	---	
1,3,5-Trimethylbenzene	1.16	---	0.0578	mg/kg dry	50	1.15	ND	101	73 - 124%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 105 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		93 %		79-120 %		"						

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Portland, OR 97202Project: **WA-980 Seattle**
Project Number: **BP Site 0980**
Project Manager: **Don Wyl****Report ID:**
A5E1268 - 05 20 25 1247

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25E0530 - EPA 3546						Soil						
Blank (25E0530-BLK2)		Prepared: 05/15/25 13:43 Analyzed: 05/15/25 19:50										
EPA 8270E (HV)												
1-Methylnaphthalene	ND	---	0.00500	mg/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	---	0.00500	mg/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	---	0.00500	mg/kg wet	1	---	---	---	---	---	---	
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 87 %		Limits: 44-120 %		Dilution: 1x						
p-Terphenyl-d14 (Surr)		110 %		54-127 %		"						
LCS (25E0530-BS1)		Prepared: 05/15/25 13:43 Analyzed: 05/15/25 20:20										
EPA 8270E (HV)												
1-Methylnaphthalene	0.0192	---	0.00500	mg/kg wet	1	0.0200	---	96	40 - 120%	---	---	
2-Methylnaphthalene	0.0169	---	0.00500	mg/kg wet	1	0.0200	---	84	38 - 122%	---	---	
Naphthalene	0.0188	---	0.00500	mg/kg wet	1	0.0200	---	94	35 - 123%	---	---	
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 95 %		Limits: 44-120 %		Dilution: 1x						
p-Terphenyl-d14 (Surr)		110 %		54-127 %		"						
Duplicate (25E0530-DUP4)		Prepared: 05/15/25 13:43 Analyzed: 05/15/25 21:20										
QC Source Sample: SB-10-8.0-8.5-20250508 (A5E1268-01)												
EPA 8270E (HV)												
1-Methylnaphthalene	ND	---	0.0479	mg/kg dry	10	---	0.0335	---	---	***	30%	Q-04
2-Methylnaphthalene	ND	---	0.0479	mg/kg dry	10	---	0.0481	---	---	***	30%	Q-04
Naphthalene	ND	---	0.0479	mg/kg dry	10	---	ND	---	---	---	30%	
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 84 %		Limits: 44-120 %		Dilution: 10x						
p-Terphenyl-d14 (Surr)		105 %		54-127 %		"						
Duplicate (25E0530-DUP5)		Prepared: 05/15/25 13:43 Analyzed: 05/15/25 22:51										
QC Source Sample: MW-25-19.5-20.0-20250509 (A5E1268-11)												
EPA 8270E (HV)												
1-Methylnaphthalene	ND	---	0.00512	mg/kg dry	1	---	ND	---	---	---	30%	
2-Methylnaphthalene	ND	---	0.00512	mg/kg dry	1	---	ND	---	---	---	30%	
Naphthalene	ND	---	0.00512	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 88 %		Limits: 44-120 %		Dilution: 1x						
p-Terphenyl-d14 (Surr)		109 %		54-127 %		"						

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Portland, OR 97202Project: WA-980 Seattle
Project Number: **BP Site 0980**
Project Manager: **Don Wyl****Report ID:**
A5E1268 - 05 20 25 1247

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25E0530 - EPA 3546							Soil					
Matrix Spike (25E0530-MS1)		Prepared: 05/15/25 13:43			Analyzed: 05/15/25 21:50							
QC Source Sample: SB-10-8.0-8.5-20250508 (A5E1268-01)												
EPA 8270E (HV)												
1-Methylnaphthalene	ND	---	0.0477	mg/kg dry	10	0.0191	0.0335	-20	40 - 120%	---	---	Q-11
2-Methylnaphthalene	ND	---	0.0477	mg/kg dry	10	0.0191	0.0481	-87	38 - 122%	---	---	Q-11
Naphthalene	ND	---	0.0477	mg/kg dry	10	0.0191	ND	145	35 - 123%	---	---	Q-11
Surr: 2-Fluorobiphenyl (Surr)		Recovery: 92 %		Limits: 44-120 %		Dilution: 10x						
p-Terphenyl-d14 (Surr)		106 %		54-127 %		"						

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ORELAP ID: OR100062

Antea Group205 SE Spokane Street, Suite 300
Portland, OR 97202Project: WA-980 SeattleProject Number: **BP Site 0980**Project Manager: **Don Wyl**Report ID:

A5E1268 - 05 20 25 1247

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25E0471 - Dry Weight Prep (EPA 8000D)							Soil					
Duplicate (25E0471-DUP8)		Prepared: 05/14/25 11:56 Analyzed: 05/15/25 04:59										
QC Source Sample: SB-10-8.0-8.5-20250508 (A5E1268-01)												
EPA 8000D												
% Solids	92.1	---	1.00	%	1	---	93.7	---	---	2	10%	

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ORELAP ID: OR100062**Antea Group**
205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**
Project Number: **BP Site 0980**
Project Manager: **Don Wyl****Report ID:**
A5E1268 - 05 20 25 1247**SAMPLE PREPARATION INFORMATION****Diesel and/or Oil Hydrocarbons by NWTPH-Dx****Prep: EPA 3546**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 25E0530							
A5E1268-01RE1	Soil	NWTPH-Dx	05/08/25 09:45	05/15/25 13:43	11.49g/5mL	10g/5mL	0.87
A5E1268-02	Soil	NWTPH-Dx	05/08/25 09:50	05/15/25 13:43	11.35g/5mL	10g/5mL	0.88
A5E1268-03	Soil	NWTPH-Dx	05/08/25 10:20	05/15/25 13:43	11.53g/5mL	10g/5mL	0.87
A5E1268-04	Soil	NWTPH-Dx	05/08/25 11:40	05/15/25 13:43	11.87g/5mL	10g/5mL	0.84
A5E1268-05	Soil	NWTPH-Dx	05/08/25 12:20	05/15/25 13:43	11.03g/5mL	10g/5mL	0.91
A5E1268-07RE1	Soil	NWTPH-Dx	05/09/25 08:35	05/15/25 13:43	11.34g/5mL	10g/5mL	0.88
A5E1268-09	Soil	NWTPH-Dx	05/09/25 09:05	05/15/25 13:43	11.05g/5mL	10g/5mL	0.91
A5E1268-10	Soil	NWTPH-Dx	05/09/25 10:00	05/15/25 13:43	11.52g/5mL	10g/5mL	0.87
A5E1268-11	Soil	NWTPH-Dx	05/09/25 10:15	05/15/25 13:43	11.66g/5mL	10g/5mL	0.86

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx**Prep: EPA 5035A**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 25E0502							
A5E1268-01	Soil	NWTPH-Gx (MS)	05/08/25 09:45	05/08/25 09:45	5.15g/5mL	5g/5mL	0.97
A5E1268-02	Soil	NWTPH-Gx (MS)	05/08/25 09:50	05/08/25 09:50	6.84g/5mL	5g/5mL	0.73
A5E1268-03	Soil	NWTPH-Gx (MS)	05/08/25 10:20	05/08/25 10:20	5.78g/5mL	5g/5mL	0.87
A5E1268-04	Soil	NWTPH-Gx (MS)	05/08/25 11:40	05/08/25 11:40	6.07g/5mL	5g/5mL	0.82
A5E1268-05	Soil	NWTPH-Gx (MS)	05/08/25 12:20	05/08/25 12:20	5.12g/5mL	5g/5mL	0.98
A5E1268-07	Soil	NWTPH-Gx (MS)	05/09/25 08:35	05/09/25 08:35	5g/5mL	5g/5mL	1.00
A5E1268-09	Soil	NWTPH-Gx (MS)	05/09/25 09:05	05/09/25 09:05	5.24g/5mL	5g/5mL	0.95
A5E1268-10	Soil	NWTPH-Gx (MS)	05/09/25 10:00	05/09/25 10:00	5.02g/5mL	5g/5mL	1.00
A5E1268-11	Soil	NWTPH-Gx (MS)	05/09/25 10:15	05/09/25 10:15	5.69g/5mL	5g/5mL	0.88

Selected Volatile Organic Compounds by EPA 5035A/8260D**Prep: EPA 5035A**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 25E0502							
A5E1268-01	Soil	5035A/8260D	05/08/25 09:45	05/08/25 09:45	5.15g/5mL	5g/5mL	0.97
A5E1268-02	Soil	5035A/8260D	05/08/25 09:50	05/08/25 09:50	6.84g/5mL	5g/5mL	0.73
A5E1268-03	Soil	5035A/8260D	05/08/25 10:20	05/08/25 10:20	5.78g/5mL	5g/5mL	0.87
A5E1268-04	Soil	5035A/8260D	05/08/25 11:40	05/08/25 11:40	6.07g/5mL	5g/5mL	0.82
A5E1268-05	Soil	5035A/8260D	05/08/25 12:20	05/08/25 12:20	5.12g/5mL	5g/5mL	0.98
A5E1268-07	Soil	5035A/8260D	05/09/25 08:35	05/09/25 08:35	5g/5mL	5g/5mL	1.00

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503-718-2323**ORELAP ID: **OR100062****Antea Group****205 SE Spokane Street, Suite 300
Portland, OR 97202**Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyl****Report ID:****A5E1268 - 05 20 25 1247****SAMPLE PREPARATION INFORMATION****Selected Volatile Organic Compounds by EPA 5035A/8260D****Prep: EPA 5035A**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A5E1268-09	Soil	5035A/8260D	05/09/25 09:05	05/09/25 09:05	5.24g/5mL	5g/5mL	0.95
A5E1268-10	Soil	5035A/8260D	05/09/25 10:00	05/09/25 10:00	5.02g/5mL	5g/5mL	1.00
A5E1268-11	Soil	5035A/8260D	05/09/25 10:15	05/09/25 10:15	5.69g/5mL	5g/5mL	0.88

Selected Semivolatile Organic Compounds by EPA 8270E**Prep: EPA 3546**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 25E0530							
A5E1268-01	Soil	EPA 8270E (HV)	05/08/25 09:45	05/15/25 13:43	11.49g/5mL	10g/5mL	0.87
A5E1268-02	Soil	EPA 8270E (HV)	05/08/25 09:50	05/15/25 13:43	11.35g/5mL	10g/5mL	0.88
A5E1268-03	Soil	EPA 8270E (HV)	05/08/25 10:20	05/15/25 13:43	11.53g/5mL	10g/5mL	0.87
A5E1268-04	Soil	EPA 8270E (HV)	05/08/25 11:40	05/15/25 13:43	11.87g/5mL	10g/5mL	0.84
A5E1268-05	Soil	EPA 8270E (HV)	05/08/25 12:20	05/15/25 13:43	11.03g/5mL	10g/5mL	0.91
A5E1268-07	Soil	EPA 8270E (HV)	05/09/25 08:35	05/15/25 13:43	11.34g/5mL	10g/5mL	0.88
A5E1268-09	Soil	EPA 8270E (HV)	05/09/25 09:05	05/15/25 13:43	11.05g/5mL	10g/5mL	0.91
A5E1268-10	Soil	EPA 8270E (HV)	05/09/25 10:00	05/15/25 13:43	11.52g/5mL	10g/5mL	0.87
A5E1268-11	Soil	EPA 8270E (HV)	05/09/25 10:15	05/15/25 13:43	11.66g/5mL	10g/5mL	0.86

Percent Dry Weight**Prep: Dry Weight Prep (EPA 8000D)**

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 25E0471							
A5E1268-01	Soil	EPA 8000D	05/08/25 09:45	05/14/25 11:56	1g	1g	1.00
A5E1268-02	Soil	EPA 8000D	05/08/25 09:50	05/14/25 11:56	1g	1g	1.00
A5E1268-03	Soil	EPA 8000D	05/08/25 10:20	05/14/25 11:56	1g	1g	1.00
A5E1268-04	Soil	EPA 8000D	05/08/25 11:40	05/14/25 11:56	1g	1g	1.00
A5E1268-05	Soil	EPA 8000D	05/08/25 12:20	05/14/25 11:56	1g	1g	1.00
A5E1268-07	Soil	EPA 8000D	05/09/25 08:35	05/14/25 11:56	1g	1g	1.00
A5E1268-09	Soil	EPA 8000D	05/09/25 09:05	05/14/25 11:56	1g	1g	1.00
A5E1268-10	Soil	EPA 8000D	05/09/25 10:00	05/14/25 11:56	1g	1g	1.00
A5E1268-11	Soil	EPA 8000D	05/09/25 10:15	05/14/25 11:56	1g	1g	1.00

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Project Number: **BP Site 0980**

Project Manager: **Don Wyll**

Report ID:

A5E1268 - 05 20 25 1247

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

- F-11** The hydrocarbon pattern indicates possible weathered diesel, mineral oil, or a contribution from a related component.
- Q-04** Spike recovery and/or RPD is outside control limits due to a non-homogeneous sample matrix.
- Q-05** Analyses are not controlled on RPD values from sample and duplicate concentrations that are below 5 times the reporting level.
- Q-11** Spike recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.
- Q-42** Matrix Spike and/or Duplicate analysis was performed on this sample. % Recovery or RPD for this analyte is outside laboratory control limits. (Refer to the QC Section of Analytical Report.)
- R-04** Reporting levels elevated due to preparation and/or analytical dilution necessary for analysis.
- S-05** Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.

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REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.
ND Analyte NOT DETECTED at or above the detection or reporting limit.
NR Result Not Reported.
RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting and Detection Limits: Default Limits

Default Reporting and Detection Limits are based on 100% dry weight with the minimum dilution for the analysis. Reporting and Detection Limits are raised due to moisture content, additional dilutions required for analysis, matrix interferences and in other cases, as necessary.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as "dry", "wet", or " " (blank) designation.

"dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.

"wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.

" " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) are not included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

DRAFT REPORT

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300
Portland, OR 97202

Project: **WA-980 Seattle**

Project Number: **BP Site 0980**

Project Manager: **Don Wyll**

Report ID:

A5E1268 - 05 20 25 1247

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to one half of the Reporting Limit (RL).

Blank results for gravimetric analyses are evaluated to the Reporting Level, not to half of the Reporting Level.

-For Blank hits falling between $\frac{1}{2}$ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.

-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.

For further details, please request a copy of this document.

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

DRAFT REPORT

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300
Portland, OR 97202

Project: **WA-980 Seattle**

Project Number: **BP Site 0980**

Project Manager: **Don Wyl**

Report ID:

A5E1268 - 05 20 25 1247

Decanted Samples:

Soils/Sediments:

Unless TCLP analysis is required or there is notification otherwise for a specific project, all Soil and Sediments containing excess water are decanted prior to analysis in order to provide the most representative sample for analysis.

Water Samples:

Water samples containing solids and sediment may need to be decanted in order to eliminate these particulates from the water extractions. In the case of organics extractions, a solvent rinse of the container will not be performed.

Volatiles Soils (5035s)

Samples that are field preserved by 5035 for volatiles are dry weight corrected using the same dry weight correction as for normal analyses.

In the case of decanted samples, the dry weight may be performed on a decanted sample, while the aliquot for 5035 may not have been treated the same way. If this is a concern, please submit separate containers for dry weight analysis for volatiles can be provided.

All samples decanted in the laboratory are noted in this report with the DCNT qualifier indicating the sample was decanted.

DRAFT REPORT

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300
Portland, OR 97202

Project: **WA-980 Seattle**

Project Number: **BP Site 0980**

Project Manager: **Don Wyll**

Report ID:

A5E1268 - 05 20 25 1247

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation)

EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.

Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provided by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

DRAFT REPORT

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DRAFT REPORT, DATA SUBJECT TO CHANGE



000 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Report ID:
ASE1268 - 05 20 25 1247

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ANALYTICAL REPORT

Apex Laboratories, LLC
6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: ORI00062

Antea Group
205 SE Spokane Street, Suite 300
Portland, OR 97202

Project: WA-980 Seattle
Project Number: BP Site 0980
Project Manager: Don Wyll

Report ID:
ASE1268 - 05 20 25 1247

APEX LABS		CHAIN OF CUSTODY		Lab # ASE1268		COC 2 of 2																					
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323																											
Company: Antea Group		Project Mgr: Don Wyll		Project Name: WA-980 Seattle		Project #: BP Site 0980																					
Address: 18378-B Redmond Way, Redmond WA		Phone: 425-830-2807		Email: Don.Wyll@antegroup.us		PO #																					
Sampled by: D Lindelf / M. Holloway		ANALYSIS REQUEST																									
State Sampled: OR WA																											
Other																											
County:																											
SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260D BTEX	8260D RBDM VOCs	8260D Halo VOCs	8260D VOCs Full List	8270E PAHs	8270E Semi-Vols Full List	8082A PCBs	8081B Pest	RCRA Metals (8)	Priority Metals (13)	Al, Si, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Ti, V, Zn	TOTAL	DISS.	TCLP	TCLP Metals (8)	RESIDUALS	WIS 30128 by WIS 30128 by WIS 30128 by WIS 30128 by	HOLD	Archive - Frozen	
1 MW-25-10.5-11.0-20250509	5/9/25	10:00	S	3		X	X	X																X	X		
2 MW-25-19.5-20.0-20250509	5/9/25	10:15	S	3		X	X	X																X	X		
3 MW-25-22.0-22.5-20250509	5/9/25	10:35	S	3		X	X	X																X	X		X
4																											
5																											
6																											
7																											
8																											
9																											
10																											

Normal Turn Around Time (TAT) = 10 Business Days --->

*** RUSH - Request ---> Indicate Date Needed:

***Rush TAT requests may incur additional cost

For TAT calculations, samples received after 3pm will be considered received the next business day.

Data will be reported by 6pm. Samples with <72 hrs of hold time may be surcharged.

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:		RECEIVED BY:		RELINQUISHED BY:		RECEIVED BY:	
Signature:	Date:	Signature:	Date:	Signature:	Date:	Signature:	Date:
M. Holloway	5/12/25	Fahra Alodi	5/13/25				
Printed Name:	Time:	Printed Name:	Time:	Printed Name:	Time:	Printed Name:	Time:
Mariah Holloway	1515	Fahra Alodi	1253				
Company:		Company:		Company:		Company:	
Antea Group		Apex Lab					

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DRAFT REPORT

DRAFT REPORT, DATA SUBJECT TO CHANGE



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300

Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:**

A5E1268 - 05 20 25 1247

APEX LABS COOLER RECEIPT FORMClient: Antea Group Element WO#: A5E1268Project/Project #: WA-980 Seattle # BP Site 0980**Delivery Info:**Date/time received: 5/13/25 @ 1253 By: JADelivered by: Apex ☐ Client ☐ ESS ☐ FedEx ☒ UPS ☐ Radio ☐ Morgan ☐ SDS ☐ Evergreen ☐ Other ☐From USDA Regulated Origin? Yes ☐ No ☒Cooler Inspection Date/time inspected: 5/13/25 @ 1253 By: JAChain of Custody included? Yes ☒ No ☐Signed/dated by client? Yes ☒ No ☐Contains USDA Reg. Soils? Yes ☐ No ☒ Unsure (email RegSoils) ☐

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	<u>5.4</u>						
Custody seals? (Y/N)	<u>N</u>						
Received on ice? (Y/N)	<u>Y</u>						
Temp. blanks? (Y/N)	<u>N</u>						
Ice type: (Gel/Real/Other)	<u>Real</u>						
Condition (In/Out):	<u>In</u>						

Cooler out of temp? (Y/N) Possible reason why: Green dots applied to out of temperature samples? Yes ☒ No ☐Out of temperature samples form initiated? Yes ☒ No ☐Sample Inspection: Date/time inspected: 5/14/25 @ 0839 By: APWAll samples intact? Yes ☒ No ☐ Comments: Bottle labels/COCs agree? Yes ☐ No ☒ Comments: MW-22-19.5-20.0-2025-08 1/2 VOA T read 1120COC/container discrepancies form initiated? Yes ☐ No ☒Containers/volumes received appropriate for analysis? Yes ☒ No ☐ Comments: Do VOA vials have visible headspace? Yes ☐ No ☐ NA ☒Comments: Water samples: pH checked: Yes ☐ No ☐ NA ☒ pH appropriate? Yes ☐ No ☐ NA ☒ pH ID: Comments: # 8812 0480 2159Labeled by: APWWitness: Cooler Inspected by: APW

Form Y-003 R-02

DRAFT REPORT

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Appendix D – RI Laboratory Analytical Reports – Groundwater



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Tuesday, June 10, 2025

Don Wyll

Antea Group

205 SE Spokane Street, Suite 300

Portland, OR 97202

RE: A5E1835 - WA-980 Seattle - BP Site 0980

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A5E1835, which was received by the laboratory on 5/29/2025 at 11:51:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: mpoquiz@apex-labs.com, or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

Cooler Receipt Information					
<u>Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.</u>					
(See Cooler Receipt Form for details)					
Cooler #1	2.0	degC	Cooler #2	2.8	degC
Cooler #3	3.3	degC			

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.

All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.



Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist

**ANALYTICAL REPORT****Apex Laboratories, LLC**6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323

ORELAP ID: OR100062

Antea Group205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyl****Report ID:****A5E1835 - 06 10 25 1002****ANALYTICAL REPORT FOR SAMPLES****SAMPLE INFORMATION**

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-4-20250527	A5E1835-01	Water	05/27/25 08:50	05/29/25 11:51
MW-11-20250527	A5E1835-02	Water	05/27/25 09:30	05/29/25 11:51
MW-11DUP-20250527	A5E1835-03	Water	05/27/25 09:30	05/29/25 11:51
MW-25-20250527	A5E1835-04	Water	05/27/25 12:00	05/29/25 11:51
B1-20250527	A5E1835-05	Water	05/27/25 13:30	05/29/25 11:51
B3-20250527	A5E1835-06	Water	05/27/25 14:15	05/29/25 11:51
MW-13-20250527	A5E1835-07	Water	05/27/25 14:55	05/29/25 11:51
MW-12-20250527	A5E1835-08	Water	05/27/25 15:45	05/29/25 11:51
MW-22-20250527	A5E1835-09	Water	05/27/25 17:00	05/29/25 11:51
MW-23-20250527	A5E1835-10	Water	05/27/25 17:40	05/29/25 11:51

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323

ORELAP ID: OR100062

Antea Group205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:****A5E1835 - 06 10 25 1002**

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-4-20250527 (A5E1835-01)				Matrix: Water		Batch: 25F0103		
Diesel	826	---	76.2	ug/L	1	06/05/25 10:58	NWTPH-Dx LL	F-13
Oil	ND	---	152	ug/L	1	06/05/25 10:58	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		Recovery: 77 %		Limits: 50-150 %	1	06/05/25 10:58	NWTPH-Dx LL	
MW-11-20250527 (A5E1835-02)				Matrix: Water		Batch: 25F0103		
Diesel	285	---	76.2	ug/L	1	06/05/25 11:22	NWTPH-Dx LL	F-13, F-15
Oil	477	---	152	ug/L	1	06/05/25 11:22	NWTPH-Dx LL	F-16
Surrogate: o-Terphenyl (Surr)		Recovery: 72 %		Limits: 50-150 %	1	06/05/25 11:22	NWTPH-Dx LL	
MW-11DUP-20250527 (A5E1835-03)				Matrix: Water		Batch: 25F0103		
Diesel	283	---	76.2	ug/L	1	06/05/25 12:17	NWTPH-Dx LL	F-13, F-15
Oil	478	---	152	ug/L	1	06/05/25 12:17	NWTPH-Dx LL	F-16
Surrogate: o-Terphenyl (Surr)		Recovery: 70 %		Limits: 50-150 %	1	06/05/25 12:17	NWTPH-Dx LL	
MW-25-20250527 (A5E1835-04)				Matrix: Water		Batch: 25F0103		
Diesel	ND	---	77.7	ug/L	1	06/05/25 10:05	NWTPH-Dx LL	
Oil	ND	---	155	ug/L	1	06/05/25 10:05	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		Recovery: 75 %		Limits: 50-150 %	1	06/05/25 10:05	NWTPH-Dx LL	
B1-20250527 (A5E1835-05)				Matrix: Water		Batch: 25F0103		
Diesel	1200	---	76.2	ug/L	1	06/05/25 12:41	NWTPH-Dx LL	F-13
Oil	ND	---	152	ug/L	1	06/05/25 12:41	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		Recovery: 82 %		Limits: 50-150 %	1	06/05/25 12:41	NWTPH-Dx LL	
B3-20250527 (A5E1835-06)				Matrix: Water		Batch: 25F0103		
Diesel	225	---	76.2	ug/L	1	06/05/25 13:06	NWTPH-Dx LL	F-13
Oil	ND	---	152	ug/L	1	06/05/25 13:06	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		Recovery: 64 %		Limits: 50-150 %	1	06/05/25 13:06	NWTPH-Dx LL	
MW-13-20250527 (A5E1835-07)				Matrix: Water		Batch: 25F0103		
Diesel	ND	---	76.9	ug/L	1	06/05/25 08:52	NWTPH-Dx LL	
Oil	ND	---	154	ug/L	1	06/05/25 08:52	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		Recovery: 75 %		Limits: 50-150 %	1	06/05/25 08:52	NWTPH-Dx LL	

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323

ORELAP ID: OR100062

Antea Group205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:**

A5E1835 - 06 10 25 1002

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-12-20250527 (A5E1835-08)				Matrix: Water		Batch: 25F0103		
Diesel	ND	---	76.2	ug/L	1	06/05/25 13:30	NWTPH-Dx LL	
Oil	431	---	152	ug/L	1	06/05/25 13:30	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		Recovery: 57 %		Limits: 50-150 %	1	06/05/25 13:30	NWTPH-Dx LL	
MW-22-20250527 (A5E1835-09)				Matrix: Water		Batch: 25F0103		
Diesel	ND	---	76.9	ug/L	1	06/05/25 09:16	NWTPH-Dx LL	
Oil	ND	---	154	ug/L	1	06/05/25 09:16	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		Recovery: 70 %		Limits: 50-150 %	1	06/05/25 09:16	NWTPH-Dx LL	
MW-23-20250527 (A5E1835-10)				Matrix: Water		Batch: 25F0103		
Diesel	ND	---	76.9	ug/L	1	06/05/25 09:40	NWTPH-Dx LL	
Oil	ND	---	154	ug/L	1	06/05/25 09:40	NWTPH-Dx LL	
Surrogate: o-Terphenyl (Surr)		Recovery: 78 %		Limits: 50-150 %	1	06/05/25 09:40	NWTPH-Dx LL	

Apex Laboratories

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300

Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:**

A5E1835 - 06 10 25 1002

ANALYTICAL SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-25-20250527 (A5E1835-04RE1)				Matrix: Water		Batch: 25E1030		
Gasoline Range Organics	ND	---	100	ug/L	1	05/30/25 15:33	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	97 %	Limits: 50-150 %	1	05/30/25 15:33	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			98 %	50-150 %	1	05/30/25 15:33	NWTPH-Gx (MS)	
MW-22-20250527 (A5E1835-09RE1)				Matrix: Water		Batch: 25F0037		
Gasoline Range Organics	ND	---	100	ug/L	1	06/02/25 18:25	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		Recovery:	106 %	Limits: 50-150 %	1	06/02/25 18:25	NWTPH-Gx (MS)	
1,4-Difluorobenzene (Sur)			115 %	50-150 %	1	06/02/25 18:25	NWTPH-Gx (MS)	

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323

ORELAP ID: OR100062

Antea Group205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:****A5E1835 - 06 10 25 1002**

ANALYTICAL SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-25-20250527 (A5E1835-04RE1)			Matrix: Water			Batch: 25E1030		
Benzene	ND	---	0.200	ug/L	1	05/30/25 15:33	EPA 8260D	
Toluene	ND	---	1.00	ug/L	1	05/30/25 15:33	EPA 8260D	
Ethylbenzene	ND	---	0.500	ug/L	1	05/30/25 15:33	EPA 8260D	
Xylenes, total	ND	---	1.50	ug/L	1	05/30/25 15:33	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	05/30/25 15:33	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	05/30/25 15:33	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	---	0.400	ug/L	1	05/30/25 15:33	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 108 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>05/30/25 15:33</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>101 %</i>		<i>80-120 %</i>	<i>1</i>	<i>05/30/25 15:33</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>100 %</i>		<i>80-120 %</i>	<i>1</i>	<i>05/30/25 15:33</i>	<i>EPA 8260D</i>	
MW-22-20250527 (A5E1835-09RE1)			Matrix: Water			Batch: 25F0037		
Benzene	ND	---	0.200	ug/L	1	06/02/25 18:25	EPA 8260D	
Toluene	ND	---	1.00	ug/L	1	06/02/25 18:25	EPA 8260D	
Ethylbenzene	ND	---	0.500	ug/L	1	06/02/25 18:25	EPA 8260D	
Xylenes, total	ND	---	1.50	ug/L	1	06/02/25 18:25	EPA 8260D	
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	06/02/25 18:25	EPA 8260D	
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	06/02/25 18:25	EPA 8260D	
1,2-Dichloroethane (EDC)	ND	---	0.400	ug/L	1	06/02/25 18:25	EPA 8260D	
<i>Surrogate: 1,4-Difluorobenzene (Surr)</i>		<i>Recovery: 102 %</i>		<i>Limits: 80-120 %</i>	<i>1</i>	<i>06/02/25 18:25</i>	<i>EPA 8260D</i>	
<i>Toluene-d8 (Surr)</i>		<i>104 %</i>		<i>80-120 %</i>	<i>1</i>	<i>06/02/25 18:25</i>	<i>EPA 8260D</i>	
<i>4-Bromofluorobenzene (Surr)</i>		<i>96 %</i>		<i>80-120 %</i>	<i>1</i>	<i>06/02/25 18:25</i>	<i>EPA 8260D</i>	

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323

ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300
Portland, OR 97202

Project: **WA-980 Seattle**

Project Number: **BP Site 0980**

Project Manager: **Don Wyl**

Report ID:

A5E1835 - 06 10 25 1002

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-25-20250527 (A5E1835-04)				Matrix: Water				
Batch: 25F0137								
Lead	ND	---	0.200	ug/L	1	06/04/25 22:32	EPA 6020B	
MW-22-20250527 (A5E1835-09)				Matrix: Water				
Batch: 25F0137								
Lead	ND	---	0.200	ug/L	1	06/04/25 22:38	EPA 6020B	

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A5E1835 - 06 10 25 1002

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
MW-25-20250527 (A5E1835-04)				Matrix: Water				
Batch: 25F0161								
Lead	ND	---	0.200	ug/L	1	06/05/25 20:27	EPA 6020B (Diss)	
MW-22-20250527 (A5E1835-09)				Matrix: Water				
Batch: 25F0161								
Lead	ND	---	0.200	ug/L	1	06/05/25 20:32	EPA 6020B (Diss)	

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205 SE Spokane Street, Suite 300
Portland, OR 97202Project: WA-980 Seattle
Project Number: **BP Site 0980**
Project Manager: **Don Wyll****Report ID:**
A5E1835 - 06 10 25 1002

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25F0103 - EPA 3510C (Fuels/Acid Ext.)						Water						
Blank (25F0103-BLK1)		Prepared: 06/04/25 07:42 Analyzed: 06/05/25 07:39										
NWTPH-Dx LL												
Diesel	ND	---	80.0	ug/L	1	---	---	---	---	---	---	
Oil	ND	---	160	ug/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 83 %		Limits: 50-150 %		Dilution: 1x						
LCS (25F0103-BS1)		Prepared: 06/04/25 07:42 Analyzed: 06/05/25 08:03										
NWTPH-Dx LL												
Diesel	364	---	80.0	ug/L	1	500	---	73	36 - 132%	---	---	
Surr: o-Terphenyl (Surr)		Recovery: 89 %		Limits: 50-150 %		Dilution: 1x						
LCS Dup (25F0103-BSD1)		Prepared: 06/04/25 07:42 Analyzed: 06/05/25 08:27										
NWTPH-Dx LL												
Diesel	370	---	80.0	ug/L	1	500	---	74	36 - 132%	2	30%	
Surr: o-Terphenyl (Surr)		Recovery: 88 %		Limits: 50-150 %		Dilution: 1x						

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:**

A5E1835 - 06 10 25 1002

QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25E1030 - EPA 5030C						Water						
Blank (25E1030-BLK1)		Prepared: 05/30/25 09:58 Analyzed: 05/30/25 12:40										
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	100	ug/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 96 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		97 %		50-150 %		"						
LCS (25E1030-BS2)		Prepared: 05/30/25 09:58 Analyzed: 05/30/25 12:19										
NWTPH-Gx (MS)												
Gasoline Range Organics	489	---	100	ug/L	1	500	---	98	80 - 120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 96 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		96 %		50-150 %		"						

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QUALITY CONTROL (QC) SAMPLE RESULTS

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25F0037 - EPA 5030C						Water						
Blank (25F0037-BLK1)		Prepared: 06/02/25 11:24 Analyzed: 06/02/25 16:37										
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	100	ug/L	1	---	---	---	---	---	---	B-02
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 104 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		110 %		50-150 %		"						
LCS (25F0037-BS2)		Prepared: 06/02/25 11:24 Analyzed: 06/02/25 16:10										
NWTPH-Gx (MS)												
Gasoline Range Organics	530	---	100	ug/L	1	500	---	106	80 - 120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		Recovery: 100 %		Limits: 50-150 %		Dilution: 1x						
1,4-Difluorobenzene (Sur)		110 %		50-150 %		"						

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Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:****A5E1835 - 06 10 25 1002**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25E1030 - EPA 5030C						Water						
Blank (25E1030-BLK1)		Prepared: 05/30/25 09:58 Analyzed: 05/30/25 12:40										
EPA 8260D												
Benzene	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Toluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Xylenes, total	ND	---	1.50	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery:		107 %	Limits: 80-120 %		Dilution: 1x					
Toluene-d8 (Surr)				102 %	80-120 %		"					
4-Bromofluorobenzene (Surr)				102 %	80-120 %		"					
LCS (25E1030-BS1)		Prepared: 05/30/25 09:58 Analyzed: 05/30/25 11:52										
EPA 8260D												
Benzene	20.8	---	0.200	ug/L	1	20.0	---	104	80 - 120%	---	---	
Toluene	20.1	---	1.00	ug/L	1	20.0	---	100	80 - 120%	---	---	
Ethylbenzene	20.5	---	0.500	ug/L	1	20.0	---	103	80 - 120%	---	---	
Xylenes, total	61.9	---	1.50	ug/L	1	60.0	---	103	80 - 120%	---	---	
Methyl tert-butyl ether (MTBE)	20.3	---	1.00	ug/L	1	20.0	---	101	80 - 120%	---	---	
1,2-Dibromoethane (EDB)	20.9	---	0.500	ug/L	1	20.0	---	105	80 - 120%	---	---	
1,2-Dichloroethane (EDC)	19.5	---	0.400	ug/L	1	20.0	---	98	80 - 120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery:		106 %	Limits: 80-120 %		Dilution: 1x					
Toluene-d8 (Surr)				101 %	80-120 %		"					
4-Bromofluorobenzene (Surr)				102 %	80-120 %		"					
Matrix Spike (25E1030-MS1)		Prepared: 05/30/25 09:58 Analyzed: 05/30/25 14:50										
QC Source Sample: MW-25-20250527 (ASE1835-04)												
EPA 8260D												
Benzene	220	---	2.00	ug/L	10	200	ND	110	79 - 120%	---	---	
Toluene	208	---	10.0	ug/L	10	200	ND	104	80 - 121%	---	---	
Ethylbenzene	214	---	5.00	ug/L	10	200	ND	107	79 - 121%	---	---	
Xylenes, total	645	---	15.0	ug/L	10	600	ND	107	79 - 121%	---	---	
Methyl tert-butyl ether (MTBE)	207	---	10.0	ug/L	10	200	ND	104	71 - 124%	---	---	
1,2-Dibromoethane (EDB)	212	---	5.00	ug/L	10	200	ND	106	77 - 121%	---	---	

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ORELAP ID: OR100062

Antea Group205 SE Spokane Street, Suite 300
Portland, OR 97202Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:**

A5E1835 - 06 10 25 1002

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25E1030 - EPA 5030C							Water					
Matrix Spike (25E1030-MS1)		Prepared: 05/30/25 09:58 Analyzed: 05/30/25 14:50										
QC Source Sample: MW-25-20250527 (A5E1835-04)												
1,2-Dichloroethane (EDC)	202	---	4.00	ug/L	10	200	ND	101	73 - 128%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery: 107 %		Limits: 80-120 %		Dilution: 1x						
Toluene-d8 (Surr)		100 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		100 %		80-120 %		"						

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A5E1835 - 06 10 25 1002

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25F0037 - EPA 5030C						Water						
Blank (25F0037-BLK1)		Prepared: 06/02/25 11:24 Analyzed: 06/02/25 16:37										
EPA 8260D												
Benzene	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Toluene	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Ethylbenzene	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
Xylenes, total	ND	---	1.50	ug/L	1	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	---	0.500	ug/L	1	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.400	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery:		99 %	Limits:		80-120 %		Dilution: 1x			
Toluene-d8 (Surr)				104 %			80-120 %		"			
4-Bromofluorobenzene (Surr)				98 %			80-120 %		"			
LCS (25F0037-BS1)		Prepared: 06/02/25 11:24 Analyzed: 06/02/25 15:43										
EPA 8260D												
Benzene	20.2	---	0.200	ug/L	1	20.0	---	101	80 - 120%	---	---	
Toluene	19.2	---	1.00	ug/L	1	20.0	---	96	80 - 120%	---	---	
Ethylbenzene	20.6	---	0.500	ug/L	1	20.0	---	103	80 - 120%	---	---	
Xylenes, total	64.5	---	1.50	ug/L	1	60.0	---	107	80 - 120%	---	---	
Methyl tert-butyl ether (MTBE)	20.5	---	1.00	ug/L	1	20.0	---	102	80 - 120%	---	---	
1,2-Dibromoethane (EDB)	20.1	---	0.500	ug/L	1	20.0	---	100	80 - 120%	---	---	
1,2-Dichloroethane (EDC)	21.9	---	0.400	ug/L	1	20.0	---	109	80 - 120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)		Recovery:		98 %	Limits:		80-120 %		Dilution: 1x			
Toluene-d8 (Surr)				101 %			80-120 %		"			
4-Bromofluorobenzene (Surr)				89 %			80-120 %		"			

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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Portland, OR 97202

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A5E1835 - 06 10 25 1002

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25F0137 - EPA 3015A						Water						
Blank (25F0137-BLK1)		Prepared: 06/04/25 13:46			Analyzed: 06/04/25 20:15							
EPA 6020B												
Lead	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
LCS (25F0137-BS1)		Prepared: 06/04/25 13:46			Analyzed: 06/04/25 20:21							
EPA 6020B												
Lead	52.0	---	0.200	ug/L	1	55.6	---	94	80 - 120%	---	---	
Matrix Spike (25F0137-MS1)		Prepared: 06/04/25 13:46			Analyzed: 06/04/25 22:43							
QC Source Sample: MW-22-20250527 (ASE1835-09)												
EPA 6020B												
Lead	52.4	---	0.200	ug/L	1	55.6	ND	94	75 - 125%	---	---	

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QUALITY CONTROL (QC) SAMPLE RESULTS

Dissolved Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection L Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 25F0161 - Matrix Matched Direct Inject							Water					
Blank (25F0161-BLK1)		Prepared: 06/05/25 09:45 Analyzed: 06/05/25 19:26										
EPA 6020B (Diss)												
Lead	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
LCS (25F0161-BS1)		Prepared: 06/05/25 09:45 Analyzed: 06/05/25 19:31										
EPA 6020B (Diss)												
Lead	53.5	---	0.200	ug/L	1	55.6	---	96	80 - 120%	---	---	

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

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Project Number: **BP Site 0980**
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SAMPLE PREPARATION INFORMATION

Diesel and/or Oil Hydrocarbons by NWTPH-Dx

Prep: EPA 3510C (Fuels/Acid Ext.)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 25F0103</u>							
A5E1835-01	Water	NWTPH-Dx LL	05/27/25 08:50	06/04/25 07:42	1050mL/2mL	1000mL/2mL	0.95
A5E1835-02	Water	NWTPH-Dx LL	05/27/25 09:30	06/04/25 07:42	1050mL/2mL	1000mL/2mL	0.95
A5E1835-03	Water	NWTPH-Dx LL	05/27/25 09:30	06/04/25 07:42	1050mL/2mL	1000mL/2mL	0.95
A5E1835-04	Water	NWTPH-Dx LL	05/27/25 12:00	06/04/25 07:42	1030mL/2mL	1000mL/2mL	0.97
A5E1835-05	Water	NWTPH-Dx LL	05/27/25 13:30	06/04/25 07:42	1050mL/2mL	1000mL/2mL	0.95
A5E1835-06	Water	NWTPH-Dx LL	05/27/25 14:15	06/04/25 07:42	1050mL/2mL	1000mL/2mL	0.95
A5E1835-07	Water	NWTPH-Dx LL	05/27/25 14:55	06/04/25 07:42	1040mL/2mL	1000mL/2mL	0.96
A5E1835-08	Water	NWTPH-Dx LL	05/27/25 15:45	06/04/25 07:42	1050mL/2mL	1000mL/2mL	0.95
A5E1835-09	Water	NWTPH-Dx LL	05/27/25 17:00	06/04/25 07:42	1040mL/2mL	1000mL/2mL	0.96
A5E1835-10	Water	NWTPH-Dx LL	05/27/25 17:40	06/04/25 11:25	1040mL/2mL	1000mL/2mL	0.96

Gasoline Range Hydrocarbons (Benzene through Naphthalene) by NWTPH-Gx

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 25E1030</u>							
A5E1835-04RE1	Water	NWTPH-Gx (MS)	05/27/25 12:00	05/30/25 12:12	5mL/5mL	5mL/5mL	1.00
<u>Batch: 25F0037</u>							
A5E1835-09RE1	Water	NWTPH-Gx (MS)	05/27/25 17:00	06/02/25 11:58	5mL/5mL	5mL/5mL	1.00

Selected Volatile Organic Compounds by EPA 8260D

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 25E1030</u>							
A5E1835-04RE1	Water	EPA 8260D	05/27/25 12:00	05/30/25 12:12	5mL/5mL	5mL/5mL	1.00
<u>Batch: 25F0037</u>							
A5E1835-09RE1	Water	EPA 8260D	05/27/25 17:00	06/02/25 11:58	5mL/5mL	5mL/5mL	1.00

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3015A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
<u>Batch: 25F0137</u>							
A5E1835-04	Water	EPA 6020B	05/27/25 12:00	06/04/25 13:46	45mL/50mL	45mL/50mL	1.00

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323

ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300
Portland, OR 97202

Project: **WA-980 Seattle**

Project Number: **BP Site 0980**

Project Manager: **Don Wyl**

Report ID:

A5E1835 - 06 10 25 1002

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3015A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A5E1835-09	Water	EPA 6020B	05/27/25 17:00	06/04/25 13:46	45mL/50mL	45mL/50mL	1.00

Dissolved Metals by EPA 6020B (ICPMS)

Prep: Matrix Matched Direct Inject

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 25F0161							
A5E1835-04	Water	EPA 6020B (Diss)	05/27/25 12:00	06/05/25 09:45	45mL/50mL	45mL/50mL	1.00
A5E1835-09	Water	EPA 6020B (Diss)	05/27/25 17:00	06/05/25 09:45	45mL/50mL	45mL/50mL	1.00

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Report ID:

A5E1835 - 06 10 25 1002

QUALIFIER DEFINITIONS

Client Sample and Quality Control (QC) Sample Qualifier Definitions:

Apex Laboratories

- B-02** Analyte detected in an associated blank at a level between one-half the MRL and the MRL. (See Notes and Conventions below.)
- F-13** The chromatographic pattern does not resemble the fuel standard used for quantitation
- F-15** Results for diesel are estimated due to overlap from the reported oil result.
- F-16** Results for oil are estimated due to overlap from the reported diesel result.
- Q-19** Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.

Apex Laboratories

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Project Manager: **Don Wyll**

Report ID:

A5E1835 - 06 10 25 1002

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

DET Analyte DETECTED at or above the detection or reporting limit.
ND Analyte NOT DETECTED at or above the detection or reporting limit.
NR Result Not Reported.
RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

Detection Limits: Limit of Detection (LOD)

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

Reporting Limits: Limit of Quantitation (LOQ)

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

Reporting and Detection Limits: Default Limits

Default Reporting and Detection Limits are based on 100% dry weight with the minimum dilution for the analysis. Reporting and Detection Limits are raised due to moisture content, additional dilutions required for analysis, matrix interferences and in other cases, as necessary.

Reporting Conventions:

Basis: Results for soil samples are generally reported on a 100% dry weight basis.
The Result Basis is listed following the units as "dry", "wet", or "" (blank) designation.
"dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")
See Percent Solids section for details of dry weight analysis.
"wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.
"" Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

QC Source:

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.

Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) are not included in this report. Please request a Full QC report if this data is required.

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories

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Project Number: **BP Site 0980**

Project Manager: **Don Wyl**

Report ID:

A5E1835 - 06 10 25 1002

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to one half of the Reporting Limit (RL).

Blank results for gravimetric analyses are evaluated to the Reporting Level, not to half of the Reporting Level.

-For Blank hits falling between $\frac{1}{2}$ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.

-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.

For further details, please request a copy of this document.

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window. In addition, sample matrix spikes are required for some analyses, and sufficient volume must be provided, and billable site specific QC requested, if this is required. All regulatory permits should be reviewed to ensure that these requirements are being met.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates. Apex Laboratories will qualify these analytes according to the most stringent requirements, however results for samples that are for non-regulatory purposes may be acceptable.

Apex Laboratories

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205 SE Spokane Street, Suite 300
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Project: WA-980 Seattle

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Project Manager: **Don Wyl**

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A5E1835 - 06 10 25 1002

Decanted Samples:

Soils/Sediments:

Unless TCLP analysis is required or there is notification otherwise for a specific project, all Soil and Sediments containing excess water are decanted prior to analysis in order to provide the most representative sample for analysis.

Water Samples:

Water samples containing solids and sediment may need to be decanted in order to eliminate these particulates from the water extractions. In the case of organics extractions, a solvent rinse of the container will not be performed.

Volatiles Soils (5035s)

Samples that are field preserved by 5035 for volatiles are dry weight corrected using the same dry weight correction as for normal analyses.

In the case of decanted samples, the dry weight may be performed on a decanted sample, while the aliquot for 5035 may not have been treated the same way. If this is a concern, please submit separate containers for dry weight analysis for volatiles can be provided.

All samples decanted in the laboratory are noted in this report with the DCNT qualifier indicating the sample was decanted.

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323

ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300
Portland, OR 97202

Project: WA-980 Seattle

Project Number: **BP Site 0980**

Project Manager: **Don Wyll**

Report ID:

A5E1835 - 06 10 25 1002

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation)

EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation.

Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provided by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

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Michele Poquiz For Kurt Johnson, Senior Chemist

Antea Group
 205 SE Spokane Street, Suite 300
 Portland, OR 97202

 Project: WA-980 Seattle
 Project Number: BP Site 0980
 Project Manager: Don Wyll

 Report ID:
 ASE1835 - 0610251002

ASE1835

Page 1 of 2


 Laboratory Management Program (LaMP) Chain of Custody Record
 Soil, Sediment and Groundwater Samples

 BP Site Node Path: ARCO 980 Req Due Date (mm/dd/yyyy): Standard TAT Rush TAT Yes No X
 BP/IRM Facility No: ARCO Facility No. 00980 Lab Work Order Number:

Lab Name: <u>Apex Laboratories LLC</u>		BPIARC Facility Address: <u>10822 Roosevelt Way NE</u>		Consultant/Contractor: <u>Antea Group</u>	
Lab Address: <u>6700 SW Sandburg St.</u>		City, State, ZIP Code: <u>Seattle, WA</u>		Consultant/Contractor Project No:	
Lab PM: <u>Cameron O'Brien</u>		Lead Regulatory Agency: <u>Washington State Department of Ecology</u>		Address: <u>18378-B Redmond Way, Redmond, WA</u>	
Lab Phone: <u>503 718 2323</u>		California Global ID No.: <u>NA</u>		Consultant/Contractor PM: <u>Don Wyll</u>	
Lab Shipping Acct: <u>NA</u>		Enfos Proposal No: <u>06097-000 / W2107102</u>		Phone: <u>425 830 2007</u> Email: <u>don.wyll@anteagroup.us</u>	
Lab Bottle Order No: <u>NA</u>		Accounting Mode: Provision <u>X</u> OOC-BU OOC-RM		Send/Submit EDD to: <u>don.wyll@anteagroup.us</u>	
Other Info:		Stage: <u>70: Commercial-Site Activities</u> Activity: <u>116: Contracts Management</u>		Invoice To: <u>BP-RM</u> BPIARC <u>X</u>	

BPIRM PM: <u>Wade Melton</u>				Sample Details		Requested Analyses										Report Type & QC Level	
																Limited (Standard) Package <u>X</u> Limited Plus Package Full Package	
Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Pre	Fit	Analysis	Pre	Fit	Comments		
	MW-4-20250527	5/17/25	850	W	-	-	G	2				STEX by EPA 8260					
	MW-11-20250527	5/17/25	930	W	-	-	G	2				MTBE by EPA 8260					
	MW-11DUP-20250527	5/17/25	930	W	-	-	G	2				EDC by EPA 8260					
	MW-25-20250527	5/17/25	1200	W	-	-	G	7				EDB by EPA 8011	X	X	X		
	B1-20250527	5/17/25	1330	W	-	-	G	2				NMTH-Gx	X				
	B3-20250527	5/17/25	1415	W	-	-	G	2				NMTH-Gx	X				

Sampler's Name: <u>Celi V. Pacheco N</u>		Relinquished By / Affiliation		Date	Time	Accepted By / Affiliation		Date	Time
Sampler's Company: <u>Antea Group</u>		<u>Don Wyll / Antea Group</u>		<u>5/24/25</u>	<u>900</u>	<u>Apex</u>		<u>5/24/25</u>	<u>1151</u>
Ship Method: <u>FedEx</u>		Ship Date: <u>5/28/25</u>							
Shipment Tracking No:									
Special Instructions: <u>report total xylenes</u>									
THIS LINE - LAB USE ONLY: Custody Seals in Place: Yes / No Temp Blank: Yes / No Cooler Temp on Receipt: _____ °F/C Trip Blank: Yes / No MS/MSD Sample Submitted: Yes / No									

 Proprietary and Confidential
 Property of BP and its Affiliates
 Antea Group - Business Confidential

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Michele Poquiz For Kurt Johnson, Senior Chemist



6700 S.W. Sandburg Street

ORELAP ID: OR100062

WA-980 Seattle

Project Manager: Don Wyll

ASE1835 - 06 10 25 1002

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Michael Fog

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street

Tigard, OR 97223

503-718-2323

ORELAP ID: OR100062

Antea Group

205 SE Spokane Street, Suite 300

Portland, OR 97202

Project: **WA-980 Seattle**Project Number: **BP Site 0980**Project Manager: **Don Wyll****Report ID:**

A5E1835 - 06 10 25 1002

APEX LABS COOLER RECEIPT FORMClient: Bp rm / Antea Group Element WO#: A5E1835Project/Project #: ARCO 980**Delivery Info:**Date/time received: 5/29/25 @ 1151 By: APWDelivered by: Apex ☐ Client ☐ ESS ☐ FedEx ☒ UPS ☐ Radio ☐ Morgan ☐ SDS ☐ Evergreen ☐ Other ☐From USDA Regulated Origin? Yes ☐ No ☒**Cooler Inspection** Date/time inspected: 5/29/25 @ 1151 By: APWChain of Custody included? Yes ☐ No ☒Signed/dated by client? Yes ☒ No ☐Contains USDA Reg. Soils? Yes ☐ No ☒ Unsure (email RegSoils) ☐

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	<u>2.0</u>	<u>2.8</u>	<u>3.3</u>				
Custody seals? (Y/N)	<u>N</u>	<u>N</u>	<u>N</u>				
Received on ice? (Y/N)	<u>Y</u>	<u>Y</u>	<u>Y</u>				
Temp. blanks? (Y/N)	<u>Y</u>	<u>Y</u>	<u>Y</u>				
Ice type: (Gel/Real/Other)	<u>Real</u>	<u>Real</u>	<u>Real</u>				
Condition (In/Out):	<u>In</u>	<u>In</u>	<u>In</u>				

Cooler out of temp? (Y/N) Possible reason why: NGreen dots applied to out of temperature samples? Yes ☒ No ☐Out of temperature samples form initiated? Yes ☒ No ☐**Sample Inspection:** Date/time inspected: 5/29/25 @ 1420 By: APWAll samples intact? Yes ☒ No ☐ Comments: Bottle labels/COCs agree? Yes ☒ No ☐ Comments: COC/container discrepancies form initiated? Yes ☐ No ☒Containers/volumes received appropriate for analysis? Yes ☒ No ☐ Comments: Do VOA vials have visible headspace? Yes ☐ No ☒ NA ☐Comments: Water samples: pH checked: Yes ☒ No ☐ NA ☐ pH appropriate? Yes ☒ No ☐ NA ☐ pH ID: A23172Comments: 8815 9496 1054Labeled by: APWWitness: APWCooler Inspected by: APW

Form Y-003 R-02

Apex Laboratories

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Appendix E – RI Laboratory Analytical Reports – Soil Vapor

Analytical Report

5/23/2025

Mr. Dennis Lindelof

ANTEA USA, Inc.

18378-B Redmond Way

Redmond WA 98052

Project Name:

Project #:

Workorder #: 2505402A

Dear Mr. Dennis Lindelof

The following report includes the data for the above referenced project for sample(s) received on 5/15/2025 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Monica Tran at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Monica Tran

Project Manager

WORK ORDER #: 2505402A

Work Order Summary

CLIENT: Mr. Dennis Lindelof
ANTEA USA, Inc.
18378-B Redmond Way
Redmond, WA 98052

BILL TO: Accounts Payable-WA
ANTEA USA, Inc.
18378-B Redmond Way
Redmond, WA 98052

PHONE: 800 477 7411

P.O. #

FAX: 425-477-7411

PROJECT #

DATE RECEIVED: 05/15/2025

CONTACT: Monica Tran

DATE COMPLETED: 05/23/2025

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	SG-4_20250513	TO-15	2.8 "Hg	1.9 psi
01B	SG-4_20250513	TO-15	2.8 "Hg	1.9 psi
02A	SG-1_20250513	TO-15	4.9 "Hg	1.9 psi
02B	SG-1_20250513	TO-15	4.9 "Hg	1.9 psi
03A	SG-2_20250513	TO-15	4.3 "Hg	2 psi
03B	SG-2_20250513	TO-15	4.3 "Hg	2 psi
04A	Lab Blank	TO-15	NA	NA
04B	Lab Blank	TO-15	NA	NA
05A	CCV	TO-15	NA	NA
05B	CCV	TO-15	NA	NA
06A	LCS	TO-15	NA	NA
06AA	LCSD	TO-15	NA	NA
06B	LCS	TO-15	NA	NA
06BB	LCSD	TO-15	NA	NA

CERTIFIED BY:



Technical Director

DATE: 05/23/25

Cert. No.: AZ Licensure-AZ0775, FL NELAP-E87680, LA NELAP-02089, MN NELAP-2836569, NH NELAP-209224-A, NJ NELAP-CA016, NY NELAP-11291, TX NELAP-T104704434, UT NELAP-CA009332023-16, VA NELAP-13180, WA NELAP-C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program) CA300005-21

Eurofins Environment Testing Northern California, LLC certifies that the test results contained in this report meet all requirements of the 2016 TNI Standard.

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000

LABORATORY NARRATIVE
EPA Method TO-15 (Hybrid)
ANTEA USA, Inc.
Workorder# 2505402A

Six 6 Liter Summa Canister (100% Certified) samples were received on May 15, 2025. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the Full Scan and SIM acquisition modes.

Receiving Notes

The Chain of Custody (COC) information for sample SG-2_20250513 did not match the information on the canister with regard to canister barcode. The sample labeled 6L0464 on the COC is labeled as 6L0446 on the canister. The client was notified of the discrepancy and the information on the canister was used to process and report the sample.

Analytical Notes

The results for each sample in this report were acquired from two separate data files originating from the same analytical run. The two data files have the same base file name and are differentiated with a "sim" extension on the SIM data file.

Total Xylenes concentration is calculated by summing the individual concentrations of m,p-Xylene and O-Xylene.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue



Air Toxics

Summary of Detected Compounds EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-4_20250513

Lab ID#: 2505402A-01A

No Detections Were Found.

Client Sample ID: SG-4_20250513

Lab ID#: 2505402A-01B

No Detections Were Found.

Client Sample ID: SG-1_20250513

Lab ID#: 2505402A-02A

No Detections Were Found.

Client Sample ID: SG-1_20250513

Lab ID#: 2505402A-02B

No Detections Were Found.

Client Sample ID: SG-2_20250513

Lab ID#: 2505402A-03A

No Detections Were Found.

Client Sample ID: SG-2_20250513

Lab ID#: 2505402A-03B

No Detections Were Found.



Air Toxics

Client Sample ID: SG-4_20250513

Lab ID#: 2505402A-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17052028	Date of Collection:	5/13/25 1:20:00 PM
Dil. Factor:	1.24	Date of Analysis:	5/21/25 01:41 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	2.5	Not Detected	8.9	Not Detected
Toluene	1.2	Not Detected	4.7	Not Detected
m,p-Xylene	1.2	Not Detected	5.4	Not Detected
o-Xylene	0.62	Not Detected	2.7	Not Detected
Total Xylene	1.9	Not Detected	8.1	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	94	70-130



Air Toxics

Client Sample ID: SG-4_20250513

Lab ID#: 2505402A-01B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17052028sim	Date of Collection:	5/13/25 1:20:00 PM
Dil. Factor:	1.24	Date of Analysis:	5/21/25 01:41 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.25	Not Detected	0.79	Not Detected
Ethyl Benzene	0.25	Not Detected	1.1	Not Detected
Naphthalene	0.25	Not Detected	1.3	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	95	70-130



Air Toxics

Client Sample ID: SG-1_20250513

Lab ID#: 2505402A-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17052029	Date of Collection:	5/13/25 3:05:00 PM
Dil. Factor:	1.35	Date of Analysis:	5/21/25 02:09 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	2.7	Not Detected	9.7	Not Detected
Toluene	1.4	Not Detected	5.1	Not Detected
m,p-Xylene	1.4	Not Detected	5.9	Not Detected
o-Xylene	0.68	Not Detected	2.9	Not Detected
Total Xylene	2.0	Not Detected	8.8	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	94	70-130



Air Toxics

Client Sample ID: SG-1_20250513

Lab ID#: 2505402A-02B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17052029sim	Date of Collection: 5/13/25 3:05:00 PM
Dil. Factor:	1.35	Date of Analysis: 5/21/25 02:09 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.27	Not Detected	0.86	Not Detected
Ethyl Benzene	0.27	Not Detected	1.2	Not Detected
Naphthalene	0.27	Not Detected	1.4	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	96	70-130



Air Toxics

Client Sample ID: SG-2_20250513

Lab ID#: 2505402A-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17052030	Date of Collection: 5/13/25 4:15:00 PM
Dil. Factor:	1.33	Date of Analysis: 5/21/25 02:38 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	2.7	Not Detected	9.6	Not Detected
Toluene	1.3	Not Detected	5.0	Not Detected
m,p-Xylene	1.3	Not Detected	5.8	Not Detected
o-Xylene	0.66	Not Detected	2.9	Not Detected
Total Xylene	2.0	Not Detected	8.7	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	93	70-130



Air Toxics

Client Sample ID: SG-2_20250513

Lab ID#: 2505402A-03B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17052030sim	Date of Collection: 5/13/25 4:15:00 PM
Dil. Factor:	1.33	Date of Analysis: 5/21/25 02:38 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.27	Not Detected	0.85	Not Detected
Ethyl Benzene	0.27	Not Detected	1.2	Not Detected
Naphthalene	0.27	Not Detected	1.4	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	97	70-130

Client Sample ID: Lab Blank

Lab ID#: 2505402A-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17052005e	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 5/20/25 10:12 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
Toluene	1.0	Not Detected	3.8	Not Detected
m,p-Xylene	1.0	Not Detected	4.3	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Total Xylene	1.5	Not Detected	6.5	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	99	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2505402A-04B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17052005simc	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 5/20/25 10:12 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.20	Not Detected	0.64	Not Detected
Ethyl Benzene	0.20	Not Detected	0.87	Not Detected
Naphthalene	0.20	Not Detected	1.0	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	100	70-130



Air Toxics

Client Sample ID: CCV

Lab ID#: 2505402A-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17052002	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 5/20/25 08:08 AM

Compound	%Recovery

Methyl tert-butyl ether	105
Toluene	102
m,p-Xylene	103
o-Xylene	99
Total Xylene	101

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	104	70-130



Air Toxics

Client Sample ID: CCV

Lab ID#: 2505402A-05B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17052002sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 5/20/25 08:08 AM

Compound	%Recovery

Benzene	100
Ethyl Benzene	104
Naphthalene	103

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	105	70-130

Client Sample ID: LCS

Lab ID#: 2505402A-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17052003	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 5/20/25 08:50 AM

Compound	%Recovery	Method Limits
Methyl tert-butyl ether	104	70-130
Toluene	99	70-130
m,p-Xylene	100	70-130
o-Xylene	99	70-130
Total Xylene	100	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	103	70-130

Client Sample ID: LCSD

Lab ID#: 2505402A-06AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17052004	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 5/20/25 09:17 AM

Compound	%Recovery	Method Limits
Methyl tert-butyl ether	102	70-130
Toluene	101	70-130
m,p-Xylene	103	70-130
o-Xylene	101	70-130
Total Xylene	102	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	107	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 2505402A-06B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17052003sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 5/20/25 08:50 AM

Compound	%Recovery	Method Limits
Benzene	101	70-130
Ethyl Benzene	104	70-130
Naphthalene	110	60-140

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	103	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 2505402A-06BB

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	17052004sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 5/20/25 09:17 AM

Compound	%Recovery	Method Limits
Benzene	101	70-130
Ethyl Benzene	106	70-130
Naphthalene	110	60-140

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	108	70-130

Method : TO-15 (Hybrid) (Sp)-BTEX, MTBE & Naph (Total Xylenes)

CAS Number	Compound	Rpt. Limit (ppbv)
1634-04-4	Methyl tert-butyl ether	2.0
71-43-2	Benzene	0.20
108-88-3	Toluene	1.0
100-41-4	Ethyl Benzene	0.20
108-38-3	m,p-Xylene	1.0
95-47-6	o-Xylene	0.50
91-20-3	Naphthalene	0.20
1330-20-7	Total Xylene	1.5

	Surrogate	Method Limits
2037-26-5	Toluene-d8	70-130
17060-07-0	1,2-Dichloroethane-d4	70-130
460-00-4	4-Bromofluorobenzene	70-130



ANALYTICAL REPORT

PREPARED FOR

Attn: Monica Tran
Eurofins Air Toxics, Inc.
180 Blue Ravine Road
Suite B
Folsom CA 95630

Generated 5/29/2025 9:04 AM

JOB DESCRIPTION

ARCO Facility No. 00980
200-78136-1

JOB NUMBER

200-78136-1

Eurofins Burlington

Job Notes

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Authorization



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5/29/2025 9:04 AM

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Definitions/Glossary

Client: Eurofins Air Toxics, Inc.
Project/Site: ARCO Facility No. 00980

Job ID: 200-78136-1
SDG: 200-78136-1

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Job Narrative
200-78136-1

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

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

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

Receipt

The samples were received on 5/23/2025 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice.

Air - GC/MS VOA

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

Detection Summary

Client: Eurofins Air Toxics, Inc.
Project/Site: ARCO Facility No. 00980

Job ID: 200-78136-1
SDG: 200-78136-1

Client Sample ID: SG-4_20250513 Lab Sample ID: 200-78136-1

No Detections.

Client Sample ID: SG-1_20250513 Lab Sample ID: 200-78136-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
C5-C8 Aliphatics (adjusted)	16		13	13	ug/m3	1.35		APH	Total/NA

Client Sample ID: SG-2_20250513 Lab Sample ID: 200-78136-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Eurofins Air Toxics, Inc.
Project/Site: ARCO Facility No. 00980

Job ID: 200-78136-1
SDG: 200-78136-1

Client Sample ID: SG-4_20250513

Lab Sample ID: 200-78136-1

Date Collected: 05/13/25 13:20

Matrix: Air

Date Received: 05/23/25 10:30

Sample Container: Summa Canister 6L

Method: MA DEP APH - Air Phase Petroleum Hydrocarbons

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Butadiene	2.0	U	2.0	2.0	ug/m3			05/23/25 15:35	1.25
Methyl tert-butyl ether	2.0	U	2.0	2.0	ug/m3			05/23/25 15:35	1.25
Benzene	2.0	U	2.0	2.0	ug/m3			05/23/25 15:35	1.25
Toluene	2.0	U	2.0	2.0	ug/m3			05/23/25 15:35	1.25
Ethylbenzene	2.0	U	2.0	2.0	ug/m3			05/23/25 15:35	1.25
m-Xylene & p-Xylene	2.0	U	2.0	2.0	ug/m3			05/23/25 15:35	1.25
o-Xylene	2.0	U	2.0	2.0	ug/m3			05/23/25 15:35	1.25
Naphthalene	2.0	U	2.0	2.0	ug/m3			05/23/25 15:35	1.25
C9-C10 Aromatics	10	U	10	10	ug/m3			05/23/25 15:35	1.25
C5-C8 Aliphatics (adjusted)	12	U	12	12	ug/m3			05/23/25 15:35	1.25
C9-C12 Aliphatics (adjusted)	12	U	12	12	ug/m3			05/23/25 15:35	1.25

Client Sample ID: SG-1_20250513

Lab Sample ID: 200-78136-2

Date Collected: 05/13/25 15:05

Matrix: Air

Date Received: 05/23/25 10:30

Sample Container: Summa Canister 6L

Method: MA DEP APH - Air Phase Petroleum Hydrocarbons

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Butadiene	2.1	U	2.1	2.1	ug/m3			05/23/25 19:04	1.35
Methyl tert-butyl ether	2.1	U	2.1	2.1	ug/m3			05/23/25 19:04	1.35
Benzene	2.1	U	2.1	2.1	ug/m3			05/23/25 19:04	1.35
Toluene	2.1	U	2.1	2.1	ug/m3			05/23/25 19:04	1.35
Ethylbenzene	2.1	U	2.1	2.1	ug/m3			05/23/25 19:04	1.35
m-Xylene & p-Xylene	2.1	U	2.1	2.1	ug/m3			05/23/25 19:04	1.35
o-Xylene	2.1	U	2.1	2.1	ug/m3			05/23/25 19:04	1.35
Naphthalene	2.1	U	2.1	2.1	ug/m3			05/23/25 19:04	1.35
C9-C10 Aromatics	11	U	11	11	ug/m3			05/23/25 19:04	1.35
C5-C8 Aliphatics (adjusted)	16		13	13	ug/m3			05/23/25 19:04	1.35
C9-C12 Aliphatics (adjusted)	13	U	13	13	ug/m3			05/23/25 19:04	1.35

Client Sample ID: SG-2_20250513

Lab Sample ID: 200-78136-3

Date Collected: 05/13/25 16:15

Matrix: Air

Date Received: 05/23/25 10:30

Sample Container: Summa Canister 6L

Method: MA DEP APH - Air Phase Petroleum Hydrocarbons

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Butadiene	2.0	U	2.0	2.0	ug/m3			05/23/25 17:19	1.32
Methyl tert-butyl ether	2.0	U	2.0	2.0	ug/m3			05/23/25 17:19	1.32
Benzene	2.0	U	2.0	2.0	ug/m3			05/23/25 17:19	1.32
Toluene	2.0	U	2.0	2.0	ug/m3			05/23/25 17:19	1.32
Ethylbenzene	2.0	U	2.0	2.0	ug/m3			05/23/25 17:19	1.32
m-Xylene & p-Xylene	2.0	U	2.0	2.0	ug/m3			05/23/25 17:19	1.32
o-Xylene	2.0	U	2.0	2.0	ug/m3			05/23/25 17:19	1.32
Naphthalene	2.0	U	2.0	2.0	ug/m3			05/23/25 17:19	1.32
C9-C10 Aromatics	10	U	10	10	ug/m3			05/23/25 17:19	1.32
C5-C8 Aliphatics (adjusted)	12	U	12	12	ug/m3			05/23/25 17:19	1.32
C9-C12 Aliphatics (adjusted)	12	U	12	12	ug/m3			05/23/25 17:19	1.32

Eurofins Burlington

Default Detection Limits

Client: Eurofins Air Toxics, Inc.
Project/Site: ARCO Facility No. 00980

Job ID: 200-78136-1
SDG: 200-78136-1

Method: APH - Air Phase Petroleum Hydrocarbons

Analyte	RL	RL
Benzene	2.0 ug/m3	2.0 ug/m3
Butadiene	2.0 ug/m3	2.0 ug/m3
C5-C8 Aliphatics (adjusted)	12 ug/m3	12 ug/m3
C9-C10 Aromatics	10 ug/m3	10 ug/m3
C9-C12 Aliphatics (adjusted)	12 ug/m3	12 ug/m3
Ethylbenzene	2.0 ug/m3	2.0 ug/m3
Methyl tert-butyl ether	2.0 ug/m3	2.0 ug/m3
m-Xylene & p-Xylene	2.0 ug/m3	2.0 ug/m3
Naphthalene	2.0 ug/m3	2.0 ug/m3
o-Xylene	2.0 ug/m3	2.0 ug/m3
Toluene	2.0 ug/m3	2.0 ug/m3

QC Sample Results

Client: Eurofins Air Toxics, Inc.
Project/Site: ARCO Facility No. 00980

Job ID: 200-78136-1
SDG: 200-78136-1

Method: APH - Air Phase Petroleum Hydrocarbons

Lab Sample ID: MB 200-216493/4
Matrix: Air
Analysis Batch: 216493

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Butadiene	2.0	U	2.0	2.0	ug/m3			05/23/25 13:50	1
Methyl tert-butyl ether	2.0	U	2.0	2.0	ug/m3			05/23/25 13:50	1
Benzene	2.0	U	2.0	2.0	ug/m3			05/23/25 13:50	1
Toluene	2.0	U	2.0	2.0	ug/m3			05/23/25 13:50	1
Ethylbenzene	2.0	U	2.0	2.0	ug/m3			05/23/25 13:50	1
m-Xylene & p-Xylene	2.0	U	2.0	2.0	ug/m3			05/23/25 13:50	1
o-Xylene	2.0	U	2.0	2.0	ug/m3			05/23/25 13:50	1
Naphthalene	2.0	U	2.0	2.0	ug/m3			05/23/25 13:50	1
C9-C10 Aromatics	10	U	10	10	ug/m3			05/23/25 13:50	1
C5-C8 Aliphatics (adjusted)	12	U	12	12	ug/m3			05/23/25 13:50	1
C9-C12 Aliphatics (adjusted)	12	U	12	12	ug/m3			05/23/25 13:50	1

Lab Sample ID: LCS 200-216493/3
Matrix: Air
Analysis Batch: 216493

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Butadiene	55.3	44.7		ug/m3		81	70 - 130
Methyl tert-butyl ether	90.4	93.3		ug/m3		103	70 - 130
Benzene	79.9	78.5		ug/m3		98	70 - 130
Toluene	94.4	99.8		ug/m3		106	70 - 130
Ethylbenzene	109	120		ug/m3		110	70 - 130
m-Xylene & p-Xylene	109	125		ug/m3		115	70 - 130
o-Xylene	109	124		ug/m3		115	70 - 130
Naphthalene	131	153		ug/m3		117	50 - 150
C9-C10 Aromatics	630	752		ug/m3		119	70 - 130
n-Heptane	103	95.4		ug/m3		93	70 - 130
n-Decane	146	165		ug/m3		113	70 - 130
1,3,5-Trimethylbenzene	123	147		ug/m3		119	70 - 130

Lab Sample ID: 200-78136-3 DU
Matrix: Air
Analysis Batch: 216493

Client Sample ID: SG-2_20250513
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Butadiene	2.0	U	2.0	U	ug/m3		NC	30
Methyl tert-butyl ether	2.0	U	2.0	U	ug/m3		NC	30
Benzene	2.0	U	2.0	U	ug/m3		NC	30
Toluene	2.0	U	2.0	U	ug/m3		NC	30
Ethylbenzene	2.0	U	2.0	U	ug/m3		NC	30
m-Xylene & p-Xylene	2.0	U	2.0	U	ug/m3		NC	30
o-Xylene	2.0	U	2.0	U	ug/m3		NC	30
Naphthalene	2.0	U	2.0	U	ug/m3		NC	30
C9-C10 Aromatics	10	U	10	U	ug/m3		NC	30
C5-C8 Aliphatics (adjusted)	12	U	12	U	ug/m3		NC	30
C9-C12 Aliphatics (adjusted)	12	U	12	U	ug/m3		NC	30

Eurofins Burlington

QC Association Summary

Client: Eurofins Air Toxics, Inc.
Project/Site: ARCO Facility No. 00980

Job ID: 200-78136-1
SDG: 200-78136-1

Air - GC/MS VOA

Analysis Batch: 216493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-78136-1	SG-4_20250513	Total/NA	Air	APH	
200-78136-2	SG-1_20250513	Total/NA	Air	APH	
200-78136-3	SG-2_20250513	Total/NA	Air	APH	
MB 200-216493/4	Method Blank	Total/NA	Air	APH	
LCS 200-216493/3	Lab Control Sample	Total/NA	Air	APH	
200-78136-3 DU	SG-2_20250513	Total/NA	Air	APH	

Lab Chronicle

Client: Eurofins Air Toxics, Inc.
Project/Site: ARCO Facility No. 00980

Job ID: 200-78136-1
SDG: 200-78136-1

Client Sample ID: SG-4_20250513

Lab Sample ID: 200-78136-1

Date Collected: 05/13/25 13:20

Matrix: Air

Date Received: 05/23/25 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	APH		1.25	216493	VTP	EET BUR	05/23/25 15:35

Client Sample ID: SG-1_20250513

Lab Sample ID: 200-78136-2

Date Collected: 05/13/25 15:05

Matrix: Air

Date Received: 05/23/25 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	APH		1.35	216493	VTP	EET BUR	05/23/25 19:04

Client Sample ID: SG-2_20250513

Lab Sample ID: 200-78136-3

Date Collected: 05/13/25 16:15

Matrix: Air

Date Received: 05/23/25 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	APH		1.32	216493	VTP	EET BUR	05/23/25 17:19

Laboratory References:

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

Accreditation/Certification Summary

Client: Eurofins Air Toxics, Inc.
Project/Site: ARCO Facility No. 00980

Job ID: 200-78136-1
SDG: 200-78136-1

Laboratory: Eurofins Burlington

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

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2336	02-25-26
Connecticut	State	PH-0751	09-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	05-20-26
Florida	NELAP	E87467	06-30-25
Minnesota	NELAP	050-999-436	12-31-25
New Hampshire	NELAP	2006	12-18-25
New Jersey	NELAP	VT972	06-30-25
New York	NELAP	10391	03-31-26
Pennsylvania	NELAP	68-00489	04-30-26
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	525-23-353-27750	12-19-26
Virginia	NELAP	460209	12-14-25
Wisconsin	State	399140830	08-31-25

Method Summary

Client: Eurofins Air Toxics, Inc.
Project/Site: ARCO Facility No. 00980

Job ID: 200-78136-1
SDG: 200-78136-1

Method	Method Description	Protocol	Laboratory
APH	Air Phase Petroleum Hydrocarbons	MA DEP	EET BUR

Protocol References:

MA DEP = Massachusetts Department Of Environmental Protection

Laboratory References:

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

Sample Summary

Client: Eurofins Air Toxics, Inc.
Project/Site: ARCO Facility No. 00980

Job ID: 200-78136-1
SDG: 200-78136-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
200-78136-1	SG-4_20250513	Air	05/13/25 13:20	05/23/25 10:30
200-78136-2	SG-1_20250513	Air	05/13/25 15:05	05/23/25 10:30
200-78136-3	SG-2_20250513	Air	05/13/25 16:15	05/23/25 10:30

AIR - GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins BurlingtonJob No.: 200-78136-1SDG No.: 200-78136-1Instrument ID: CHAE.iAnalysis Batch Number: 215485Lab Sample ID: IC 200-215485/3

Client Sample ID: _____

Date Analyzed: 04/24/25 11:56Lab File ID: 200-0064859-003.DGC Column: RTX-624ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl tert-butyl ether	9.99	Peak assignment corrected	V0FK	04/24/25 20:37
C5-C8 Aliphatics	12.88	Incomplete Integration	V0FK	04/24/25 14:36
n-Octane	17.19	Peak assignment corrected	V0FK	04/24/25 20:37
C9-C12 Aliphatics	20.17	Incomplete Integration	V0FK	04/24/25 14:40
Dodecane	21.95	Incomplete Integration	V0FK	04/24/25 15:34
Naphthalene	22.02	Incomplete Integration	V0FK	04/24/25 16:24

Lab Sample ID: IC 200-215485/5

Client Sample ID: _____

Date Analyzed: 04/24/25 13:40Lab File ID: 200-0064859-005.DGC Column: RTX-624ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl tert-butyl ether	9.99	Peak assignment corrected	V0FK	04/24/25 20:37
n-Octane	17.19	Peak assignment corrected	V0FK	04/24/25 20:37
Dodecane	21.94	Incomplete Integration	V0FK	04/24/25 16:38
Naphthalene	22.02	Incomplete Integration	V0FK	04/24/25 16:38

Lab Sample ID: IC 200-215485/6

Client Sample ID: _____

Date Analyzed: 04/24/25 14:35Lab File ID: 200-0064859-006.DGC Column: RTX-624ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Octane	17.19	Peak assignment corrected	V0FK	04/24/25 20:37
Naphthalene	22.03	Incomplete Integration	V0FK	04/24/25 16:37

AIR - GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins BurlingtonJob No.: 200-78136-1SDG No.: 200-78136-1Instrument ID: CHAE.iAnalysis Batch Number: 215485Lab Sample ID: IC 200-215485/7

Client Sample ID: _____

Date Analyzed: 04/24/25 15:28Lab File ID: 200-0064859-007.DGC Column: RTX-624ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Octane	17.19	Peak assignment corrected	V0FK	04/24/25 20:38

Lab Sample ID: ICIS 200-215485/8

Client Sample ID: _____

Date Analyzed: 04/24/25 16:19Lab File ID: 200-0064859-008.DGC Column: RTX-624ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Octane	17.20	Peak assignment corrected	V0FK	04/24/25 20:36

Lab Sample ID: IC 200-215485/9

Client Sample ID: _____

Date Analyzed: 04/24/25 17:11Lab File ID: 200-0064859-009.DGC Column: RTX-624ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Octane	17.20	Peak assignment corrected	V0FK	04/24/25 20:38

Lab Sample ID: ICV 200-215485/11

Client Sample ID: _____

Date Analyzed: 04/24/25 18:55Lab File ID: 200-0064859-011.DGC Column: RTX-624ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Octane	17.20	Peak assignment corrected	V0FK	04/24/25 20:39

AIR - GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins BurlingtonJob No.: 200-78136-1SDG No.: 200-78136-1Instrument ID: CHAE.iAnalysis Batch Number: 216493Lab Sample ID: CCVIS 200-216493/2

Client Sample ID: _____

Date Analyzed: 05/23/25 12:06Lab File ID: 200-0065256-002.DGC Column: RTX-624ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Butadiene	5.19	Peak assignment corrected	V0FK	05/23/25 12:43
Isopentane	6.94	Peak assignment corrected	V0FK	05/23/25 12:44
Methyl tert-butyl ether	9.96	Peak assignment corrected	V0FK	05/23/25 12:44
Chlorobromomethane	11.12	Peak assignment corrected	V0FK	05/23/25 12:43
Hexane	11.17	Peak assignment corrected	V0FK	05/23/25 12:44
C5-C8 Aliphatics	12.88	Incomplete Integration	V0FK	05/23/25 12:51
C5-C8 Aliphatics (Raw)	12.88	Incomplete Integration	V0FK	05/23/25 12:51
Benzene	12.95	Peak assignment corrected	V0FK	05/23/25 12:44
Cyclohexane	13.24	Peak assignment corrected	V0FK	05/23/25 12:44
1,4-Difluorobenzene	13.40	Peak assignment corrected	V0FK	05/23/25 12:43
2,3-Dimethylpentane	13.54	Peak assignment corrected	V0FK	05/23/25 12:44
n-Heptane	14.51	Peak assignment corrected	V0FK	05/23/25 12:44
Toluene	16.23	Peak assignment corrected	V0FK	05/23/25 12:47
Chlorobenzene-d5	17.89	Peak assignment corrected	V0FK	05/23/25 12:43

Lab Sample ID: MB 200-216493/4

Client Sample ID: _____

Date Analyzed: 05/23/25 13:50Lab File ID: 200-0065256-004.DGC Column: RTX-624ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toluene		Invalid Compound ID	V0FK	05/23/25 15:22

Lab Sample ID: 200-78136-1Client Sample ID: SG-4_20250513Date Analyzed: 05/23/25 15:35Lab File ID: 200-0065256-006.DGC Column: RTX-624ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Naphthalene		Invalid Compound ID	V0FK	05/28/25 09:16
Toluene		Invalid Compound ID	V0FK	05/28/25 09:15

AIR - GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Burlington Job No.: 200-78136-1
SDG No.: 200-78136-1
Instrument ID: CHAE.i Analysis Batch Number: 216493
Lab Sample ID: 200-78136-3 Client Sample ID: SG-2_20250513
Date Analyzed: 05/23/25 17:19 Lab File ID: 200-0065256-008.D GC Column: RTX-624 ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Naphthalene		Invalid Compound ID	V0FK	05/28/25 09:17

Lab Sample ID: 200-78136-3 DU Client Sample ID: SG-2_20250513 DU
Date Analyzed: 05/23/25 18:12 Lab File ID: 200-0065256-009.D GC Column: RTX-624 ID: 0.32 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Naphthalene		Invalid Compound ID	V0FK	05/28/25 09:18

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Burlington

Job No.: 200-78136-1

SDG No.: 200-78136-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
APHLCsw_00065	05/18/25	02/18/25	Nitrogen, Lot NA	15.46 L	APH ICV MIX_00011	387 mL	1,3,5-Trimethylbenzene	123.159 ug/m3
							Benzene	79.8532 ug/m3
							Butadiene	55.3215 ug/m3
							C5-C8 Aliphatics (adjusted)	570.487 ug/m3
							C5-C8 Aliphatics (Raw)	570.487 ug/m3
							C9-C10 Aromatics	630.064 ug/m3
							C9-C10 Aromatics (mz 120)	492.636 ug/m3
							C9-C10 Aromatics (mz 134)	137.428 ug/m3
							C9-C12 Aliphatics (adjusted)	886.896 ug/m3
							C9-C12 Aliphatics (Raw)	886.896 ug/m3
							Ethylbenzene	108.64 ug/m3
							m-Xylene & p-Xylene	108.64 ug/m3
							Methyl tert-butyl ether	90.3668 ug/m3
							n-Decane	145.939 ug/m3
							n-Heptane	102.633 ug/m3
							Naphthalene	131.169 ug/m3
							o-Xylene	108.64 ug/m3
							Toluene	94.3719 ug/m3
.APH ICV MIX_00011	01/21/26		Linde, Lot ab-118377		(Purchased Reagent)		1,3,5-Trimethylbenzene	4920 ug/m3
							Benzene	3190 ug/m3
							Butadiene	2210 ug/m3
							C5-C8 Aliphatics (adjusted)	22790 ug/m3
							C5-C8 Aliphatics (Raw)	22790 ug/m3
							C9-C10 Aromatics	25170 ug/m3
							C9-C10 Aromatics (mz 120)	19680 ug/m3
							C9-C10 Aromatics (mz 134)	5490 ug/m3
							C9-C12 Aliphatics (adjusted)	35430 ug/m3
							C9-C12 Aliphatics (Raw)	35430 ug/m3
							Ethylbenzene	4340 ug/m3
							m-Xylene & p-Xylene	4340 ug/m3
							Methyl tert-butyl ether	3610 ug/m3
							n-Decane	5830 ug/m3
							n-Heptane	4100 ug/m3
							Naphthalene	5240 ug/m3
							o-Xylene	4340 ug/m3
							Toluene	3770 ug/m3
APHLCsw_00066	08/23/25	05/23/25	Nitrogen, Lot NA	15.46 L	APH ICV MIX_00011	387 mL	1,3,5-Trimethylbenzene	123.159 ug/m3
							Benzene	79.8532 ug/m3
							Butadiene	55.3215 ug/m3
							C5-C8 Aliphatics (adjusted)	570.487 ug/m3
							C9-C10 Aromatics	630.064 ug/m3
							C9-C12 Aliphatics (adjusted)	886.896 ug/m3
							Ethylbenzene	108.64 ug/m3
							m-Xylene & p-Xylene	108.64 ug/m3
							Methyl tert-butyl ether	90.3668 ug/m3
							n-Decane	145.939 ug/m3
							n-Heptane	102.633 ug/m3

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Burlington

Job No.: 200-78136-1

SDG No.: 200-78136-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene	131.169 ug/m3
							o-Xylene	108.64 ug/m3
							Toluene	94.3719 ug/m3
.APH ICV MIX_00011	01/21/26		Linde, Lot ab-118377		(Purchased Reagent)		1,3,5-Trimethylbenzene	4920 ug/m3
							Benzene	3190 ug/m3
							Butadiene	2210 ug/m3
							C5-C8 Aliphatics (adjusted)	22790 ug/m3
							C9-C10 Aromatics	25170 ug/m3
							C9-C12 Aliphatics (adjusted)	35430 ug/m3
							Ethylbenzene	4340 ug/m3
							m-Xylene & p-Xylene	4340 ug/m3
							Methyl tert-butyl ether	3610 ug/m3
							n-Decane	5830 ug/m3
							n-Heptane	4100 ug/m3
							Naphthalene	5240 ug/m3
							o-Xylene	4340 ug/m3
							Toluene	3770 ug/m3
APHLv11w_00043	06/24/25	04/24/25	Nitrogen, Lot NA	15.46 L	APHLv13w_00066	618 mL	1,2,3-Trimethylbenzene	4.92318 ug/m3
							1,3,5-Trimethylbenzene	4.92318 ug/m3
							2,3-Dimethylheptane	5.25339 ug/m3
							2,3-Dimethylpentane	4.10265 ug/m3
							2-Methylbutane	2.95191 ug/m3
							3-Ethyltoluene	4.92318 ug/m3
							4-Isopropyltoluene	5.49355 ug/m3
							Benzene	3.19206 ug/m3
							Butadiene	2.21143 ug/m3
							Butylcyclohexane	5.74371 ug/m3
							C5-C8 Aliphatics	22.8047 ug/m3
							C9-C10 Aromatics (mz 120)	19.6927 ug/m3
							C9-C10 Aromatics (mz 134)	5.49355 ug/m3
							C9-C12 Aliphatics	35.4529 ug/m3
							Cyclohexane	3.44222 ug/m3
							Dodecane	6.9745 ug/m3
							Ethylbenzene	4.3428 ug/m3
							Hexane	3.53228 ug/m3
							Isopropylbenzene	4.92318 ug/m3
							m-Xylene & p-Xylene	4.3428 ug/m3
							Methyl tert-butyl ether	3.61233 ug/m3
							n-Decane	5.83377 ug/m3
							n-Heptane	4.10265 ug/m3
							n-Nonane	5.25339 ug/m3
							n-Octane	4.67302 ug/m3
							Naphthalene	5.24339 ug/m3
							o-Xylene	4.3428 ug/m3
							Toluene	3.77244 ug/m3
							Undecane	6.39413 ug/m3
.APHLv13w_00066	07/24/25	04/24/25	Nitrogen, Lot NA	15.46 L	APH CAL MIX_00019	387 mL	1,2,3-Trimethylbenzene	123.159 ug/m3

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Burlington

Job No.: 200-78136-1

SDG No.: 200-78136-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3,5-Trimethylbenzene	123.159 ug/m3
							2,3-Dimethylheptane	131.42 ug/m3
							2,3-Dimethylpentane	102.633 ug/m3
							2-Methylbutane	73.8454 ug/m3
							3-Ethyltoluene	123.159 ug/m3
							4-Isopropyltoluene	137.428 ug/m3
							Benzene	79.8532 ug/m3
							Butadiene	55.3215 ug/m3
							Butylcyclohexane	143.686 ug/m3
							C5-C8 Aliphatics	570.487 ug/m3
							C9-C10 Aromatics (mz 120)	492.636 ug/m3
							C9-C10 Aromatics (mz 134)	137.428 ug/m3
							C9-C12 Aliphatics	886.896 ug/m3
							Cyclohexane	86.1113 ug/m3
							Dodecane	174.475 ug/m3
							Ethylbenzene	108.64 ug/m3
							Hexane	88.3642 ug/m3
							Isopropylbenzene	123.159 ug/m3
							m-Xylene & p-Xylene	108.64 ug/m3
							Methyl tert-butyl ether	90.3668 ug/m3
							n-Decane	145.939 ug/m3
							n-Heptane	102.633 ug/m3
							n-Nonane	131.42 ug/m3
							n-Octane	116.901 ug/m3
							Naphthalene	131.169 ug/m3
							o-Xylene	108.64 ug/m3
							Toluene	94.3719 ug/m3
							Undecane	159.957 ug/m3
..APH CAL MIX_00019	01/21/26		Linde, Lot Y235617		(Purchased Reagent)	1,2,3-Trimethylbenzene	4920 ug/m3	
						1,3,5-Trimethylbenzene	4920 ug/m3	
						2,3-Dimethylheptane	5250 ug/m3	
						2,3-Dimethylpentane	4100 ug/m3	
						2-Methylbutane	2950 ug/m3	
						3-Ethyltoluene	4920 ug/m3	
						4-Isopropyltoluene	5490 ug/m3	
						Benzene	3190 ug/m3	
						Butadiene	2210 ug/m3	
						Butylcyclohexane	5740 ug/m3	
						C5-C8 Aliphatics	22790 ug/m3	
						C9-C10 Aromatics (mz 120)	19680 ug/m3	
						C9-C10 Aromatics (mz 134)	5490 ug/m3	
						C9-C12 Aliphatics	35430 ug/m3	
						Cyclohexane	3440 ug/m3	
						Dodecane	6970 ug/m3	
						Ethylbenzene	4340 ug/m3	
						Hexane	3530 ug/m3	
						Isopropylbenzene	4920 ug/m3	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Burlington

Job No.: 200-78136-1

SDG No.: 200-78136-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							m-Xylene & p-Xylene	4340 ug/m3
							Methyl tert-butyl ether	3610 ug/m3
							n-Decane	5830 ug/m3
							n-Heptane	4100 ug/m3
							n-Nonane	5250 ug/m3
							n-Octane	4670 ug/m3
							Naphthalene	5240 ug/m3
							o-Xylene	4340 ug/m3
							Toluene	3770 ug/m3
							Undecane	6390 ug/m3
APHLv13w_00066	07/24/25	04/24/25	Nitrogen, Lot NA	15.46 L	APH CAL MIX_00019	387 mL	1,2,3-Trimethylbenzene	123.159 ug/m3
							1,3,5-Trimethylbenzene	123.159 ug/m3
							2,3-Dimethylheptane	131.42 ug/m3
							2,3-Dimethylpentane	102.633 ug/m3
							2-Methylbutane	73.8454 ug/m3
							3-Ethyltoluene	123.159 ug/m3
							4-Isopropyltoluene	137.428 ug/m3
							Benzene	79.8532 ug/m3
							Butadiene	55.3215 ug/m3
							Butylcyclohexane	143.686 ug/m3
							C5-C8 Aliphatics	570.487 ug/m3
							C9-C10 Aromatics (mz 120)	492.636 ug/m3
							C9-C10 Aromatics (mz 134)	137.428 ug/m3
							C9-C12 Aliphatics	886.896 ug/m3
							Cyclohexane	86.1113 ug/m3
							Dodecane	174.475 ug/m3
							Ethylbenzene	108.64 ug/m3
							Hexane	88.3642 ug/m3
							Isopropylbenzene	123.159 ug/m3
							m-Xylene & p-Xylene	108.64 ug/m3
							Methyl tert-butyl ether	90.3668 ug/m3
							n-Decane	145.939 ug/m3
							n-Heptane	102.633 ug/m3
							n-Nonane	131.42 ug/m3
							n-Octane	116.901 ug/m3
							Naphthalene	131.169 ug/m3
							o-Xylene	108.64 ug/m3
							Toluene	94.3719 ug/m3
							Undecane	159.957 ug/m3
.APH CAL MIX_00019	01/21/26		Linde, Lot Y235617		(Purchased Reagent)		1,2,3-Trimethylbenzene	4920 ug/m3
							1,3,5-Trimethylbenzene	4920 ug/m3
							2,3-Dimethylheptane	5250 ug/m3
							2,3-Dimethylpentane	4100 ug/m3
							2-Methylbutane	2950 ug/m3
							3-Ethyltoluene	4920 ug/m3
							4-Isopropyltoluene	5490 ug/m3
							Benzene	3190 ug/m3

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Burlington

Job No.: 200-78136-1

SDG No.: 200-78136-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Butadiene	2210 ug/m3
							Butylcyclohexane	5740 ug/m3
							C5-C8 Aliphatics	22790 ug/m3
							C9-C10 Aromatics (mz 120)	19680 ug/m3
							C9-C10 Aromatics (mz 134)	5490 ug/m3
							C9-C12 Aliphatics	35430 ug/m3
							Cyclohexane	3440 ug/m3
							Dodecane	6970 ug/m3
							Ethylbenzene	4340 ug/m3
							Hexane	3530 ug/m3
							Isopropylbenzene	4920 ug/m3
							m-Xylene & p-Xylene	4340 ug/m3
							Methyl tert-butyl ether	3610 ug/m3
							n-Decane	5830 ug/m3
							n-Heptane	4100 ug/m3
							n-Nonane	5250 ug/m3
							n-Octane	4670 ug/m3
							Naphthalene	5240 ug/m3
							o-Xylene	4340 ug/m3
							Toluene	3770 ug/m3
							Undecane	6390 ug/m3
APHLv13w_00066	07/24/25	04/24/25	Nitrogen, Lot NA	15.46 L	APH CAL MIX_00019	387 mL	C5-C8 Aliphatics (adjusted)	570.487 ug/m3
							C5-C8 Aliphatics (Raw)	570.487 ug/m3
							C9-C10 Aromatics	630.064 ug/m3
							C9-C12 Aliphatics (adjusted)	886.896 ug/m3
							C9-C12 Aliphatics (Raw)	886.896 ug/m3
.APH CAL MIX_00019	01/21/26		Linde, Lot Y235617		(Purchased Reagent)		C5-C8 Aliphatics (adjusted)	22790 ug/m3
							C5-C8 Aliphatics (Raw)	22790 ug/m3
							C9-C10 Aromatics	25170 ug/m3
							C9-C12 Aliphatics (adjusted)	35430 ug/m3
							C9-C12 Aliphatics (Raw)	35430 ug/m3
APHLv14_00011	07/24/25	04/24/25	Nitrogen, Lot NA	15.46 L	APH CAL MIX_00019	773 mL	1,2,3-Trimethylbenzene	246 ug/m3
							1,3,5-Trimethylbenzene	246 ug/m3
							2,3-Dimethylheptane	262.5 ug/m3
							2,3-Dimethylpentane	205 ug/m3
							2-Methylbutane	147.5 ug/m3
							3-Ethyltoluene	246 ug/m3
							4-Isopropyltoluene	274.5 ug/m3
							Benzene	159.5 ug/m3
							Butadiene	110.5 ug/m3
							Butylcyclohexane	287 ug/m3
							C5-C8 Aliphatics	1139.5 ug/m3
							C9-C10 Aromatics (mz 120)	984 ug/m3
							C9-C10 Aromatics (mz 134)	274.5 ug/m3
							C9-C12 Aliphatics	1771.5 ug/m3
							Cyclohexane	172 ug/m3
							Dodecane	348.5 ug/m3

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Burlington

Job No.: 200-78136-1

SDG No.: 200-78136-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethylbenzene	217 ug/m3
							Hexane	176.5 ug/m3
							Isopropylbenzene	246 ug/m3
							m-Xylene & p-Xylene	217 ug/m3
							Methyl tert-butyl ether	180.5 ug/m3
							n-Decane	291.5 ug/m3
							n-Heptane	205 ug/m3
							n-Nonane	262.5 ug/m3
							n-Octane	233.5 ug/m3
							Naphthalene	262 ug/m3
							o-Xylene	217 ug/m3
							Toluene	188.5 ug/m3
.APH CAL MIX_00019	01/21/26	Linde, Lot Y235617					Undecane	319.5 ug/m3
							1,2,3-Trimethylbenzene	4920 ug/m3
							1,3,5-Trimethylbenzene	4920 ug/m3
							2,3-Dimethylheptane	5250 ug/m3
							2,3-Dimethylpentane	4100 ug/m3
							2-Methylbutane	2950 ug/m3
							3-Ethyltoluene	4920 ug/m3
							4-Isopropyltoluene	5490 ug/m3
							Benzene	3190 ug/m3
							Butadiene	2210 ug/m3
							Butylcyclohexane	5740 ug/m3
							C5-C8 Aliphatics	22790 ug/m3
							C9-C10 Aromatics (mz 120)	19680 ug/m3
							C9-C10 Aromatics (mz 134)	5490 ug/m3
							C9-C12 Aliphatics	35430 ug/m3
							Cyclohexane	3440 ug/m3
							Dodecane	6970 ug/m3
							Ethylbenzene	4340 ug/m3
							Hexane	3530 ug/m3
							Isopropylbenzene	4920 ug/m3
							m-Xylene & p-Xylene	4340 ug/m3
							Methyl tert-butyl ether	3610 ug/m3
							n-Decane	5830 ug/m3
							n-Heptane	4100 ug/m3
							n-Nonane	5250 ug/m3
							n-Octane	4670 ug/m3
							Naphthalene	5240 ug/m3
							o-Xylene	4340 ug/m3
							Toluene	3770 ug/m3
							Undecane	6390 ug/m3
ATTO15AEISs_00003	02/15/28	Spectra Gases, Lot CC-270582					1,4-Difluorobenzene	466.63 ug/m3
							4-Bromofluorobenzene	715.75 ug/m3
							BFB	715.75 ug/m3
							Chlorobenzene-d5	480.94 ug/m3
							Chlorobromomethane	529.16 ug/m3

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Burlington Job No.: 200-78136-1

SDG No.: 200-78136-1

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Xylenes, Total	

Reagent

APH CAL MIX_00019

THE LINDE GROUP

Linde

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Test America Laboratories Inc.
530 Community Dr. Ste. 11
South Burlington, VT 05403-6650



*974976

ID: APH CAL MIX_00019

Exp: 01/21/26 Prpd: VTP

APH Calibration Mix ug/m3

PAGE:

1 of 2

ANALYSIS REPORT

Sales#:	117522744	Cylinder Size:	185 (3.2" X 9.4")
Production#:	1622805	Cylinder #:	Y235617
Report Date:	Jan-21-2025	Cylinder Pressure:	1700 psig
P.O.#:	P92243-RESTEK	Cylinder Valve:	CGA 180 / Aluminum
Blend Type:	QUALIFIED	Cylinder Volume:	0.8 Liter
Material#:	24087760	Cylinder Material:	Aluminum
Traceability:	NIST by weight	Gas Volume:	98 Liters
Expiration Date:	Jan-21-2026	Blend Tolerance:	10% Relative
Do NOT use under:	150 psig	Analytical Accuracy:	5% Relative
Part Number:	34540	NIST Traceable Certificate#:	111785

COMPONENT	CAS NUMBER	REQUESTED CONC	QUALIFIED CONC
1,3-Butadiene	106-99-0	1.00 ppm	1.02 ppm
Isopentane	78-78-4	1.00 ppm	0.97 ppm
Methyl Tert-Butyl Ether	1634-04-4	1.00 ppm	1.05 ppm
N-Hexane	110-54-3	1.00 ppm	1.02 ppm
Benzene	71-43-2	1.00 ppm	1.01 ppm
Cyclohexane	110-82-7	1.00 ppm	1.02 ppm
2,3-Dimethylpentane	565-59-3	1.00 ppm	1.00 ppm
n-Heptane	142-82-5	1.00 ppm	1.02 ppm
Toluene	108-88-3	1.00 ppm	1.02 ppm
N-Octane	111-65-9	1.00 ppm	1.04 ppm
Ethylbenzene	100-41-4	1.00 ppm	1.03 ppm
2,3-Dimethylheptane	3074-71-3	1.00 ppm	1.03 ppm
P-Xylene	106-42-3	0.50 ppm	0.51 ppm
M-Xylene	108-38-3	0.50 ppm	0.51 ppm
O-Xylene	95-47-6	1.00 ppm	1.04 ppm
n-Nonane	111-84-2	1.00 ppm	1.03 ppm
Isopropylbenzene	98-82-8	1.00 ppm	1.05 ppm
1-Methyl-3-Ethylbenzene	620-14-4	1.00 ppm	1.07 ppm
1,3,5-Trimethylbenzene	108-67-8	1.00 ppm	1.05 ppm
N-Decane	124-18-5	1.00 ppm	1.10 ppm
1,2,3-Trimethylbenzene	526-73-8	1.00 ppm	1.06 ppm
p-Isopropyltoluene	99-87-6	1.00 ppm	1.06 ppm
Butylcyclohexane	1678-93-9	1.00 ppm	1.07 ppm
n-Undecane	1120-21-4	1.00 ppm	1.10 ppm

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PAGE: 2 of 2

ANALYSIS REPORT

Sales#:	117522744	Cylinder Size:	185 (3.2" X 9.4")
Production#:	1622805	Cylinder # :	Y235617
Report Date:	Jan-21-2025	Cylinder Pressure:	1700 psig
P.O.# :	P92243-RESTEK	Cylinder Valve:	CGA 180 / Aluminum
Blend Type:	QUALIFIED	Cylinder Volume:	0.8 Liter
Material#:	24087760	Cylinder Material:	Aluminum
Traceability:	NIST by weight	Gas Volume:	98 Liters
Expiration Date:	Jan-21-2026	Blend Tolerance:	10% Relative
Do NOT use under:	150 psig	Analytical Accuracy:	5% Relative
Part Number:	34540	NIST Traceable Certificate#:	111785

COMPONENT	CAS NUMBER	REQUESTED CONC	QUALIFIED CONC
Naphthalene (Analytical Accuracy $\pm$ 10%)	91-20-3	1.00 ppm	1.10 ppm
n-Dodecane	112-40-3	1.00 ppm	0.92 ppm
Nitrogen	7727-37-9	Balance	Balance

Source Identification Number: 329752

ANALYST: 

Brian Bramkamp

DATE: Jan-21-2025

Reagent

APH ICV MIX_00011

THE LINDE GROUP

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*974976

ID: APH CAL MIX_00019

Exp: 01/21/26 Prpd: VTP

APH Calibration Mix ug/m3

PAGE:

1 of 2

ANALYSIS REPORT

Sales#:	117522744	Cylinder Size:	185 (3.2" X 9.4")
Production#:	1622805	Cylinder #:	Y235617
Report Date:	Jan-21-2025	Cylinder Pressure:	1700 psig
P.O.#:	P92243-RESTEK	Cylinder Valve:	CGA 180 / Aluminum
Blend Type:	QUALIFIED	Cylinder Volume:	0.8 Liter
Material#:	24087760	Cylinder Material:	Aluminum
Traceability:	NIST by weight	Gas Volume:	98 Liters
Expiration Date:	Jan-21-2026	Blend Tolerance:	10% Relative
Do NOT use under:	150 psig	Analytical Accuracy:	5% Relative
Part Number:	34540	NIST Traceable Certificate#:	111785

COMPONENT	CAS NUMBER	REQUESTED CONC	QUALIFIED CONC
1,3-Butadiene	106-99-0	1.00 ppm	1.02 ppm
Isopentane	78-78-4	1.00 ppm	0.97 ppm
Methyl Tert-Butyl Ether	1634-04-4	1.00 ppm	1.05 ppm
N-Hexane	110-54-3	1.00 ppm	1.02 ppm
Benzene	71-43-2	1.00 ppm	1.01 ppm
Cyclohexane	110-82-7	1.00 ppm	1.02 ppm
2,3-Dimethylpentane	565-59-3	1.00 ppm	1.00 ppm
n-Heptane	142-82-5	1.00 ppm	1.02 ppm
Toluene	108-88-3	1.00 ppm	1.02 ppm
N-Octane	111-65-9	1.00 ppm	1.04 ppm
Ethylbenzene	100-41-4	1.00 ppm	1.03 ppm
2,3-Dimethylheptane	3074-71-3	1.00 ppm	1.03 ppm
P-Xylene	106-42-3	0.50 ppm	0.51 ppm
M-Xylene	108-38-3	0.50 ppm	0.51 ppm
O-Xylene	95-47-6	1.00 ppm	1.04 ppm
n-Nonane	111-84-2	1.00 ppm	1.03 ppm
Isopropylbenzene	98-82-8	1.00 ppm	1.05 ppm
1-Methyl-3-Ethylbenzene	620-14-4	1.00 ppm	1.07 ppm
1,3,5-Trimethylbenzene	108-67-8	1.00 ppm	1.05 ppm
N-Decane	124-18-5	1.00 ppm	1.10 ppm
1,2,3-Trimethylbenzene	526-73-8	1.00 ppm	1.06 ppm
p-Isopropyltoluene	99-87-6	1.00 ppm	1.06 ppm
Butylcyclohexane	1678-93-9	1.00 ppm	1.07 ppm
n-Undecane	1120-21-4	1.00 ppm	1.10 ppm

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PAGE: 2 of 2

ANALYSIS REPORT

Sales#:	117522744	Cylinder Size:	185 (3.2" X 9.4")
Production#:	1622805	Cylinder # :	Y235617
Report Date:	Jan-21-2025	Cylinder Pressure:	1700 psig
P.O.# :	P92243-RESTEK	Cylinder Valve:	CGA 180 / Aluminum
Blend Type:	QUALIFIED	Cylinder Volume:	0.8 Liter
Material#:	24087760	Cylinder Material:	Aluminum
Traceability:	NIST by weight	Gas Volume:	98 Liters
Expiration Date:	Jan-21-2026	Blend Tolerance:	10% Relative
Do NOT use under:	150 psig	Analytical Accuracy:	5% Relative
Part Number:	34540	NIST Traceable Certificate#:	111785

COMPONENT	CAS NUMBER	REQUESTED CONC	QUALIFIED CONC
Naphthalene (Analytical Accuracy $\pm$ 10%)	91-20-3	1.00 ppm	1.10 ppm
n-Dodecane	112-40-3	1.00 ppm	0.92 ppm
Nitrogen	7727-37-9	Balance	Balance

Source Identification Number: 329752



ANALYST: _____
Brian Bramkamp

DATE: Jan-21-2025

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PAGE: 1 of 2



1974977

ID: APH ICV MIX_00011

Exp. 01/21/26 Pp'd VTP

APH Second source Mix ug

ANALYSIS REPORT

Sales#:	117494659	Cylinder Size:	185 (3.2" X 9.4")
Production#:	1602668	Cylinder # :	AB-118377
Report Date:	Jan-18-2024	Cylinder Pressure:	1700 psig
P.O.# :	P64480-RESTEK	Cylinder Valve:	CGA 180 / Aluminum
Blend Type:	QUALIFIED	Cylinder Volume:	0.8 Liter
Material#:	24087760	Cylinder Material:	Aluminum
Traceability:	NIST by weight	Gas Volume:	98 Liters
Expiration Date:	Jan-18-2025	Blend Tolerance:	10% Relative
Do NOT use under:	150 psig	Analytical Accuracy:	5% Relative
Part Number:	34540	NIST Traceable Certificate#:	23-103001

EXP: 1/21/2026
VTP 1/24/25

COMPONENT	CAS NUMBER	REQUESTED CONC	QUALIFIED CONC
1,3-Butadiene	106-99-0	1.00 ppm	1.00 ppm
Isopentane	78-78-4	1.00 ppm	0.95 ppm
Methyl Tert-Butyl Ether	1634-04-4	1.00 ppm	1.05 ppm
N-Hexane	110-54-3	1.00 ppm	1.02 ppm
Benzene	71-43-2	1.00 ppm	1.01 ppm
Cyclohexane	110-82-7	1.00 ppm	1.03 ppm
2,3-Dimethylpentane	565-59-3	1.00 ppm	1.01 ppm
n-Heptane	142-82-5	1.00 ppm	1.02 ppm
Toluene	108-88-3	1.00 ppm	1.01 ppm
N-Octane	111-65-9	1.00 ppm	1.03 ppm
Ethylbenzene	100-41-4	1.00 ppm	1.02 ppm
2,3-Dimethylheptane	3074-71-3	1.00 ppm	1.02 ppm
P-Xylene	106-42-3	0.50 ppm	0.50 ppm
M-Xylene	108-38-3	0.50 ppm	0.50 ppm
O-Xylene	95-47-6	1.00 ppm	1.02 ppm
n-Nonane	111-84-2	1.00 ppm	1.02 ppm
Isopropylbenzene	98-82-8	1.00 ppm	1.02 ppm
1-Methyl-3-Ethylbenzene	620-14-4	1.00 ppm	1.02 ppm
1,3,5-Trimethylbenzene	108-67-8	1.00 ppm	1.02 ppm
N-Decane	124-18-5	1.00 ppm	1.07 ppm
1,2,3-Trimethylbenzene	526-73-8	1.00 ppm	1.07 ppm
p-Isopropyltoluene	99-87-6	1.00 ppm	1.07 ppm
Butylcyclohexane	1678-93-9	1.00 ppm	1.09 ppm
n-Undecane	1120-21-4	1.00 ppm	1.10 ppm

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PAGE: 2 of 2

ANALYSIS REPORT

Sales#:	117494659	Cylinder Size:	185 (3.2" X 9.4")
Production#:	1602668	Cylinder #:	AB-118377
Report Date:	Jan-18-2024	Cylinder Pressure:	1700 psig
P.O.#:	P64480-RESTEK	Cylinder Valve:	CGA 180 / Aluminum
Blend Type:	QUALIFIED	Cylinder Volume:	0.8 Liter
Material#:	24087760	Cylinder Material:	Aluminum
Traceability:	NIST by weight	Gas Volume:	98 Liters
Expiration Date:	Jan-18-2025 Exp: 1/21/2026	Blend Tolerance:	10% Relative
Do NOT use under:	150 psig	Analytical Accuracy:	5% Relative
Part Number:	34540 VTP 1/29/25	NIST Traceable Certificate#:	23-103001

COMPONENT	CAS NUMBER	REQUESTED CONC	QUALIFIED CONC
Naphthalene (Analytical Accuracy $\pm$ 20%)	91-20-3	1.00 ppm	1.10 ppm
n-Dodecane	112-40-3	1.00 ppm	1.05 ppm
Nitrogen	7727-37-9	Balance	Balance

Source Identification Number: 322877

ANALYST: 

Brian Bramkamp

DATE: Jan-18-2024

Reagent

ATTO15AEISs_00003

THE LINDE GROUP

Linde

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PAGE: 1 of 1

ANALYSIS REPORT

Sales#:	117467735	Cylinder Size:	152 (8" X 47.5")
Production#:	1581669	Cylinder #:	CC-270582
Report Date:	Feb-15-2023	Cylinder Pressure:	2000 psig
P.O.#:	75421326	Cylinder Valve:	CGA 350 / Steel
Blend Type:	QUALIFIED	Cylinder Volume:	29.5 Liter
Material#:	24088974	Cylinder Material:	Aluminum
Traceability:	NIST by weight	Gas Volume:	4000 Liters
Expiration Date:	Feb-15-2024 Feb-15-2028	Blend Tolerance:	10% Relative
Do NOT use under:	150 psig	Analytical Accuracy:	10% Relative

COMPONENT	CAS NUMBER	REQUESTED CONC	QUALIFIED CONC
Bromochloromethane	74-97-5	100 ppb	95 ppb
1,4-Difluorobenzene	540-36-3	100 ppb	96 ppb
Chlorobenzene-d5	3114-55-4	100 ppb	101 ppb
4-Bromofluorobenzene	460-00-4	100 ppb	102 ppb
Nitrogen	7727-37-9	Balance	Balance



1979054

ID: ATTO15AEISs_00003

Exp: 02/15/28 Prod: VTF

Instrument: AE Internal St

* ISTD Tank exp 5 years from
report date.

ANALYST:

Brian Bramkamp

DATE: Feb-15-2023

Method MADEP_APH

Air Phase Petroleum Hydrocarbons by
Method MADEP_APH

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Burlington Job No.: 200-78136-1
 SDG No.: 200-78136-1
 Matrix: Air Level: Low Lab File ID: 200-0065256-003.D
 Lab ID: LCS 200-216493/3 Client ID: _____

COMPOUND	SPIKE ADDED (ug/m3)	LCS CONCENTRATION (ug/m3)	LCS % REC	QC LIMITS REC	#
Butadiene	55.3	44.7	81	70-130	
Methyl tert-butyl ether	90.4	93.3	103	70-130	
Benzene	79.9	78.5	98	70-130	
Toluene	94.4	99.8	106	70-130	
Ethylbenzene	109	120	110	70-130	
m-Xylene & p-Xylene	109	125	115	70-130	
o-Xylene	109	124	115	70-130	
Naphthalene	131	153	117	50-150	
C9-C10 Aromatics	630	752	119	70-130	
n-Heptane	103	95.4	93	70-130	
n-Decane	146	165	113	70-130	
1,3,5-Trimethylbenzene	123	147	119	70-130	

Column to be used to flag recovery and RPD values

AIR - GC/MS VOA DUPLICATE SUMMARY

Lab Name: Eurofins Burlington Job No.: 200-78136-1
SDG No.: 200-78136-1
Matrix: Air Level: Low Lab File ID: 200-0065256-009.D
Lab ID: 200-78136-3 DU Client ID: SG-2_20250513 DU

COMPOUND	SAMPLE CONCENTRATION (ug/m3)	DUPLICATE CONCENTRATION (ug/m3)	%RPD	%RPD LIMIT	#
Butadiene	2.0 U	2.0 U	NC	30	
Methyl tert-butyl ether	2.0 U	2.0 U	NC	30	
Benzene	2.0 U	2.0 U	NC	30	
Toluene	2.0 U	2.0 U	NC	30	
Ethylbenzene	2.0 U	2.0 U	NC	30	
m-Xylene & p-Xylene	2.0 U	2.0 U	NC	30	
o-Xylene	2.0 U	2.0 U	NC	30	
Naphthalene	2.0 U	2.0 U	NC	30	
C9-C10 Aromatics	10 U	10 U	NC	30	
C5-C8 Aliphatics (adjusted)	12 U	12 U	NC	30	
C9-C12 Aliphatics (adjusted)	12 U	12 U	NC	30	

Column to be used to flag %RPD values

APH

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Burlington Job No.: 200-78136-1
SDG No.: 200-78136-1
Lab File ID: 200-0065256-004.D Lab Sample ID: MB 200-216493/4
Matrix: Air Heated Purge: (Y/N) N
Instrument ID: CHAE.i Date Analyzed: 05/23/2025 13:50
GC Column: RTX-624 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-216493/3	200-0065256 -003.D	05/23/2025 12:59
SG-4_20250513	200-78136-1	200-0065256 -006.D	05/23/2025 15:35
SG-2_20250513	200-78136-3	200-0065256 -008.D	05/23/2025 17:19
SG-2_20250513 DU	200-78136-3 DU	200-0065256 -009.D	05/23/2025 18:12
SG-1_20250513	200-78136-2	200-0065256 -010.D	05/23/2025 19:04

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Burlington Job No.: 200-78136-1
SDG No.: 200-78136-1
Lab File ID: 200-0064859-001.D BFB Injection Date: 04/24/2025
Instrument ID: CHAE.i BFB Injection Time: 10:12
Analysis Batch No.: 215485

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	15.9
75	30.0 - 66.0% of mass 95	44.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.0 (0.0) 1
174	50.0 - 120.0% of mass 95	88.7
175	4.0 - 9.0 % of mass 174	6.6 (7.4) 1
176	93.0 - 101.0% of mass 174	86.2 (97.1) 1
177	5.0 - 9.0% of mass 176	5.6 (6.5) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 200-215485/3	200-0064859-0	04/24/2025	11:56
	IC 200-215485/5	200-0064859-0	04/24/2025	13:40
	IC 200-215485/6	200-0064859-0	04/24/2025	14:35
	IC 200-215485/7	200-0064859-0	04/24/2025	15:28
	ICIS 200-215485/8	200-0064859-0	04/24/2025	16:19
	IC 200-215485/9	200-0064859-0	04/24/2025	17:11
	ICV 200-215485/11	200-0064859-0	04/24/2025	18:55

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Burlington Job No.: 200-78136-1
SDG No.: 200-78136-1
Lab File ID: 200-0065256-001.D BFB Injection Date: 05/23/2025
Instrument ID: CHAE.i BFB Injection Time: 11:16
Analysis Batch No.: 216493

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	15.0
75	30.0 - 66.0% of mass 95	45.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.0 (0.0) 1
174	50.0 - 120.0% of mass 95	95.0
175	4.0 - 9.0 % of mass 174	6.9 (7.2) 1
176	93.0 - 101.0% of mass 174	93.1 (98.0) 1
177	5.0 - 9.0% of mass 176	6.2 (6.6) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 200-216493/2	200-0065256-0	05/23/2025	12:06
	LCS 200-216493/3	200-0065256-0	05/23/2025	12:59
	MB 200-216493/4	200-0065256-0	05/23/2025	13:50
SG-4_20250513	200-78136-1	200-0065256-0	05/23/2025	15:35
SG-2_20250513	200-78136-3	200-0065256-0	05/23/2025	17:19
SG-2_20250513 DU	200-78136-3 DU	200-0065256-0	05/23/2025	18:12
SG-1_20250513	200-78136-2	200-0065256-0	05/23/2025	19:04

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Burlington Job No.: 200-78136-1
SDG No.: 200-78136-1
Sample No.: ICIS 200-215485/8 Date Analyzed: 04/24/2025 16:19
Instrument ID: CHAE.i GC Column: RTX-624 ID: 0.32 (mm)
Lab File ID (Standard): 200-0064859-008.D Heated Purge: (Y/N) N
Calibration ID: 55056

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		164652	11.13	912787	13.42	821567	17.90
UPPER LIMIT		329304	11.46	1825574	13.75	1643134	18.23
LOWER LIMIT		82326	10.80	456394	13.09	410784	17.57
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-215485/11		149288	11.13	840096	13.42	770137	17.90

BCM = Chlorobromomethane
DFBZ = 1,4-Difluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area
RT Limit = $\pm$ 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Burlington Job No.: 200-78136-1
SDG No.: 200-78136-1
Sample No.: ICIS 200-215485/8 Date Analyzed: 04/24/2025 16:19
Instrument ID: CHAE.i GC Column: RTX-624 ID: 0.32 (mm)
Lab File ID (Standard): 200-0064859-008.D Heated Purge: (Y/N) N
Calibration ID: 55056

		BFB					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		577030	19.14				
UPPER LIMIT		1154060	19.47				
LOWER LIMIT		288515	18.81				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 200-215485/11		544465	19.15				

BFB = 4-Bromofluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = $\pm$ 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Burlington Job No.: 200-78136-1
 SDG No.: 200-78136-1
 Sample No.: CCVIS 200-216493/2 Date Analyzed: 05/23/2025 12:06
 Instrument ID: CHAE.i GC Column: RTX-624 ID: 0.32 (mm)
 Lab File ID (Standard): 200-0065256-002.D Heated Purge: (Y/N) N
 Calibration ID: 55056

		BCM		DFBZ		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		114727	11.12	641081	13.40	562576	17.89
UPPER LIMIT		229454	11.45	1282162	13.73	1125152	18.22
LOWER LIMIT		57364	10.79	320541	13.07	281288	17.56
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-216493/3		104491	11.13	588682	13.42	528450	17.90
MB 200-216493/4		98664	11.13	568043	13.42	454561	17.91
200-78136-1	SG-4_20250513	97801	11.13	553412	13.42	513149	17.91
200-78136-3	SG-2_20250513	91853	11.13	523784	13.41	479031	17.90
200-78136-3 DU	SG-2_20250513 DU	92720	11.13	505130	13.41	441531	17.90
200-78136-2	SG-1_20250513	94031	11.13	517388	13.42	469720	17.90

BCM = Chlorobromomethane
 DFBZ = 1,4-Difluorobenzene
 CBNZd5 = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area
 RT Limit = $\pm$ 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Burlington Job No.: 200-78136-1
 SDG No.: 200-78136-1
 Sample No.: CCVIS 200-216493/2 Date Analyzed: 05/23/2025 12:06
 Instrument ID: CHAE.i GC Column: RTX-624 ID: 0.32 (mm)
 Lab File ID (Standard): 200-0065256-002.D Heated Purge: (Y/N) N
 Calibration ID: 55056

		BFB					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		411300	19.14				
UPPER LIMIT		822600	19.47				
LOWER LIMIT		205650	18.81				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 200-216493/3		385800	19.15				
MB 200-216493/4		243917	19.15				
200-78136-1	SG-4_20250513	340806	19.15				
200-78136-3	SG-2_20250513	319069	19.14				
200-78136-3 DU	SG-2_20250513 DU	301091	19.14				
200-78136-2	SG-1_20250513	313486	19.14				

BFB = 4-Bromofluorobenzene

Area Limit = 50%-200% of internal standard area
 RT Limit = $\pm$ 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>Eurofins Burlington</u>	Job No.: <u>200-78136-1</u>
SDG No.: <u>200-78136-1</u>	
Client Sample ID: <u>SG-4_20250513</u>	Lab Sample ID: <u>200-78136-1</u>
Matrix: <u>Air</u>	Lab File ID: <u>200-0065256-006.D</u>
Analysis Method: <u>APH</u>	Date Collected: <u>05/13/2025 13:20</u>
Sample wt/vol: <u>312 (mL)</u>	Date Analyzed: <u>05/23/2025 15:35</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1.25</u>
Soil Extract Vol.: _____	GC Column: <u>RTX-624</u> ID: <u>0.32 (mm)</u>
Purge Volume: _____	Heated Purge: (Y/N) _____ pH: _____
% Moisture: _____ % Solids: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>216493</u>	Units: <u>ug/m3</u>
Preparation Batch No.: _____	Instrument ID: <u>CHAE.i</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
106-99-0	Butadiene	2.0	U	2.0	2.0
1634-04-4	Methyl tert-butyl ether	2.0	U	2.0	2.0
71-43-2	Benzene	2.0	U	2.0	2.0
108-88-3	Toluene	2.0	U	2.0	2.0
100-41-4	Ethylbenzene	2.0	U	2.0	2.0
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	2.0
95-47-6	o-Xylene	2.0	U	2.0	2.0
91-20-3	Naphthalene	2.0	U	2.0	2.0
STL00133	C9-C10 Aromatics	10	U	10	10
STL00041	C5-C8 Aliphatics (adjusted)	12	U	12	12
STL00106	C9-C12 Aliphatics (adjusted)	12	U	12	12

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-006.D
 Lims ID: 200-78136-A-1
 Client ID: SG-4_20250513
 Sample Type: Client
 Inject. Date: 23-May-2025 15:35:30 ALS Bottle#: 6 Worklist Smp#: 6
 Purge Vol: 250.000 mL Dil. Factor: 1.2500
 Sample Info: 200-0065256-006
 Operator ID: vtp Instrument ID: CHAE.i
 Method: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\MADEP_APH_1.m
 Limit Group: AIR_APH_Limits
 Last Update: 28-May-2025 09:16:09 Calib Date: 24-Apr-2025 17:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-009.D
 Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
 Process Host: CTX1653

First Level Reviewer: V0FK

Date: 28-May-2025 09:16:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/m3	Flags
1 Butadiene	54		5.200				ND	
3 Methyl tert-butyl ether	73		9.970				ND	
* 4 Chlorobromomethane	128	11.132	11.132	0.000	94	97801	529.2	
A 13 C5-C8 Aliphatics (Raw)	1	12.893	(6.852-18.933)		0	157924	10.3	
6 Benzene	78		12.963				ND	
* 8 1,4-Difluorobenzene	114	13.419	13.419	0.000	99	553412	466.6	
10 n-Heptane	43		14.514				ND	
11 Toluene	91		16.242				ND	MU
* 15 Chlorobenzene-d5	117	17.909	17.903	0.006	97	513149	480.9	
16 Ethylbenzene	91		18.250				ND	
17 2,3-Dimethylheptane	43		18.304				ND	
18 m-Xylene & p-Xylene	91		18.402				ND	
19 o-Xylene	91		18.779				ND	
20 n-Nonane	43		18.943				ND	
* 21 4-Bromofluorobenzene	95	19.150	19.150	0.000	99	340806	715.8	
24 1,3,5-Trimethylbenzene	105		19.813				ND	
26 n-Decane	57		20.190				ND	
A 28 C9-C10 Aromatics (mz 134)	134		(18.879-21.934)				ND	
A 25 C9-C10 Aromatics (mz 120)	120		(18.879-21.934)				ND	
A 34 C9-C12 Aliphatics (Raw)	1	20.452	(18.933-21.971)		0	111861	7.75	
33 Naphthalene	128		22.034				ND	MU
S 36 C9-C10 Aromatics	1		27.980				ND	
S 38 C5-C8 Aliphatics (adjusted)	1				0		10.3	
S 39 C9-C12 Aliphatics (adjusted)	1				0		7.75	

QC Flag Legend

Processing Flags

Review Flags

U - Marked Undetected

Reagents:

ATTO15AEISs_00003

Amount Added: 60.00

Units: mL

Run Reagent

Report Date: 28-May-2025 09:16:10

Chrom Revision: 2.3 07-May-2025 18:53:14

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-006.D

Injection Date: 23-May-2025 15:35:30

Instrument ID: CHAE.i

Operator ID: vtp

Lims ID: 200-78136-A-1

Lab Sample ID: 200-78136-1

Worklist Smp#: 6

Client ID: SG-4_20250513

Purge Vol: 250.000 mL

Dil. Factor: 1.2500

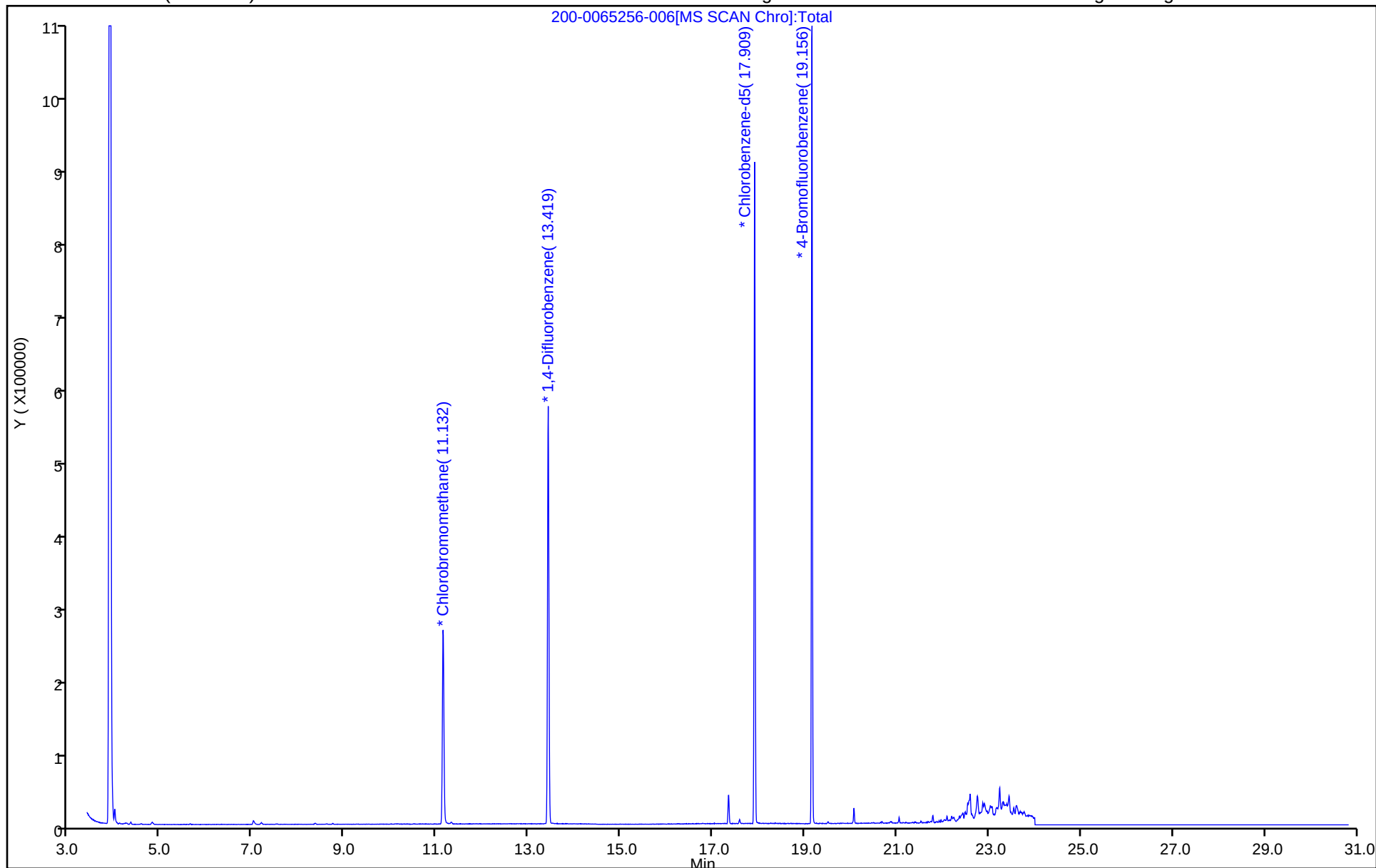
ALS Bottle#: 6

Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-006.D

Injection Date: 23-May-2025 15:35:30

Instrument ID: CHAE.i

Lims ID: 200-78136-A-1

Lab Sample ID: 200-78136-1

Client ID: SG-4_20250513

Operator ID: vtp

ALS Bottle#:

6

Worklist Smp#: 6

Purge Vol: 250.000 mL

Dil. Factor: 1.2500

Method: MADEP_APH_1

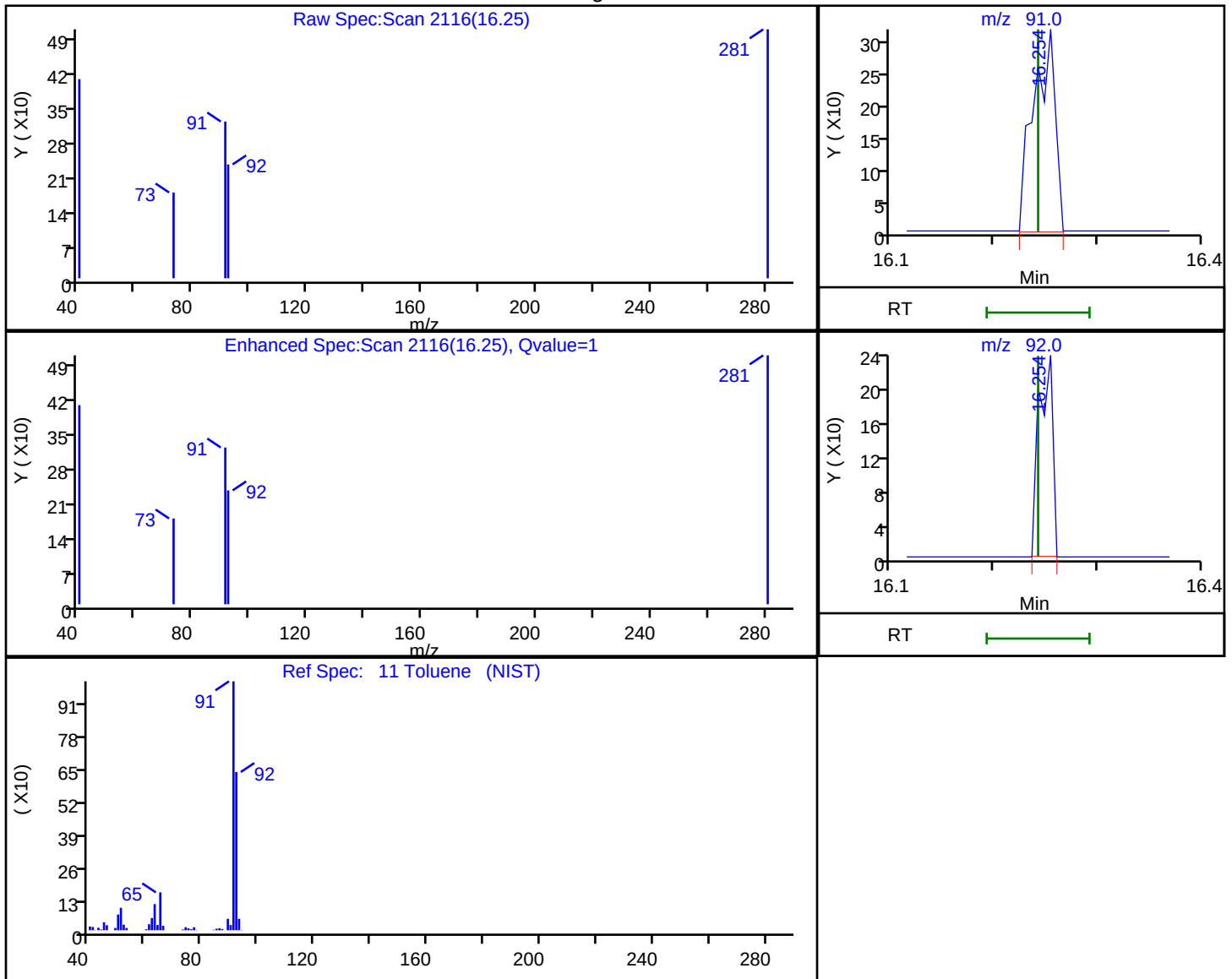
Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Detector: MS SCAN

11 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
16.25	91.00	464	0.066498
16.25	92.00	214	

Reviewer: V0FK, 28-May-2025 09:15:47 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected

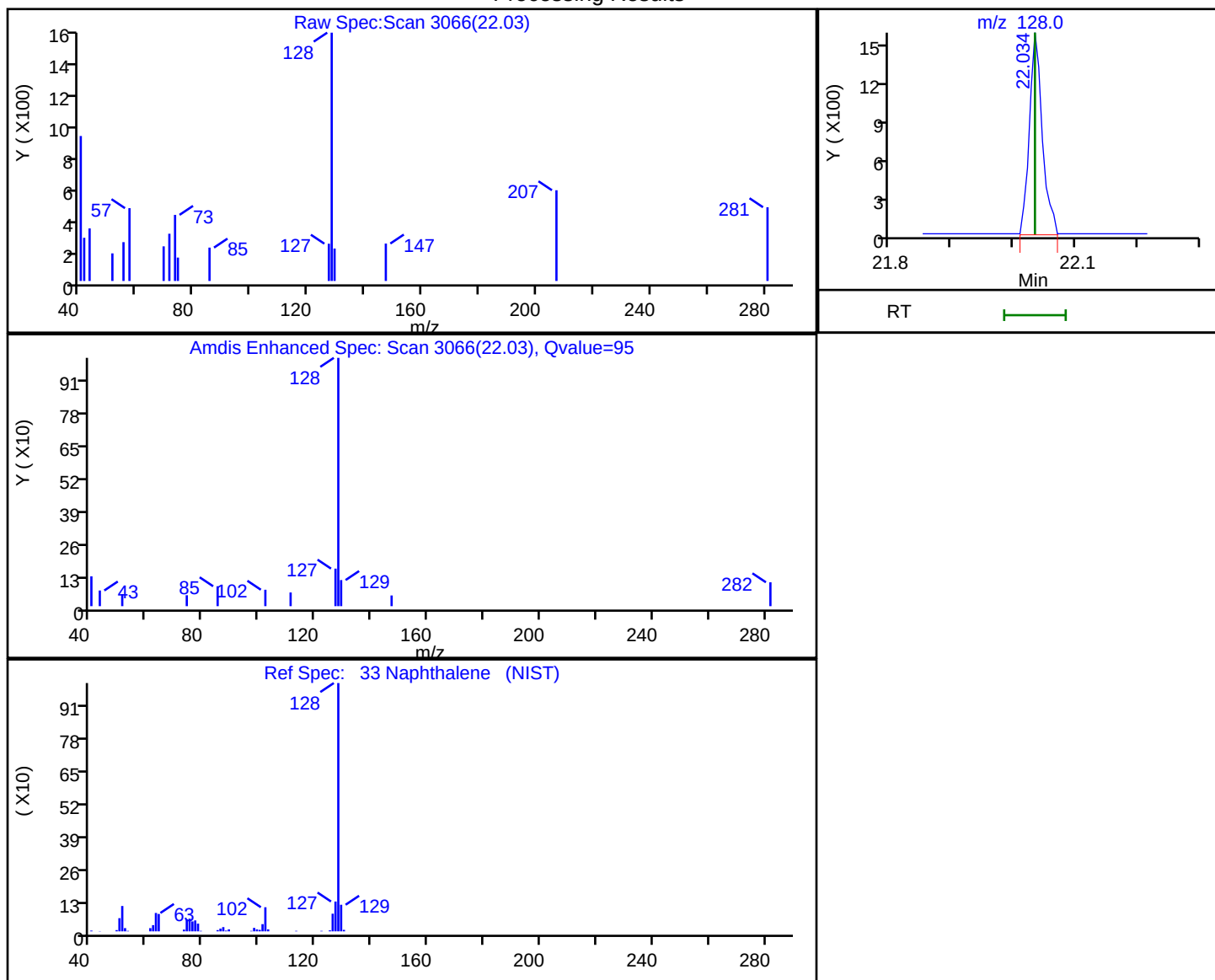
Audit Reason: Invalid Compound ID

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-006.D
Injection Date: 23-May-2025 15:35:30 Instrument ID: CHAE.i
Lims ID: 200-78136-A-1 Lab Sample ID: 200-78136-1
Client ID: SG-4_20250513
Operator ID: vtp ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 250.000 mL Dil. Factor: 1.2500
Method: MADEP_APH_1 Limit Group: AIR_APH_Limits
Column: RTX-624 (0.32 mm) Detector: MS SCAN

33 Naphthalene, CAS: 91-20-3

Processing Results



RT	Mass	Response	Amount
22.03	128.00	2305	0.488065

Reviewer: V0FK, 28-May-2025 09:16:04 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>Eurofins Burlington</u>	Job No.: <u>200-78136-1</u>
SDG No.: <u>200-78136-1</u>	
Client Sample ID: <u>SG-1_20250513</u>	Lab Sample ID: <u>200-78136-2</u>
Matrix: <u>Air</u>	Lab File ID: <u>200-0065256-010.D</u>
Analysis Method: <u>APH</u>	Date Collected: <u>05/13/2025 15:05</u>
Sample wt/vol: <u>317 (mL)</u>	Date Analyzed: <u>05/23/2025 19:04</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1.35</u>
Soil Extract Vol.: _____	GC Column: <u>RTX-624</u> ID: <u>0.32 (mm)</u>
Purge Volume: _____	Heated Purge: (Y/N) _____ pH: _____
% Moisture: _____ % Solids: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>216493</u>	Units: <u>ug/m3</u>
Preparation Batch No.: _____	Instrument ID: <u>CHAE.i</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
106-99-0	Butadiene	2.1	U	2.1	2.1
1634-04-4	Methyl tert-butyl ether	2.1	U	2.1	2.1
71-43-2	Benzene	2.1	U	2.1	2.1
108-88-3	Toluene	2.1	U	2.1	2.1
100-41-4	Ethylbenzene	2.1	U	2.1	2.1
179601-23-1	m-Xylene & p-Xylene	2.1	U	2.1	2.1
95-47-6	o-Xylene	2.1	U	2.1	2.1
91-20-3	Naphthalene	2.1	U	2.1	2.1
STL00133	C9-C10 Aromatics	11	U	11	11
STL00041	C5-C8 Aliphatics (adjusted)	16		13	13
STL00106	C9-C12 Aliphatics (adjusted)	13	U	13	13

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-010.D
 Lims ID: 200-78136-A-2
 Client ID: SG-1_20250513
 Sample Type: Client
 Inject. Date: 23-May-2025 19:04:30 ALS Bottle#: 10 Worklist Smp#: 10
 Purge Vol: 250.000 mL Dil. Factor: 1.3500
 Sample Info: 200-0065256-010
 Operator ID: vtp Instrument ID: CHAE.i
 Method: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\MADEP_APH_1.m
 Limit Group: AIR_APH_Limits
 Last Update: 28-May-2025 09:18:27 Calib Date: 24-Apr-2025 17:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-009.D
 Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
 Process Host: CTX1653

First Level Reviewer: V0FK

Date: 28-May-2025 09:18:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/m3	Flags
1 Butadiene	54		5.200				ND	
3 Methyl tert-butyl ether	73		9.970				ND	
* 4 Chlorobromomethane	128	11.132	11.132	0.000	95	94031	529.2	
A 13 C5-C8 Aliphatics (Raw)	1	12.893	(6.852-18.933)		0	215848	15.0	
6 Benzene	78		12.963				ND	
* 8 1,4-Difluorobenzene	114	13.419	13.419	0.000	98	517388	466.6	
10 n-Heptane	43		14.514				ND	
11 Toluene	91		16.242				ND	
* 15 Chlorobenzene-d5	117	17.903	17.903	0.000	97	469720	480.9	
16 Ethylbenzene	91		18.250				ND	
17 2,3-Dimethylheptane	43		18.304				ND	
18 m-Xylene & p-Xylene	91		18.402				ND	
19 o-Xylene	91		18.779				ND	
20 n-Nonane	43		18.943				ND	
* 21 4-Bromofluorobenzene	95	19.144	19.150	-0.006	96	313486	715.8	
24 1,3,5-Trimethylbenzene	105		19.813				ND	
26 n-Decane	57		20.190				ND	
A 28 C9-C10 Aromatics (mz 134)	134		(18.879-21.934)				ND	
A 25 C9-C10 Aromatics (mz 120)	120		(18.879-21.934)				ND	
A 34 C9-C12 Aliphatics (Raw)	1	20.452	(18.933-21.971)		0	15986	1.21	
33 Naphthalene	128		22.034				ND	
S 36 C9-C10 Aromatics	1		27.980				ND	
S 38 C5-C8 Aliphatics (adjusted)	1				0		15.0	
S 39 C9-C12 Aliphatics (adjusted)	1				0		1.21	

QC Flag Legend

Processing Flags

Reagents:

ATTO15AEISs_00003

Amount Added: 60.00

Units: mL

Run Reagent

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-010.D

Injection Date: 23-May-2025 19:04:30

Instrument ID: CHAE.i

Operator ID: vtp

Lims ID: 200-78136-A-2

Lab Sample ID: 200-78136-2

Worklist Smp#: 10

Client ID: SG-1_20250513

Purge Vol: 250.000 mL

Dil. Factor: 1.3500

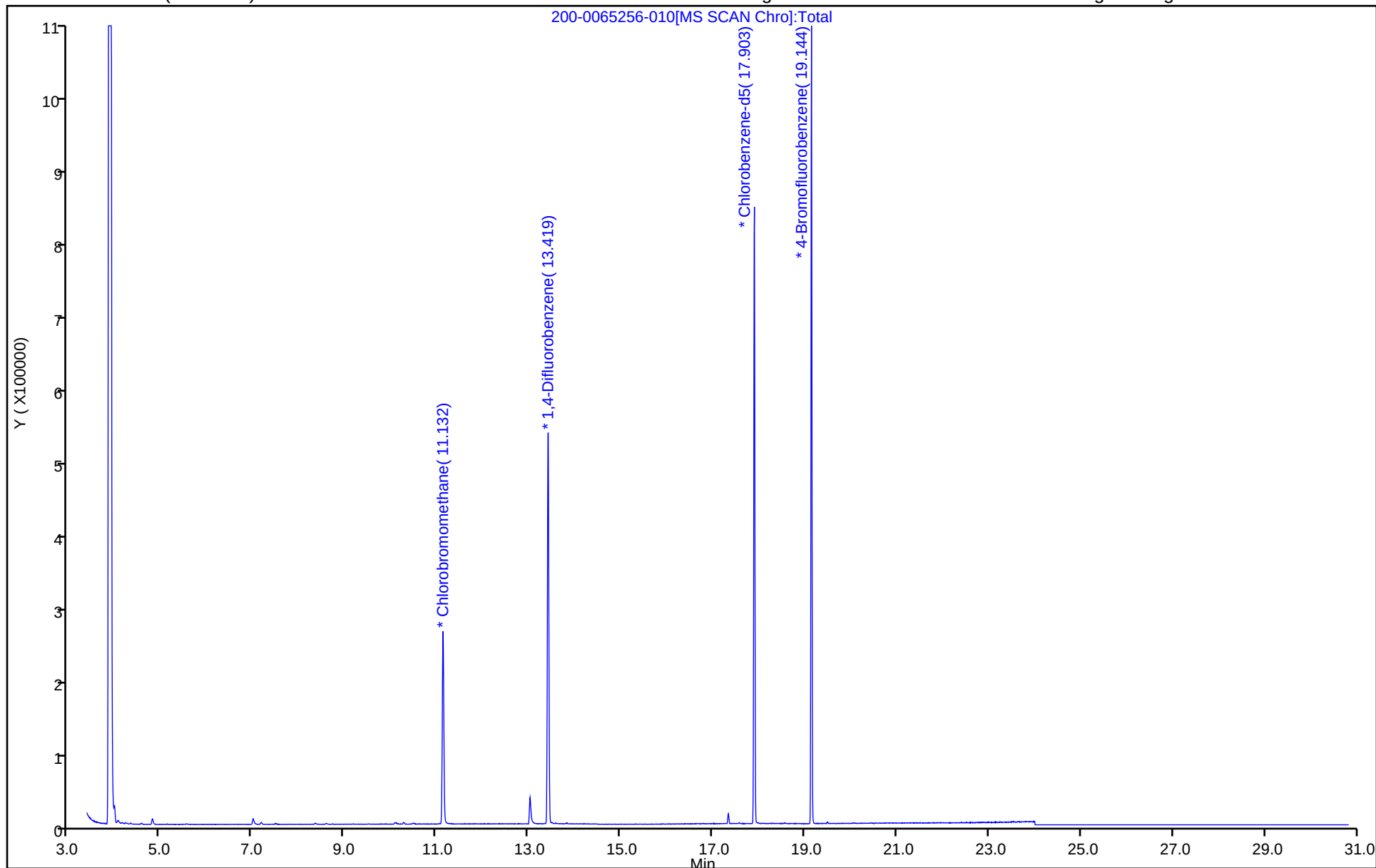
ALS Bottle#: 10

Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>Eurofins Burlington</u>	Job No.: <u>200-78136-1</u>
SDG No.: <u>200-78136-1</u>	
Client Sample ID: <u>SG-2_20250513</u>	Lab Sample ID: <u>200-78136-3</u>
Matrix: <u>Air</u>	Lab File ID: <u>200-0065256-008.D</u>
Analysis Method: <u>APH</u>	Date Collected: <u>05/13/2025 16:15</u>
Sample wt/vol: <u>330 (mL)</u>	Date Analyzed: <u>05/23/2025 17:19</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1.32</u>
Soil Extract Vol.: _____	GC Column: <u>RTX-624</u> ID: <u>0.32 (mm)</u>
Purge Volume: _____	Heated Purge: (Y/N) _____ pH: _____
% Moisture: _____ % Solids: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>216493</u>	Units: <u>ug/m3</u>
Preparation Batch No.: _____	Instrument ID: <u>CHAE.i</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
106-99-0	Butadiene	2.0	U	2.0	2.0
1634-04-4	Methyl tert-butyl ether	2.0	U	2.0	2.0
71-43-2	Benzene	2.0	U	2.0	2.0
108-88-3	Toluene	2.0	U	2.0	2.0
100-41-4	Ethylbenzene	2.0	U	2.0	2.0
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	2.0
95-47-6	o-Xylene	2.0	U	2.0	2.0
91-20-3	Naphthalene	2.0	U	2.0	2.0
STL00133	C9-C10 Aromatics	10	U	10	10
STL00041	C5-C8 Aliphatics (adjusted)	12	U	12	12
STL00106	C9-C12 Aliphatics (adjusted)	12	U	12	12

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-008.D
 Lims ID: 200-78136-A-3
 Client ID: SG-2_20250513
 Sample Type: Client
 Inject. Date: 23-May-2025 17:19:30 ALS Bottle#: 8 Worklist Smp#: 8
 Purge Vol: 250.000 mL Dil. Factor: 1.3200
 Sample Info: 200-0065256-008
 Operator ID: vtp Instrument ID: CHAE.i
 Method: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\MADEP_APH_1.m
 Limit Group: AIR_APH_Limits
 Last Update: 28-May-2025 09:17:55 Calib Date: 24-Apr-2025 17:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-009.D
 Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
 Process Host: CTX1653

First Level Reviewer: V0FK

Date: 28-May-2025 09:17:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/m3	Flags
1 Butadiene	54		5.200				ND	
3 Methyl tert-butyl ether	73		9.970				ND	
* 4 Chlorobromomethane	128	11.132	11.132	0.000	94	91853	529.2	
A 13 C5-C8 Aliphatics (Raw)	1	12.893	(6.852-18.933)		0	137771	9.46	
6 Benzene	78		12.963				ND	
* 8 1,4-Difluorobenzene	114	13.413	13.419	-0.006	99	523784	466.6	
10 n-Heptane	43		14.514				ND	
11 Toluene	91	16.242	16.242	0.000	1	703	0.1079	
* 15 Chlorobenzene-d5	117	17.903	17.903	0.000	97	479031	480.9	
16 Ethylbenzene	91		18.250				ND	
17 2,3-Dimethylheptane	43		18.304				ND	
18 m-Xylene & p-Xylene	91		18.402				ND	
19 o-Xylene	91		18.779				ND	
20 n-Nonane	43		18.943				ND	
* 21 4-Bromofluorobenzene	95	19.144	19.150	-0.006	97	319069	715.8	
24 1,3,5-Trimethylbenzene	105		19.813				ND	
26 n-Decane	57		20.190				ND	
A 28 C9-C10 Aromatics (mz 134)	134		(18.879-21.934)				ND	
A 25 C9-C10 Aromatics (mz 120)	120		(18.879-21.934)				ND	
A 34 C9-C12 Aliphatics (Raw)	1	20.452	(18.933-21.971)		0	48700	3.61	
33 Naphthalene	128		22.034				ND	MU
S 36 C9-C10 Aromatics	1		27.980				ND	
S 38 C5-C8 Aliphatics (adjusted)	1				0		9.35	
S 39 C9-C12 Aliphatics (adjusted)	1				0		3.61	

QC Flag Legend

Processing Flags

Review Flags

U - Marked Undetected

Reagents:

ATTO15AEISs_00003

Amount Added: 60.00

Units: mL

Run Reagent

Report Date: 28-May-2025 09:17:55

Chrom Revision: 2.3 07-May-2025 18:53:14

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-008.D

Injection Date: 23-May-2025 17:19:30

Instrument ID: CHAE.i

Operator ID: vtp

Lims ID: 200-78136-A-3

Lab Sample ID: 200-78136-3

Worklist Smp#: 8

Client ID: SG-2_20250513

Purge Vol: 250.000 mL

Dil. Factor: 1.3200

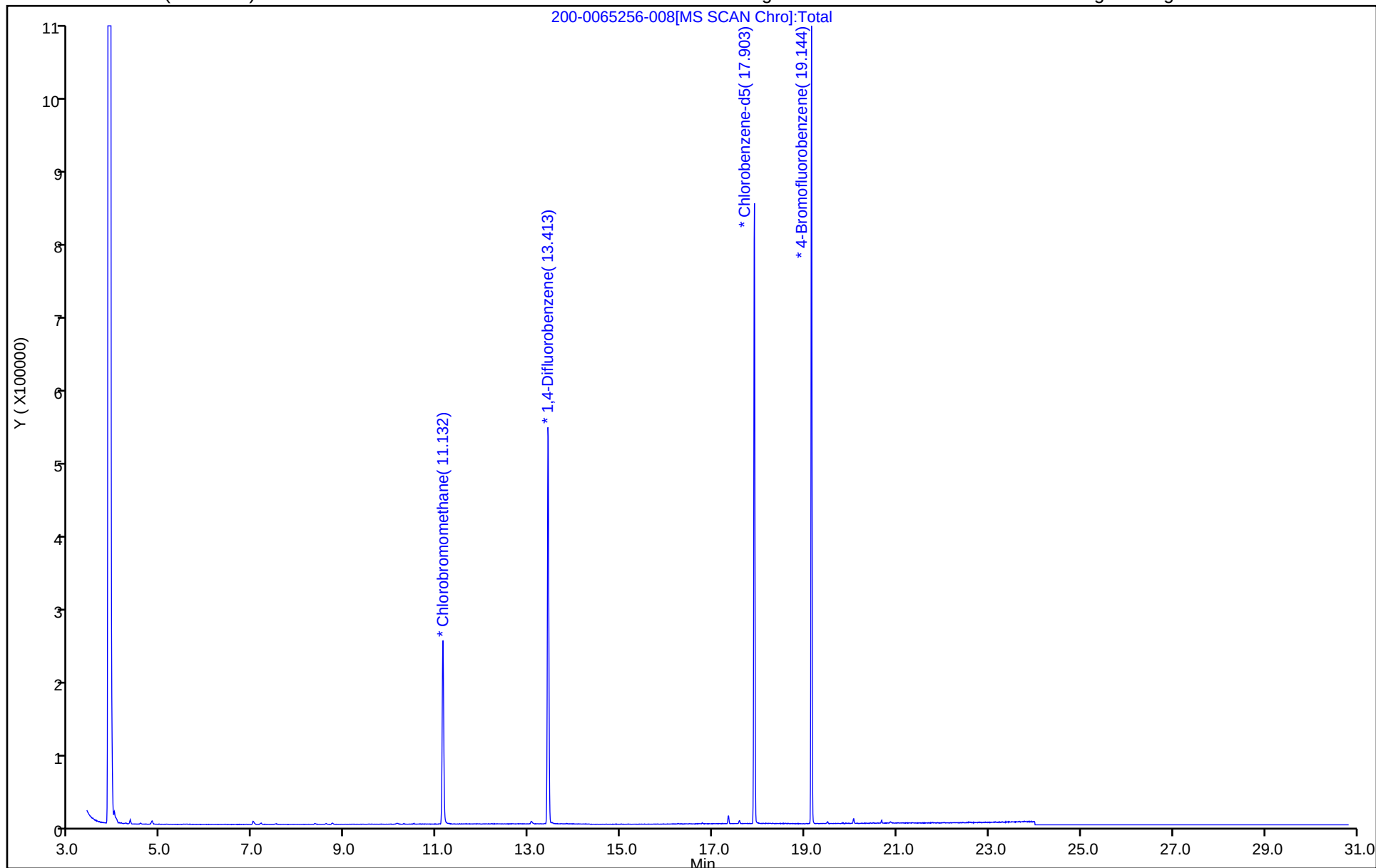
ALS Bottle#: 8

Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

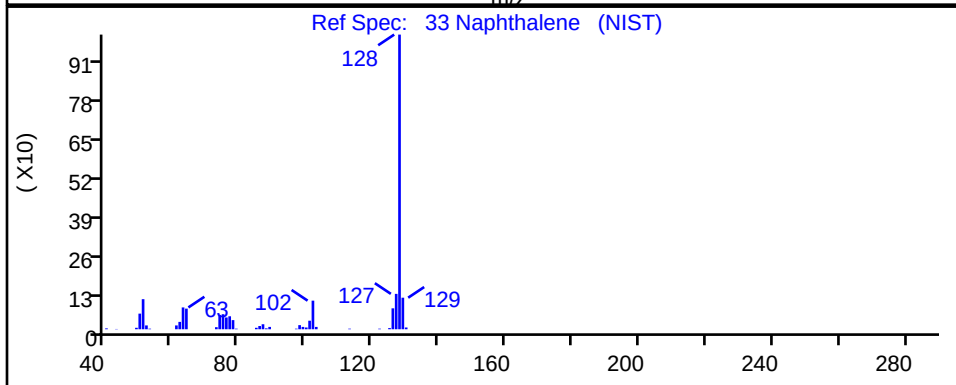
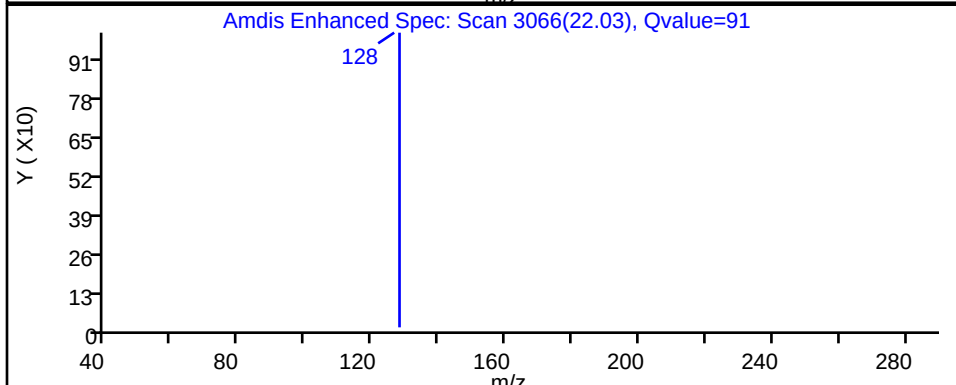
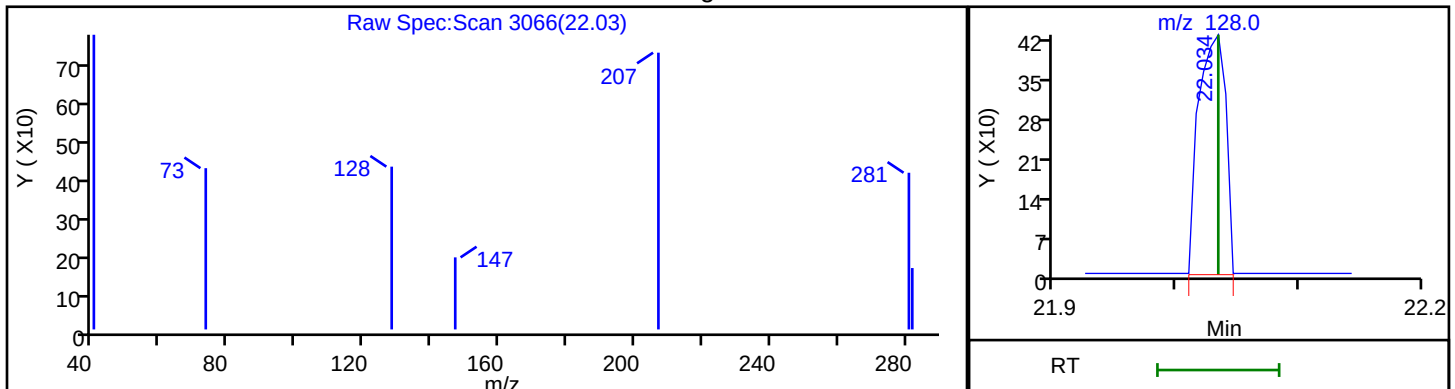


Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-008.D
Injection Date: 23-May-2025 17:19:30 Instrument ID: CHAE.i
Lims ID: 200-78136-A-3 Lab Sample ID: 200-78136-3
Client ID: SG-2_20250513
Operator ID: vtp ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 250.000 mL Dil. Factor: 1.3200
Method: MADEP_APH_1 Limit Group: AIR_APH_Limits
Column: RTX-624 (0.32 mm) Detector: MS SCAN

33 Naphthalene, CAS: 91-20-3

Processing Results



RT	Mass	Response	Amount
22.03	128.00	657	0.149022

Reviewer: V0FK, 28-May-2025 09:17:50 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 200-78136-1 Analy Batch No.: 215485
SDG No.: 200-78136-1
Instrument ID: CHAE.i GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 04/24/2025 11:56 Calibration End Date: 04/24/2025 17:11 Calibration ID: 55056

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-215485/3	200-0064859-003.D
Level 2	IC 200-215485/5	200-0064859-005.D
Level 3	IC 200-215485/6	200-0064859-006.D
Level 4	IC 200-215485/7	200-0064859-007.D
Level 5	ICIS 200-215485/8	200-0064859-008.D
Level 6	IC 200-215485/9	200-0064859-009.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Butadiene	11.048 11.286	9.6534	9.4075	10.376	10.732	Ave		10.41 7				7.3		30.0			
Isopentane	16.153 11.259	14.081	11.836	12.106	11.832	Ave		12.87 8				14.6		50.0			
Methyl tert-butyl ether	28.411 28.468	29.729	26.726	29.266	28.670	Ave		28.54 5				3.6		30.0			
Hexane	2.5562 2.5416	2.6260	2.5095	2.6291	2.6463	Ave		2.584 8				2.2		50.0			
C5-C8 Aliphatics	12.334 11.089	18.625	12.217	12.012	11.553	Ave		12.97 2				21.6		30.0			
Benzene	5.5919 5.5887	5.5196	5.4061	5.7658	5.7429	Ave		5.602 5				2.4		30.0			
Cyclohexane	2.7061 2.7259	2.7337	2.7166	2.8220	2.8231	Ave		2.754 6				1.9		50.0			
2,3-Dimethylpentane	2.5816 2.6054	2.6031	2.5290	2.7565	2.6906	Ave		2.627 7				3.1		50.0			
n-Heptane	2.5457 2.6678	2.6031	2.4221	2.7984	2.7366	Ave		2.629 0				5.2		50.0			
Toluene	6.5092 6.7786	6.2047	6.1590	6.6962	6.8905	Ave		6.539 7				4.7		30.0			
n-Octane	3.0380 3.3486	3.1549	2.9305	3.6133	3.4432	Ave		3.254 8				8.0		50.0			
Ethylbenzene	7.2862 8.0041	7.1961	6.7481	8.3307	8.1049	Ave		7.611 7				8.2		30.0			
2,3-Dimethylheptane	4.4613 4.5187	4.4363	4.2578	5.0829	4.8390	Ave		4.599 3				6.6		50.0			
m-Xylene & p-Xylene	5.5684 6.1156	5.3482	5.1355	6.3800	6.1566	Ave		5.784 1				8.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Burlington Job No.: 200-78136-1 Analy Batch No.: 215485
SDG No.: 200-78136-1
Instrument ID: CHAE.i GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 04/24/2025 11:56 Calibration End Date: 04/24/2025 17:11 Calibration ID: 55056

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
o-Xylene	5.8631 6.6045	5.6863	5.3065	6.7839	6.5105	Ave		6.125 8				9.6		30.0			
n-Nonane	3.2057 3.5211	3.2148	3.0782	4.0042	3.6548	Ave		3.446 4				10.1		50.0			
Isopropylbenzene	7.5933 8.3936	7.2754	6.9519	8.8942	8.2662	Ave		7.895 8				9.4		50.0			
3-Ethyltoluene	6.3330 7.9918	6.3320	6.3569	8.3163	7.4294	Ave		7.126 6				12.7		50.0			
1,3,5-Trimethylbenzene	5.7773 6.9371	5.5726	5.6987	7.2734	6.3519	Ave		6.268 5				11.3		50.0			
C9-C10 Aromatics (mz 120)	2.4644 2.9630	2.4630	2.5514	3.2296	2.8377	Ave		2.751 5				11.3		30.0			
C9-C12 Aliphatics	10.245 14.856	12.129	12.596	16.425	14.962	Ave		13.53 6				16.8		30.0			
n-Decane	2.6394 3.7064	2.7771	3.1416	4.1057	3.4965	Ave		3.311 1				17.0		50.0			
4-Isopropyltoluene	6.6394 7.8268	6.8373	7.1885	9.0799	7.7489	Ave		7.553 5				11.7		50.0			
1,2,3-Trimethylbenzene	5.6138 6.8261	5.6955	5.9401	7.6227	6.5282	Ave		6.371 1				12.2		50.0			
C9-C10 Aromatics (mz 134)	1.7637 1.9876	1.6942	1.8038	2.2945	1.9475	Ave		1.915 2				11.3		30.0			
Butylcyclohexane	3.6858 4.5437	3.6841	4.0265	5.0988	4.2912	Ave		4.221 7				12.9		50.0			
Undecane	1.8883 3.4666	2.1231	2.6681	3.7491	3.5543	Ave		2.908 2				27.3		50.0			
Dodecane	0.7615 2.0256	1.0037	1.5695	2.2121	2.3726	Ave		1.657 5				40.0		50.0			
Naphthalene	2.5063 5.8667	3.0352	4.2327	5.1572	5.7596	Ave		4.426 3				32.0		40.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington Job No.: 200-78136-1 Analy Batch No.: 215485

SDG No.: 200-78136-1

Instrument ID: CHAE.i GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2025 11:56 Calibration End Date: 04/24/2025 17:11 Calibration ID: 55056

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-215485/3	200-0064859-003.D
Level 2	IC 200-215485/5	200-0064859-005.D
Level 3	IC 200-215485/6	200-0064859-006.D
Level 4	IC 200-215485/7	200-0064859-007.D
Level 5	ICIS 200-215485/8	200-0064859-008.D
Level 6	IC 200-215485/9	200-0064859-009.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/M3)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Butadiene	BCM	Ave	1695 378135	2648	12891	32687	184735	0.442 111	0.885	4.42	11.1	55.3
Isopentane	BCM	Ave	3308 503555	5156	21649	50906	271876	0.590 148	1.18	5.90	14.8	73.8
Methyl tert-butyl ether	BCM	Ave	7120 1558060	13321	59821	150598	806142	0.722 181	1.44	7.22	18.1	90.4
Hexane	DFBZ	Ave	3982 857034	7182	34442	81744	457417	0.706 177	1.41	7.06	17.7	88.4
C5-C8 Aliphatics	DFBZ	Ave	124048 24140628	328864	1082511	2411209	12892439	4.56 1140	9.12	45.6	114	570
Benzene	DFBZ	Ave	7872 1703005	13642	67050	162004	897055	0.638 160	1.28	6.38	16.0	79.9
Cyclohexane	DFBZ	Ave	4108 895735	7286	36334	85506	475542	0.688 172	1.38	6.88	17.2	86.1
2,3-Dimethylpentane	DFBZ	Ave	4671 1020389	8269	40314	99546	540161	0.821 205	1.64	8.21	20.5	103
n-Heptane	DFBZ	Ave	4606 1044861	8269	38610	101058	549401	0.821 205	1.64	8.21	20.5	103
Toluene	CBNZd 5	Ave	9154 2150543	15940	75979	202265	1110825	0.754 189	1.51	7.54	18.9	94.4
n-Octane	DFBZ	Ave	6261 1493815	11415	53209	148628	787371	0.935 234	1.87	9.35	23.4	117
Ethylbenzene	CBNZd 5	Ave	11796 2923265	21282	95834	289682	1504150	0.869 217	1.74	8.69	21.7	109
2,3-Dimethylheptane	CBNZd 5	Ave	8737 1996370	15871	73146	213804	1086347	1.05 263	2.10	10.5	26.3	131
m-Xylene & p-Xylene	CBNZd 5	Ave	9015 2233528	15817	72932	221850	1142581	0.869 217	1.74	8.69	21.7	109

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington Job No.: 200-78136-1 Analy Batch No.: 215485
SDG No.: 200-78136-1
Instrument ID: CHAE.i GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 04/24/2025 11:56 Calibration End Date: 04/24/2025 17:11 Calibration ID: 55056

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/M3)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
o-Xylene	CBNZd 5	Ave	9492 2412110	16817	75360	235895	1208249	0.869 217	1.74	8.69	21.7	109
n-Nonane	CBNZd 5	Ave	6278 1555602	11501	52882	168430	820485	1.05 263	2.10	10.5	26.3	131
Isopropylbenzene	CBNZd 5	Ave	13936 3475184	24392	111922	350606	1739107	0.985 246	1.97	9.85	24.6	123
3-Ethyltoluene	CBNZd 5	Ave	11623 3308828	21229	102342	327827	1563049	0.985 246	1.97	9.85	24.6	123
1,3,5-Trimethylbenzene	CBNZd 5	Ave	10603 2872138	18683	91746	286716	1336366	0.985 246	1.97	9.85	24.6	123
C9-C10 Aromatics (mz 120)	CBNZd 5	Ave	18092 4907051	33030	164302	509233	2388032	3.94 984	7.88	39.4	98.5	493
C9-C12 Aliphatics	CBNZd 5	Ave	135397 44293918	292845	1460372	4662687	22667862	7.09 1772	14.2	70.9	177	887
n-Decane	CBNZd 5	Ave	5740 1818393	11033	59933	191779	871665	1.17 292	2.33	11.7	29.2	146
4-Isopropyltoluene	CBNZd 5	Ave	13597 3615915	25579	129139	399397	1819149	1.10 275	2.20	11.0	27.5	137
1,2,3-Trimethylbenzene	CBNZd 5	Ave	10303 2826181	19095	95632	300486	1373447	0.985 246	1.97	9.85	24.6	123
C9-C10 Aromatics (mz 134)	CBNZd 5	Ave	3612 918242	6338	32404	100927	457194	1.10 275	2.20	11.0	27.5	137
Butylcyclohexane	CBNZd 5	Ave	7892 2194768	14410	75628	234494	1053280	1.15 287	2.30	11.5	28.7	144
Undecane	CBNZd 5	Ave	4501 1864088	9245	55790	191943	971194	1.28 320	2.56	12.8	32.0	160
Dodecane	CBNZd 5	Ave	1980 1188105	4767	35796	123532	707160	1.39 349	2.79	13.9	34.9	174

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Burlington Job No.: 200-78136-1 Analy Batch No.: 215485
SDG No.: 200-78136-1
Instrument ID: CHAE.i GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 04/24/2025 11:56 Calibration End Date: 04/24/2025 17:11 Calibration ID: 55056

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/M3)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Naphthalene	CBNZd 5	Ave	4899	10838	72577	216518	1290566	1.05	2.10	10.5	26.2	131
			2586955					262				

Curve Type Legend:

Ave = Average ISTD

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-003.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 24-Apr-2025 11:56:30 ALS Bottle#: 3 Worklist Smp#: 3
 Purge Vol: 250.000 mL Dil. Factor: 1.0000
 Sample Info: 200-0064859-003
 Operator ID: vtp Instrument ID: CHAE.i
 Sublist: chrom-MADEP_APH_1*sub1
 Method: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\MADEP_APH_1.m
 Limit Group: AIR_APH_Limits
 Last Update: 25-Apr-2025 09:55:31 Calib Date: 24-Apr-2025 17:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-009.D
 Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
 Process Host: CTX1611

First Level Reviewer: V0FK

Date: 24-Apr-2025 14:45:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/m3	OnCol Amt ug/m3	Flags
1 Butadiene	54	5.182	5.188	-0.006	93	1695	0.4423	0.4691	
2 2-Methylbutane	43	6.928	6.940	-0.012	94	3308	0.5904	0.7405	
3 Methyl tert-butyl ether	73	9.988	9.964	0.024	97	7120	0.7225	0.7191	Ma
* 4 Chlorobromomethane	128	11.107	11.132	-0.025	92	183555	529.2	529.2	
5 Hexane	57	11.162	11.180	-0.018	95	3982	0.7065	0.6986	
A 12 C5-C8 Aliphatics	1	12.883	(6.840-18.927)		0	124048	4.56	4.34	M
6 Benzene	78	12.945	12.963	-0.018	98	7872	0.6384	0.6372	
7 Cyclohexane	56	13.237	13.255	-0.018	96	4108	0.6884	0.6763	
* 8 1,4-Difluorobenzene	114	13.395	13.419	-0.024	99	1028953	466.6	466.6	
9 2,3-Dimethylpentane	56	13.535	13.553	-0.018	89	4671	0.8205	0.8061	
10 n-Heptane	43	14.502	14.520	-0.018	93	4606	0.8205	0.7945	
11 Toluene	91	16.230	16.242	-0.012	97	9154	0.7545	0.7510	
14 n-Octane	43	17.191	17.197	-0.006	92	6261	0.9346	0.8724	Ma
* 15 Chlorobenzene-d5	117	17.897	17.903	-0.006	97	896442	480.9	480.9	
16 Ethylbenzene	91	18.243	18.249	-0.006	98	11796	0.8686	0.8314	
17 2,3-Dimethylheptane	43	18.292	18.298	-0.006	92	8737	1.05	1.02	
18 m-Xylene & p-Xylene	91	18.396	18.395	0.001	96	9015	0.8686	0.8362	
19 o-Xylene	91	18.773	18.779	-0.006	98	9492	0.8686	0.8313	
20 n-Nonane	43	18.931	18.937	-0.006	89	6278	1.05	0.9773	
* 21 4-Bromofluorobenzene	95	19.138	19.144	-0.006	99	593800	715.8	715.8	
22 Isopropylbenzene	105	19.235	19.241	-0.006	98	13936	0.9846	0.9469	
23 3-Ethyltoluene	105	19.710	19.716	-0.006	98	11623	0.9846	0.8750	
24 1,3,5-Trimethylbenzene	105	19.801	19.807	-0.006	98	10603	0.9846	0.9075	
A 37 C9-C12 Aliphatics	1	20.174	(18.288-22.060)		0	135397	7.09	5.37	M
26 n-Decane	57	20.172	20.184	-0.012	91	5740	1.17	0.9301	
A 28 C9-C10 Aromatics (mz 134)	134	20.440	(18.879-21.933)		0	3612	1.10	1.01	
A 25 C9-C10 Aromatics (mz 120)	120	19.840	(18.879-21.933)		0	18092	3.94	3.53	
27 4-Isopropyltoluene	119	20.440	20.446	-0.006	94	13597	1.10	0.9658	
29 1,2,3-Trimethylbenzene	105	20.446	20.452	-0.006	94	10303	0.9846	0.8676	
30 Butylcyclohexane	83	20.622	20.634	-0.012	97	7892	1.15	1.00	
31 Undecane	57	21.121	21.133	-0.012	94	4501	1.28	0.8303	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/m3	OnCol Amt ug/m3	Flags
32 Dodecane	57	21.948	21.960	-0.012	93	1980	1.39	0.6409	M
33 Naphthalene	128	22.015	22.033	-0.018	97	4899	1.05	0.5938	M
S 35 Xylenes, Total	1				0		1.74	1.67	
S 36 C9-C10 Aromatics	1				0		5.04	4.54	
S 38 C5-C8 Aliphatics (adjusted)	1				0			-6.60	
S 39 C9-C12 Aliphatics (adjusted)	1				0			-4.54	
\$ 40 BFB									

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

APHLv1w_00043

Amount Added: 50.00

Units: mL

ATTO15AEISs_00003

Amount Added: 60.00

Units: mL

Run Reagent

Report Date: 25-Apr-2025 09:55:32

Chrom Revision: 2.3 18-Apr-2025 15:35:42

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-003.D

Injection Date: 24-Apr-2025 11:56:30

Instrument ID: CHAE.i

Operator ID: vtp

Lims ID: ic

Worklist Smp#: 3

Client ID:

Purge Vol: 250.000 mL

Dil. Factor: 1.0000

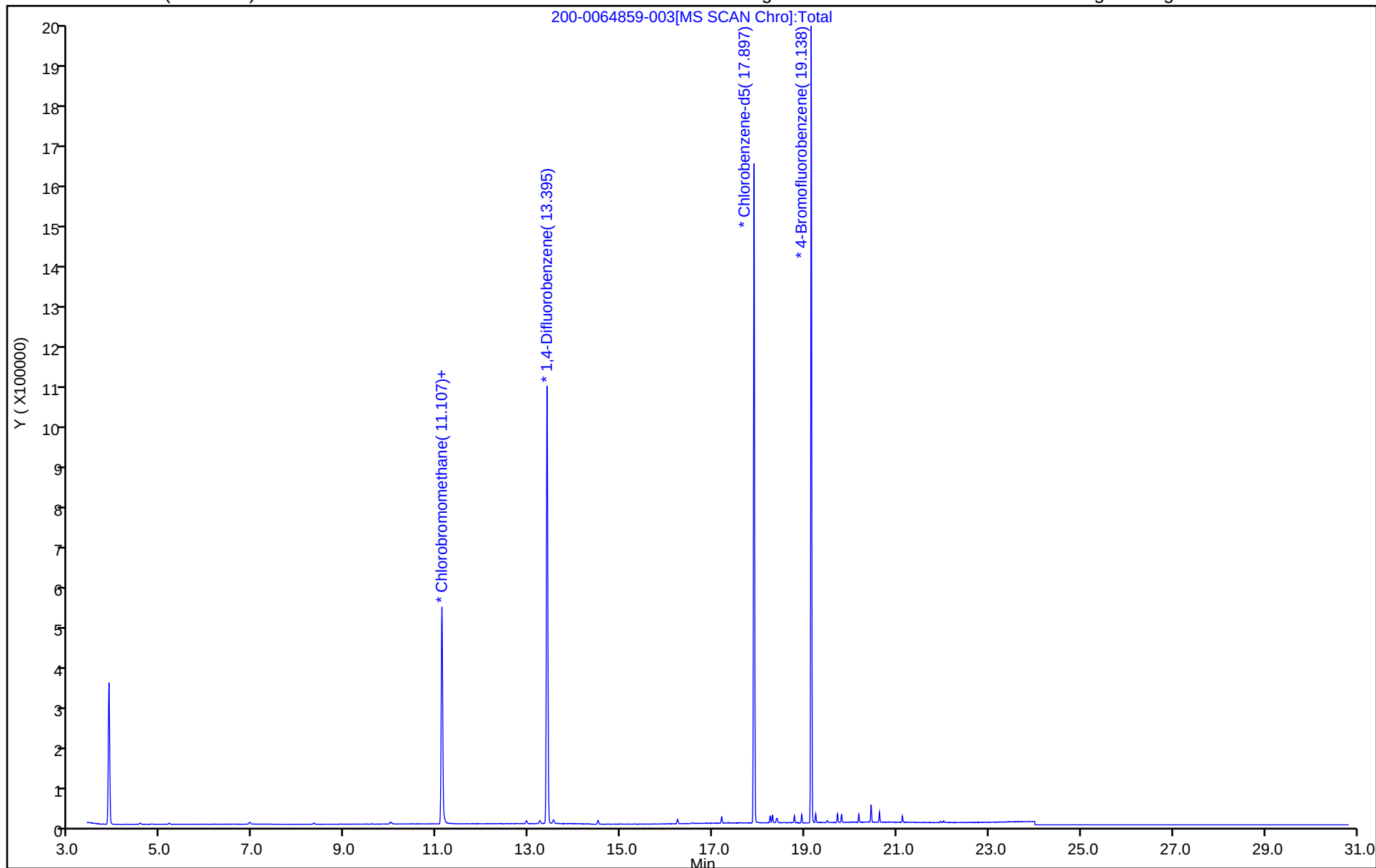
ALS Bottle#: 3

Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-003.D

Injection Date: 24-Apr-2025 11:56:30

Instrument ID: CHAE.i

Lims ID: ic

Client ID:

Operator ID: vtp

ALS Bottle#:

3

Worklist Smp#:

3

Purge Vol: 250.000 mL

Dil. Factor:

1.0000

Method: MADEP_APH_1

Limit Group:

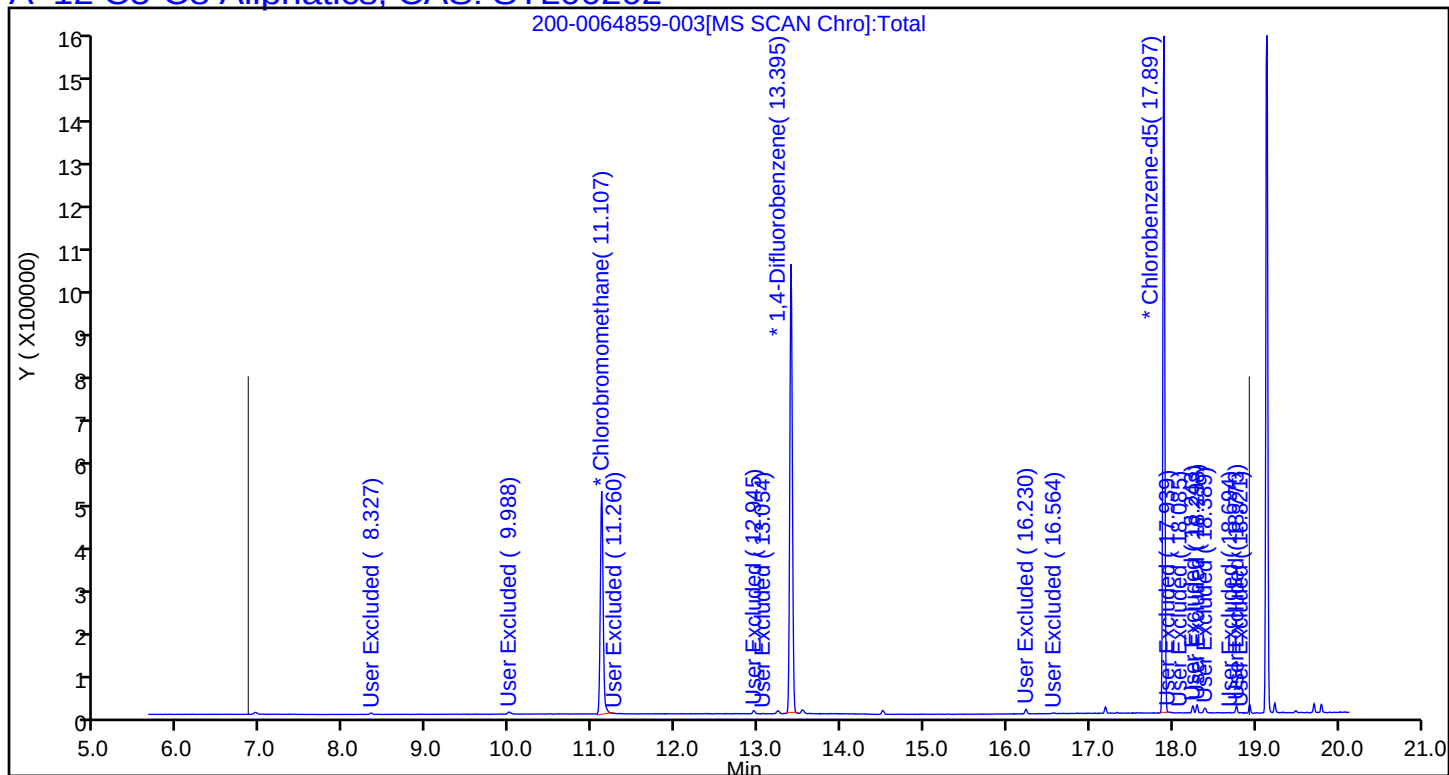
AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Detector

MS SCAN

A 12 C5-C8 Aliphatics, CAS: STL00202



Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-003.D

Injection Date: 24-Apr-2025 11:56:30

Instrument ID: CHAE.i

Lims ID: ic

Client ID:

Operator ID: vtp

ALS Bottle#:

3

Worklist Smp#:

3

Purge Vol: 250.000 mL

Dil. Factor:

1.0000

Method: MADEP_APH_1

Limit Group:

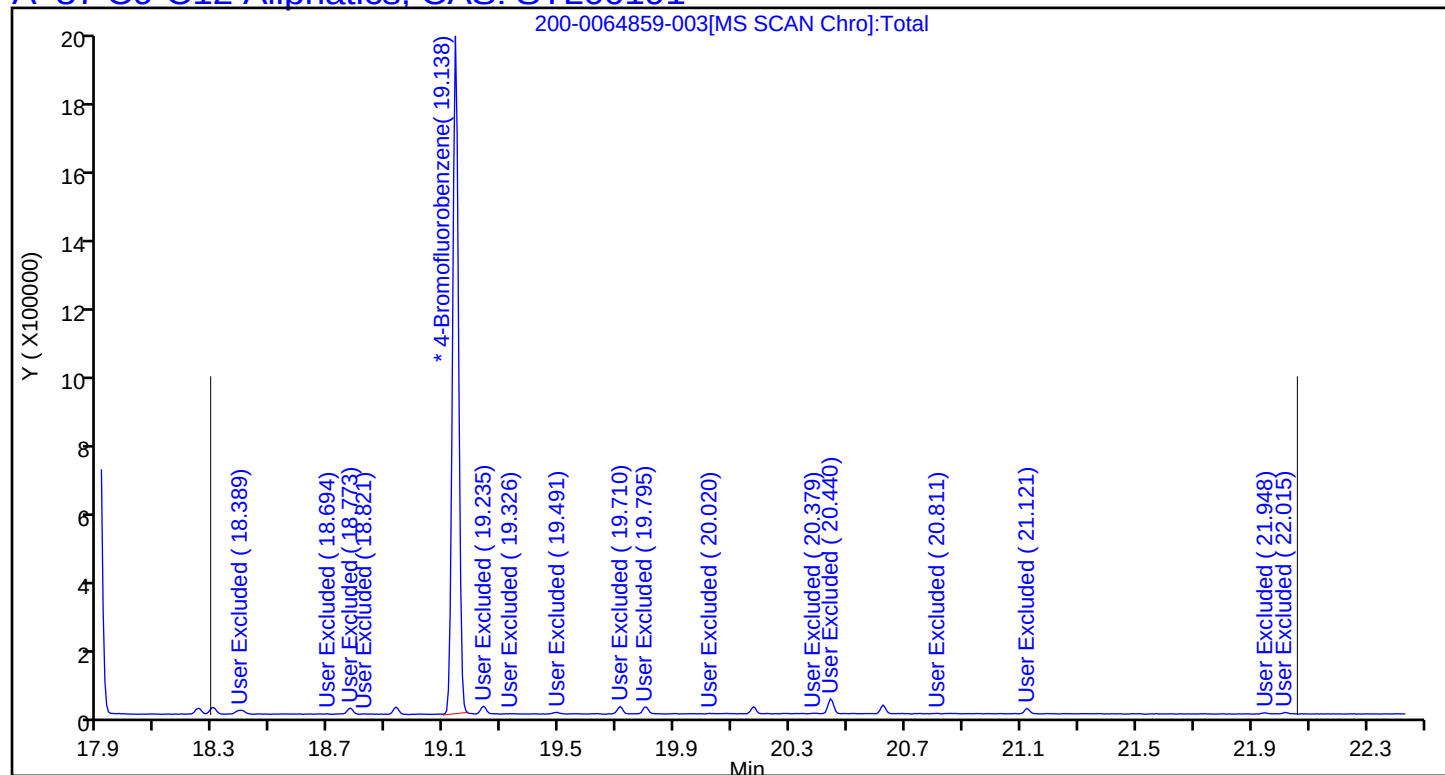
AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Detector

MS SCAN

A 37 C9-C12 Aliphatics, CAS: STL00191



Eurofins Burlington

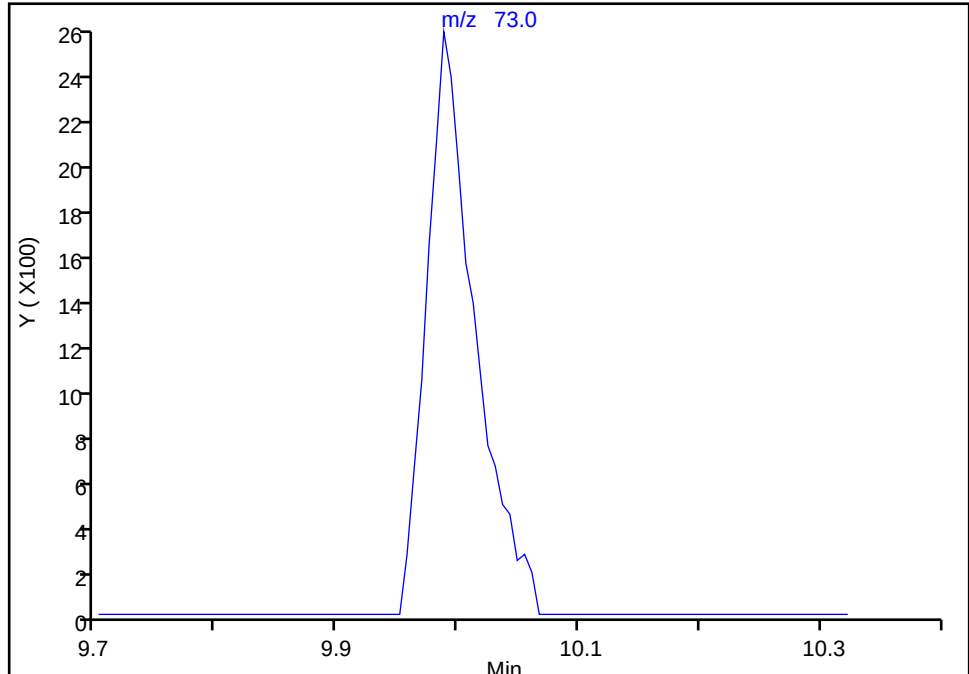
Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-003.D
Injection Date: 24-Apr-2025 11:56:30 Instrument ID: CHAE.i
Lims ID: ic
Client ID:
Operator ID: vtp ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Method: MADEP_APH_1 Limit Group: AIR_APH_Limits
Column: RTX-624 (0.32 mm) Detector: MS SCAN

3 Methyl tert-butyl ether, CAS: 1634-04-4

Signal: 1

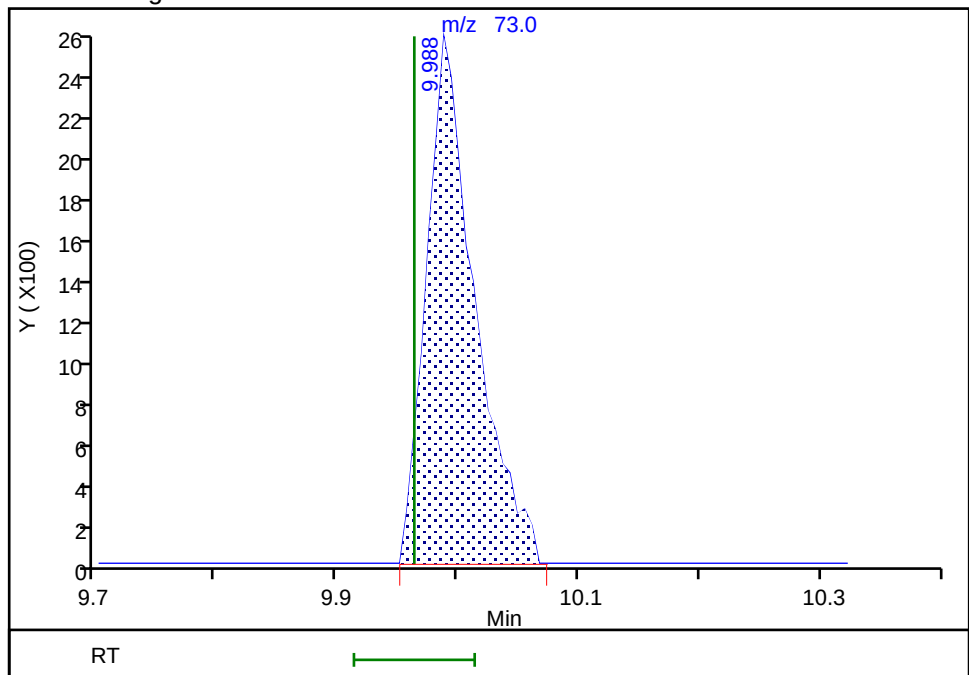
Not Detected
Expected RT: 9.96

Processing Integration Results



RT: 9.99
Area: 7120
Amount: 0.719069
Amount Units: ug/m3

Manual Integration Results



Reviewer: V0FK, 24-Apr-2025 20:37:14 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Burlington

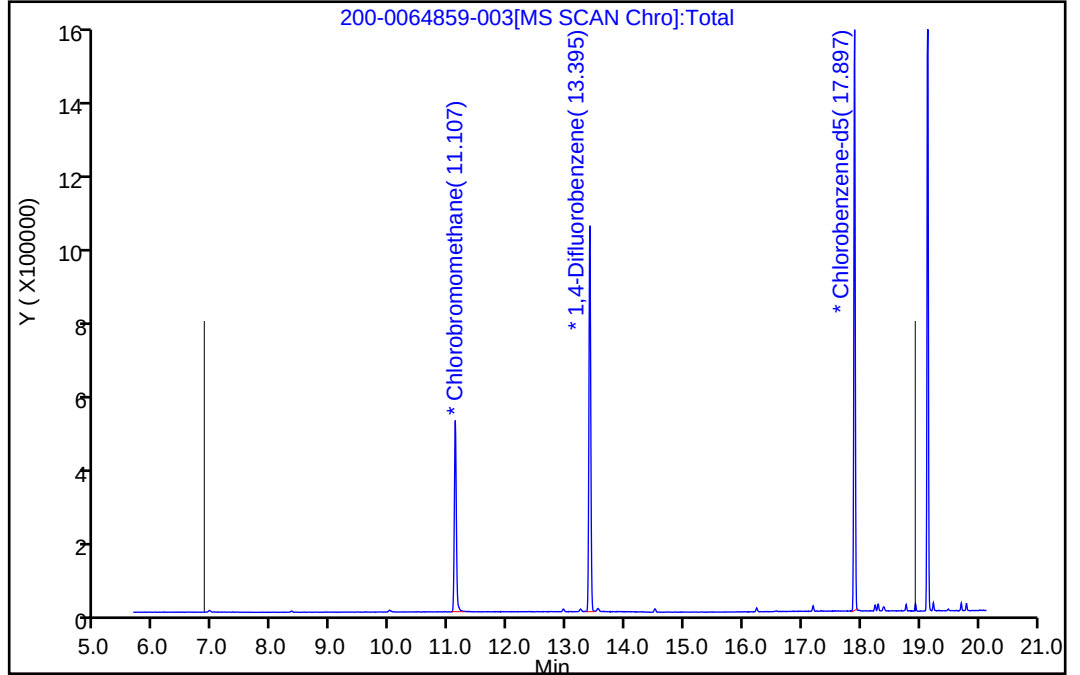
Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-003.D
Injection Date: 24-Apr-2025 11:56:30 Instrument ID: CHAE.i
Lims ID: ic
Client ID:
Operator ID: vtp ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Method: MADEP_APH_1 Limit Group: AIR_APH_Limits
Column: RTX-624 (0.32 mm) Detector MS SCAN

A 12 C5-C8 Aliphatics, RT: 12.883, CAS: STL00202

Signal: 1

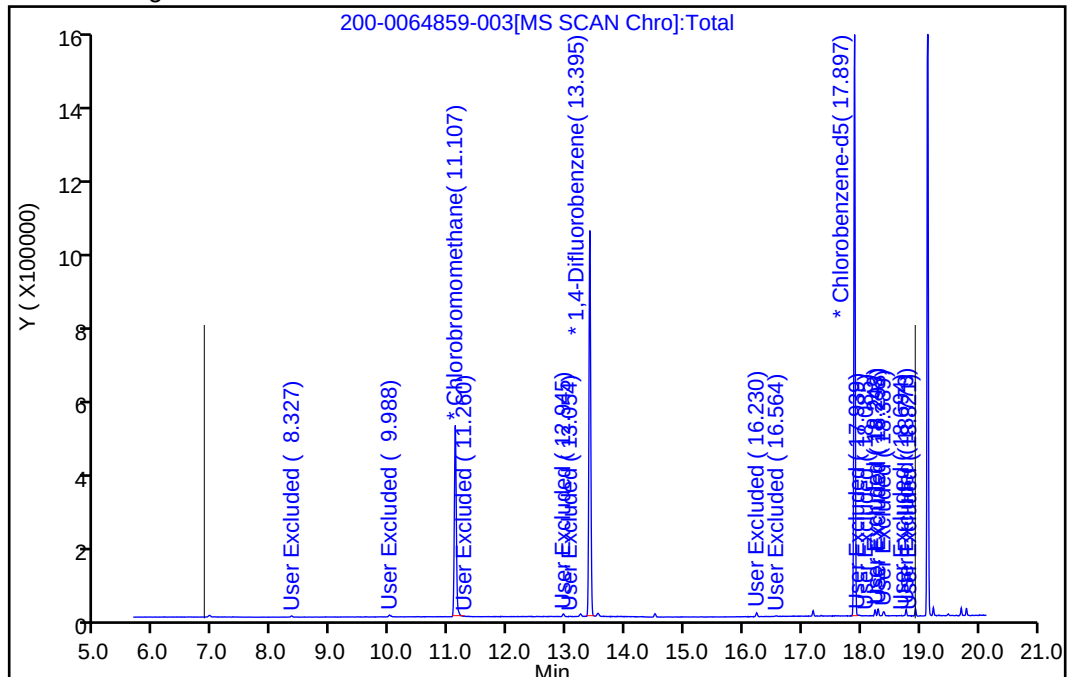
RT: 12.86
Response: 377063
Amount: 4.772766

Processing Integration Results



RT: 12.88
Response: 124048
Amount: 4.336821

Manual Integration Results



Reviewer: V0FK, 24-Apr-2025 14:36:09 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Burlington

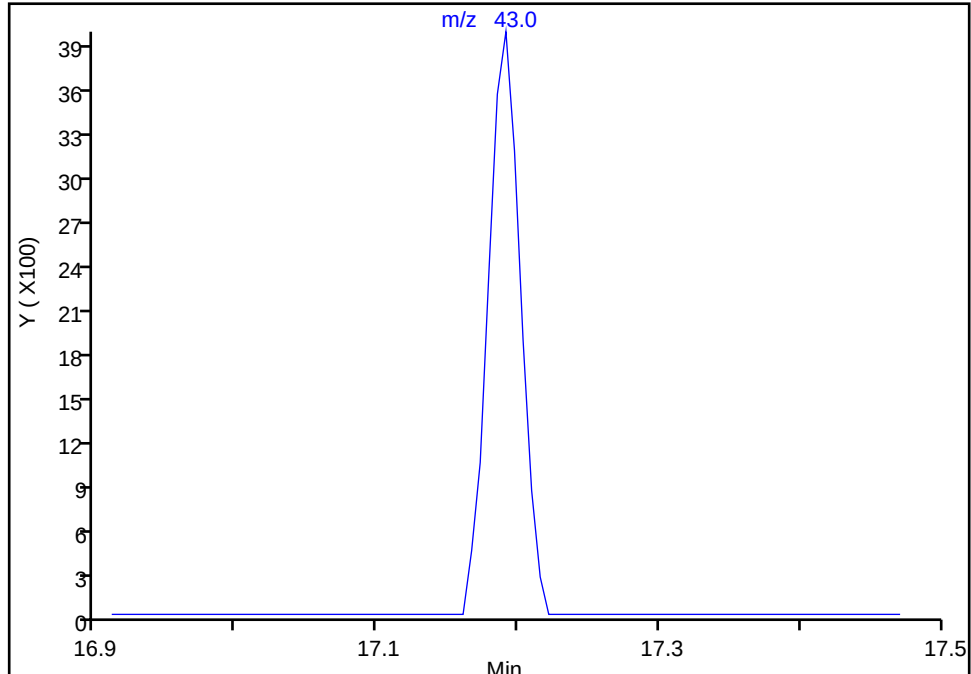
Data File:	\\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-003.D		
Injection Date:	24-Apr-2025 11:56:30	Instrument ID:	CHAE.i
Lims ID:	ic		
Client ID:			
Operator ID:	vtp	ALS Bottle#:	3
Purge Vol:	250.000 mL	Dil. Factor:	1.0000
Method:	MADEP_APH_1	Limit Group:	AIR_APH_Limits
Column:	RTX-624 (0.32 mm)	Detector:	MS SCAN
		Worklist Smp#:	3

14 n-Octane, CAS: 111-65-9

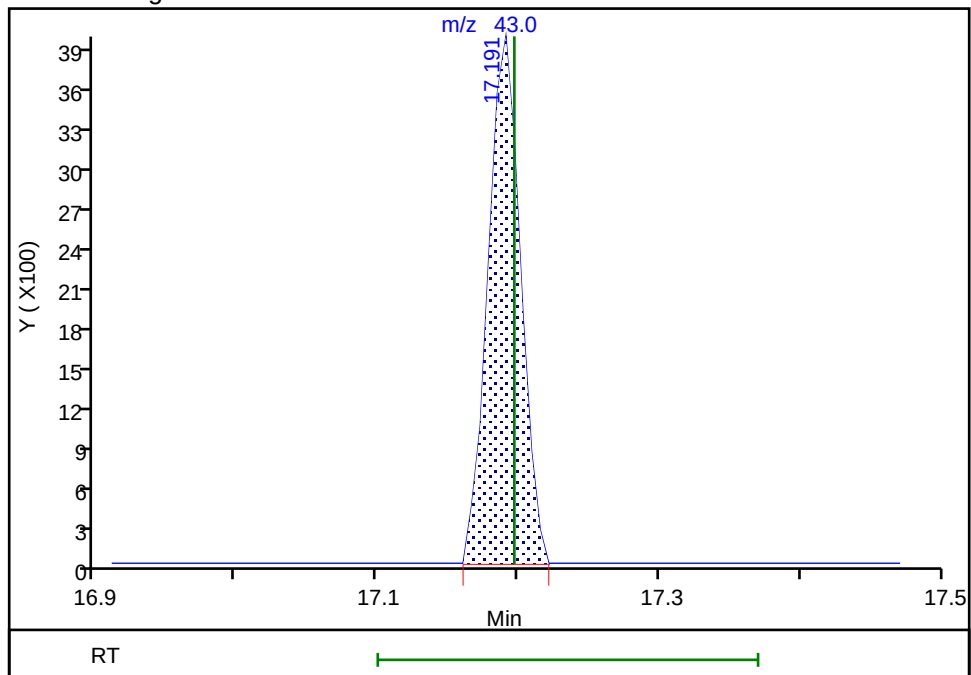
Signal: 1

Not Detected
Expected RT: 17.20

Processing Integration Results

RT: 17.19
Area: 6261
Amount: 0.872372
Amount Units: ug/m3

Manual Integration Results



Reviewer: V0FK, 24-Apr-2025 20:37:11 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Burlington

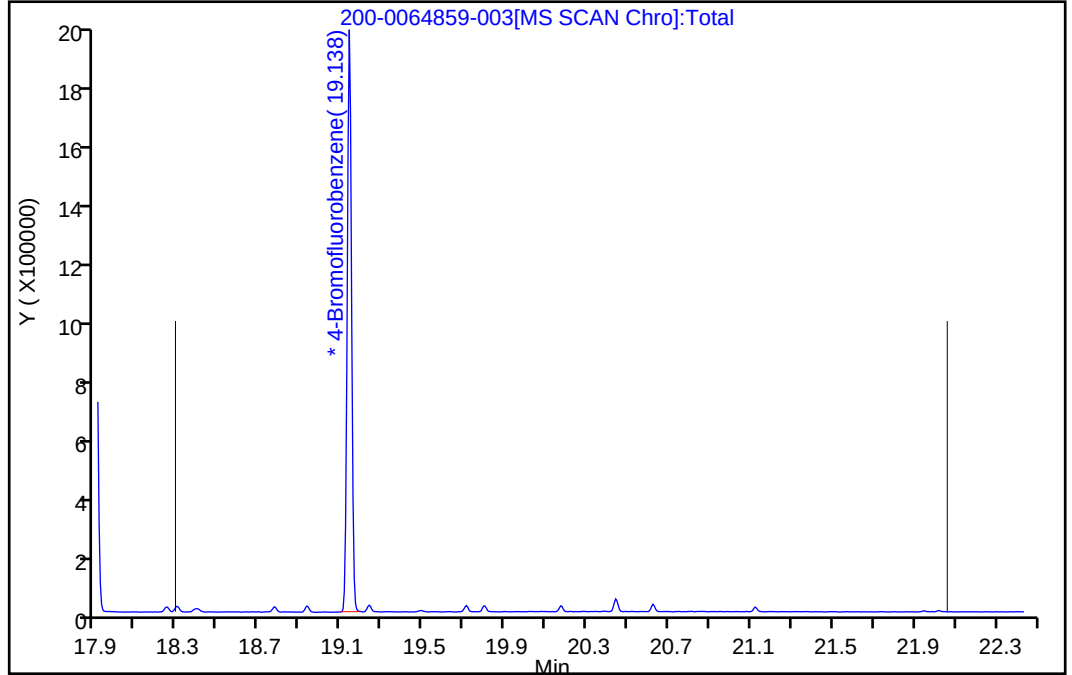
Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-003.D
Injection Date: 24-Apr-2025 11:56:30 Instrument ID: CHAE.i
Lims ID: ic
Client ID:
Operator ID: vtp ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Method: MADEP_APH_1 Limit Group: AIR_APH_Limits
Column: RTX-624 (0.32 mm) Detector: MS SCAN

A 37 C9-C12 Aliphatics, RT: 20.174, CAS: STL00191

Signal: 1

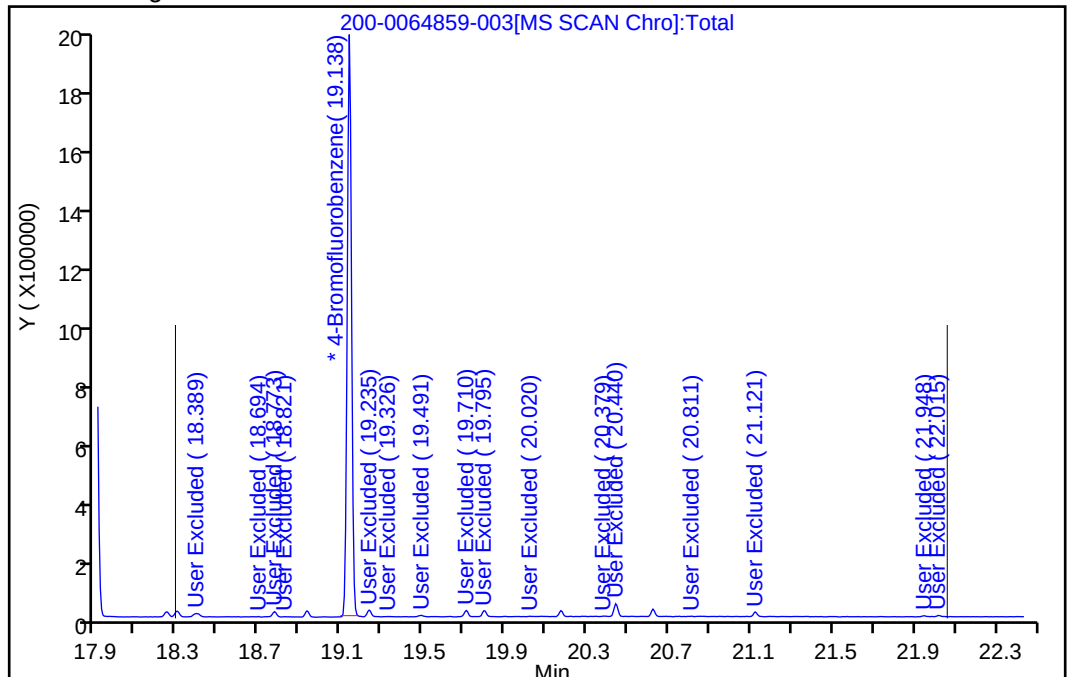
RT: 20.15
Response: 437367
Amount: 7.736901

Processing Integration Results



RT: 20.17
Response: 135397
Amount: 5.366587

Manual Integration Results



Reviewer: V0FK, 24-Apr-2025 14:40:56 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Burlington

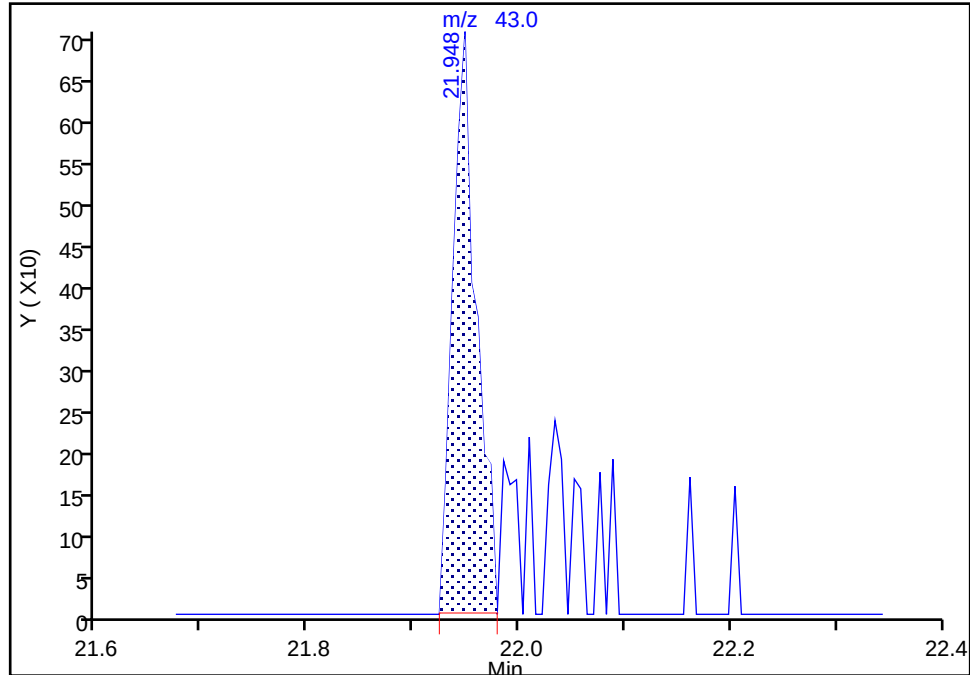
Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-003.D
Injection Date: 24-Apr-2025 11:56:30 Instrument ID: CHAE.i
Lims ID: ic
Client ID:
Operator ID: vtp ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Method: MADEP_APH_1 Limit Group: AIR_APH_Limits
Column: RTX-624 (0.32 mm) Detector: MS SCAN

32 Dodecane, CAS: 112-40-3

Signal: 2

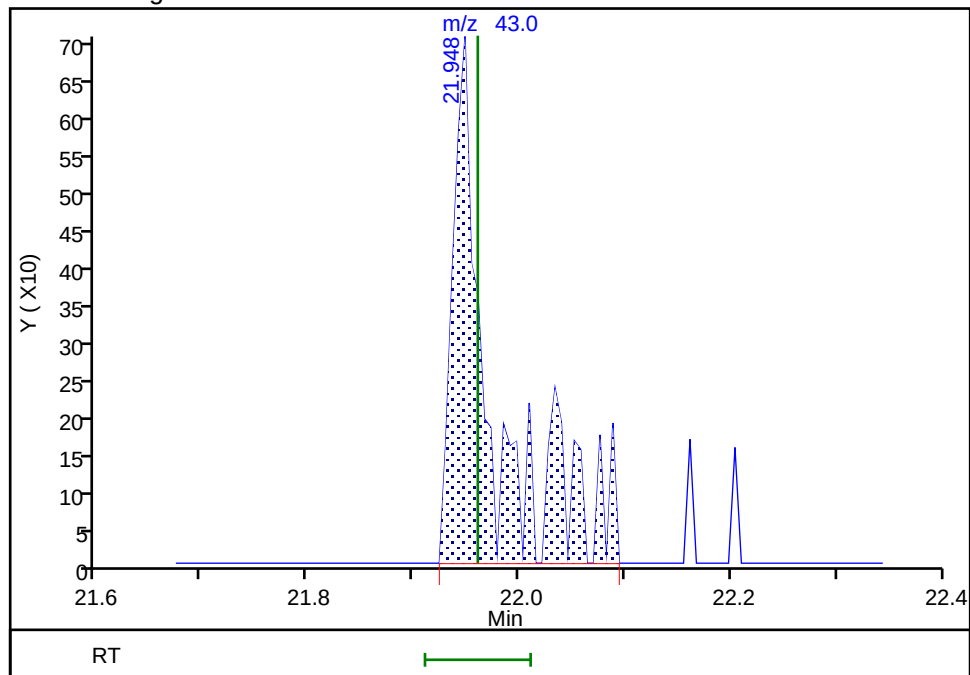
RT: 21.95
Area: 1092
Amount: 0.829453
Amount Units: ug/m3

Processing Integration Results



RT: 21.95
Area: 1818
Amount: 0.640885
Amount Units: ug/m3

Manual Integration Results



Reviewer: V0FK, 24-Apr-2025 15:34:15 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Burlington

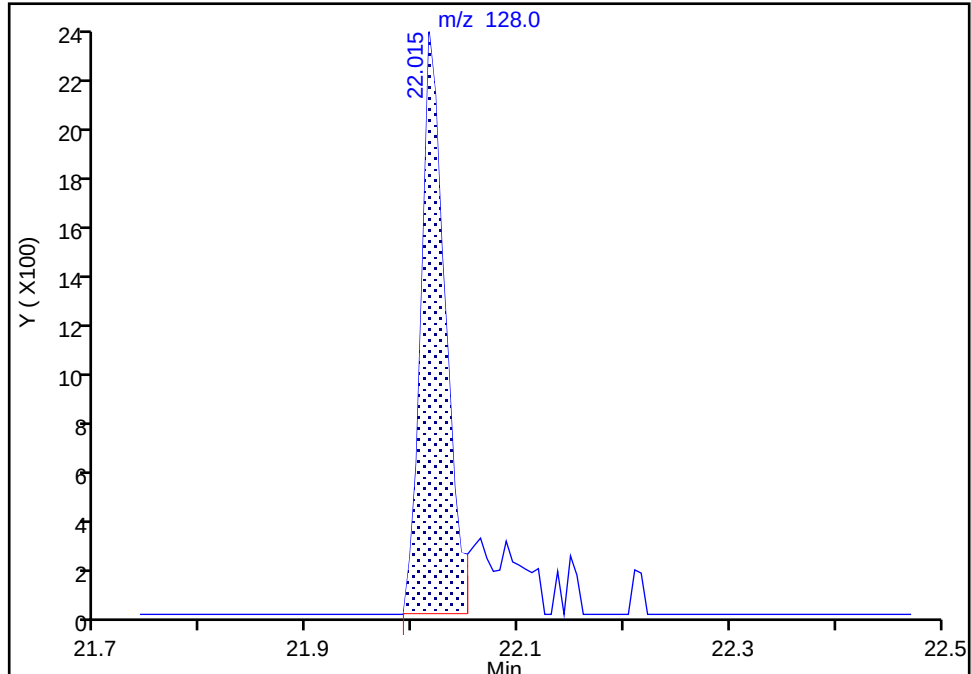
Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-003.D
Injection Date: 24-Apr-2025 11:56:30 Instrument ID: CHAE.i
Lims ID: ic
Client ID:
Operator ID: vtp ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Method: MADEP_APH_1 Limit Group: AIR_APH_Limits
Column: RTX-624 (0.32 mm) Detector: MS SCAN

33 Naphthalene, CAS: 91-20-3

Signal: 1

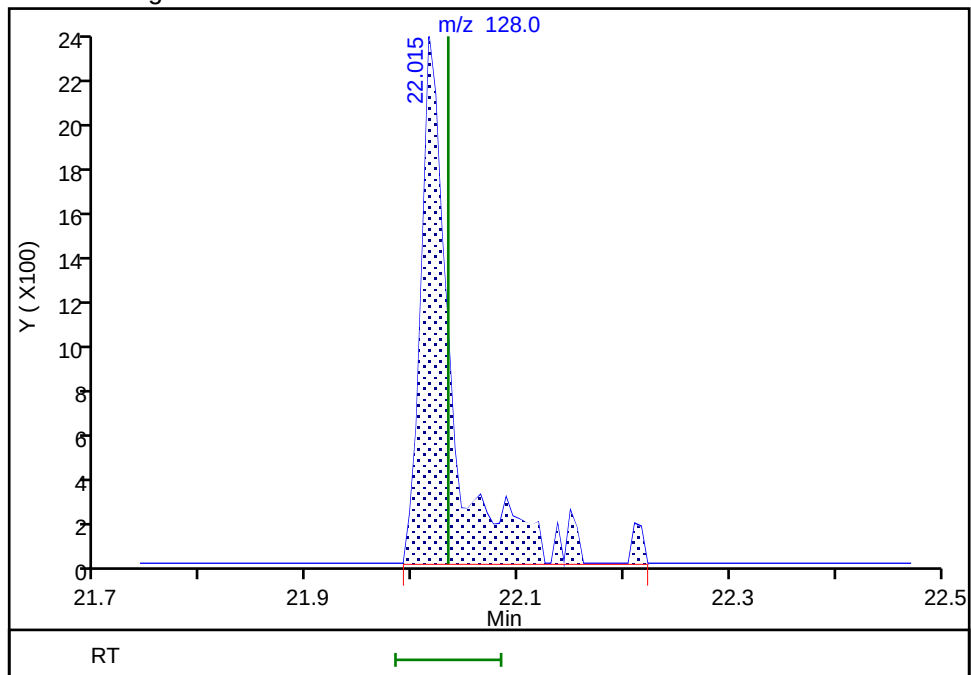
RT: 22.02
Area: 3698
Amount: 0.586595
Amount Units: ug/m3

Processing Integration Results



RT: 22.02
Area: 4899
Amount: 0.593793
Amount Units: ug/m3

Manual Integration Results



Reviewer: V0FK, 24-Apr-2025 16:24:17 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-005.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 24-Apr-2025 13:40:30 ALS Bottle#: 5 Worklist Smp#: 5
 Purge Vol: 250.000 mL Dil. Factor: 1.0000
 Sample Info: 200-0064859-005
 Operator ID: vtp Instrument ID: CHAE.i
 Sublist: chrom-MADEP_APH_1*sub1
 Method: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\MADEP_APH_1.m
 Limit Group: AIR_APH_Limits
 Last Update: 25-Apr-2025 09:55:33 Calib Date: 24-Apr-2025 17:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-009.D
 Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
 Process Host: CTX1611

First Level Reviewer: V0FK

Date: 24-Apr-2025 14:49:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/m3	OnCol Amt ug/m3	Flags
1 Butadiene	54	5.182	5.188	-0.006	87	2648	0.8846	0.8197	
2 2-Methylbutane	43	6.940	6.940	0.000	94	5156	1.18	1.29	
3 Methyl tert-butyl ether	73	9.994	9.964	0.030	96	13321	1.44	1.50	Ma
* 4 Chlorobromomethane	128	11.113	11.132	-0.019	91	164093	529.2	529.2	
5 Hexane	57	11.162	11.180	-0.018	93	7182	1.41	1.44	
A 12 C5-C8 Aliphatics	1	12.883	(6.840-18.927)		0	328864	9.12	13.1	
6 Benzene	78	12.951	12.963	-0.012	98	13642	1.28	1.26	
7 Cyclohexane	56	13.243	13.255	-0.012	96	7286	1.38	1.37	
* 8 1,4-Difluorobenzene	114	13.401	13.419	-0.018	99	903253	466.6	466.6	
9 2,3-Dimethylpentane	56	13.541	13.553	-0.012	90	8269	1.64	1.63	
10 n-Heptane	43	14.508	14.520	-0.012	94	8269	1.64	1.62	
11 Toluene	91	16.236	16.242	-0.006	98	15940	1.51	1.43	
14 n-Octane	43	17.185	17.197	-0.012	91	11415	1.87	1.81	Ma
* 15 Chlorobenzene-d5	117	17.891	17.903	-0.012	97	818797	480.9	480.9	
16 Ethylbenzene	91	18.243	18.249	-0.006	99	21282	1.74	1.64	
17 2,3-Dimethylheptane	43	18.292	18.298	-0.006	95	15871	2.10	2.03	
18 m-Xylene & p-Xylene	91	18.383	18.395	-0.012	98	15817	1.74	1.61	
19 o-Xylene	91	18.767	18.779	-0.012	98	16817	1.74	1.61	
20 n-Nonane	43	18.925	18.937	-0.012	91	11501	2.10	1.96	
* 21 4-Bromofluorobenzene	95	19.132	19.144	-0.012	98	549955	715.8	715.8	
22 Isopropylbenzene	105	19.229	19.241	-0.012	98	24392	1.97	1.81	
23 3-Ethyltoluene	105	19.703	19.716	-0.013	98	21229	1.97	1.75	
24 1,3,5-Trimethylbenzene	105	19.795	19.807	-0.012	98	18683	1.97	1.75	
A 37 C9-C12 Aliphatics	1	20.174	(18.288-22.060)		0	292845	14.2	12.7	
26 n-Decane	57	20.166	20.184	-0.018	91	11033	2.33	1.96	
A 28 C9-C10 Aromatics (mz 134)	134	20.437	(18.879-21.933)		0	6338	2.20	1.94	
A 25 C9-C10 Aromatics (mz 120)	120	19.840	(18.879-21.933)		0	33030	7.88	7.05	
27 4-Isopropyltoluene	119	20.440	20.446	-0.006	94	25579	2.20	1.99	
29 1,2,3-Trimethylbenzene	105	20.446	20.452	-0.006	95	19095	1.97	1.76	
30 Butylcyclohexane	83	20.622	20.634	-0.012	95	14410	2.30	2.00	
31 Undecane	57	21.121	21.133	-0.012	95	9245	2.56	1.87	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/m3	OnCol Amt ug/m3	Flags
32 Dodecane	57	21.942	21.960	-0.018	96	4767	2.79	1.69	M
33 Naphthalene	128	22.015	22.033	-0.018	98	10838	2.10	1.44	M
S 35 Xylenes, Total	1				0		3.47	3.22	
S 36 C9-C10 Aromatics	1				0		10.1	8.99	
S 38 C5-C8 Aliphatics (adjusted)	1				0			-13.0	
S 39 C9-C12 Aliphatics (adjusted)	1				0			-8.99	
\$ 40 BFB									

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

APHLv1w_00043

Amount Added: 100.00

Units: mL

ATTO15AEISs_00003

Amount Added: 60.00

Units: mL

Run Reagent

Report Date: 25-Apr-2025 09:55:33

Chrom Revision: 2.3 18-Apr-2025 15:35:42

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-005.D

Injection Date: 24-Apr-2025 13:40:30

Instrument ID: CHAE.i

Operator ID: vtp

Lims ID: ic

Worklist Smp#: 5

Client ID:

Purge Vol: 250.000 mL

Dil. Factor: 1.0000

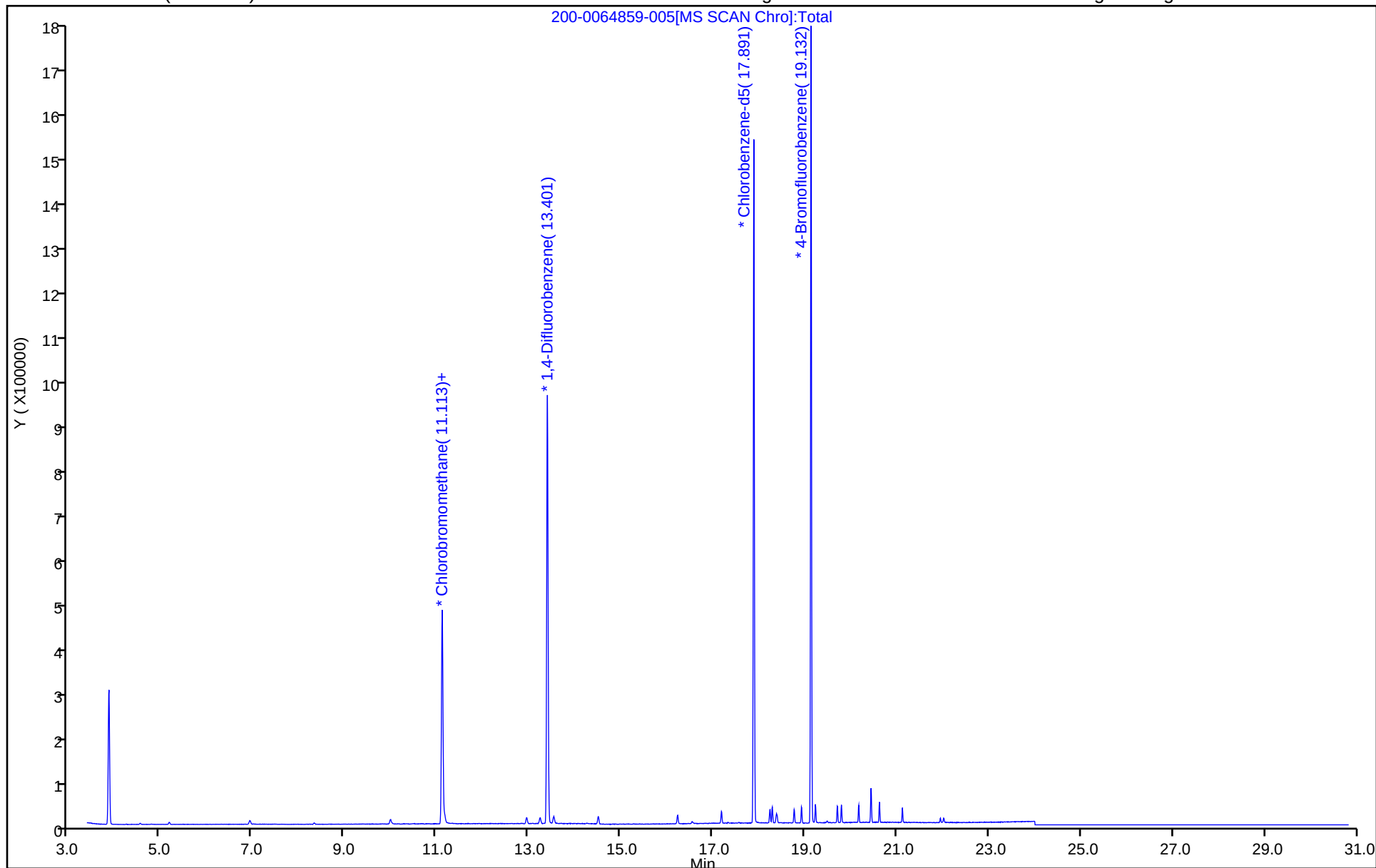
ALS Bottle#: 5

Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-005.D

Injection Date: 24-Apr-2025 13:40:30

Instrument ID: CHAE.i

Lims ID: ic

Client ID:

Operator ID: vtp

ALS Bottle#: 5

Worklist Smp#: 5

Purge Vol: 250.000 mL

Dil. Factor: 1.0000

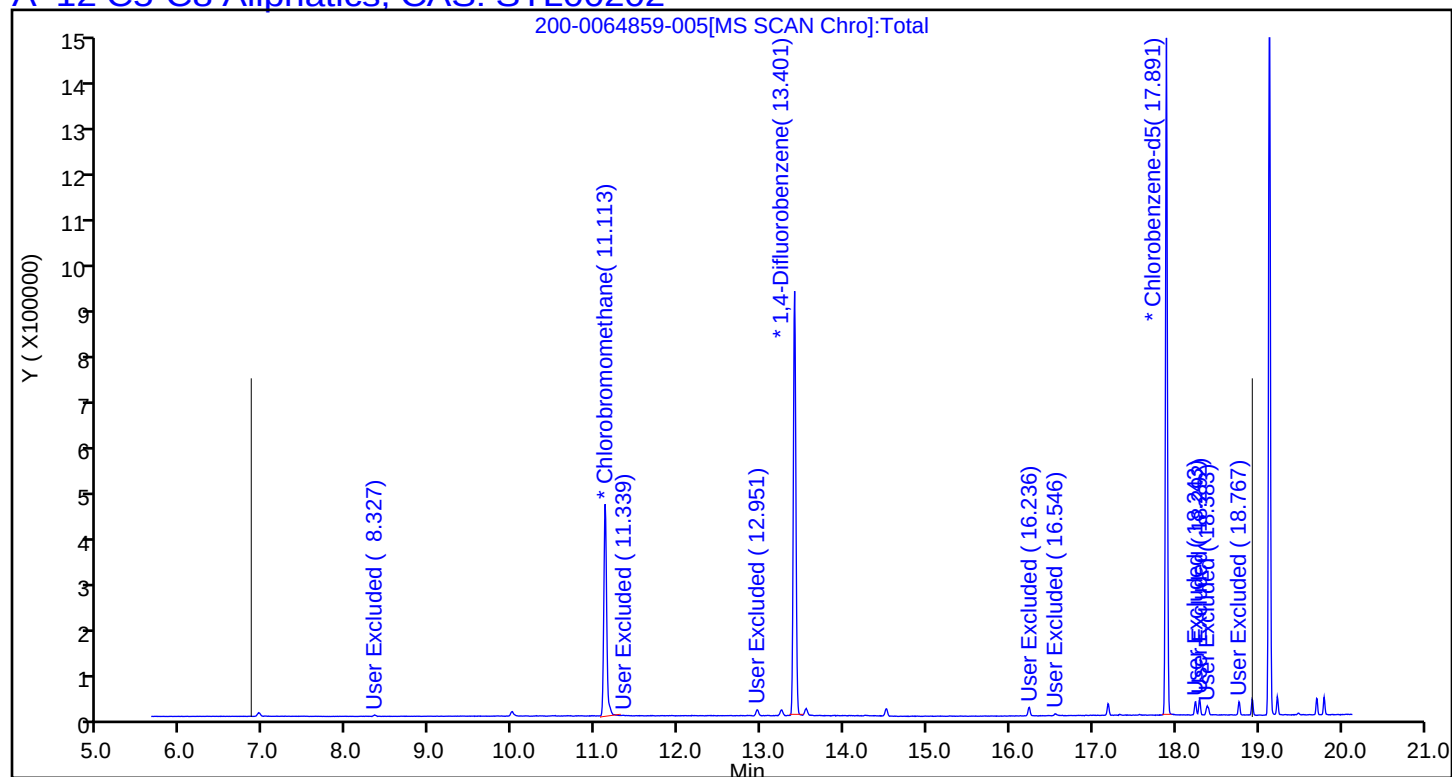
Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Detector: MS SCAN

A 12 C5-C8 Aliphatics, CAS: STL00202



Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-005.D

Injection Date: 24-Apr-2025 13:40:30

Instrument ID: CHAE.i

Lims ID: ic

Client ID:

Operator ID: vtp

ALS Bottle#: 5

Worklist Smp#: 5

Purge Vol: 250.000 mL

Dil. Factor: 1.0000

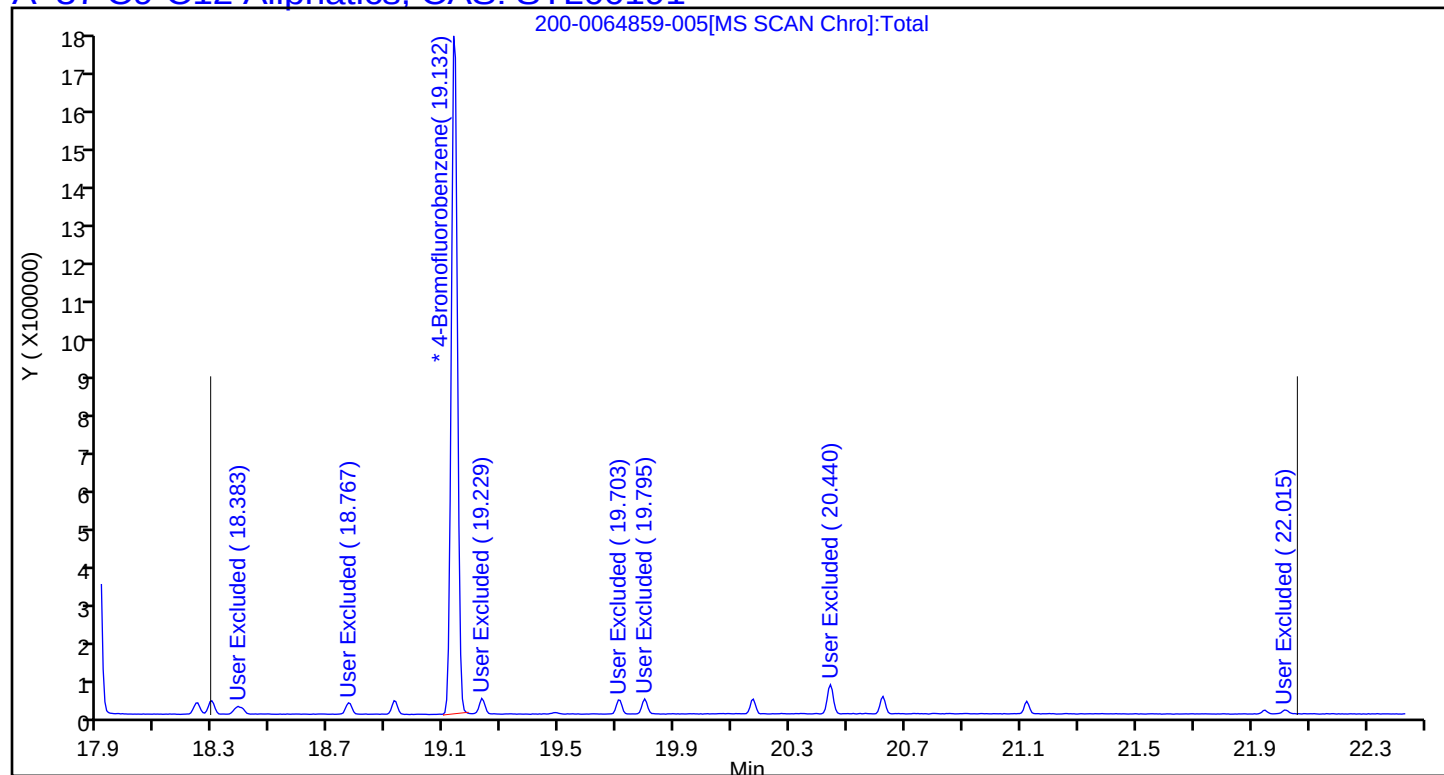
Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Detector: MS SCAN

A 37 C9-C12 Aliphatics, CAS: STL00191



Eurofins Burlington

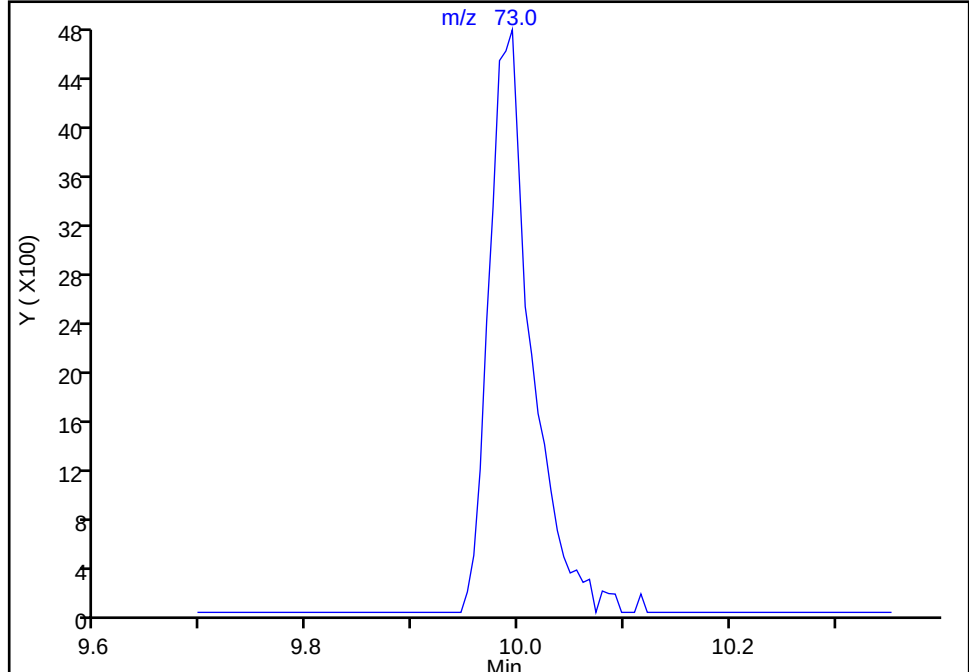
Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-005.D
Injection Date: 24-Apr-2025 13:40:30 Instrument ID: CHAE.i
Lims ID: ic
Client ID:
Operator ID: vtp ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Method: MADEP_APH_1 Limit Group: AIR_APH_Limits
Column: RTX-624 (0.32 mm) Detector: MS SCAN

3 Methyl tert-butyl ether, CAS: 1634-04-4

Signal: 1

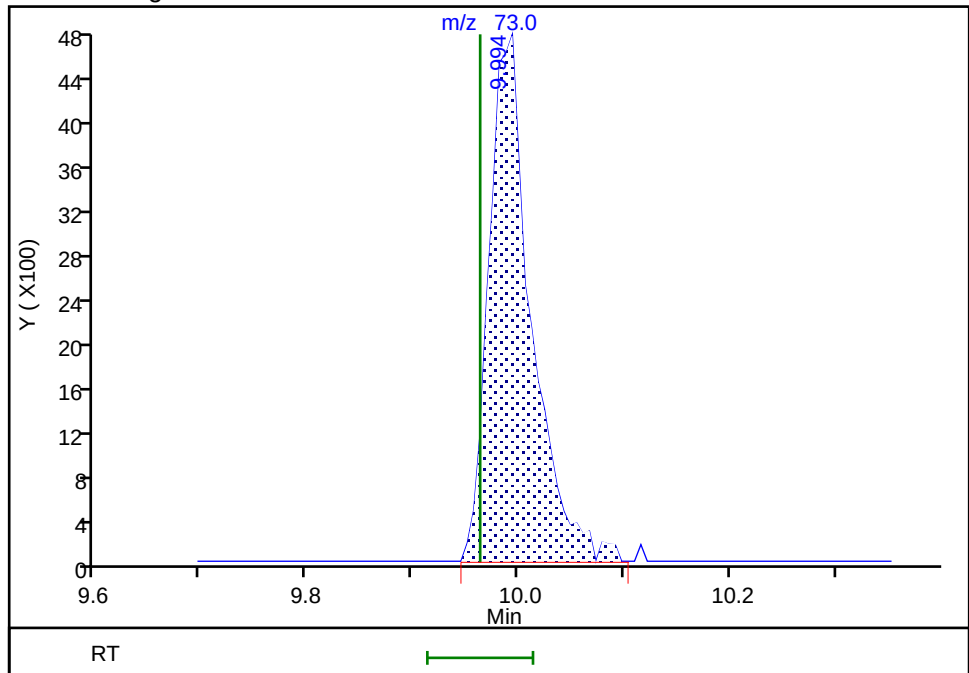
Not Detected
Expected RT: 9.96

Processing Integration Results



RT: 9.99
Area: 13321
Amount: 1.504886
Amount Units: ug/m3

Manual Integration Results



Reviewer: V0FK, 24-Apr-2025 20:37:43 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Burlington

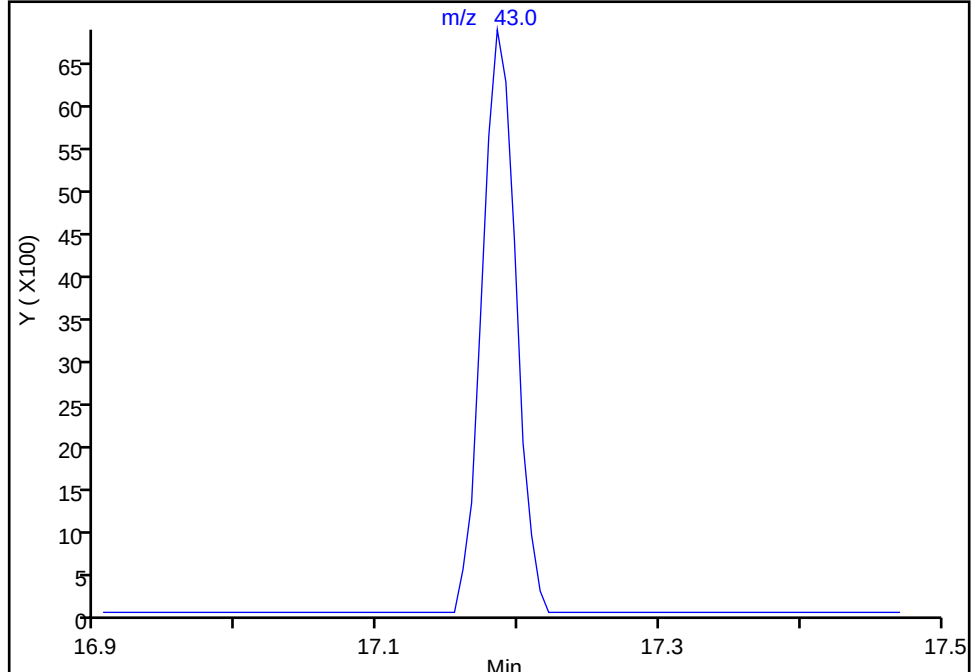
Data File:	\\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-005.D		
Injection Date:	24-Apr-2025 13:40:30	Instrument ID:	CHAE.i
Lims ID:	ic		
Client ID:			
Operator ID:	vtp	ALS Bottle#:	5
Purge Vol:	250.000 mL	Dil. Factor:	1.0000
Method:	MADEP_APH_1	Limit Group:	AIR_APH_Limits
Column:	RTX-624 (0.32 mm)	Detector:	MS SCAN
		Worklist Smp#:	5

14 n-Octane, CAS: 111-65-9

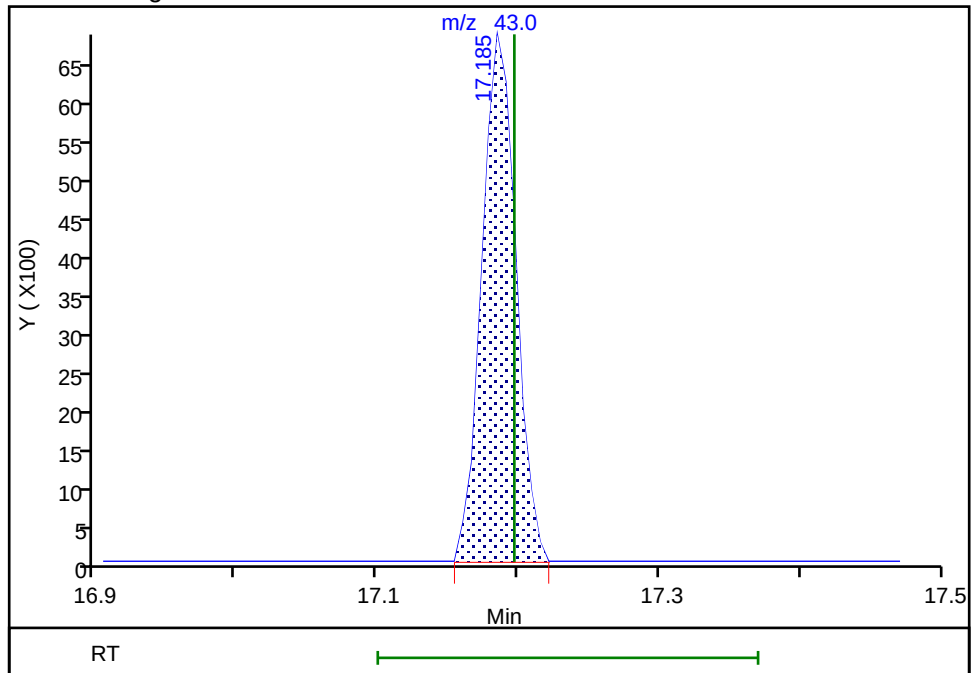
Signal: 1

Not Detected
Expected RT: 17.20

Processing Integration Results

RT: 17.18
Area: 11415
Amount: 1.811840
Amount Units: ug/m3

Manual Integration Results



Reviewer: V0FK, 24-Apr-2025 20:37:40 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Burlington

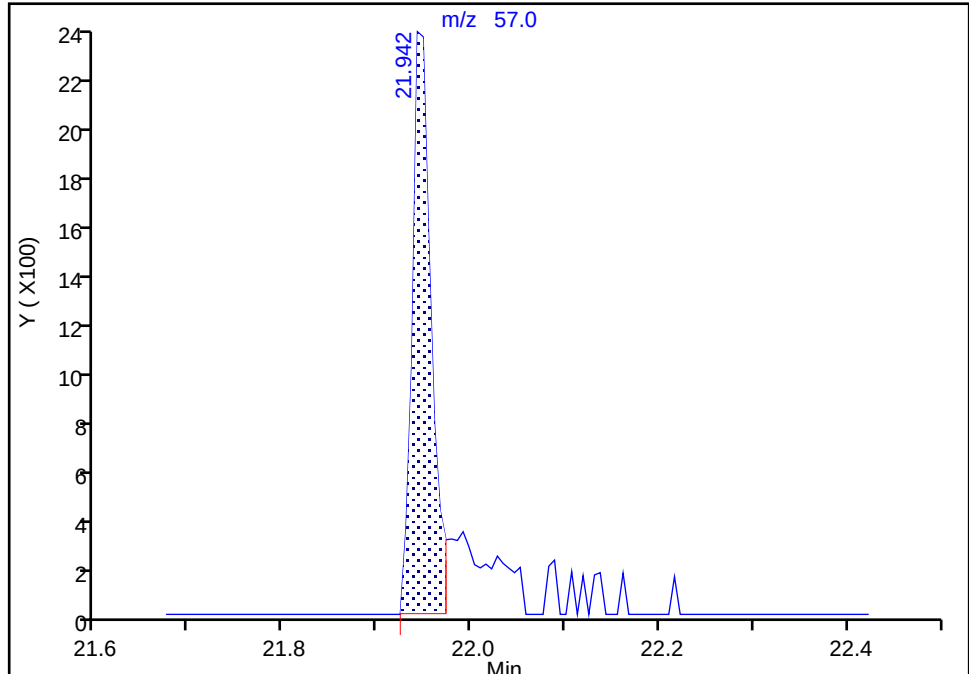
Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-005.D
Injection Date: 24-Apr-2025 13:40:30 Instrument ID: CHAE.i
Lims ID: ic
Client ID:
Operator ID: vtp ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Method: MADEP_APH_1 Limit Group: AIR_APH_Limits
Column: RTX-624 (0.32 mm) Detector: MS SCAN

32 Dodecane, CAS: 112-40-3

Signal: 1

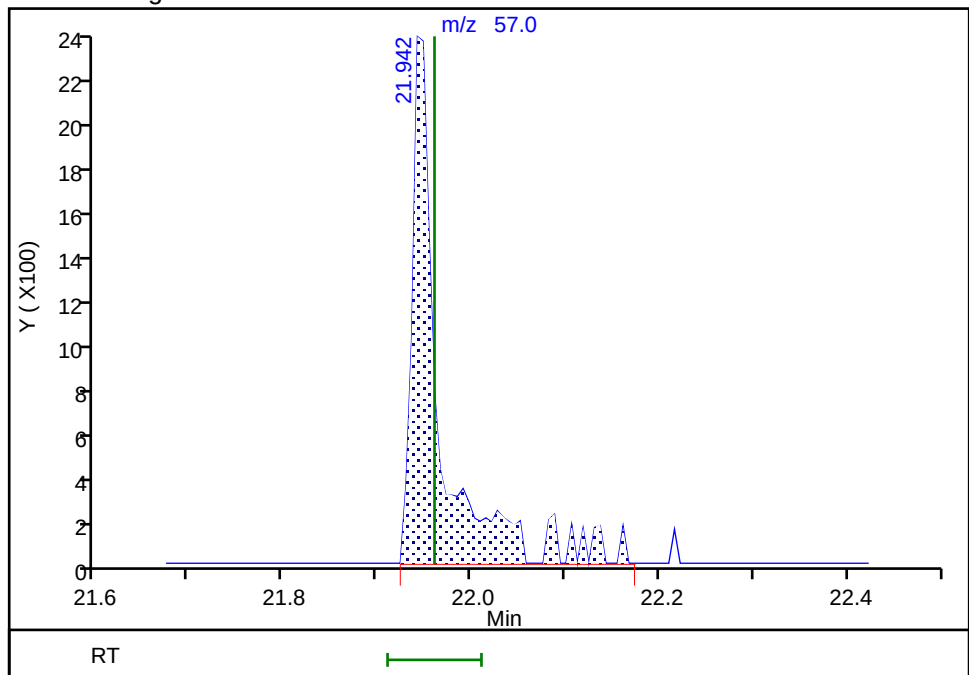
RT: 21.94
Area: 3253
Amount: 1.461924
Amount Units: ug/m3

Processing Integration Results



RT: 21.94
Area: 4767
Amount: 1.689298
Amount Units: ug/m3

Manual Integration Results



Reviewer: V0FK, 24-Apr-2025 16:38:36 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Burlington

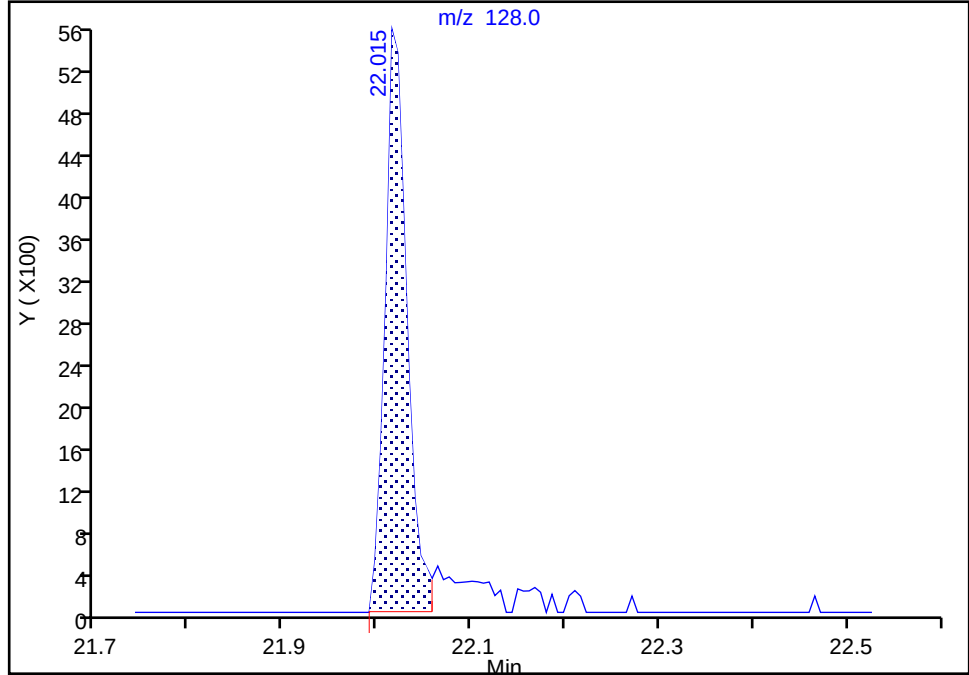
Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-005.D
Injection Date: 24-Apr-2025 13:40:30 Instrument ID: CHAE.i
Lims ID: ic
Client ID:
Operator ID: vtp ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Method: MADEP_APH_1 Limit Group: AIR_APH_Limits
Column: RTX-624 (0.32 mm) Detector: MS SCAN

33 Naphthalene, CAS: 91-20-3

Signal: 1

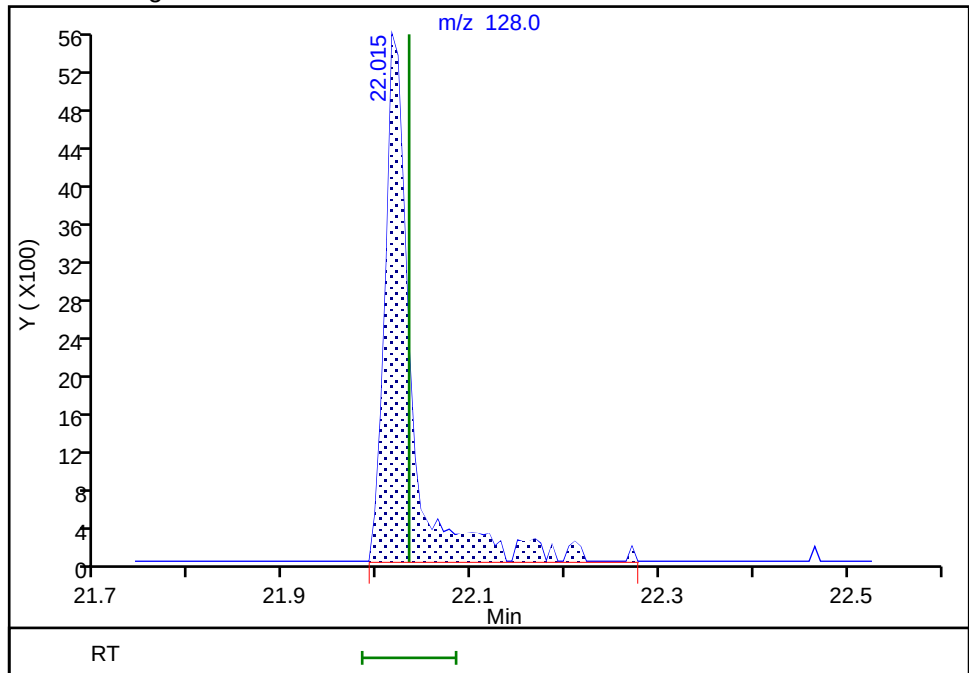
RT: 22.02
Area: 8888
Amount: 1.476495
Amount Units: ug/m3

Processing Integration Results



RT: 22.02
Area: 10838
Amount: 1.438211
Amount Units: ug/m3

Manual Integration Results



Reviewer: V0FK, 24-Apr-2025 16:38:30 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-006.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 24-Apr-2025 14:35:30 ALS Bottle#: 6 Worklist Smp#: 6
 Purge Vol: 250.000 mL Dil. Factor: 1.0000
 Sample Info: 200-0064859-006
 Operator ID: vtp Instrument ID: CHAE.i
 Sublist: chrom-MADEP_APH_1*sub1
 Method: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\MADEP_APH_1.m
 Limit Group: AIR_APH_Limits
 Last Update: 25-Apr-2025 09:55:34 Calib Date: 24-Apr-2025 17:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-009.D
 Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
 Process Host: CTX1611

First Level Reviewer: V0FK

Date: 24-Apr-2025 15:33:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/m3	OnCol Amt ug/m3	Flags
1 Butadiene	54	5.182	5.188	-0.006	93	12891	4.42	3.99	
2 2-Methylbutane	43	6.934	6.940	-0.006	93	21649	5.90	5.43	
3 Methyl tert-butyl ether	73	9.970	9.964	0.006	97	59821	7.22	6.76	
* 4 Chlorobromomethane	128	11.114	11.132	-0.018	91	163944	529.2	529.2	
5 Hexane	57	11.168	11.180	-0.012	94	34442	7.06	6.86	
A 12 C5-C8 Aliphatics	1	12.883	(6.840-18.927)		0	1082511	45.6	43.0	
6 Benzene	78	12.951	12.963	-0.012	98	67050	6.38	6.16	
7 Cyclohexane	56	13.243	13.255	-0.012	98	36334	6.88	6.79	
* 8 1,4-Difluorobenzene	114	13.401	13.419	-0.018	99	906540	466.6	466.6	
9 2,3-Dimethylpentane	56	13.541	13.553	-0.012	92	40314	8.21	7.90	
10 n-Heptane	43	14.508	14.520	-0.012	94	38610	8.21	7.56	
11 Toluene	91	16.230	16.242	-0.012	98	75979	7.54	7.11	
14 n-Octane	43	17.185	17.197	-0.012	93	53209	9.35	8.41	Ma
* 15 Chlorobenzene-d5	117	17.891	17.903	-0.012	98	786368	480.9	480.9	
16 Ethylbenzene	91	18.244	18.249	-0.005	99	95834	8.69	7.70	
17 2,3-Dimethylheptane	43	18.292	18.298	-0.006	96	73146	10.5	9.73	
18 m-Xylene & p-Xylene	91	18.383	18.395	-0.012	98	72932	8.69	7.71	
19 o-Xylene	91	18.767	18.779	-0.012	98	75360	8.69	7.52	
20 n-Nonane	43	18.931	18.937	-0.006	91	52882	10.5	9.38	
* 21 4-Bromofluorobenzene	95	19.138	19.144	-0.006	98	539400	715.8	715.8	
22 Isopropylbenzene	105	19.229	19.241	-0.012	98	111922	9.85	8.67	
23 3-Ethyltoluene	105	19.710	19.716	-0.006	98	102342	9.85	8.78	
24 1,3,5-Trimethylbenzene	105	19.795	19.807	-0.012	98	91746	9.85	8.95	
A 37 C9-C12 Aliphatics	1	20.174	(18.288-22.060)		0	1460372	70.9	66.0	
26 n-Decane	57	20.172	20.184	-0.012	91	59933	11.7	11.1	
A 28 C9-C10 Aromatics (mz 134)	134	20.440	(18.879-21.933)		0	32404	11.0	10.3	
A 25 C9-C10 Aromatics (mz 120)	120	19.840	(18.879-21.933)		0	164302	39.4	36.5	
27 4-Isopropyltoluene	119	20.440	20.446	-0.006	95	129139	11.0	10.5	
29 1,2,3-Trimethylbenzene	105	20.446	20.452	-0.006	90	95632	9.85	9.18	
30 Butylcyclohexane	83	20.622	20.634	-0.012	96	75628	11.5	11.0	
31 Undecane	57	21.127	21.133	-0.006	95	55790	12.8	11.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/m3	OnCol Amt ug/m3	Flags
32 Dodecane	57	21.954	21.960	-0.006	97	35796	13.9	13.2	
33 Naphthalene	128	22.027	22.033	-0.006	98	72577	10.5	10.0	M
S 35 Xylenes, Total	1				0		17.4	15.2	
S 36 C9-C10 Aromatics	1				0		50.4	46.9	
S 38 C5-C8 Aliphatics (adjusted)	1				0			-62.1	
S 39 C9-C12 Aliphatics (adjusted)	1				0			-46.9	
\$ 40 BFB									

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

APHLv1w_00043

Amount Added: 500.00

Units: mL

ATTO15AEISs_00003

Amount Added: 60.00

Units: mL

Run Reagent

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-006.D

Injection Date: 24-Apr-2025 14:35:30

Instrument ID: CHAE.i

Operator ID: vtp

Lims ID: ic

Worklist Smp#: 6

Client ID:

Purge Vol: 250.000 mL

Dil. Factor: 1.0000

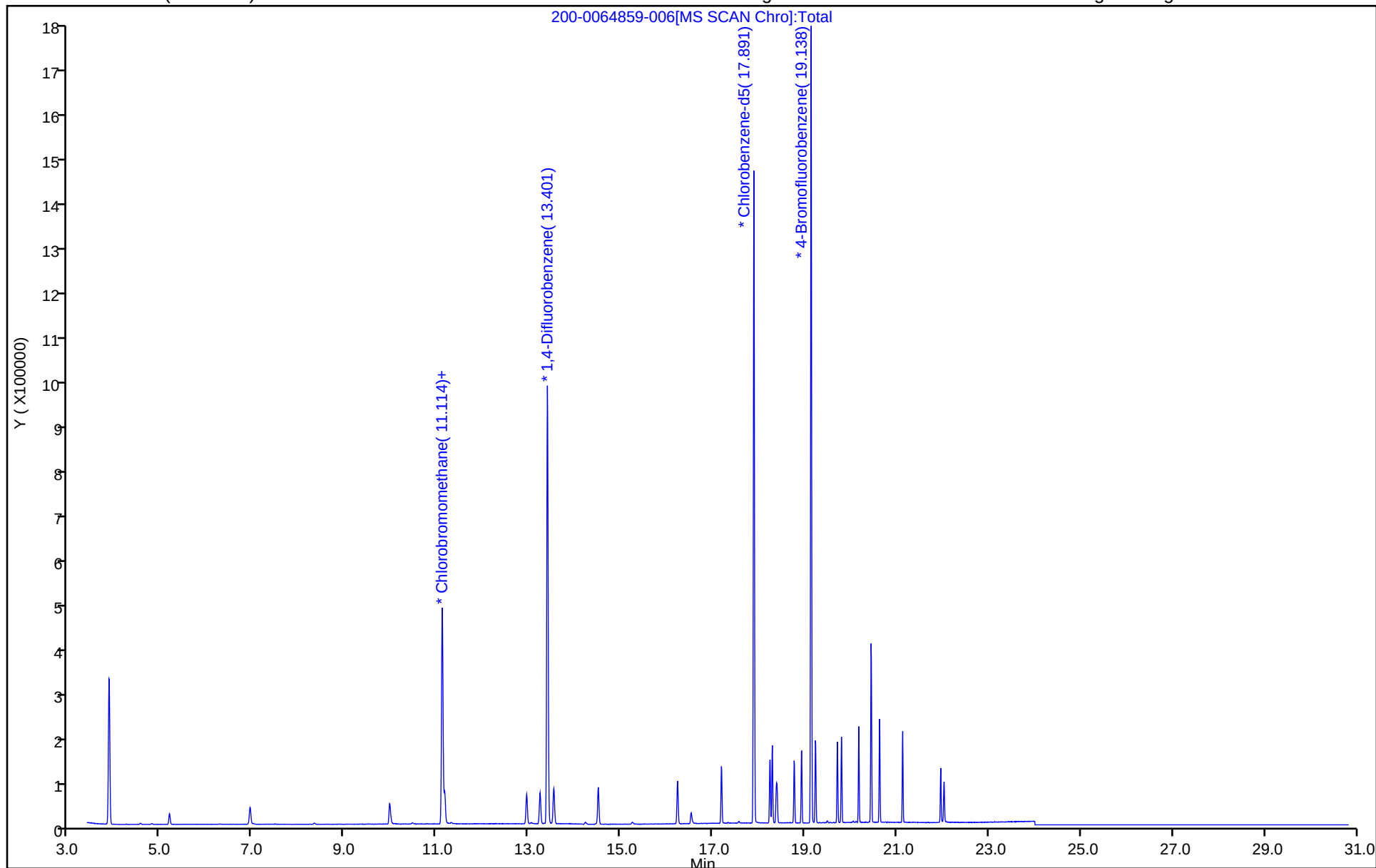
ALS Bottle#: 6

Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-006.D

Injection Date: 24-Apr-2025 14:35:30

Instrument ID: CHAE.i

Lims ID: ic

Client ID:

Operator ID: vtp

ALS Bottle#: 6

Worklist Smp#: 6

Purge Vol: 250.000 mL

Dil. Factor: 1.0000

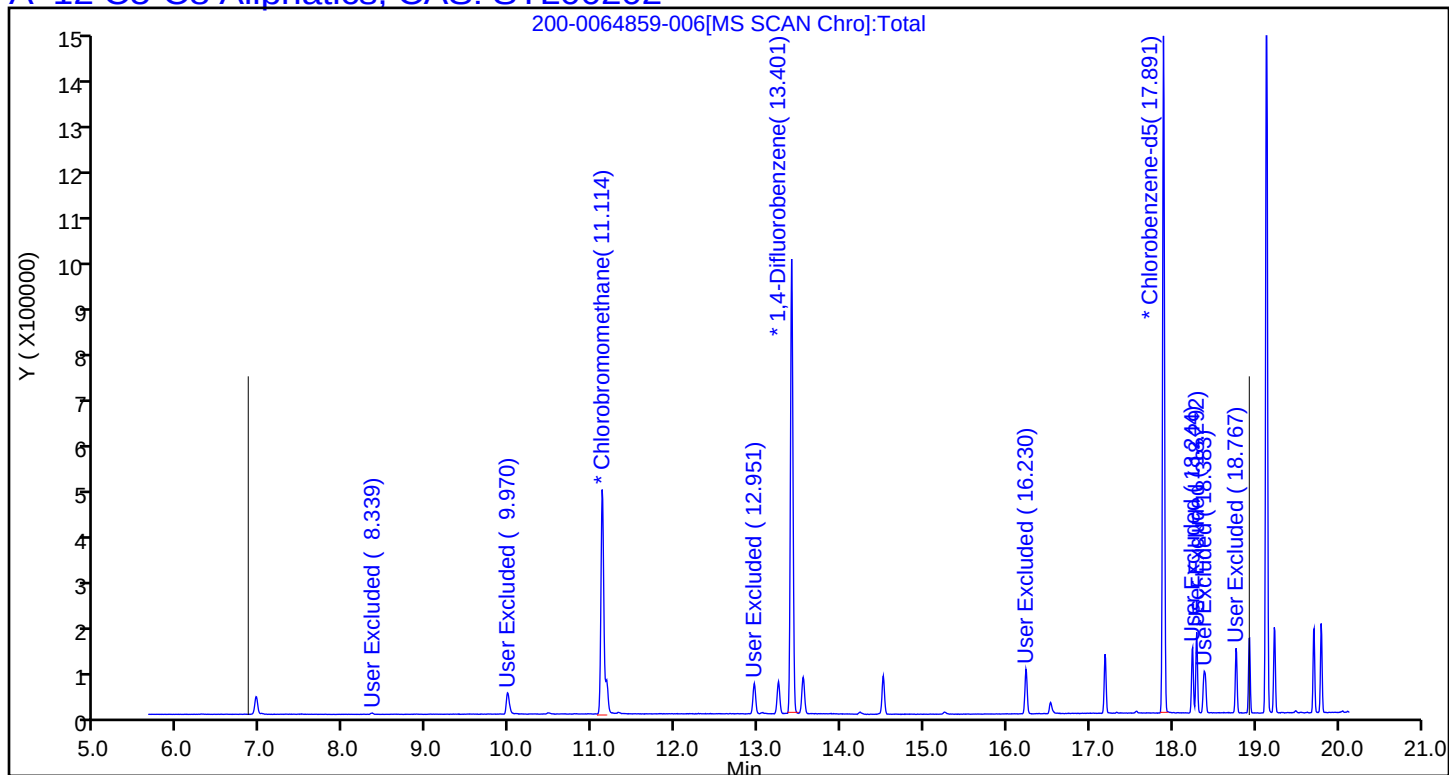
Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Detector: MS SCAN

A 12 C5-C8 Aliphatics, CAS: STL00202



Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-006.D

Injection Date: 24-Apr-2025 14:35:30

Instrument ID: CHAE.i

Lims ID: ic

Client ID:

Operator ID: vtp

ALS Bottle#: 6

Worklist Smp#: 6

Purge Vol: 250.000 mL

Dil. Factor: 1.0000

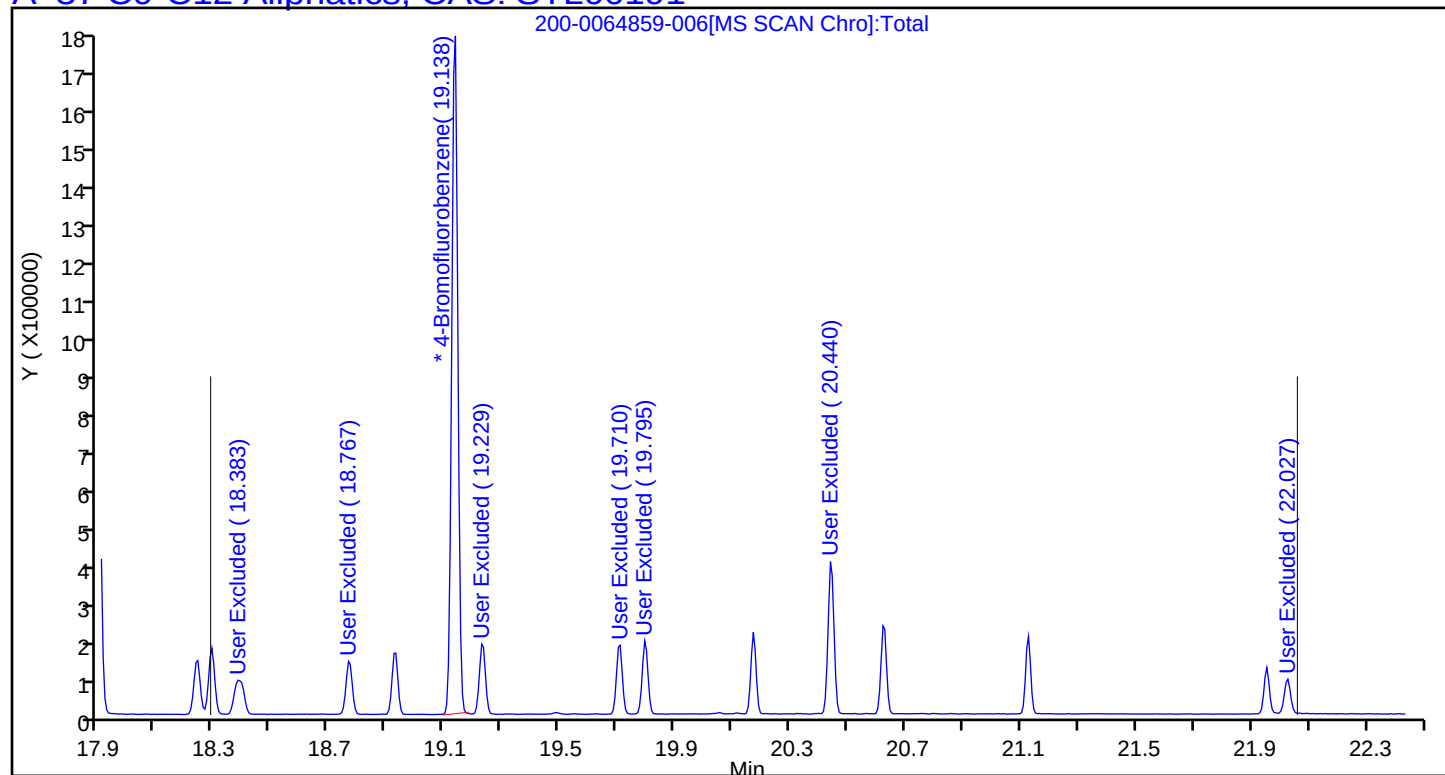
Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Detector: MS SCAN

A 37 C9-C12 Aliphatics, CAS: STL00191



Eurofins Burlington

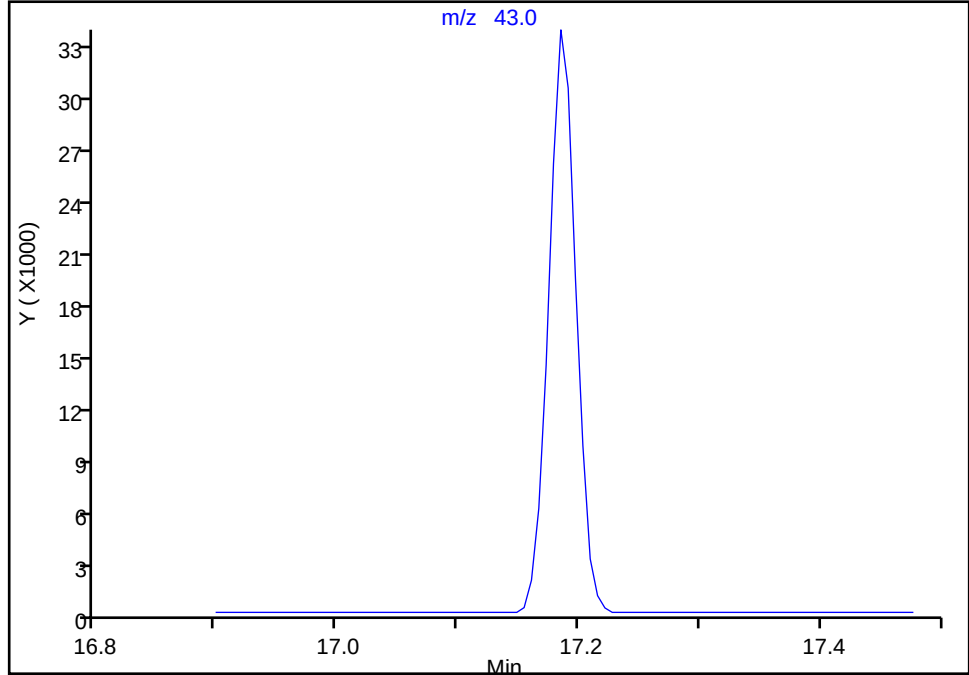
Data File:	\\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-006.D		
Injection Date:	24-Apr-2025 14:35:30	Instrument ID:	CHAE.i
Lims ID:	ic		
Client ID:			
Operator ID:	vtp	ALS Bottle#:	6
Purge Vol:	250.000 mL	Dil. Factor:	1.0000
Method:	MADEP_APH_1	Limit Group:	AIR_APH_Limits
Column:	RTX-624 (0.32 mm)	Detector:	MS SCAN
		Worklist Smp#:	6

14 n-Octane, CAS: 111-65-9

Signal: 1

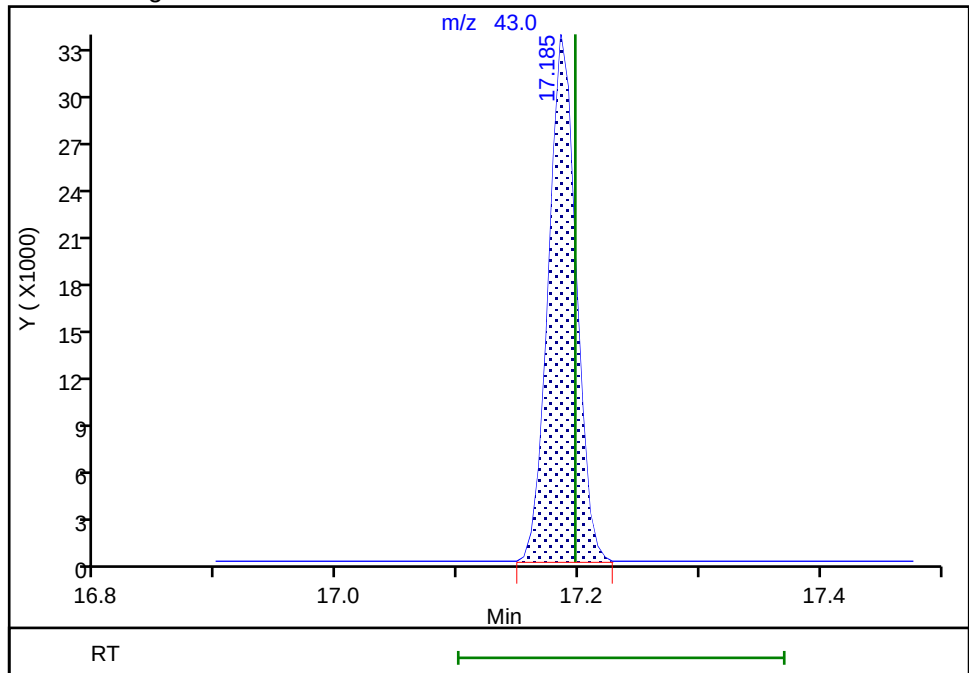
Not Detected
Expected RT: 17.20

Processing Integration Results



RT: 17.18
Area: 53209
Amount: 8.414950
Amount Units: ug/m3

Manual Integration Results



Reviewer: V0FK, 24-Apr-2025 20:37:53 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Burlington

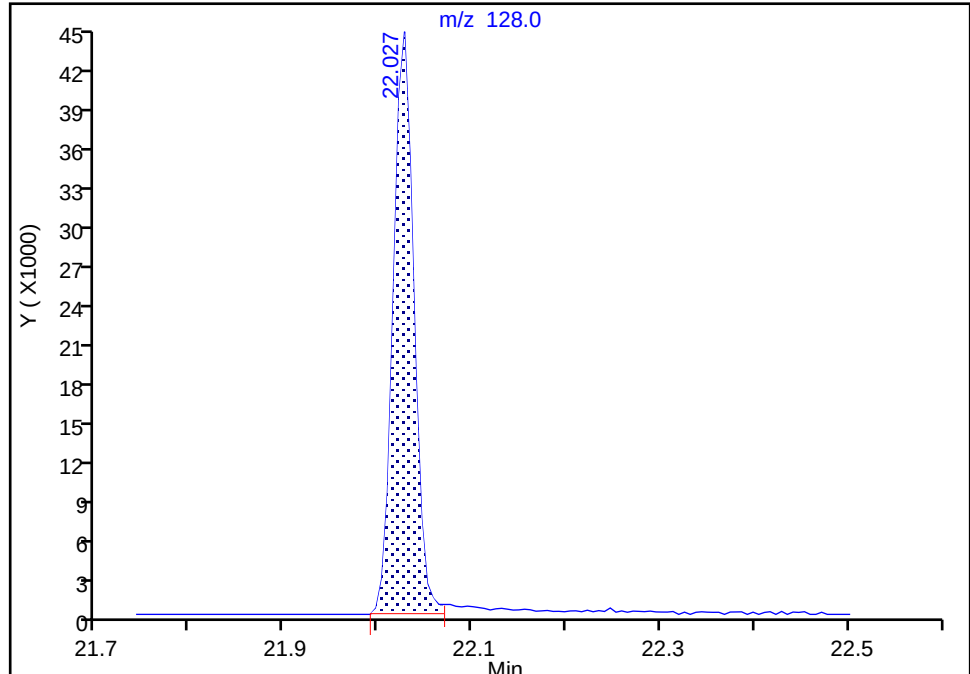
Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-006.D
Injection Date: 24-Apr-2025 14:35:30 Instrument ID: CHAE.i
Lims ID: ic
Client ID:
Operator ID: vtp ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Method: MADEP_APH_1 Limit Group: AIR_APH_Limits
Column: RTX-624 (0.32 mm) Detector: MS SCAN

33 Naphthalene, CAS: 91-20-3

Signal: 1

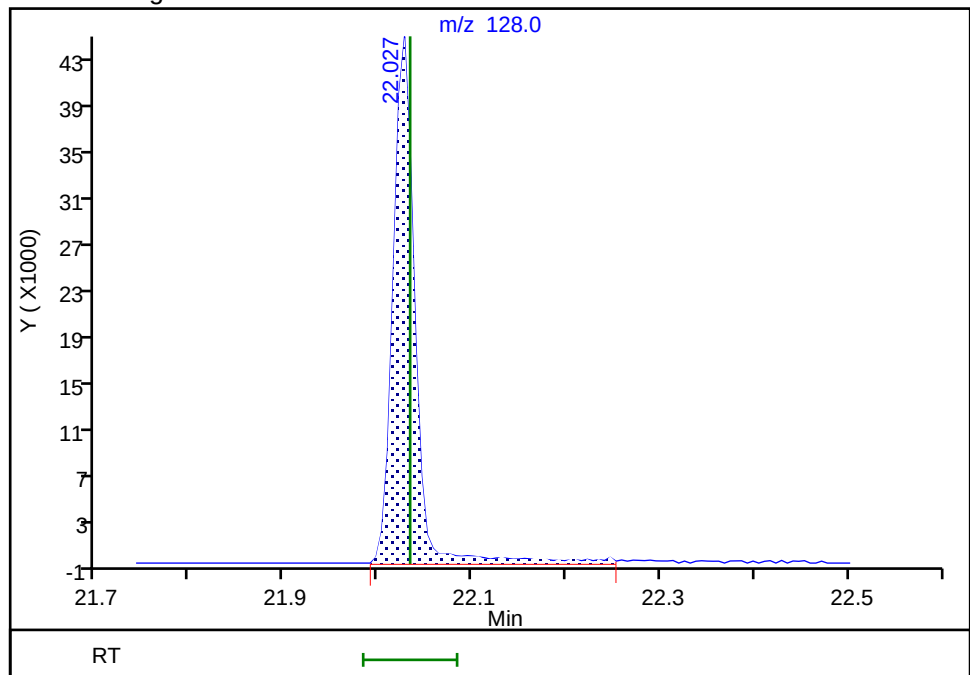
RT: 22.03
Area: 68424
Amount: 11.547398
Amount Units: ug/m3

Processing Integration Results



RT: 22.03
Area: 72577
Amount: 10.028199
Amount Units: ug/m3

Manual Integration Results



Reviewer: V0FK, 24-Apr-2025 16:37:53 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-007.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 24-Apr-2025 15:28:30 ALS Bottle#: 7 Worklist Smp#: 7
 Purge Vol: 250.000 mL Dil. Factor: 1.0000
 Sample Info: 200-0064859-007
 Operator ID: vtp Instrument ID: CHAE.i
 Sublist: chrom-MADEP_APH_1*sub1
 Method: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\MADEP_APH_1.m
 Limit Group: AIR_APH_Limits
 Last Update: 25-Apr-2025 09:55:37 Calib Date: 24-Apr-2025 17:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-009.D
 Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
 Process Host: CTX1611

First Level Reviewer: V0FK

Date: 24-Apr-2025 16:22:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/m3	OnCol Amt ug/m3	Flags
1 Butadiene	54	5.188	5.188	0.000	94	32687	11.1	11.0	
2 2-Methylbutane	43	6.940	6.940	0.000	94	50906	14.8	13.9	
3 Methyl tert-butyl ether	73	9.970	9.970	0.000	97	150598	18.1	18.5	
* 4 Chlorobromomethane	128	11.126	11.126	0.000	91	150661	529.2	529.2	
5 Hexane	57	11.174	11.174	0.000	94	81744	17.7	18.0	
A 12 C5-C8 Aliphatics	1	12.880	(6.840-18.921)		0	2411209	114.1	105.7	
6 Benzene	78	12.957	12.957	0.000	98	162004	16.0	16.4	
7 Cyclohexane	56	13.249	13.249	0.000	98	85506	17.2	17.6	
* 8 1,4-Difluorobenzene	114	13.407	13.407	0.000	99	820953	466.6	466.6	
9 2,3-Dimethylpentane	56	13.547	13.547	0.000	92	99546	20.5	21.5	
10 n-Heptane	43	14.514	14.514	0.000	94	101058	20.5	21.8	
11 Toluene	91	16.236	16.236	0.000	98	202265	18.9	19.3	
14 n-Octane	43	17.191	17.191	0.000	93	148628	23.4	26.0	Ma
* 15 Chlorobenzene-d5	117	17.897	17.897	0.000	97	769677	480.9	480.9	
16 Ethylbenzene	91	18.243	18.243	0.000	99	289682	21.7	23.8	
17 2,3-Dimethylheptane	43	18.292	18.292	0.000	96	213804	26.3	29.0	
18 m-Xylene & p-Xylene	91	18.395	18.395	0.000	98	221850	21.7	24.0	
19 o-Xylene	91	18.773	18.773	0.000	98	235895	21.7	24.1	
20 n-Nonane	43	18.931	18.931	0.000	91	168430	26.3	30.5	
* 21 4-Bromofluorobenzene	95	19.138	19.138	0.000	98	551141	715.8	715.8	
22 Isopropylbenzene	105	19.235	19.235	0.000	98	350606	24.6	27.7	
23 3-Ethyltoluene	105	19.710	19.710	0.000	98	327827	24.6	28.7	
24 1,3,5-Trimethylbenzene	105	19.801	19.801	0.000	98	286716	24.6	28.6	
A 37 C9-C12 Aliphatics	1	20.171	(18.282-22.060)		0	4662687	177.4	215.2	
26 n-Decane	57	20.178	20.178	0.000	90	191779	29.2	36.2	
A 28 C9-C10 Aromatics (mz 134)	134	20.437	(18.873-21.927)		0	100927	27.5	32.9	
A 25 C9-C10 Aromatics (mz 120)	120	19.846	(18.873-21.927)		0	509233	98.5	115.6	
27 4-Isopropyltoluene	119	20.446	20.446	0.000	95	399397	27.5	33.0	
29 1,2,3-Trimethylbenzene	105	20.452	20.452	0.000	92	300486	24.6	29.5	
30 Butylcyclohexane	83	20.628	20.628	0.000	96	234494	28.7	34.7	
31 Undecane	57	21.133	21.133	0.000	96	191943	32.0	41.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/m3	OnCol Amt ug/m3	Flags
32 Dodecane	57	21.960	21.960	0.000	97	123532	34.9	46.6	
33 Naphthalene	128	22.027	22.027	0.000	99	216518	26.2	30.6	
S 35 Xylenes, Total	1				0		43.5	48.0	
S 36 C9-C10 Aromatics	1				0		126.0	148.6	
\$ 40 BFB									

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

APHLv13w_00066

Amount Added: 50.00

Units: mL

ATTO15AEISs_00003

Amount Added: 60.00

Units: mL

Run Reagent

Report Date: 25-Apr-2025 09:55:37

Chrom Revision: 2.3 18-Apr-2025 15:35:42

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-007.D

Injection Date: 24-Apr-2025 15:28:30

Instrument ID: CHAE.i

Operator ID: vtp

Lims ID: ic

Worklist Smp#: 7

Client ID:

Purge Vol: 250.000 mL

Dil. Factor: 1.0000

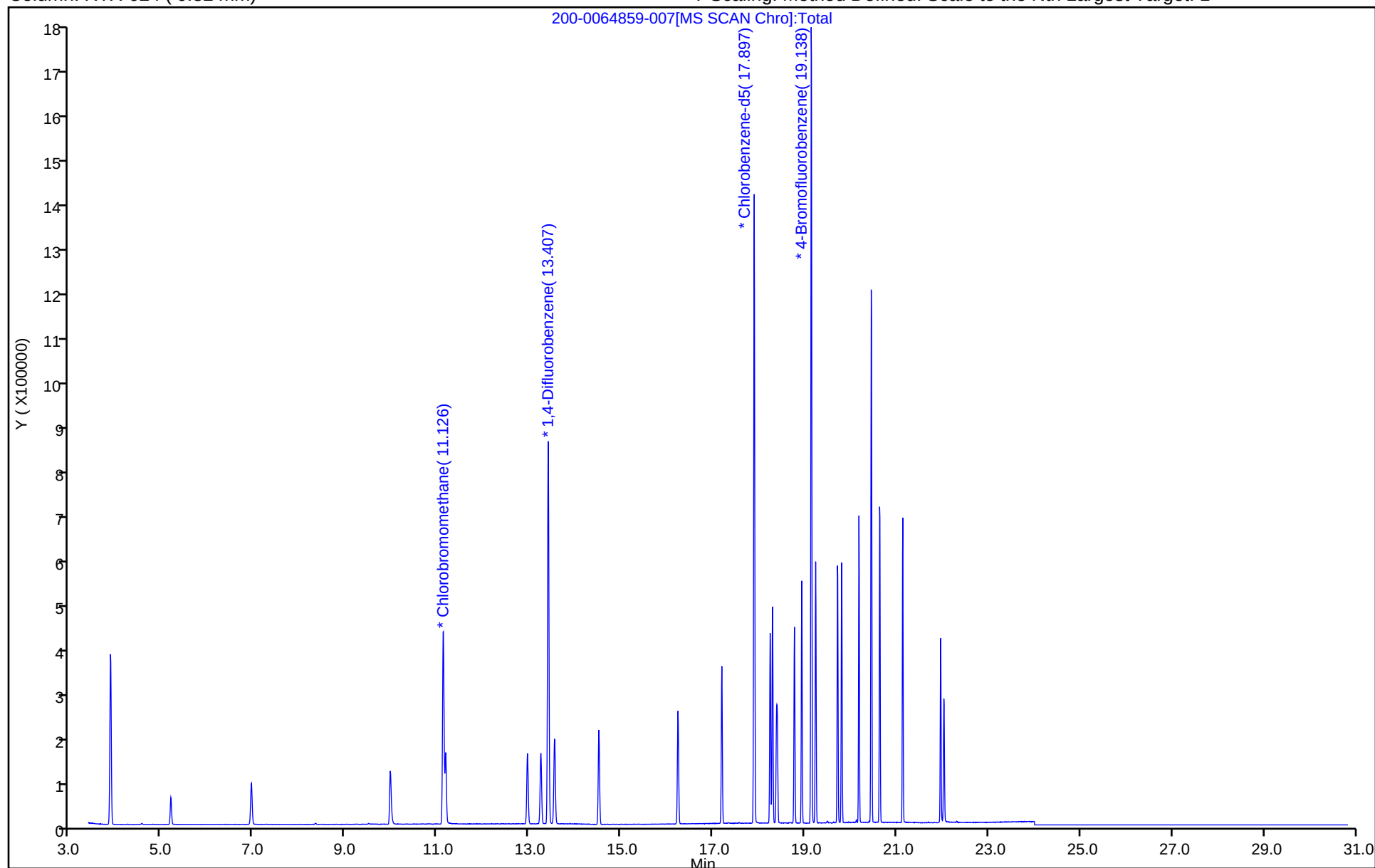
ALS Bottle#: 7

Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-007.D

Injection Date: 24-Apr-2025 15:28:30

Instrument ID: CHAE.i

Lims ID: ic

Client ID:

Operator ID: vtp

ALS Bottle#:

7

Worklist Smp#:

7

Purge Vol: 250.000 mL

Dil. Factor:

1.0000

Method: MADEP_APH_1

Limit Group:

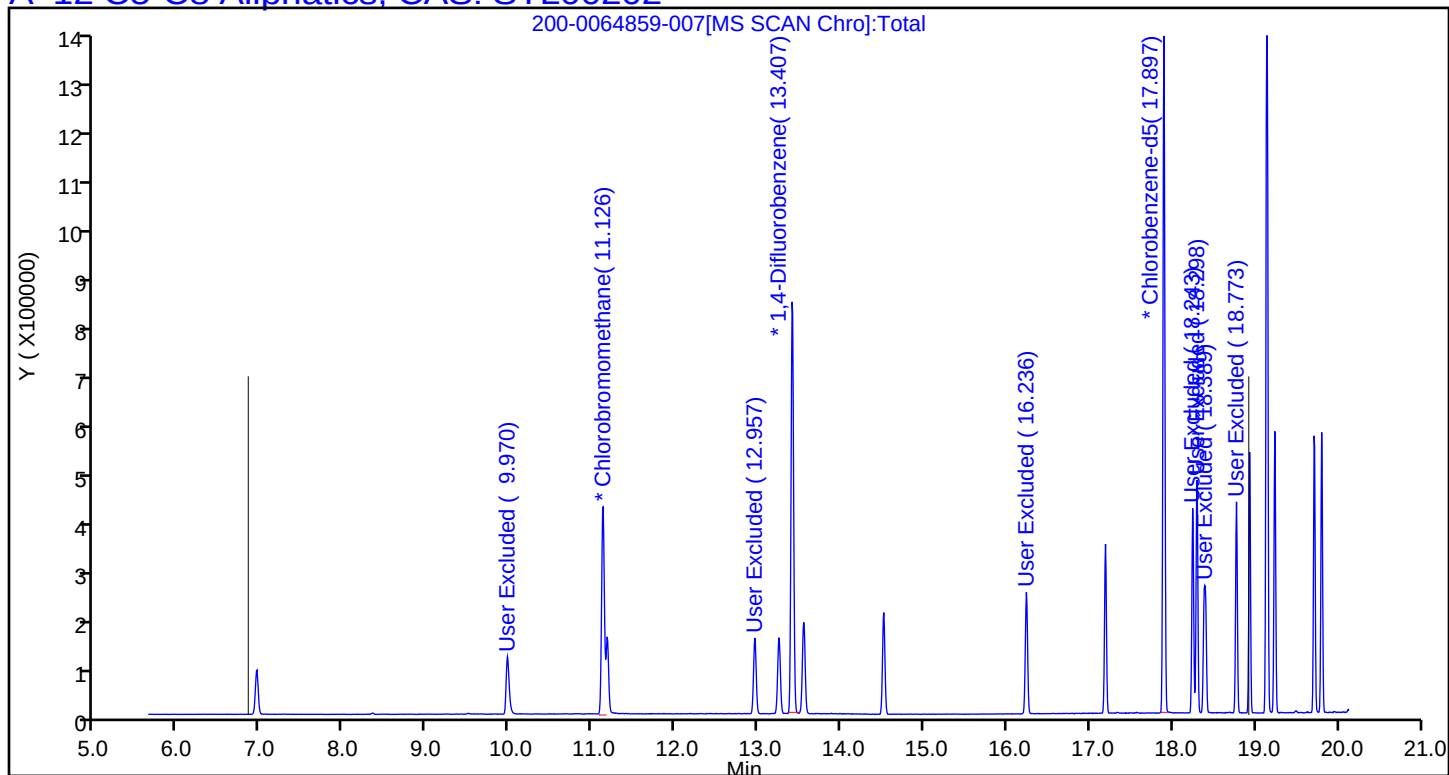
AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Detector

MS SCAN

A 12 C5-C8 Aliphatics, CAS: STL00202



Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-007.D

Injection Date: 24-Apr-2025 15:28:30

Instrument ID: CHAE.i

Lims ID: ic

Client ID:

Operator ID: vtp

ALS Bottle#: 7

Worklist Smp#: 7

Purge Vol: 250.000 mL

Dil. Factor: 1.0000

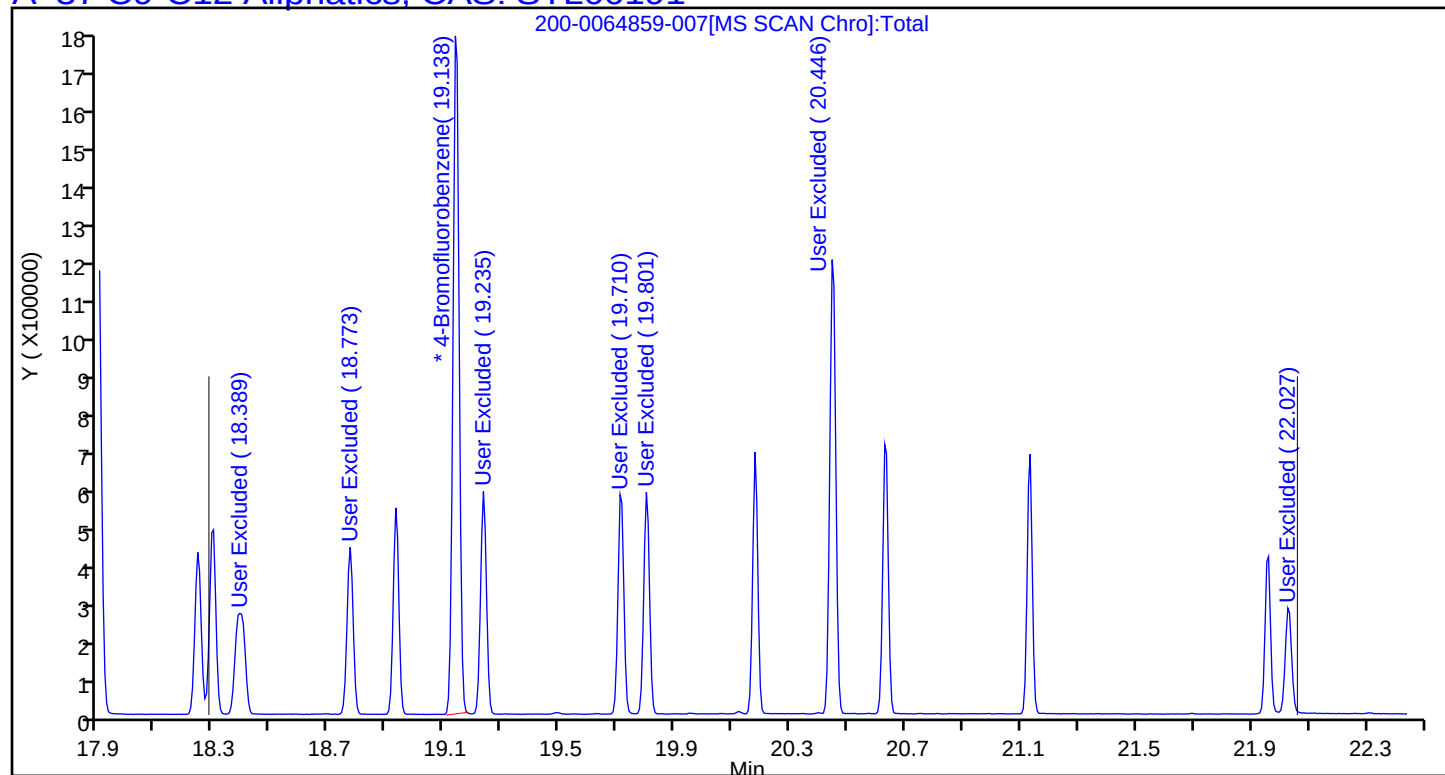
Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Detector: MS SCAN

A 37 C9-C12 Aliphatics, CAS: STL00191



Eurofins Burlington

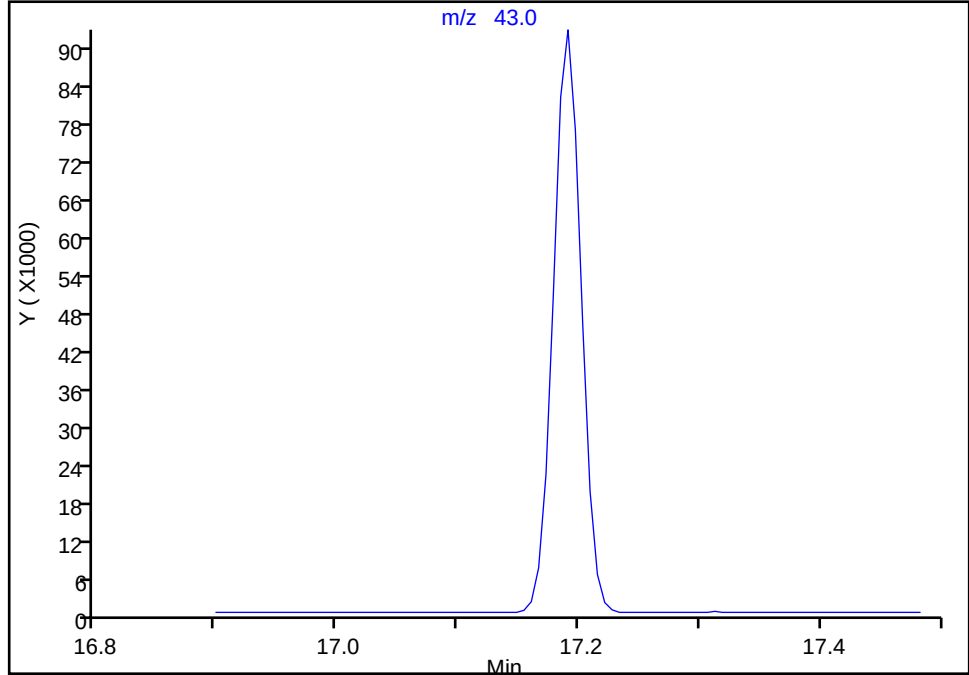
Data File:	\\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-007.D		
Injection Date:	24-Apr-2025 15:28:30	Instrument ID:	CHAE.i
Lims ID:	ic		
Client ID:			
Operator ID:	vtp	ALS Bottle#:	7
Purge Vol:	250.000 mL	Dil. Factor:	1.0000
Method:	MADEP_APH_1	Limit Group:	AIR_APH_Limits
Column:	RTX-624 (0.32 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

14 n-Octane, CAS: 111-65-9

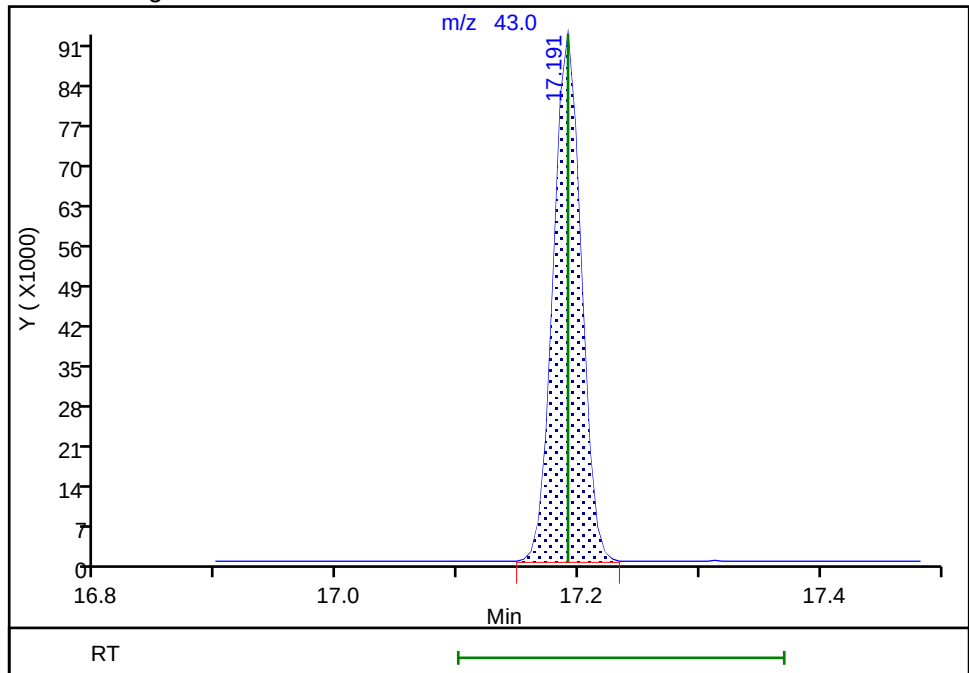
Signal: 1

Not Detected
Expected RT: 17.19

Processing Integration Results

RT: 17.19
Area: 148628
Amount: 25.955879
Amount Units: ug/m3

Manual Integration Results



Reviewer: V0FK, 24-Apr-2025 20:38:08 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-008.D
 Lims ID: icis
 Client ID:
 Sample Type: ICIS Calib Level: 5
 Inject. Date: 24-Apr-2025 16:19:30 ALS Bottle#: 8 Worklist Smp#: 8
 Purge Vol: 250.000 mL Dil. Factor: 1.0000
 Sample Info: 200-0064859-008
 Operator ID: vtp Instrument ID: CHAE.i
 Sublist: chrom-MADEP_APH_1*sub1
 Method: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\MADEP_APH_1.m
 Limit Group: AIR_APH_Limits
 Last Update: 25-Apr-2025 09:55:39 Calib Date: 24-Apr-2025 17:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-009.D
 Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
 Process Host: CTX1611

First Level Reviewer: V0FK

Date: 25-Apr-2025 09:33:13

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/m3	OnCol Amt ug/m3	Flags
1 Butadiene	54	5.188	5.188	0.000	94	184735	55.3	57.0	
2 2-Methylbutane	43	6.940	6.940	0.000	93	271876	73.8	67.8	
3 Methyl tert-butyl ether	73	9.964	9.964	0.000	96	806142	90.4	90.8	
* 4 Chlorobromomethane	128	11.132	11.132	0.000	92	164652	529.2	529.2	
5 Hexane	57	11.180	11.180	0.000	94	457417	88.4	90.5	
A 12 C5-C8 Aliphatics	1	12.883	(6.840-18.927)		0	12892439	570.5	508.1	
6 Benzene	78	12.963	12.963	0.000	98	897055	79.9	81.9	
7 Cyclohexane	56	13.255	13.255	0.000	98	475542	86.1	88.3	
* 8 1,4-Difluorobenzene	114	13.419	13.419	0.000	99	912787	466.6	466.6	
9 2,3-Dimethylpentane	56	13.553	13.553	0.000	92	540161	102.6	105.1	
10 n-Heptane	43	14.520	14.520	0.000	93	549401	102.6	106.8	
11 Toluene	91	16.242	16.242	0.000	97	1110825	94.4	99.4	
14 n-Octane	43	17.197	17.197	0.000	92	787371	116.9	123.7	Ma
* 15 Chlorobenzene-d5	117	17.903	17.903	0.000	97	821567	480.9	480.9	
16 Ethylbenzene	91	18.249	18.249	0.000	99	1504150	108.6	115.7	
17 2,3-Dimethylheptane	43	18.298	18.298	0.000	95	1086347	131.4	138.3	
18 m-Xylene & p-Xylene	91	18.395	18.395	0.000	98	1142581	108.6	115.6	
19 o-Xylene	91	18.779	18.779	0.000	98	1208249	108.6	115.5	
20 n-Nonane	43	18.937	18.937	0.000	90	820485	131.4	139.4	
* 21 4-Bromofluorobenzene	95	19.144	19.144	0.000	98	577030	715.8	715.8	
22 Isopropylbenzene	105	19.241	19.241	0.000	98	1739107	123.2	128.9	
23 3-Ethyltoluene	105	19.716	19.716	0.000	98	1563049	123.2	128.4	
24 1,3,5-Trimethylbenzene	105	19.807	19.807	0.000	98	1336366	123.2	124.8	
A 37 C9-C12 Aliphatics	1	20.174	(18.288-22.060)		0	22667862	886.9	980.3	
26 n-Decane	57	20.184	20.184	0.000	91	871665	145.9	154.1	
A 28 C9-C10 Aromatics (mz 134)	134	21.048	(18.879-21.933)		0	457194	137.4	139.7	
A 25 C9-C10 Aromatics (mz 120)	120	19.852	(18.879-21.933)		0	2388032	492.6	508.1	
27 4-Isopropyltoluene	119	20.446	20.446	0.000	94	1819149	137.4	141.0	
29 1,2,3-Trimethylbenzene	105	20.452	20.452	0.000	93	1373447	123.2	126.2	
30 Butylcyclohexane	83	20.634	20.634	0.000	96	1053280	143.7	146.1	
31 Undecane	57	21.133	21.133	0.000	95	971194	160.0	195.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/m3	OnCol Amt ug/m3	Flags
32 Dodecane	57	21.960	21.960	0.000	97	707160	174.5	249.8	
33 Naphthalene	128	22.033	22.033	0.000	99	1290566	131.2	170.7	
S 35 Xylenes, Total	1				0		217.3	231.1	
S 36 C9-C10 Aromatics	1				0		630.1	647.8	
\$ 40 BFB									

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

APHLv13w_00066

Amount Added: 250.00

Units: mL

ATTO15AEISs_00003

Amount Added: 60.00

Units: mL

Run Reagent

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-008.D

Injection Date: 24-Apr-2025 16:19:30

Instrument ID: CHAE.i

Operator ID: vtp

Lims ID: icis

Worklist Smp#: 8

Client ID:

Purge Vol: 250.000 mL

Dil. Factor: 1.0000

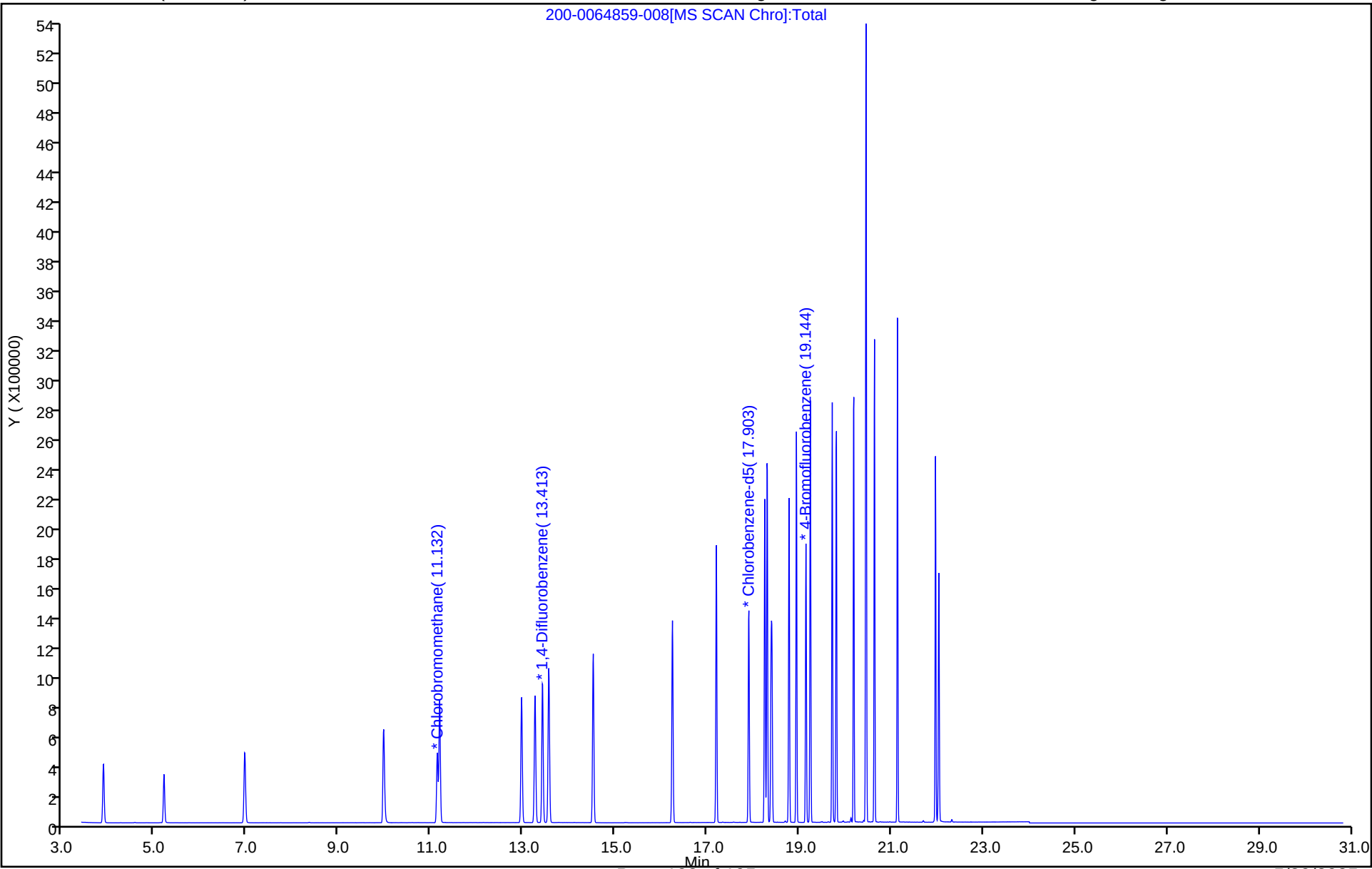
ALS Bottle#: 8

Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-008.D

Injection Date: 24-Apr-2025 16:19:30

Instrument ID: CHAE.i

Lims ID: icis

Client ID:

Operator ID: vtp

ALS Bottle#: 8

Worklist Smp#: 8

Purge Vol: 250.000 mL

Dil. Factor: 1.0000

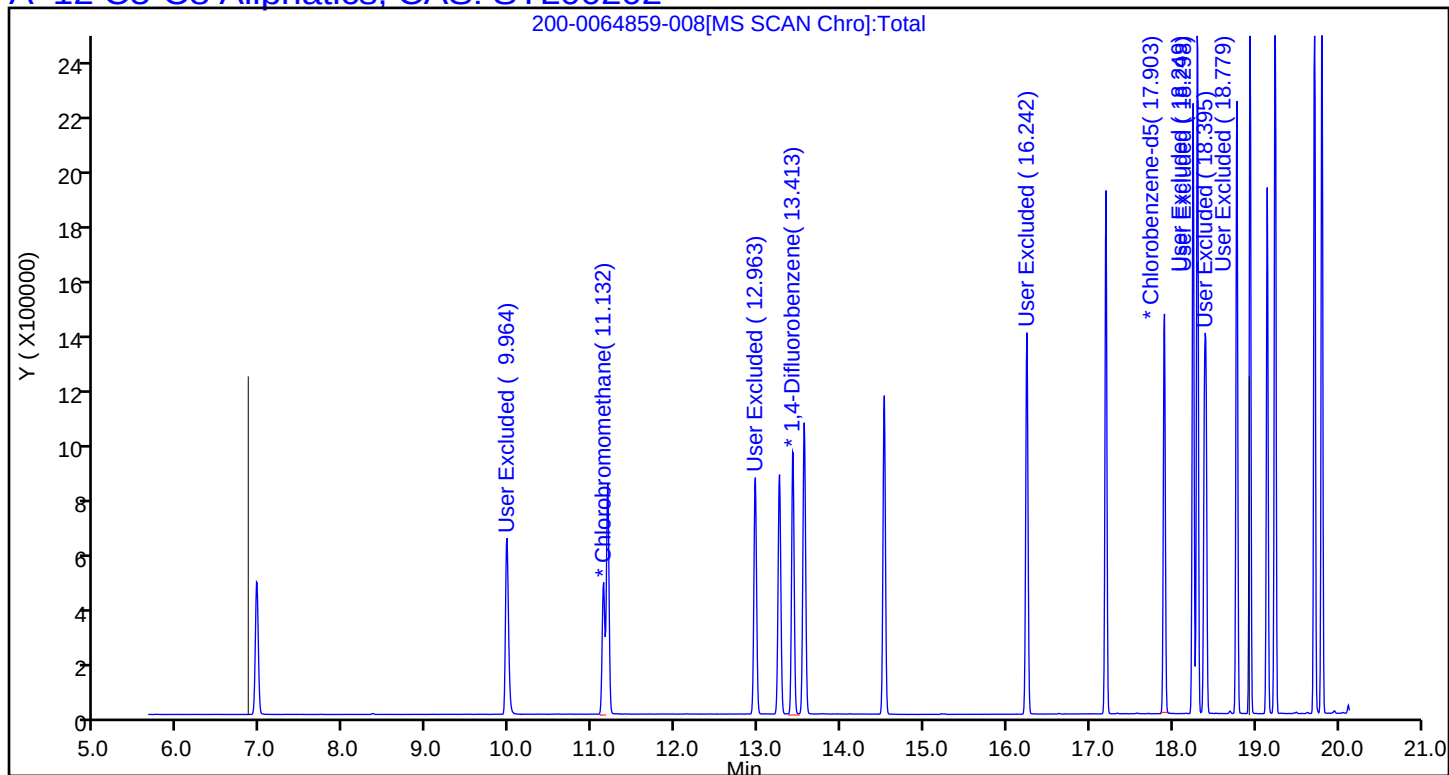
Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Detector: MS SCAN

A 12 C5-C8 Aliphatics, CAS: STL00202



Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-008.D

Injection Date: 24-Apr-2025 16:19:30

Instrument ID: CHAE.i

Lims ID: icis

Client ID:

Operator ID: vtp

ALS Bottle#: 8

Worklist Smp#: 8

Purge Vol: 250.000 mL

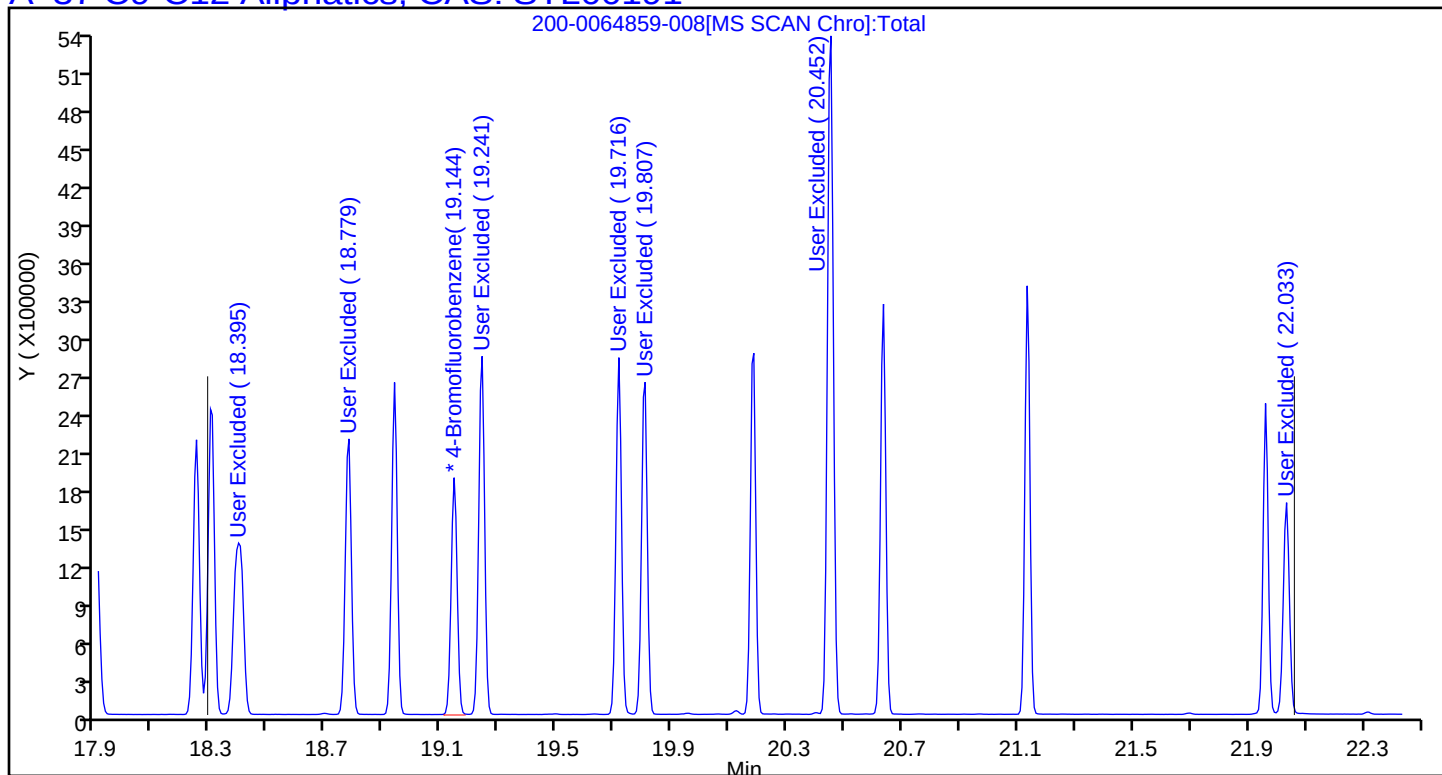
Dil. Factor: 1.0000

Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Detector: MS SCAN

A 37 C9-C12 Aliphatics, CAS: STL00191

Eurofins Burlington

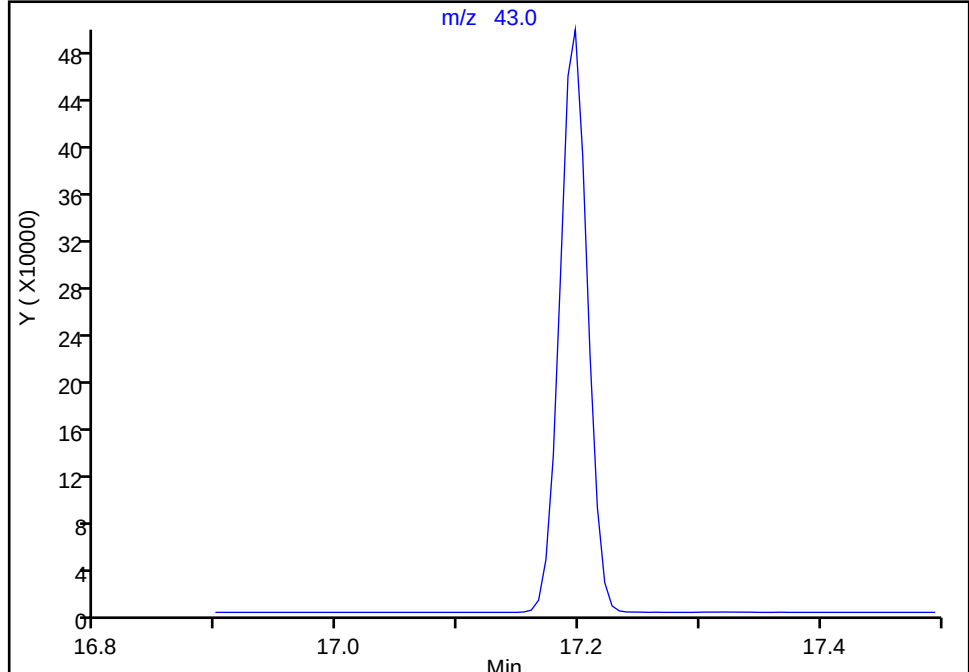
Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-008.D
Injection Date: 24-Apr-2025 16:19:30 Instrument ID: CHAE.i
Lims ID: icis
Client ID:
Operator ID: vtp ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Method: MADEP_APH_1 Limit Group: AIR_APH_Limits
Column: RTX-624 (0.32 mm) Detector: MS SCAN

14 n-Octane, CAS: 111-65-9

Signal: 1

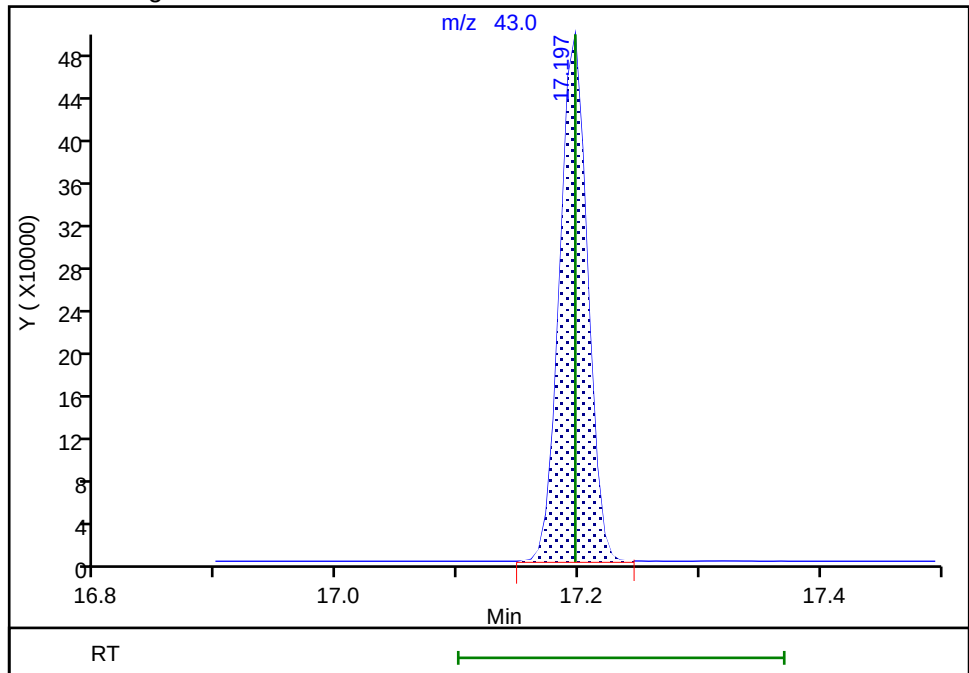
Not Detected
Expected RT: 17.20

Processing Integration Results



RT: 17.20
Area: 787371
Amount: 123.6697
Amount Units: ug/m3

Manual Integration Results



Reviewer: V0FK, 24-Apr-2025 20:36:54 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-009.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 24-Apr-2025 17:11:30 ALS Bottle#: 9 Worklist Smp#: 9
 Purge Vol: 250.000 mL Dil. Factor: 1.0000
 Sample Info: 200-0064859-009
 Operator ID: vtp Instrument ID: CHAE.i
 Sublist: chrom-MADEP_APH_1*sub1
 Method: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\MADEP_APH_1.m
 Limit Group: AIR_APH_Limits
 Last Update: 25-Apr-2025 09:55:41 Calib Date: 24-Apr-2025 17:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-009.D
 Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
 Process Host: CTX1611

First Level Reviewer: V0FK

Date: 24-Apr-2025 18:01:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/m3	OnCol Amt ug/m3	Flags
1 Butadiene	54	5.188	5.188	0.000	92	378135	110.5	119.7	
2 2-Methylbutane	43	6.940	6.940	0.000	93	503555	147.5	129.0	
3 Methyl tert-butyl ether	73	9.958	9.964	-0.006	96	1558060	180.5	180.0	
* 4 Chlorobromomethane	128	11.132	11.132	0.000	92	160447	529.2	529.2	
5 Hexane	57	11.180	11.180	0.000	94	857034	176.5	173.6	
A 12 C5-C8 Aliphatics	1	12.880	(6.840-18.927)		0	24140628	1139.5	974.1	
6 Benzene	78	12.963	12.963	0.000	98	1703005	159.5	159.1	
7 Cyclohexane	56	13.255	13.255	0.000	98	895735	172.0	170.2	
* 8 1,4-Difluorobenzene	114	13.419	13.419	0.000	99	891493	466.6	466.6	
9 2,3-Dimethylpentane	56	13.553	13.553	0.000	92	1020389	205.0	203.3	
10 n-Heptane	43	14.520	14.520	0.000	93	1044861	205.0	208.0	
11 Toluene	91	16.242	16.242	0.000	97	2150543	188.5	195.4	
14 n-Octane	43	17.197	17.197	0.000	92	1493815	233.5	240.2	Ma
* 15 Chlorobenzene-d5	117	17.903	17.903	0.000	97	809441	480.9	480.9	
16 Ethylbenzene	91	18.250	18.249	0.001	99	2923265	217.0	228.2	
17 2,3-Dimethylheptane	43	18.304	18.298	0.006	93	1996370	262.5	257.9	
18 m-Xylene & p-Xylene	91	18.396	18.395	0.001	98	2233528	217.0	229.4	
19 o-Xylene	91	18.779	18.779	0.000	98	2412110	217.0	234.0	
20 n-Nonane	43	18.937	18.937	0.000	90	1555602	262.5	268.2	
* 21 4-Bromofluorobenzene	95	19.144	19.144	0.000	99	592392	715.8	715.8	
22 Isopropylbenzene	105	19.241	19.241	0.000	98	3475184	246.0	261.5	
23 3-Ethyltoluene	105	19.722	19.716	0.006	99	3308828	246.0	275.9	
24 1,3,5-Trimethylbenzene	105	19.807	19.807	0.000	98	2872138	246.0	272.2	
A 37 C9-C12 Aliphatics	1	20.171	(18.288-22.060)		0	44293918	1771.5	1944.3	
26 n-Decane	57	20.184	20.184	0.000	91	1818393	291.5	326.3	
A 28 C9-C10 Aromatics (mz 134)	134	20.914	(18.879-21.933)		0	918242	274.5	284.9	
A 25 C9-C10 Aromatics (mz 120)	120	20.169	(18.879-21.933)		0	4907051	984.0	1059.6	
27 4-Isopropyltoluene	119	20.452	20.446	0.006	92	3615915	274.5	284.4	
29 1,2,3-Trimethylbenzene	105	20.458	20.452	0.006	93	2826181	246.0	263.6	
30 Butylcyclohexane	83	20.634	20.634	0.000	95	2194768	287.0	308.9	
31 Undecane	57	21.133	21.133	0.000	95	1864088	319.5	380.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/m3	OnCol Amt ug/m3	Flags
32 Dodecane	57	21.961	21.960	0.000	98	1188105	348.5	425.9	
33 Naphthalene	128	22.034	22.033	0.001	99	2586955	262.0	347.3	
S 35 Xylenes, Total	1				0		434.0	463.4	
S 36 C9-C10 Aromatics	1				0		1258.5	1344.5	
S 38 C5-C8 Aliphatics (adjusted)	1				0			-1752.2	
S 39 C9-C12 Aliphatics (adjusted)	1				0			-1344.5	
\$ 40 BFB									

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

APHLv14_00011

Amount Added: 250.00

Units: mL

ATTO15AEISs_00003

Amount Added: 60.00

Units: mL

Run Reagent

Report Date: 25-Apr-2025 09:55:42

Chrom Revision: 2.3 18-Apr-2025 15:35:42

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-009.D

Injection Date: 24-Apr-2025 17:11:30

Instrument ID: CHAE.i

Operator ID: vtp

Lims ID: ic

Worklist Smp#: 9

Client ID:

Purge Vol: 250.000 mL

Dil. Factor: 1.0000

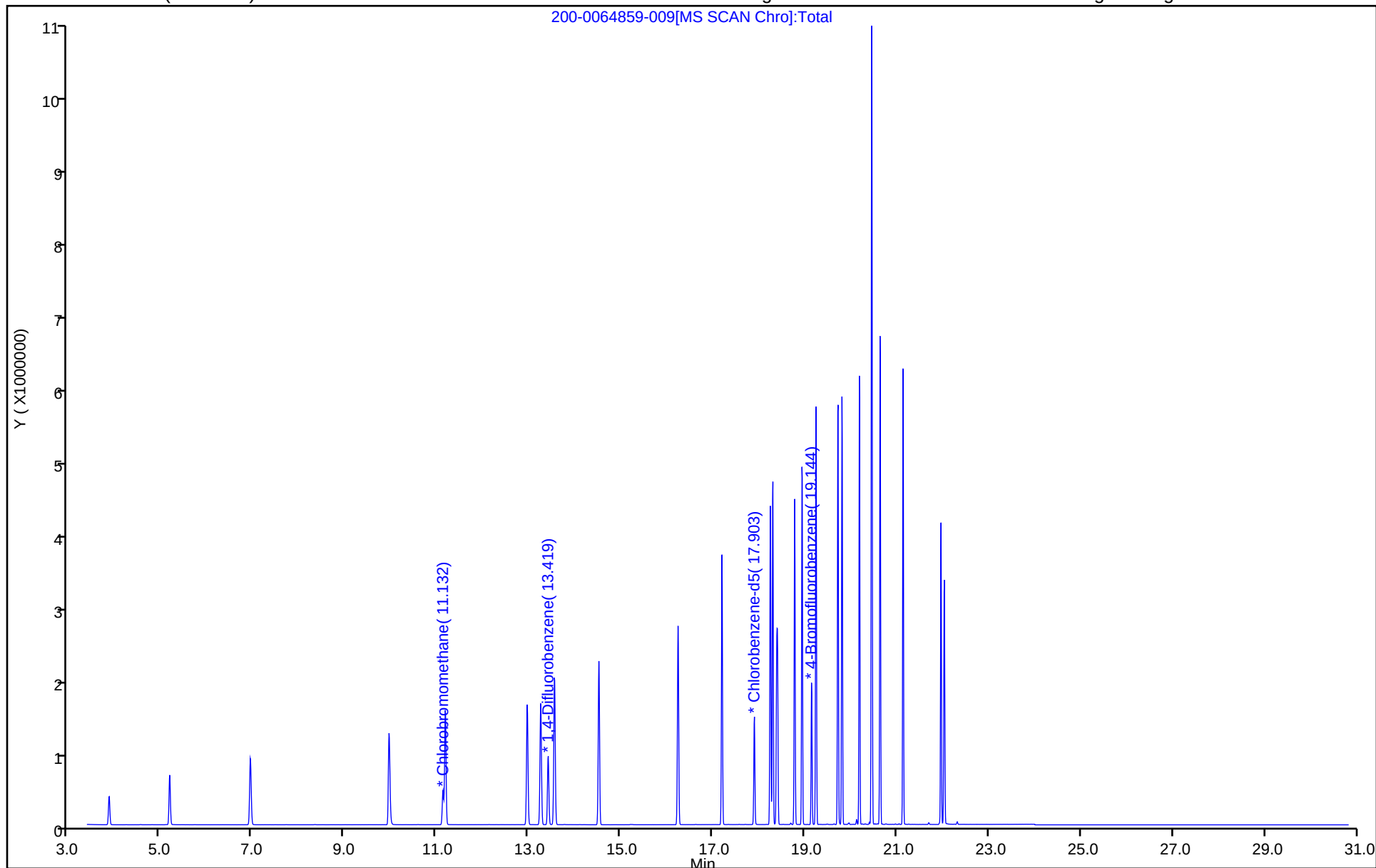
ALS Bottle#: 9

Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-009.D

Injection Date: 24-Apr-2025 17:11:30

Instrument ID: CHAE.i

Lims ID: ic

Client ID:

Operator ID: vtp

ALS Bottle#: 9

Worklist Smp#: 9

Purge Vol: 250.000 mL

Dil. Factor: 1.0000

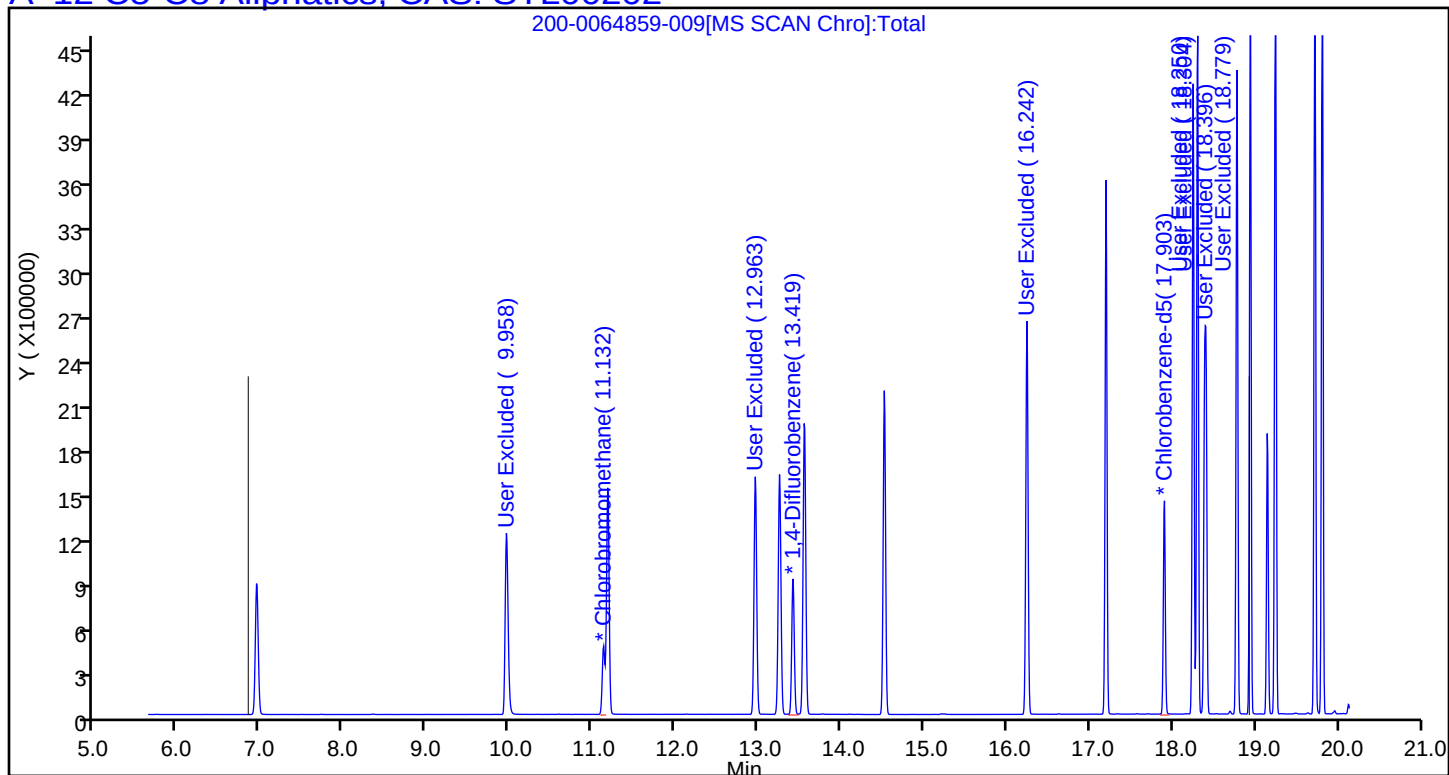
Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Detector: MS SCAN

A 12 C5-C8 Aliphatics, CAS: STL00202



Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-009.D

Injection Date: 24-Apr-2025 17:11:30

Instrument ID: CHAE.i

Lims ID: ic

Client ID:

Operator ID: vtp

ALS Bottle#: 9

Worklist Smp#: 9

Purge Vol: 250.000 mL

Dil. Factor: 1.0000

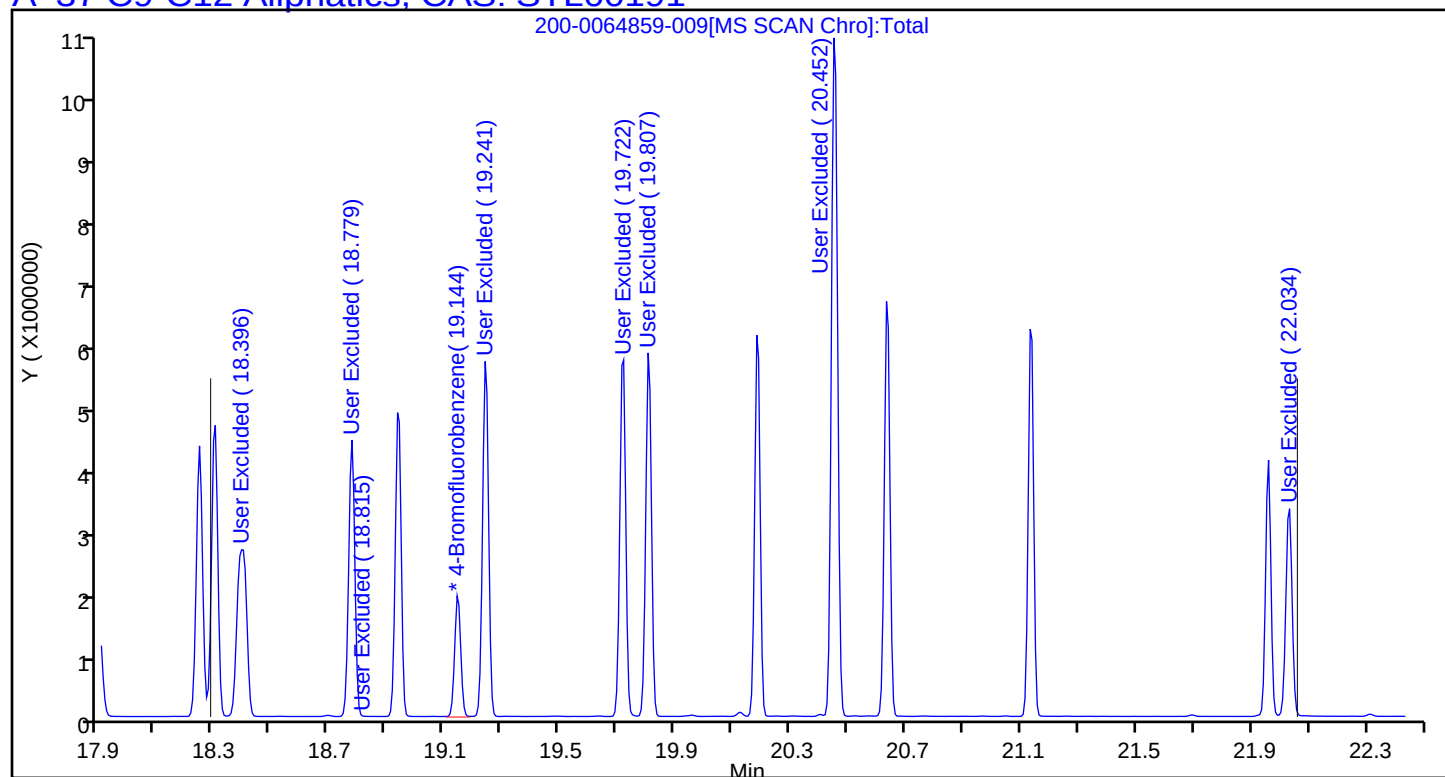
Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Detector: MS SCAN

A 37 C9-C12 Aliphatics, CAS: STL00191



Eurofins Burlington

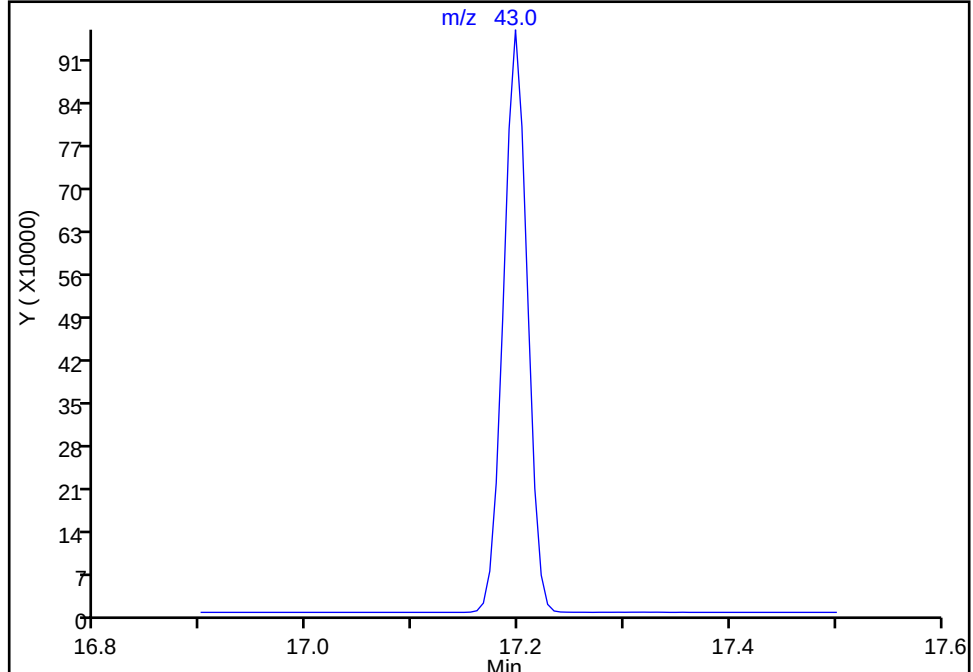
Data File:	\\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-009.D		
Injection Date:	24-Apr-2025 17:11:30	Instrument ID:	CHAE.i
Lims ID:	ic		
Client ID:			
Operator ID:	vtp	ALS Bottle#:	9 Worklist Smp#: 9
Purge Vol:	250.000 mL	Dil. Factor:	1.0000
Method:	MADEP_APH_1	Limit Group:	AIR_APH_Limits
Column:	RTX-624 (0.32 mm)	Detector:	MS SCAN

14 n-Octane, CAS: 111-65-9

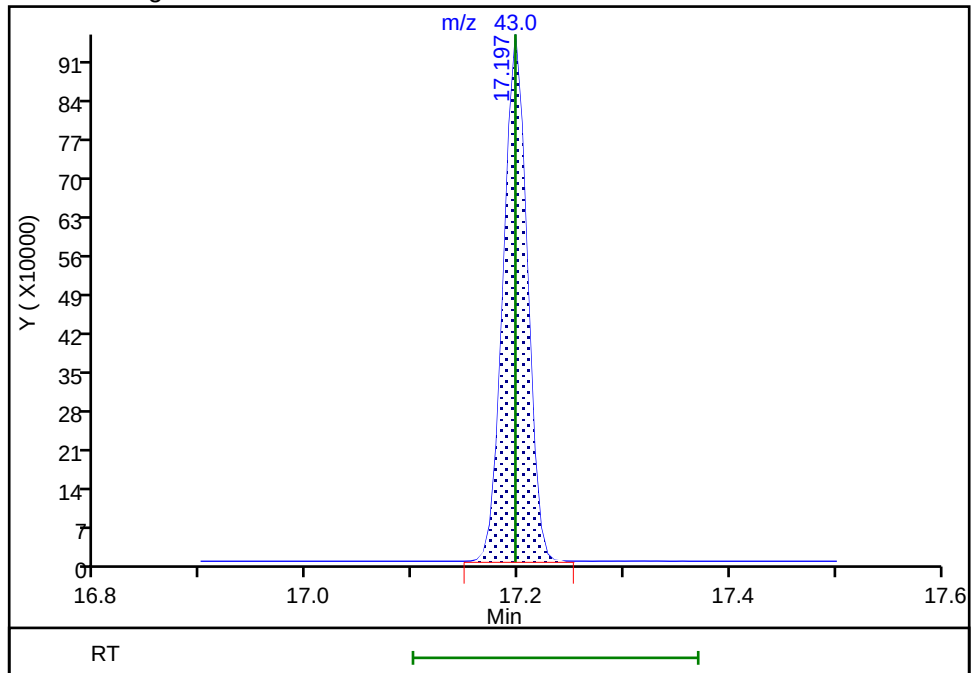
Signal: 1

Not Detected
Expected RT: 17.20

Processing Integration Results

RT: 17.20
Area: 1493815
Amount: 240.2328
Amount Units: ug/m3

Manual Integration Results



Reviewer: V0FK, 24-Apr-2025 20:38:19 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Calibration

/ Butadiene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

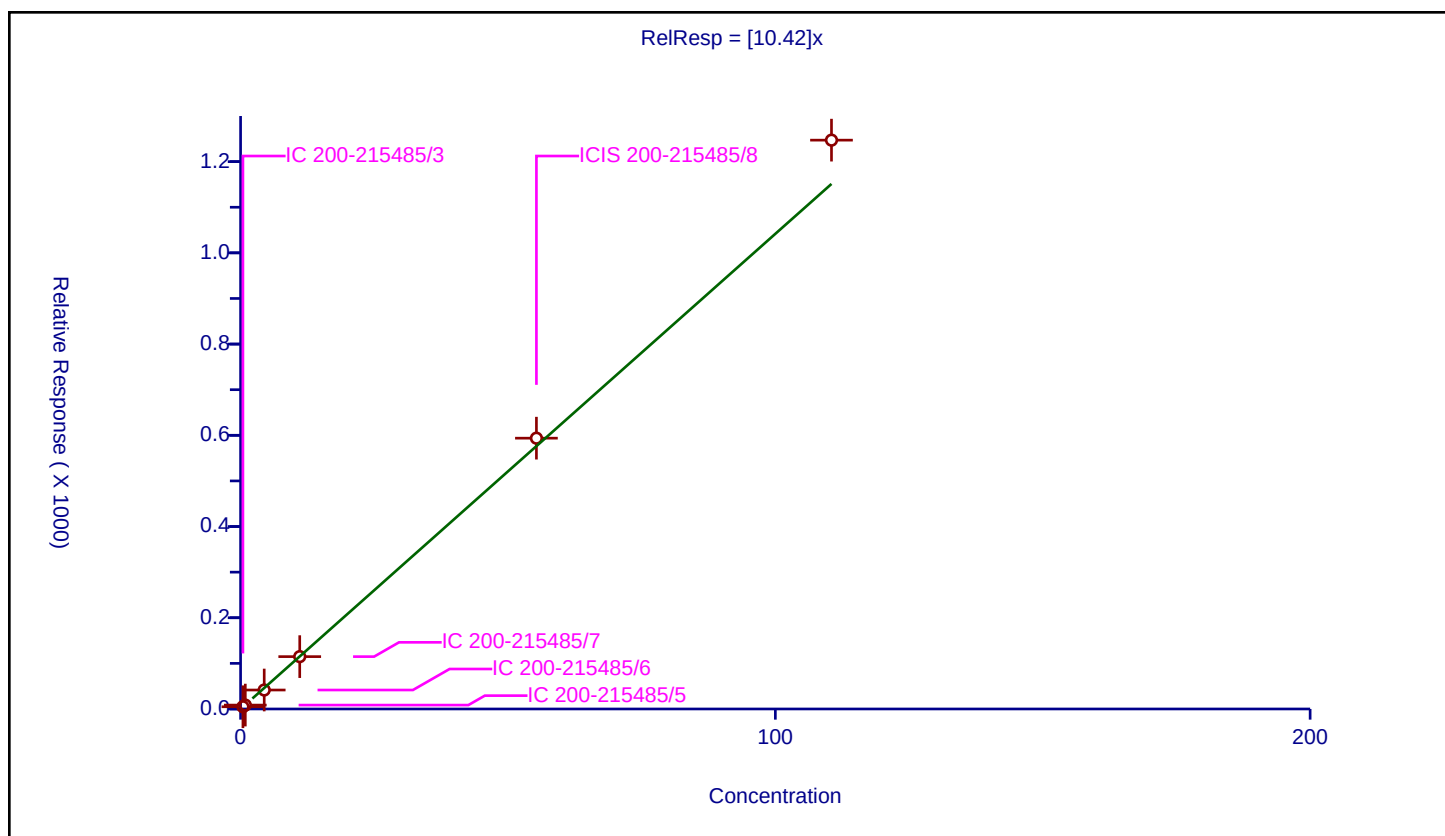
Curve Coefficients

Intercept: 0
Slope: 10.42

Error Coefficients

Relative Standard Deviation: 7.3

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	0.442286	4.886417	529.16	183555.0	11.048104	Y
2	IC 200-215485/5	0.884571	8.539156	529.16	164093.0	9.653442	Y
3	IC 200-215485/6	4.422855	41.60812	529.16	163944.0	9.407525	Y
4	IC 200-215485/7	11.064295	114.805112	529.16	150661.0	10.37618	Y
5	ICIS 200-215485/8	55.321475	593.702916	529.16	164652.0	10.731871	Y
6	IC 200-215485/9	110.5	1247.102885	529.16	160447.0	11.285999	Y



Calibration

/ 2-Methylbutane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

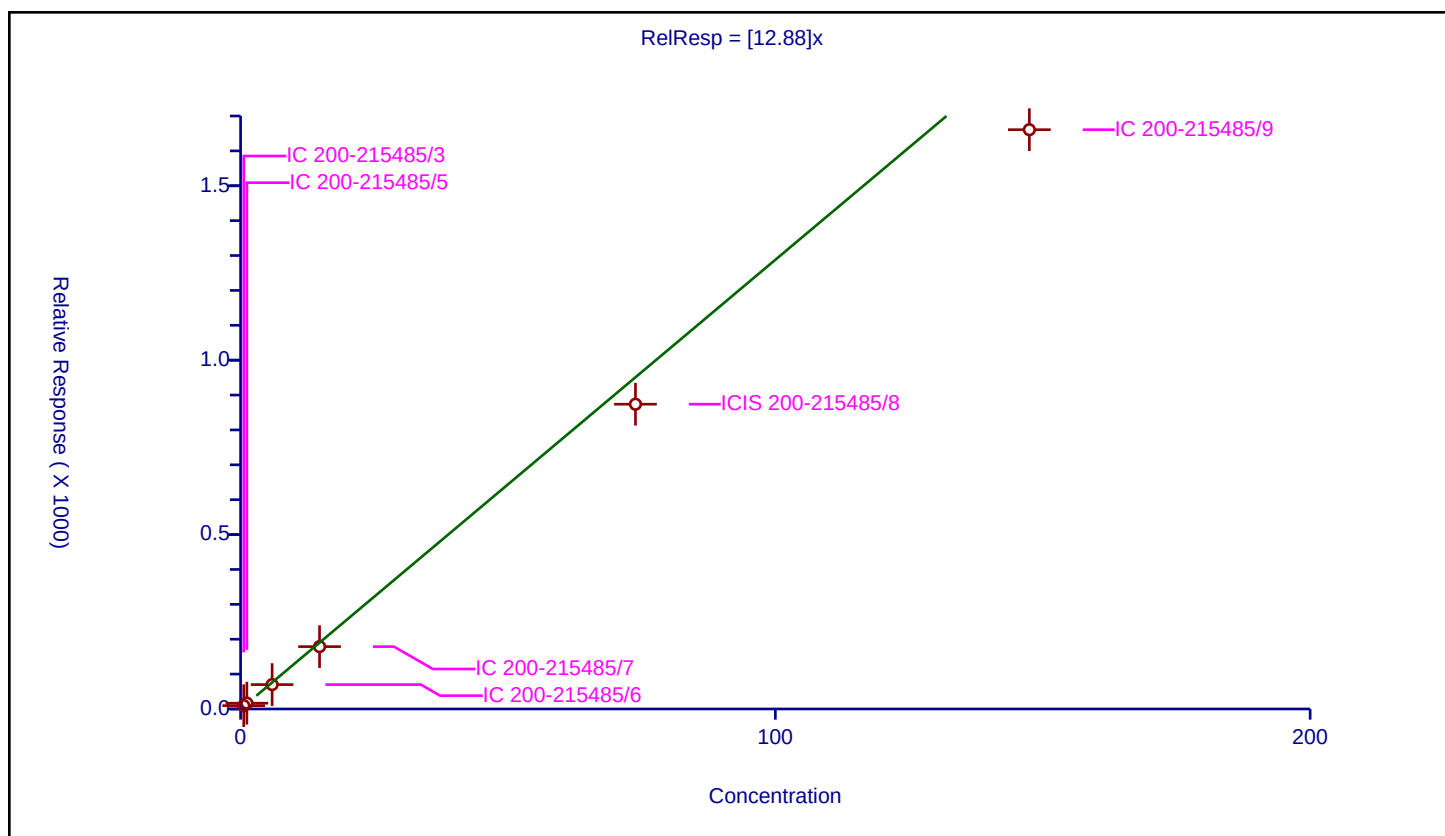
Curve Coefficients

Intercept: 0
 Slope: 12.88

Error Coefficients

Relative Standard Deviation: 14.6

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	0.590381	9.53644	529.16	183555.0	16.153023	Y
2	IC 200-215485/5	1.180762	16.626846	529.16	164093.0	14.081451	Y
3	IC 200-215485/6	5.903811	69.876207	529.16	163944.0	11.835779	Y
4	IC 200-215485/7	14.769082	178.794904	529.16	150661.0	12.106027	Y
5	ICIS 200-215485/8	73.845408	873.757404	529.16	164652.0	11.832251	Y
6	IC 200-215485/9	147.5	1660.742574	529.16	160447.0	11.259272	Y



Calibration

/ Methyl tert-butyl ether

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

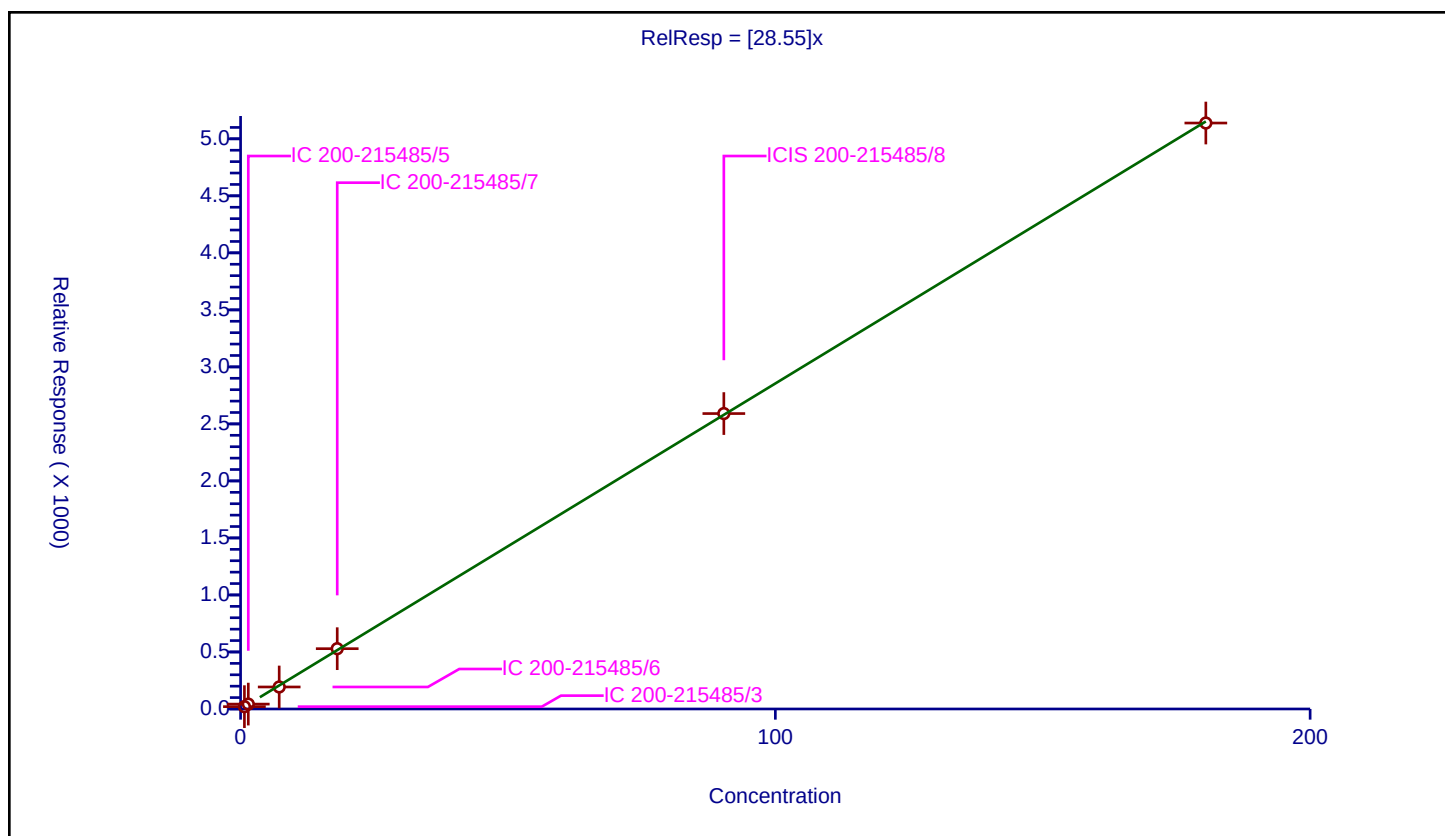
Curve Coefficients

Intercept: 0
Slope: 28.55

Error Coefficients

Relative Standard Deviation: 3.6

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	0.722466	20.525833	529.16	183555.0	28.410778	Y
2	IC 200-215485/5	1.444933	42.956984	529.16	164093.0	29.729399	Y
3	IC 200-215485/6	7.224664	193.083494	529.16	163944.0	26.725602	Y
4	IC 200-215485/7	18.073351	528.938728	529.16	150661.0	29.266224	Y
5	ICIS 200-215485/8	90.366753	2590.786026	529.16	164652.0	28.669682	Y
6	IC 200-215485/9	180.5	5138.538144	529.16	160447.0	28.468355	Y



Calibration

/ Hexane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

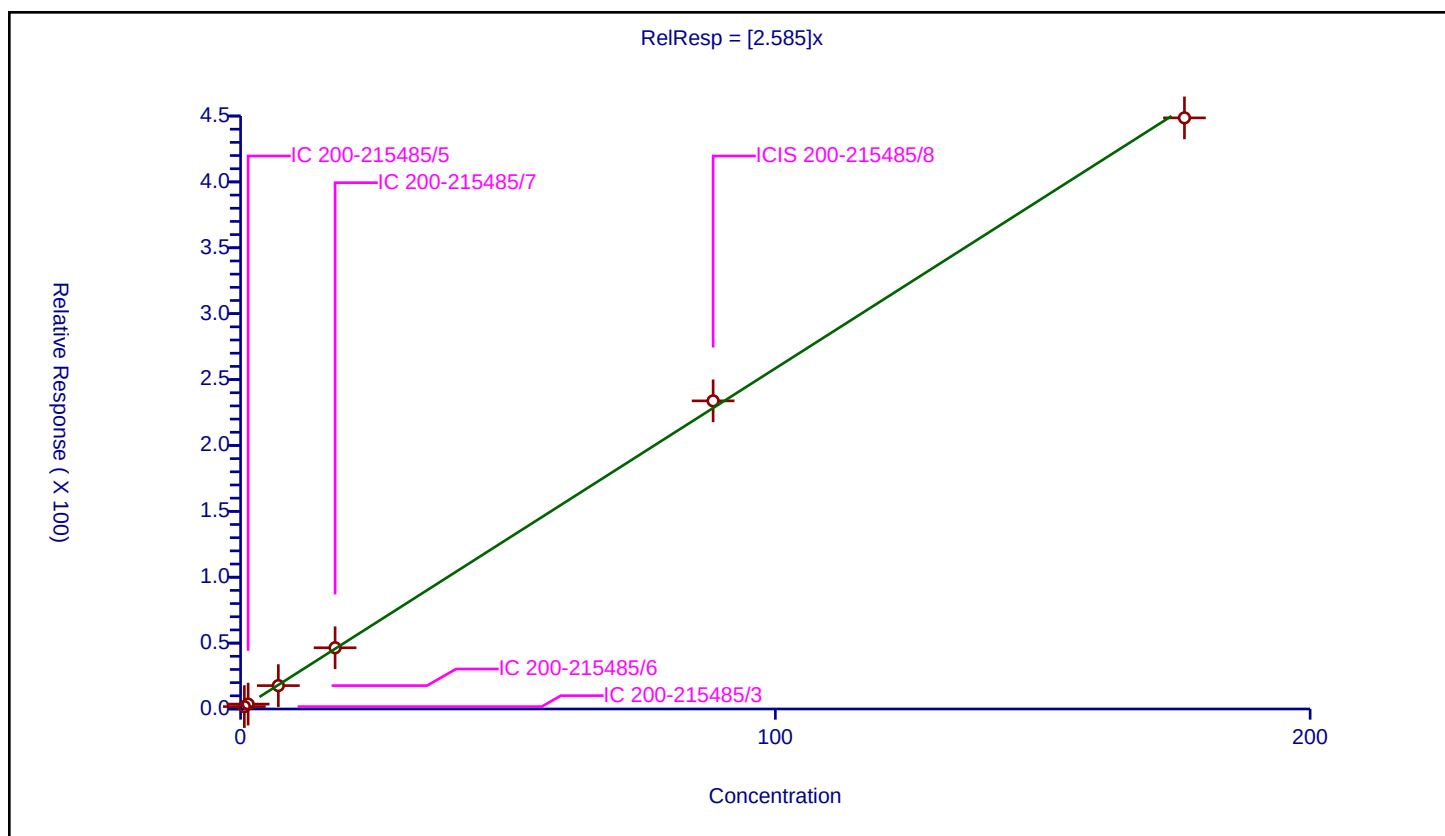
Curve Coefficients

Intercept: 0
 Slope: 2.585

Error Coefficients

Relative Standard Deviation: 2.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	0.706456	1.805836	466.63	1028953.0	2.55619	Y
2	IC 200-215485/5	1.412912	3.710297	466.63	903253.0	2.625993	Y
3	IC 200-215485/6	7.064561	17.728584	466.63	906540.0	2.50951	Y
4	IC 200-215485/7	17.672833	46.463321	466.63	820953.0	2.629082	Y
5	ICIS 200-215485/8	88.364166	233.838228	466.63	912787.0	2.646302	Y
6	IC 200-215485/9	176.5	448.593287	466.63	891493.0	2.541605	Y



Calibration

/ C5-C8 Aliphatics

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

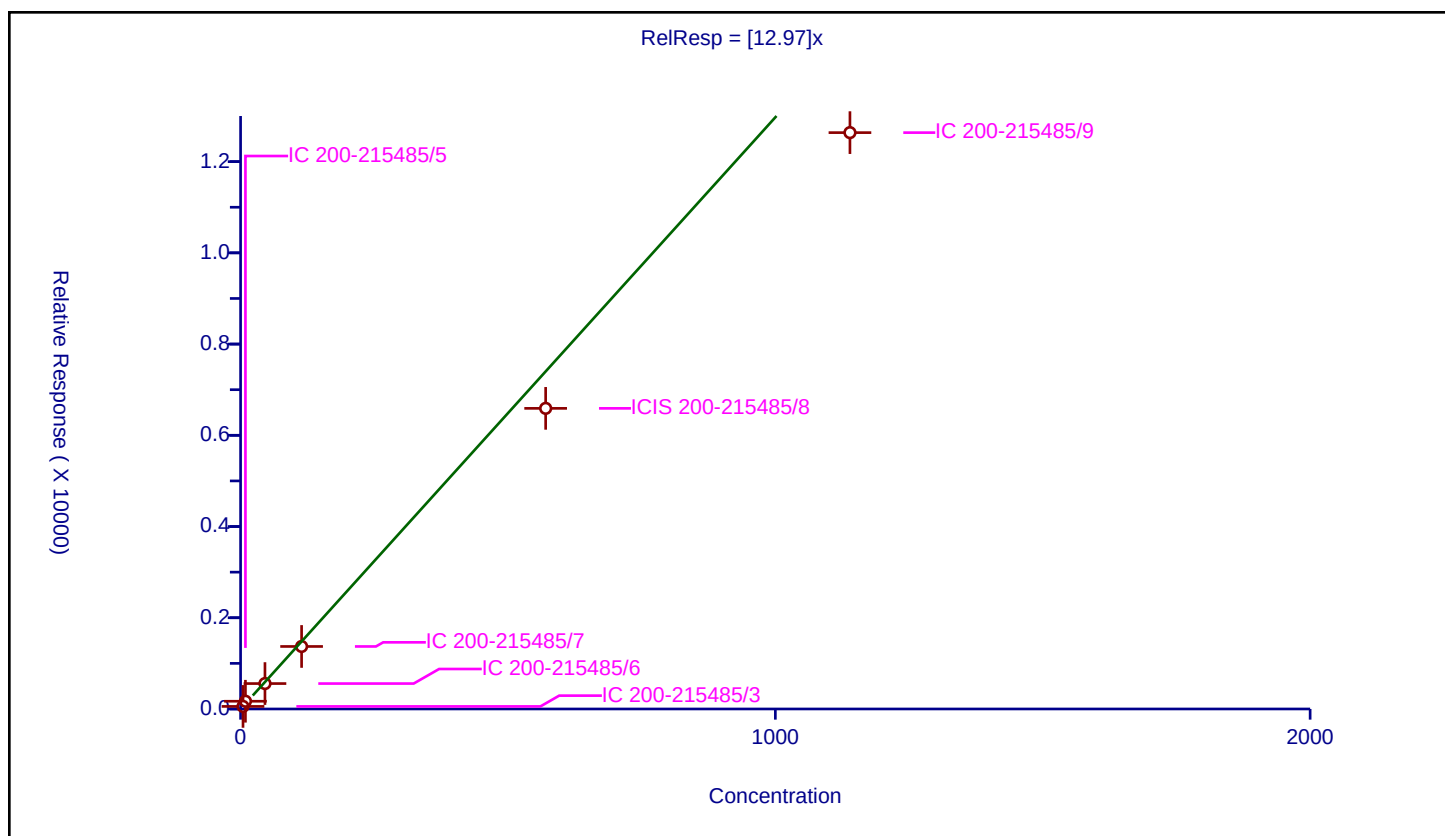
Curve Coefficients

Intercept: 0
Slope: 12.97

Error Coefficients

Relative Standard Deviation: 21.6

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	4.560944	56.255746	466.63	1028953.0	12.334232	Y
2	IC 200-215485/5	9.121889	169.894601	466.63	903253.0	18.624937	Y
3	IC 200-215485/6	45.609444	557.208847	466.63	906540.0	12.216962	Y
4	IC 200-215485/7	114.097413	1370.53212	466.63	820953.0	12.011947	Y
5	ICIS 200-215485/8	570.487063	6590.802466	466.63	912787.0	11.552939	Y
6	IC 200-215485/9	1139.5	12635.815698	466.63	891493.0	11.088912	Y



Calibration

/ Benzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

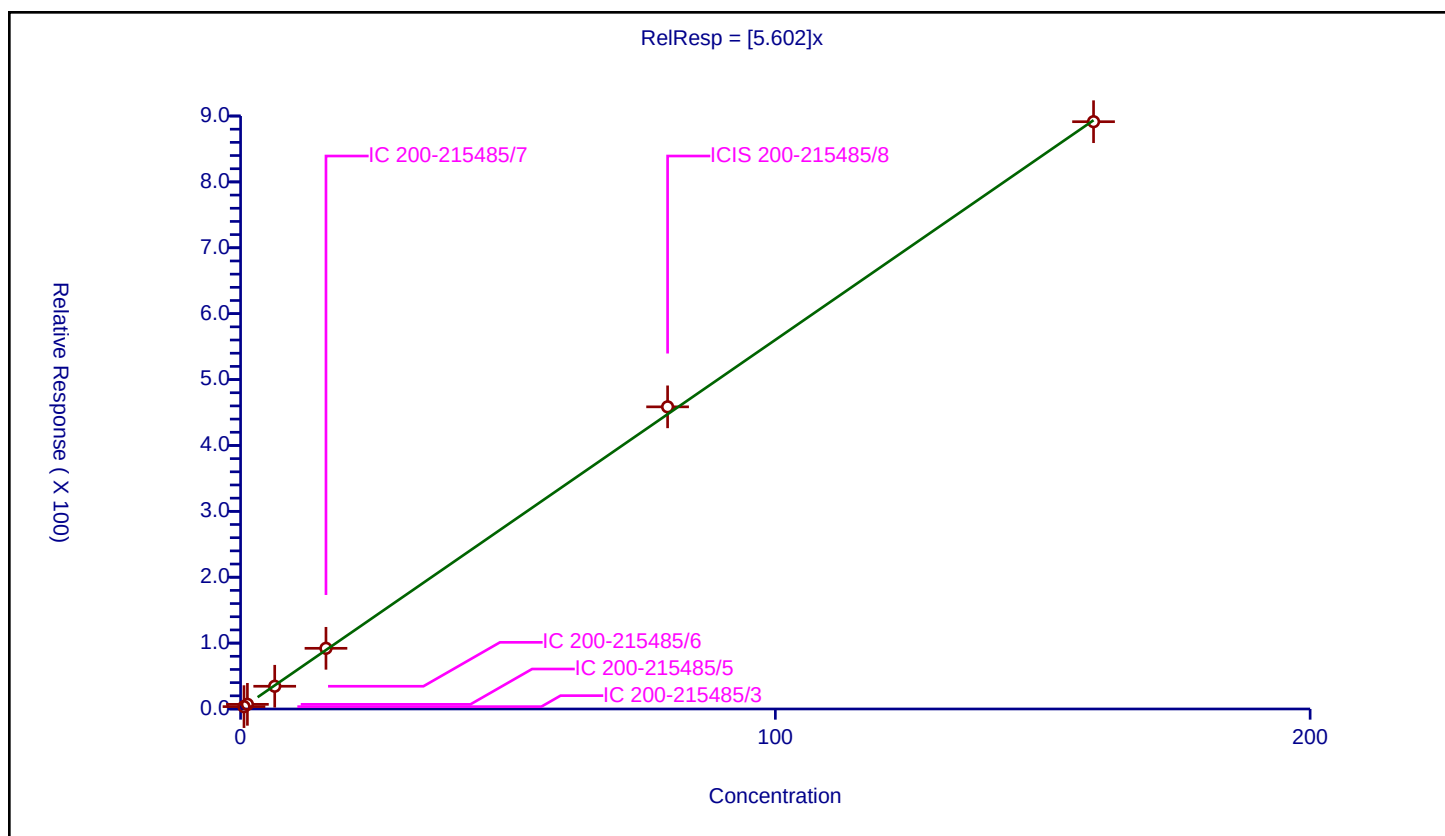
Curve Coefficients

Intercept: 0
Slope: 5.602

Error Coefficients

Relative Standard Deviation: 2.4

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	0.638412	3.569951	466.63	1028953.0	5.591921	Y
2	IC 200-215485/5	1.276824	7.047601	466.63	903253.0	5.519632	Y
3	IC 200-215485/6	6.384121	34.51314	466.63	906540.0	5.406091	Y
4	IC 200-215485/7	15.970634	92.083136	466.63	820953.0	5.765778	Y
5	ICIS 200-215485/8	79.853169	458.587573	466.63	912787.0	5.742885	Y
6	IC 200-215485/9	159.5	891.39592	466.63	891493.0	5.588689	Y



Calibration

/ Cyclohexane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

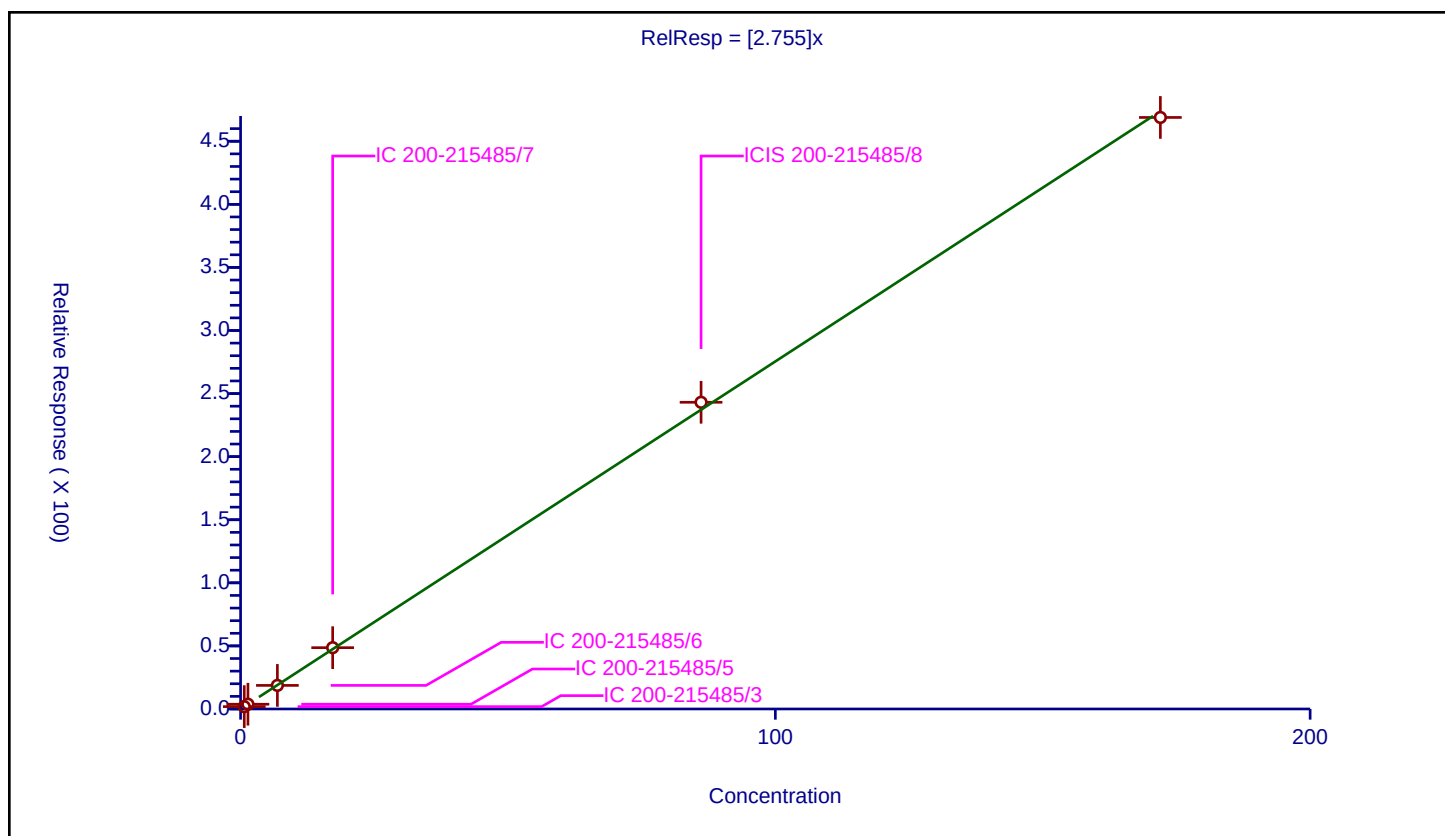
Curve Coefficients

Intercept: 0
Slope: 2.755

Error Coefficients

Relative Standard Deviation: 1.9

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	0.688444	1.862977	466.63	1028953.0	2.706068	Y
2	IC 200-215485/5	1.376889	3.764024	466.63	903253.0	2.733717	Y
3	IC 200-215485/6	6.884444	18.702467	466.63	906540.0	2.716627	Y
4	IC 200-215485/7	17.222251	48.601643	466.63	820953.0	2.822026	Y
5	ICIS 200-215485/8	86.111255	243.103992	466.63	912787.0	2.823138	Y
6	IC 200-215485/9	172.0	468.85037	466.63	891493.0	2.725874	Y



Calibration

/ 2,3-Dimethylpentane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

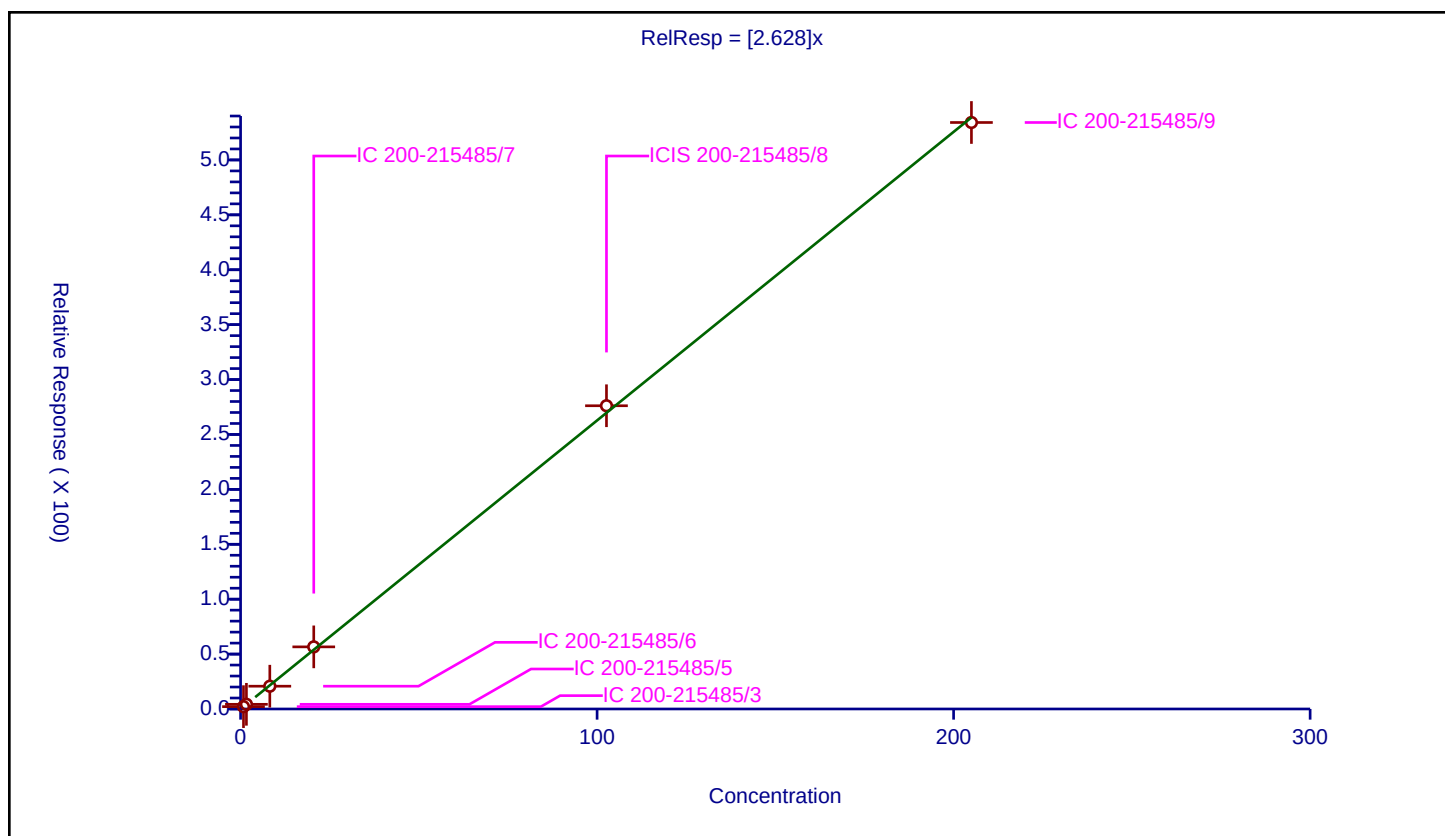
Curve Coefficients

Intercept: 0
Slope: 2.628

Error Coefficients

Relative Standard Deviation: 3.1

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	0.82053	2.118298	466.63	1028953.0	2.581622	Y
2	IC 200-215485/5	1.641059	4.271852	466.63	903253.0	2.603106	Y
3	IC 200-215485/6	8.205297	20.751122	466.63	906540.0	2.528991	Y
4	IC 200-215485/7	20.52652	56.581985	466.63	820953.0	2.756531	Y
5	ICIS 200-215485/8	102.6326	276.138165	466.63	912787.0	2.69055	Y
6	IC 200-215485/9	205.0	534.097429	466.63	891493.0	2.605353	Y



Calibration

/ n-Heptane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

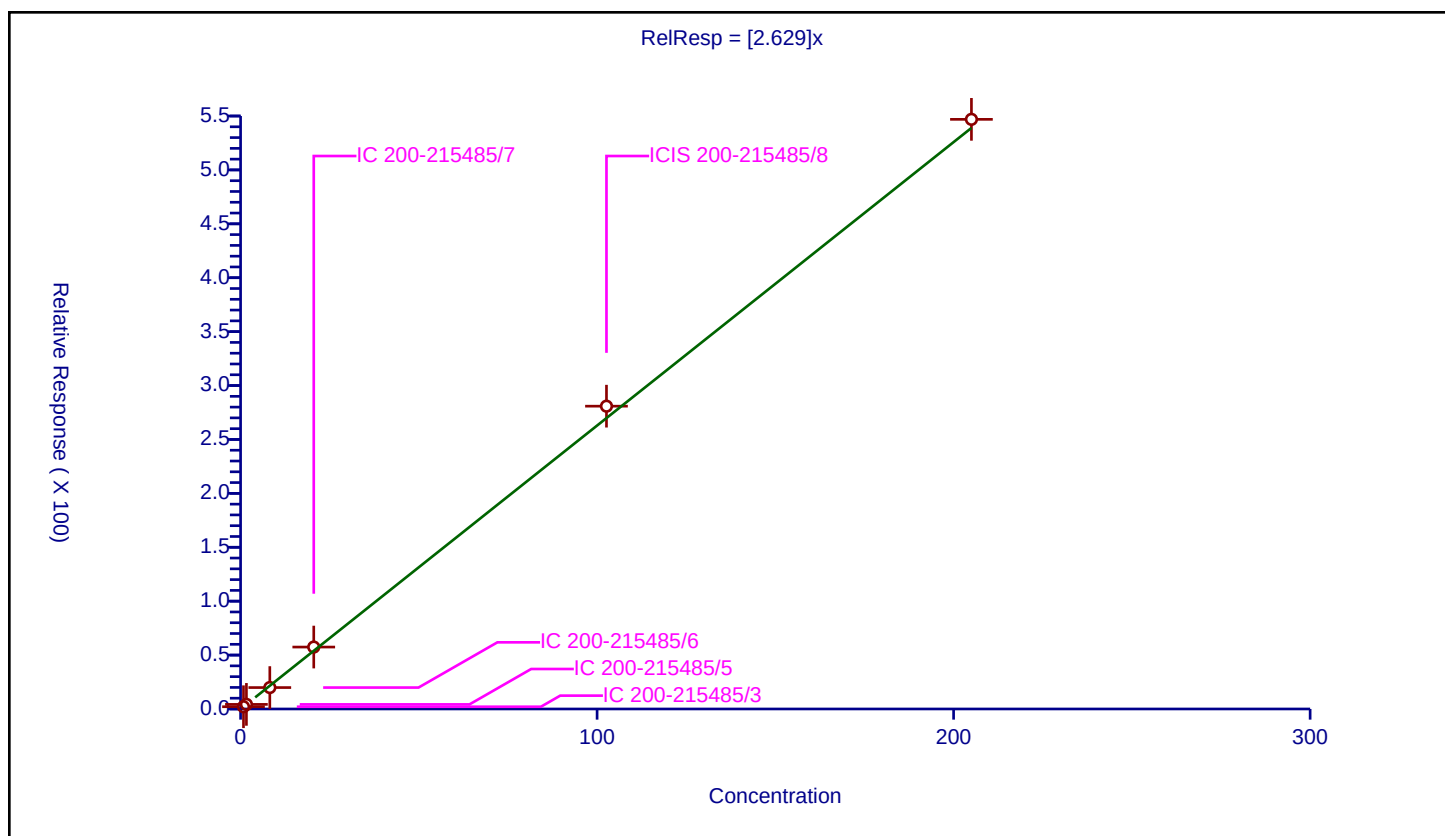
Curve Coefficients

Intercept: 0
 Slope: 2.629

Error Coefficients

Relative Standard Deviation: 5.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	0.82053	2.08882	466.63	1028953.0	2.545697	Y
2	IC 200-215485/5	1.641059	4.271852	466.63	903253.0	2.603106	Y
3	IC 200-215485/6	8.205297	19.874009	466.63	906540.0	2.422095	Y
4	IC 200-215485/7	20.52652	57.441406	466.63	820953.0	2.7984	Y
5	ICIS 200-215485/8	102.6326	280.861788	466.63	912787.0	2.736575	Y
6	IC 200-215485/9	205.0	546.906693	466.63	891493.0	2.667838	Y



Calibration

/ Toluene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

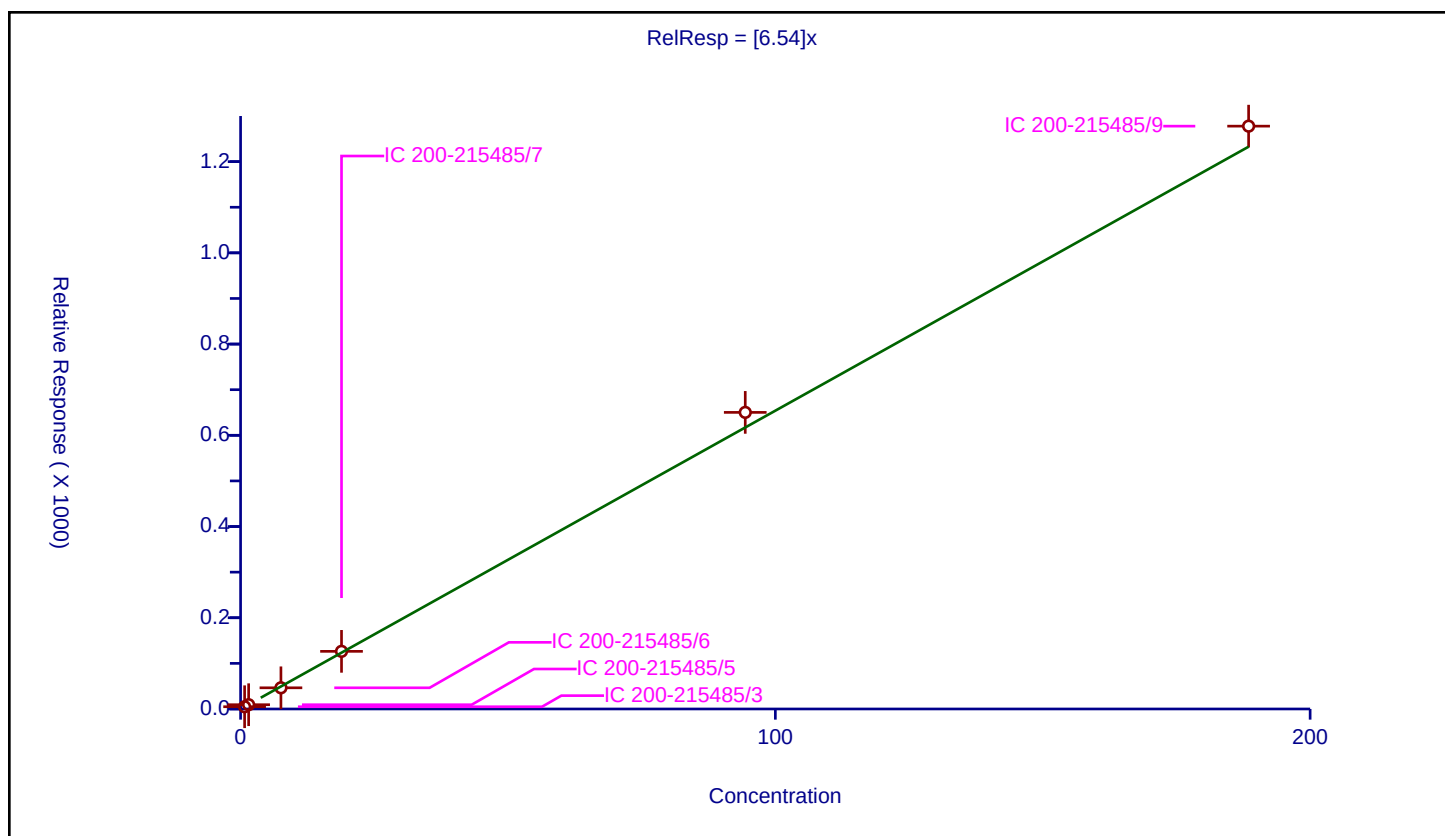
Curve Coefficients

Intercept: 0
Slope: 6.54

Error Coefficients

Relative Standard Deviation: 4.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	0.754487	4.911109	480.94	896442.0	6.509203	Y
2	IC 200-215485/5	1.508974	9.36274	480.94	818797.0	6.204705	Y
3	IC 200-215485/6	7.544871	46.468499	480.94	786368.0	6.158952	Y
4	IC 200-215485/7	18.874386	126.387211	480.94	769677.0	6.696229	Y
5	ICIS 200-215485/8	94.371928	650.269759	480.94	821567.0	6.8905	Y
6	IC 200-215485/9	188.5	1277.773365	480.94	809441.0	6.778639	Y



Calibration

/ n-Octane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

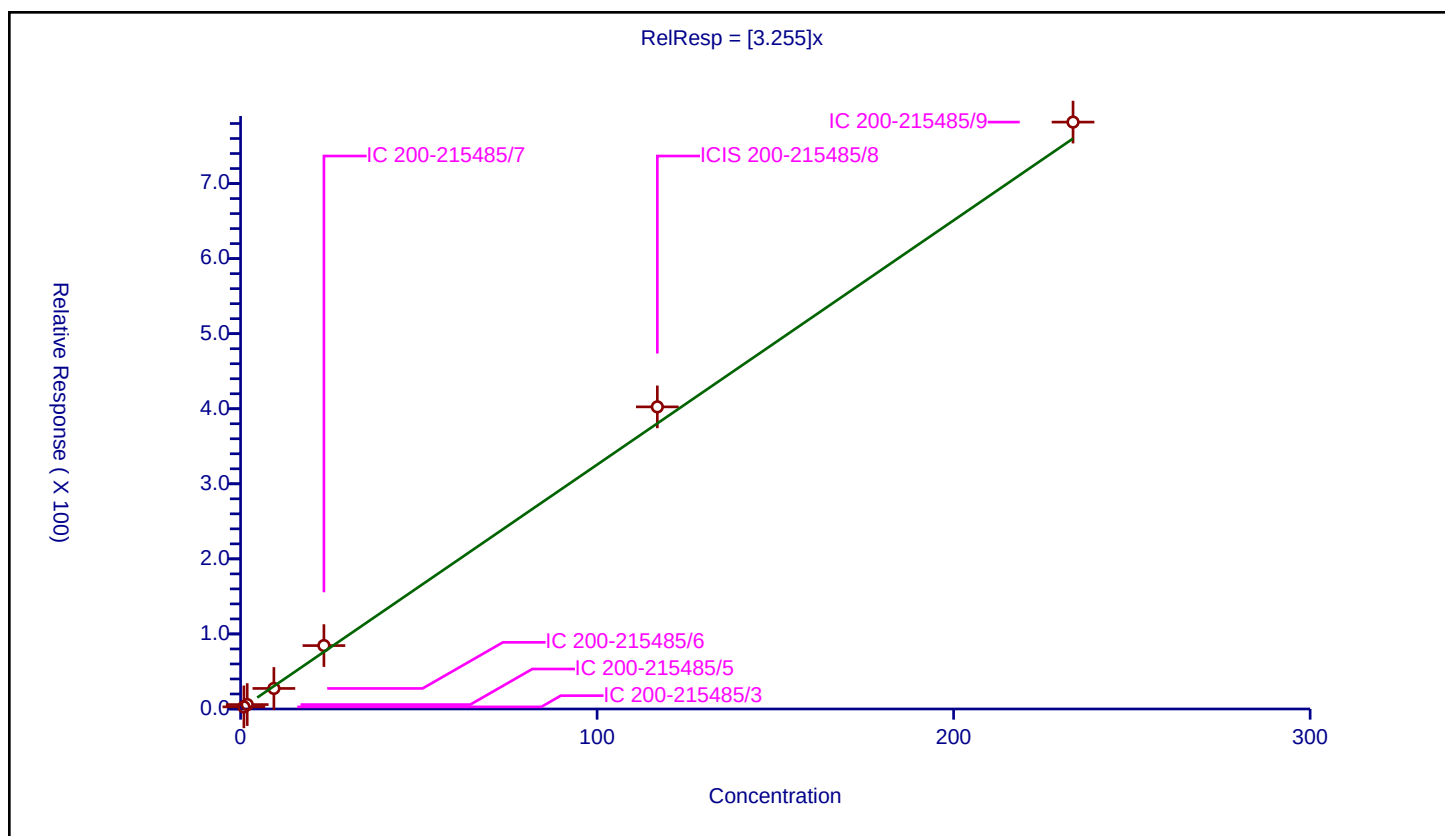
Curve Coefficients

Intercept: 0
Slope: 3.255

Error Coefficients

Relative Standard Deviation: 8.0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	0.934603	2.839362	466.63	1028953.0	3.03804	Y
2	IC 200-215485/5	1.869207	5.897109	466.63	903253.0	3.154873	Y
3	IC 200-215485/6	9.346034	27.38866	466.63	906540.0	2.930512	Y
4	IC 200-215485/7	23.380207	84.480212	466.63	820953.0	3.613322	Y
5	ICIS 200-215485/8	116.901035	402.515515	466.63	912787.0	3.443216	Y
6	IC 200-215485/9	233.5	781.90058	466.63	891493.0	3.348611	Y



Calibration

/ Ethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

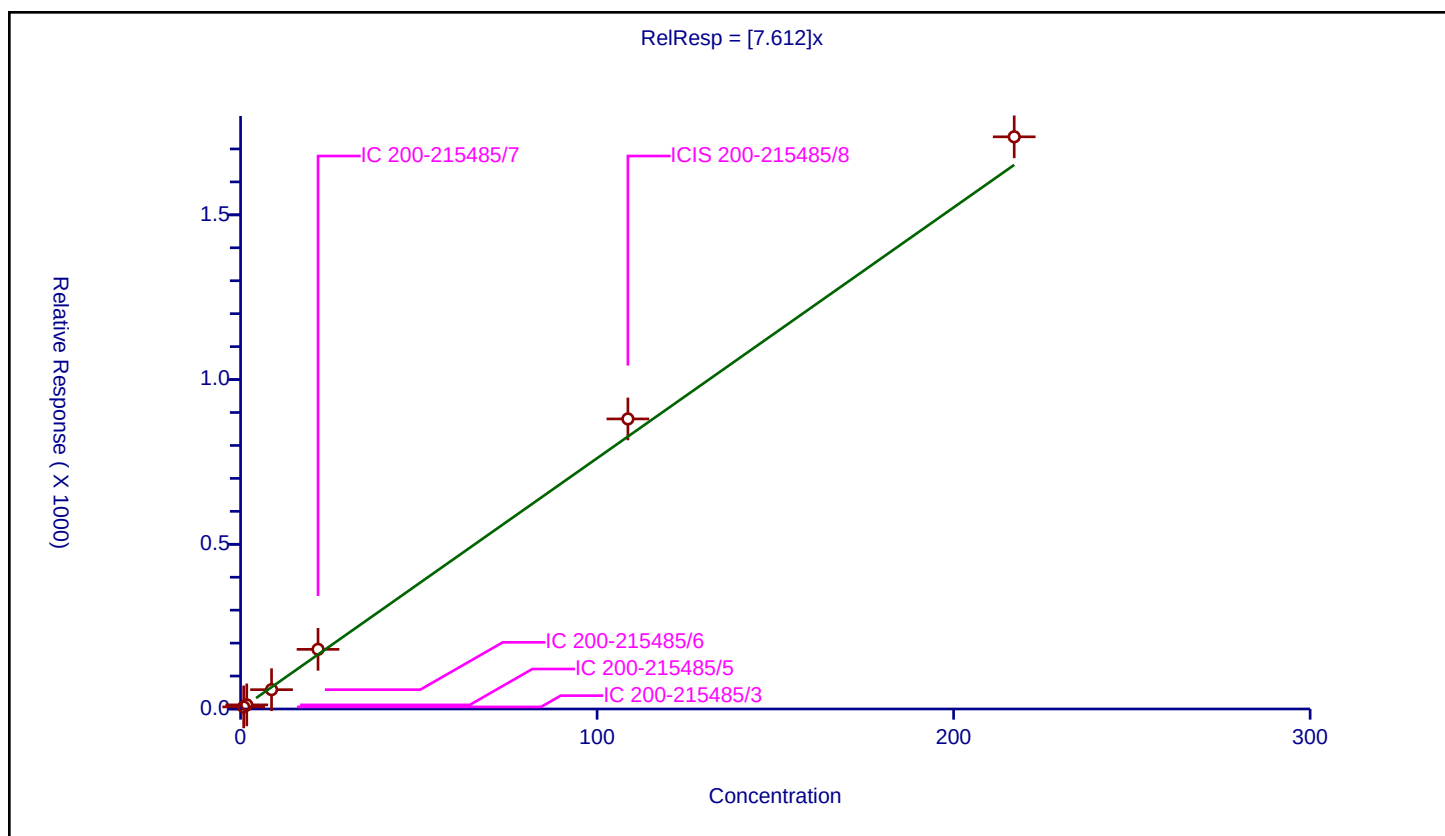
Curve Coefficients

Intercept: 0
 Slope: 7.612

Error Coefficients

Relative Standard Deviation: 8.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	0.868561	6.328539	480.94	896442.0	7.286237	Y
2	IC 200-215485/5	1.737121	12.500492	480.94	818797.0	7.196095	Y
3	IC 200-215485/6	8.685607	58.611749	480.94	786368.0	6.748146	Y
4	IC 200-215485/7	21.728072	181.010555	480.94	769677.0	8.330723	Y
5	ICIS 200-215485/8	108.640362	880.519667	480.94	821567.0	8.104904	Y
6	IC 200-215485/9	217.0	1736.896289	480.94	809441.0	8.00413	Y



Calibration

/ 2,3-Dimethylheptane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

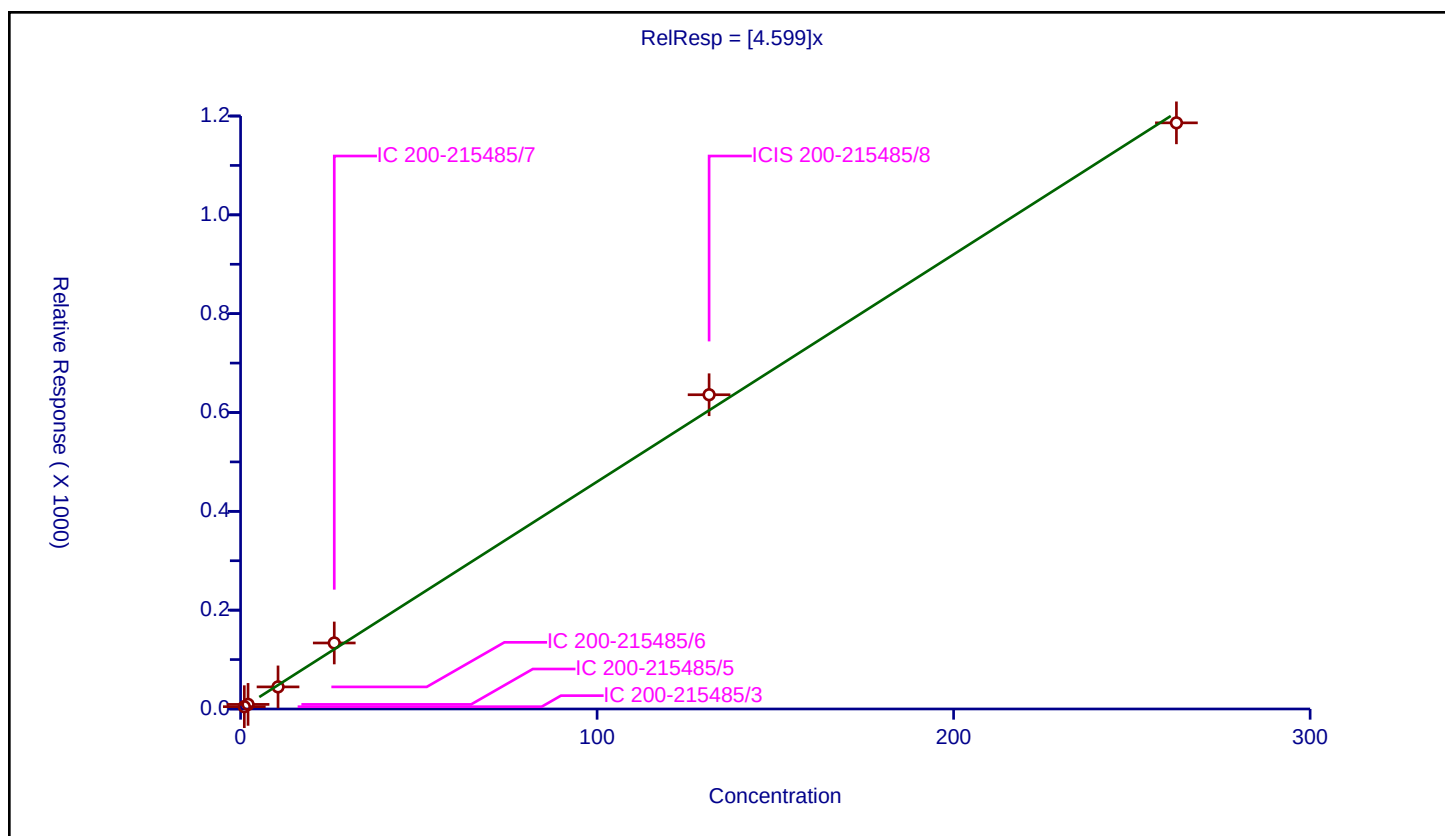
Curve Coefficients

Intercept: 0
Slope: 4.599

Error Coefficients

Relative Standard Deviation: 6.6

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	1.050678	4.687389	480.94	896442.0	4.461298	Y
2	IC 200-215485/5	2.101357	9.322211	480.94	818797.0	4.436282	Y
3	IC 200-215485/6	10.506783	44.735845	480.94	786368.0	4.257806	Y
4	IC 200-215485/7	26.283959	133.597465	480.94	769677.0	5.082852	Y
5	ICIS 200-215485/8	131.419793	635.940497	480.94	821567.0	4.839001	Y
6	IC 200-215485/9	262.5	1186.169452	480.94	809441.0	4.518741	Y



Calibration

/ m-Xylene & p-Xylene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

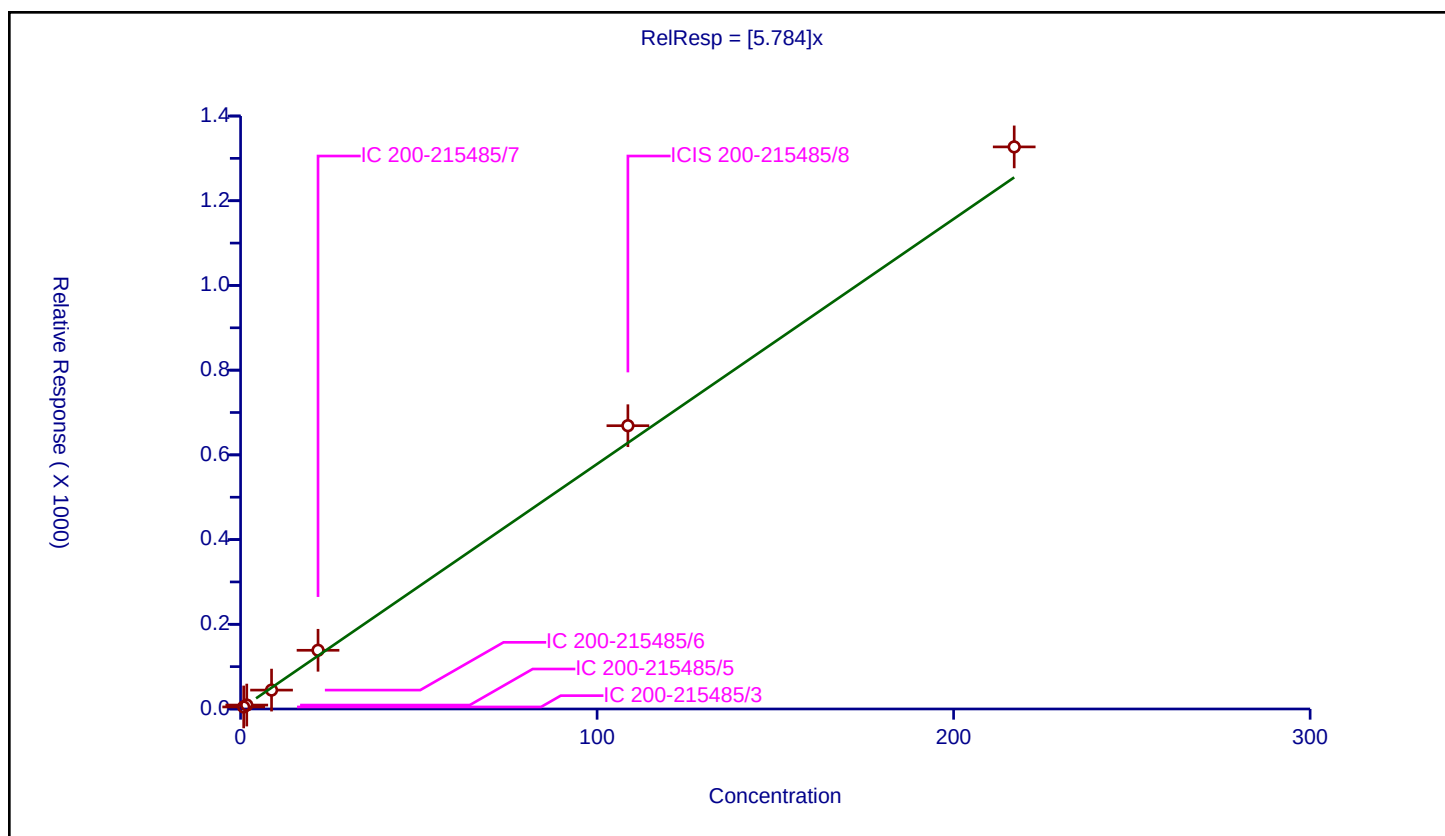
Curve Coefficients

Intercept: 0
 Slope: 5.784

Error Coefficients

Relative Standard Deviation: 8.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	0.868561	4.836536	480.94	896442.0	5.568449	Y
2	IC 200-215485/5	1.737121	9.290493	480.94	818797.0	5.348212	Y
3	IC 200-215485/6	8.685607	44.604964	480.94	786368.0	5.135503	Y
4	IC 200-215485/7	21.728072	138.625084	480.94	769677.0	6.379999	Y
5	ICIS 200-215485/8	108.640362	668.859516	480.94	821567.0	6.156639	Y
6	IC 200-215485/9	217.0	1327.079993	480.94	809441.0	6.115576	Y



Calibration

/ o-Xylene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

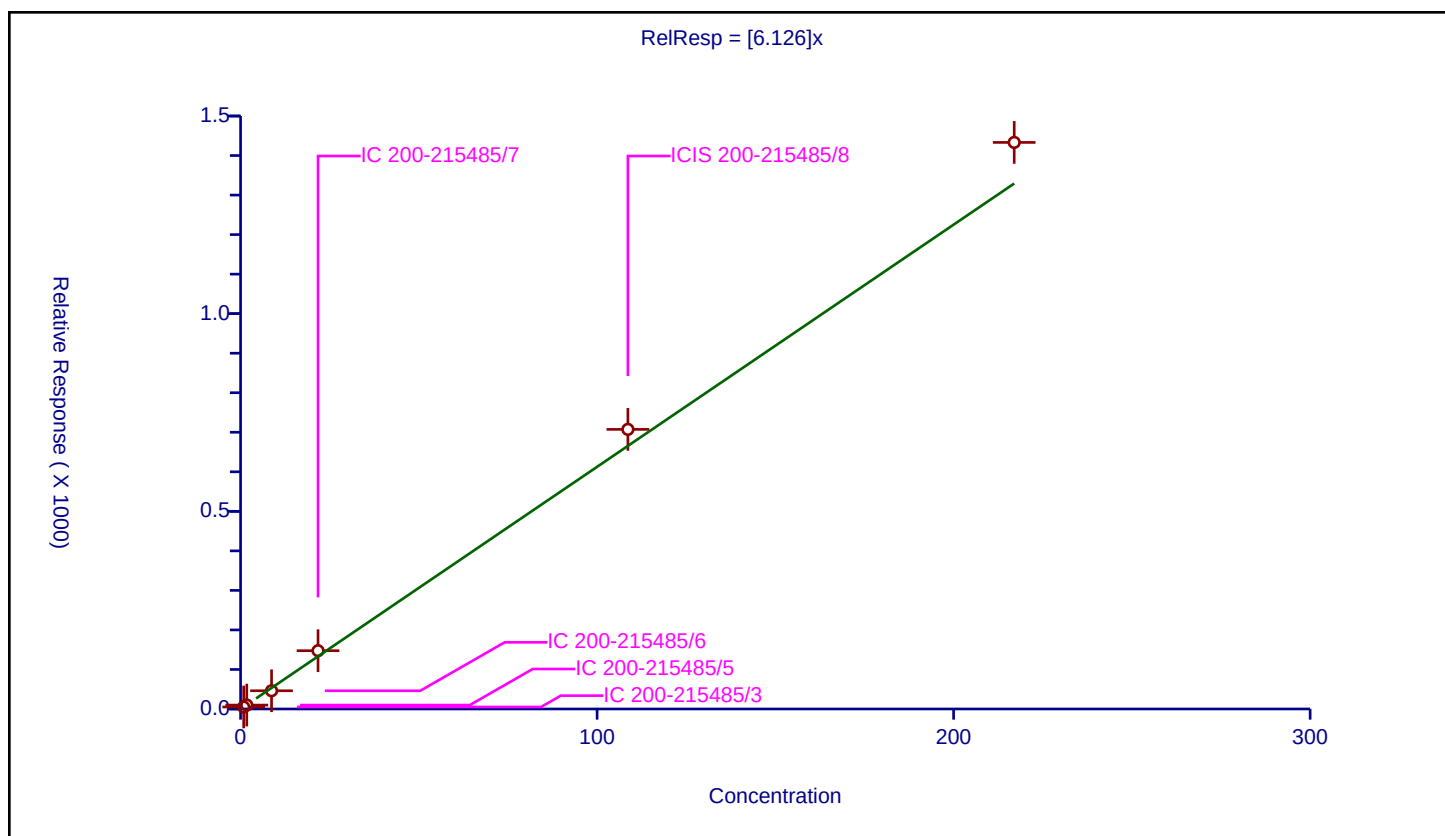
Curve Coefficients

Intercept: 0
 Slope: 6.126

Error Coefficients

Relative Standard Deviation: 9.6

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	0.868561	5.092446	480.94	896442.0	5.863086	Y
2	IC 200-215485/5	1.737121	9.877867	480.94	818797.0	5.686342	Y
3	IC 200-215485/6	8.685607	46.08992	480.94	786368.0	5.306471	Y
4	IC 200-215485/7	21.728072	147.401236	480.94	769677.0	6.783908	Y
5	ICIS 200-215485/8	108.640362	707.301138	480.94	821567.0	6.510482	Y
6	IC 200-215485/9	217.0	1433.186833	480.94	809441.0	6.604548	Y



Calibration

/ n-Nonane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

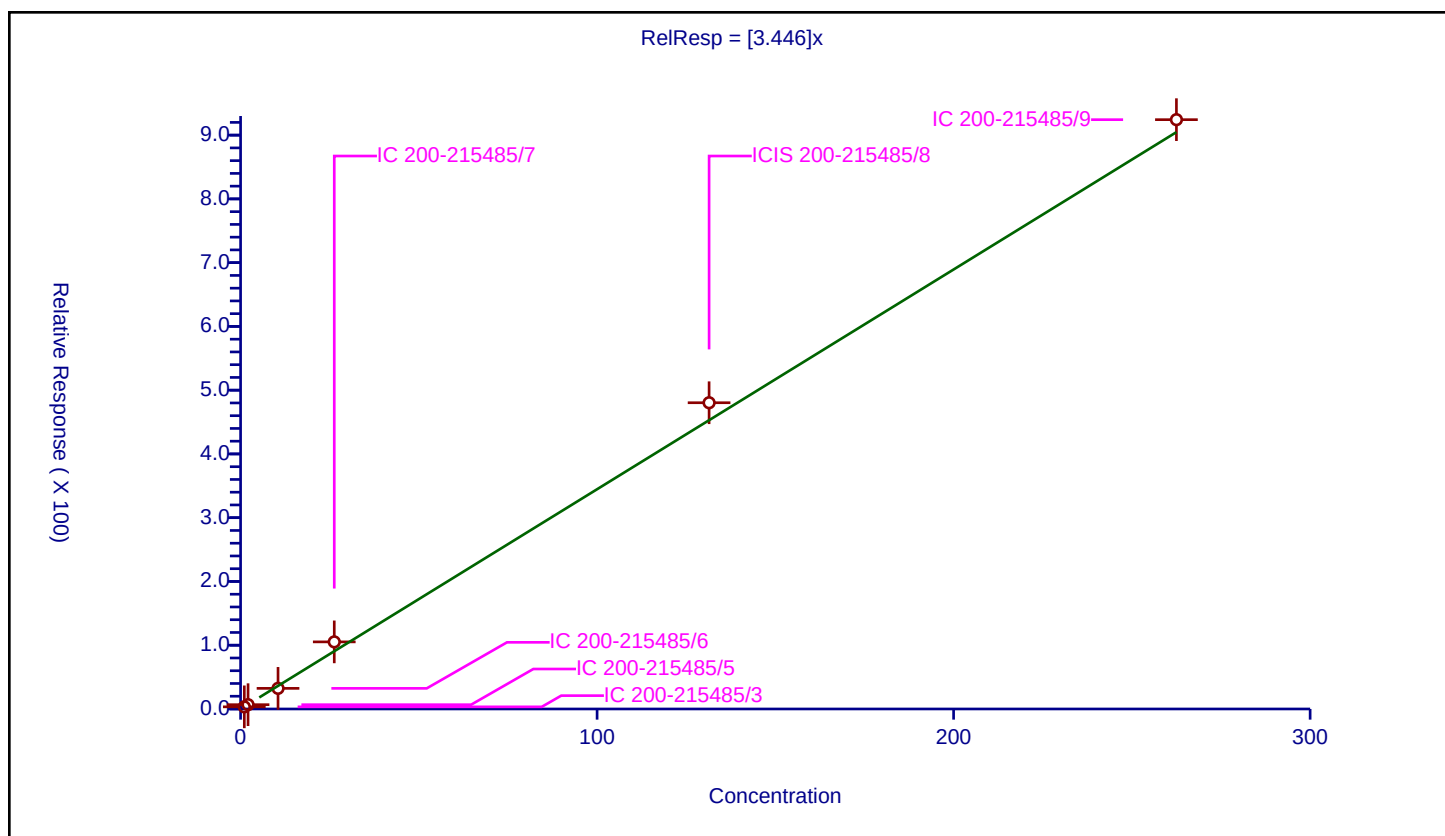
Curve Coefficients

Intercept: 0
 Slope: 3.446

Error Coefficients

Relative Standard Deviation: 10.1

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	1.050678	3.368139	480.94	896442.0	3.205681	Y
2	IC 200-215485/5	2.101357	6.755387	480.94	818797.0	3.214774	Y
3	IC 200-215485/6	10.506783	32.342452	480.94	786368.0	3.078245	Y
4	IC 200-215485/7	26.283959	105.245089	480.94	769677.0	4.004157	Y
5	ICIS 200-215485/8	131.419793	480.306604	480.94	821567.0	3.654751	Y
6	IC 200-215485/9	262.5	924.281357	480.94	809441.0	3.521072	Y



Calibration

/ Isopropylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

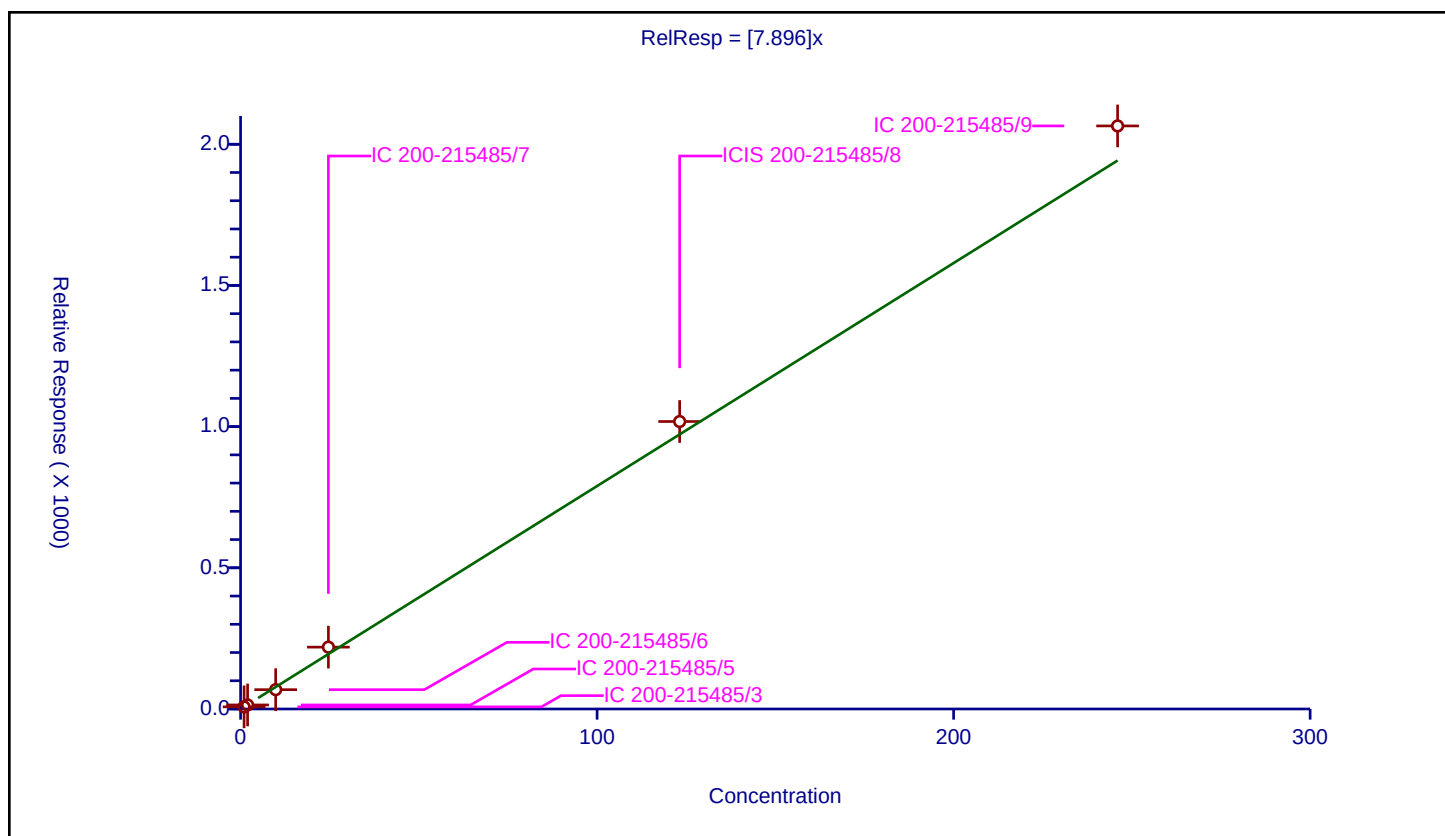
Curve Coefficients

Intercept: 0
 Slope: 7.896

Error Coefficients

Relative Standard Deviation: 9.4

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	0.984636	7.476646	480.94	896442.0	7.593313	Y
2	IC 200-215485/5	1.969271	14.327225	480.94	818797.0	7.275394	Y
3	IC 200-215485/6	9.846357	68.451115	480.94	786368.0	6.951923	Y
4	IC 200-215485/7	24.631824	219.079497	480.94	769677.0	8.894165	Y
5	ICIS 200-215485/8	123.15912	1018.061973	480.94	821567.0	8.266233	Y
6	IC 200-215485/9	246.0	2064.826211	480.94	809441.0	8.393602	Y



Calibration

/ 3-Ethyltoluene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

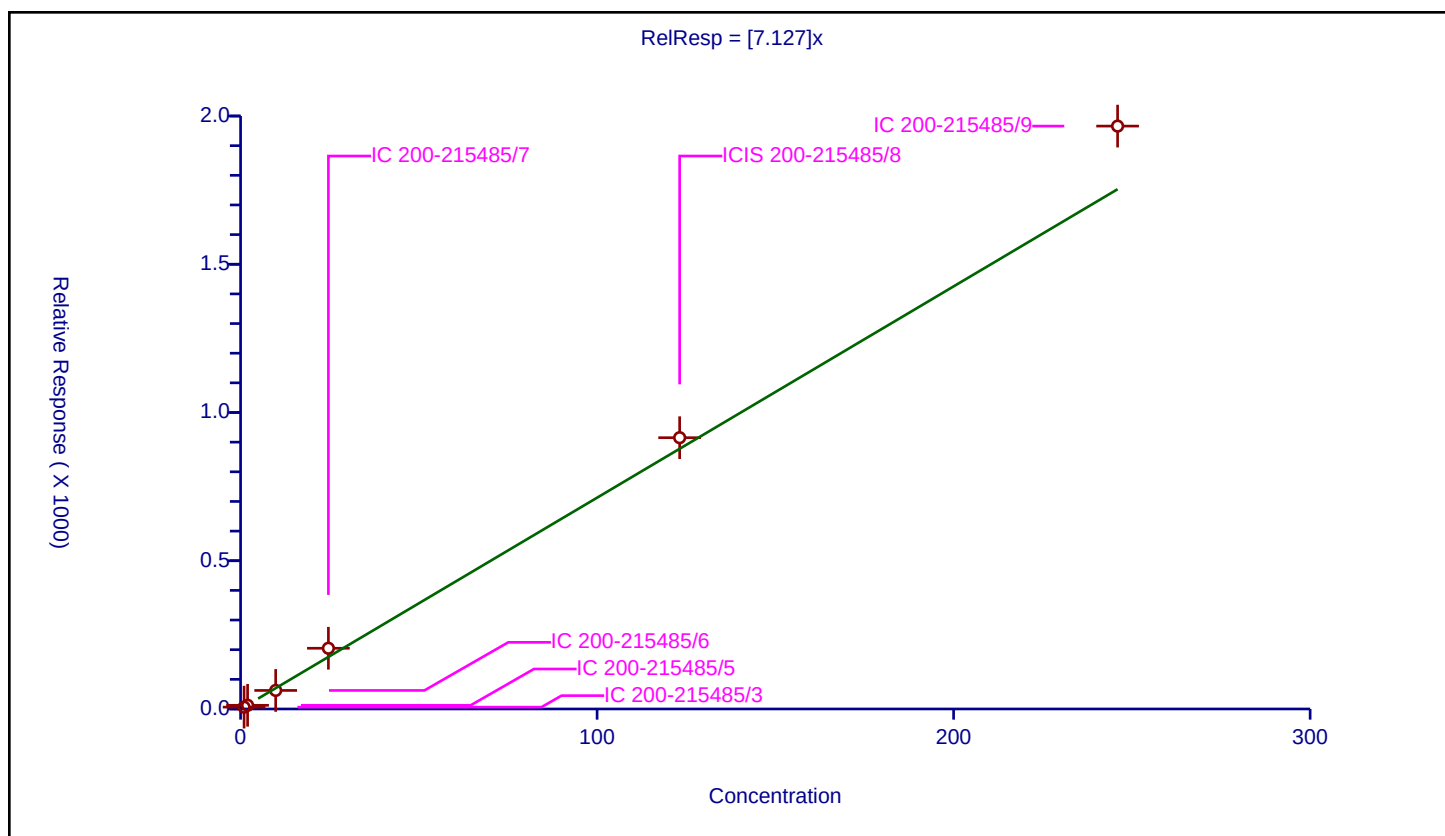
Curve Coefficients

Intercept: 0
Slope: 7.127

Error Coefficients

Relative Standard Deviation: 12.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	0.984636	6.235725	480.94	896442.0	6.333028	Y
2	IC 200-215485/5	1.969271	12.469361	480.94	818797.0	6.331967	Y
3	IC 200-215485/6	9.846357	62.59202	480.94	786368.0	6.356871	Y
4	IC 200-215485/7	24.631824	204.845822	480.94	769677.0	8.316307	Y
5	ICIS 200-215485/8	123.15912	914.99876	480.94	821567.0	7.429403	Y
6	IC 200-215485/9	246.0	1965.983609	480.94	809441.0	7.991803	Y



Calibration

/ 1,3,5-Trimethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

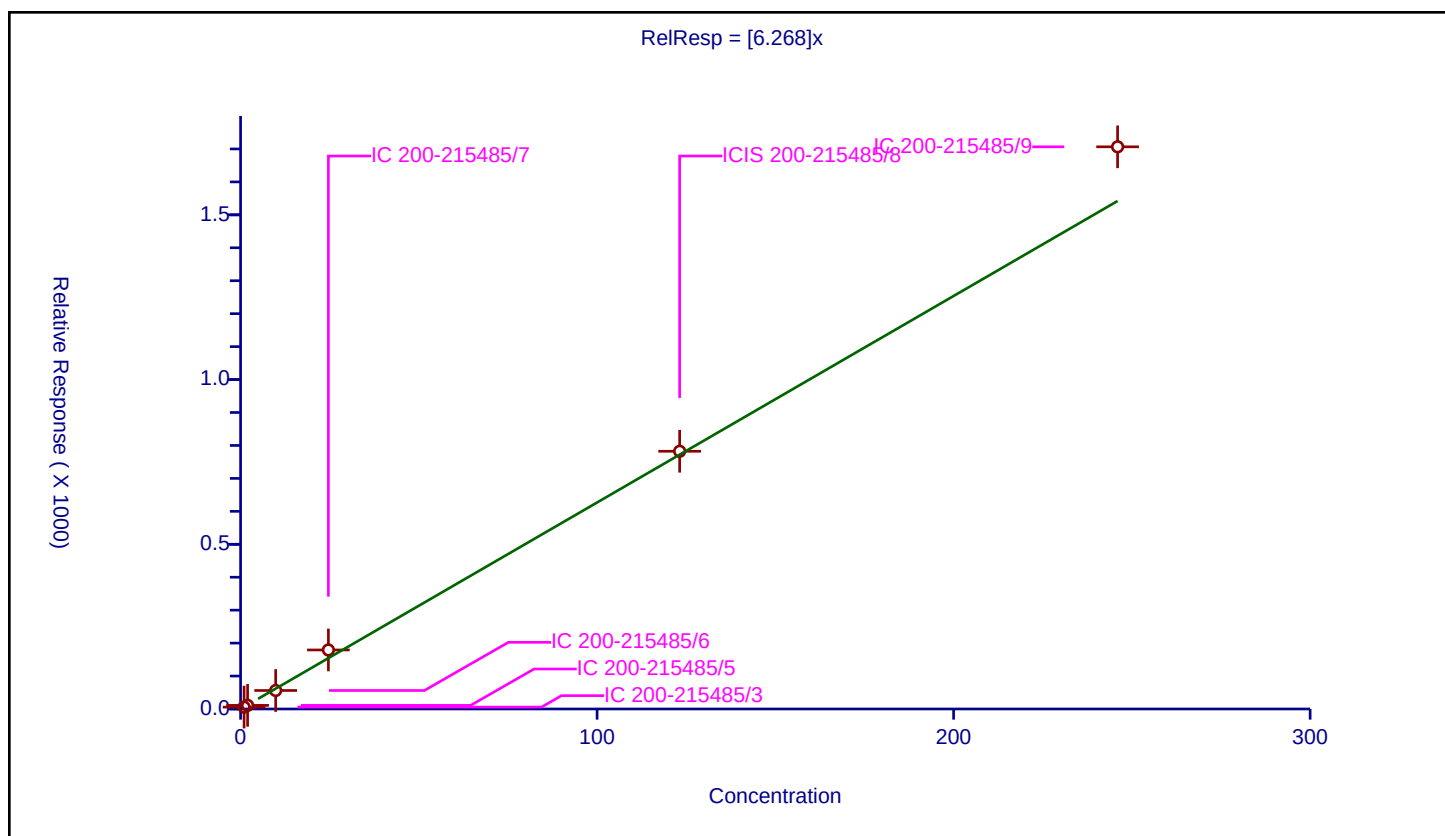
Curve Coefficients

Intercept: 0
 Slope: 6.268

Error Coefficients

Relative Standard Deviation: 11.3

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	0.984636	5.688496	480.94	896442.0	5.77726	Y
2	IC 200-215485/5	1.969271	10.973907	480.94	818797.0	5.572572	Y
3	IC 200-215485/6	9.846357	56.111542	480.94	786368.0	5.698711	Y
4	IC 200-215485/7	24.631824	179.157222	480.94	769677.0	7.273405	Y
5	ICIS 200-215485/8	123.15912	782.3	480.94	821567.0	6.351945	Y
6	IC 200-215485/9	246.0	1706.518511	480.94	809441.0	6.937067	Y



Calibration

/ C9-C10 Aromatics (mz 120)

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

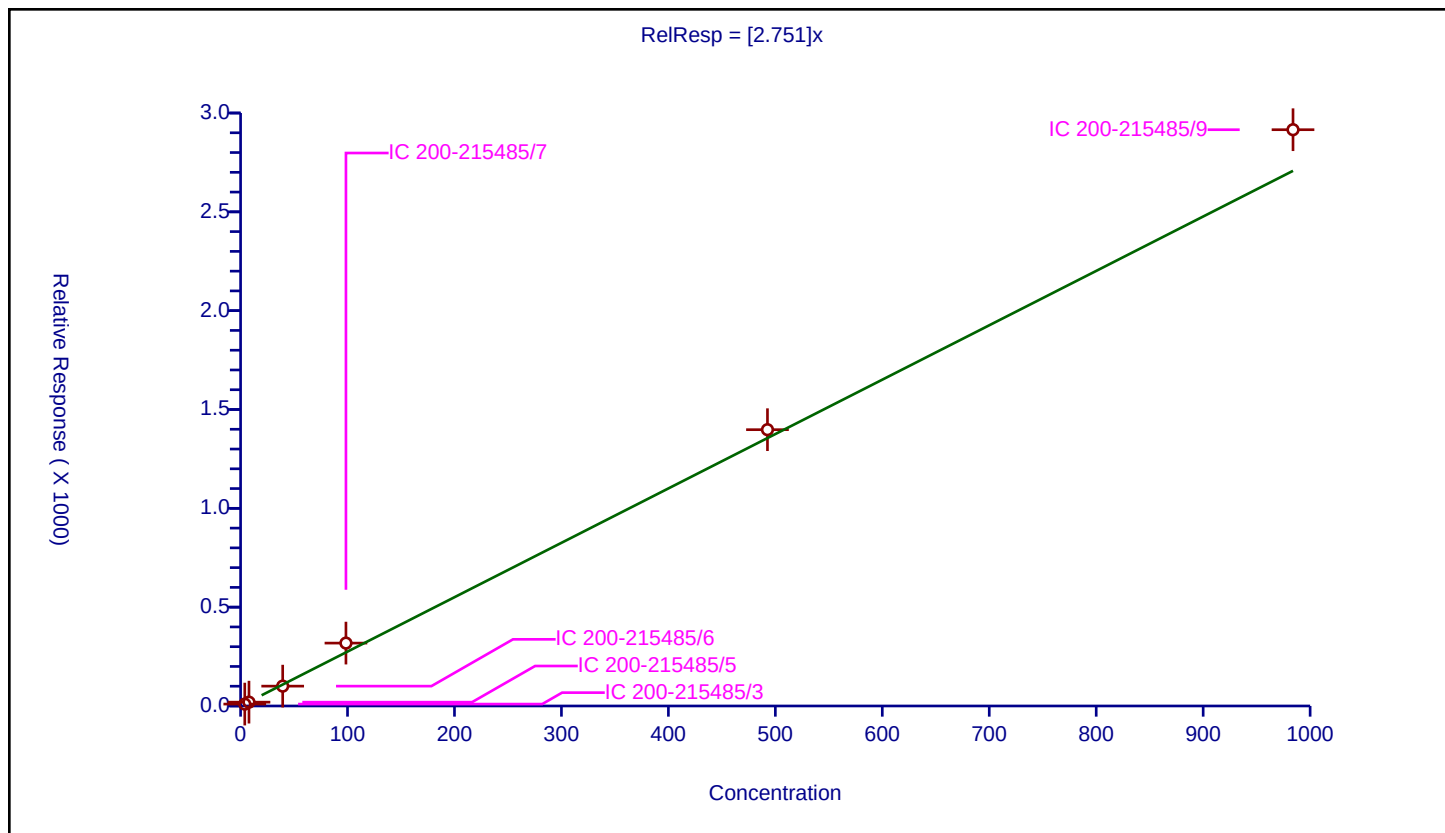
Curve Coefficients

Intercept: 0
Slope: 2.751

Error Coefficients

Relative Standard Deviation: 11.3

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	3.938543	9.706335	480.94	896442.0	2.464448	Y
2	IC 200-215485/5	7.877085	19.40096	480.94	818797.0	2.462962	Y
3	IC 200-215485/6	39.385426	100.486546	480.94	786368.0	2.551364	Y
4	IC 200-215485/7	98.527296	318.199087	480.94	769677.0	3.229553	Y
5	ICIS 200-215485/8	492.636481	1397.938464	480.94	821567.0	2.837667	Y
6	IC 200-215485/9	984.0	2915.588793	480.94	809441.0	2.962997	Y



Calibration

/ n-Decane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

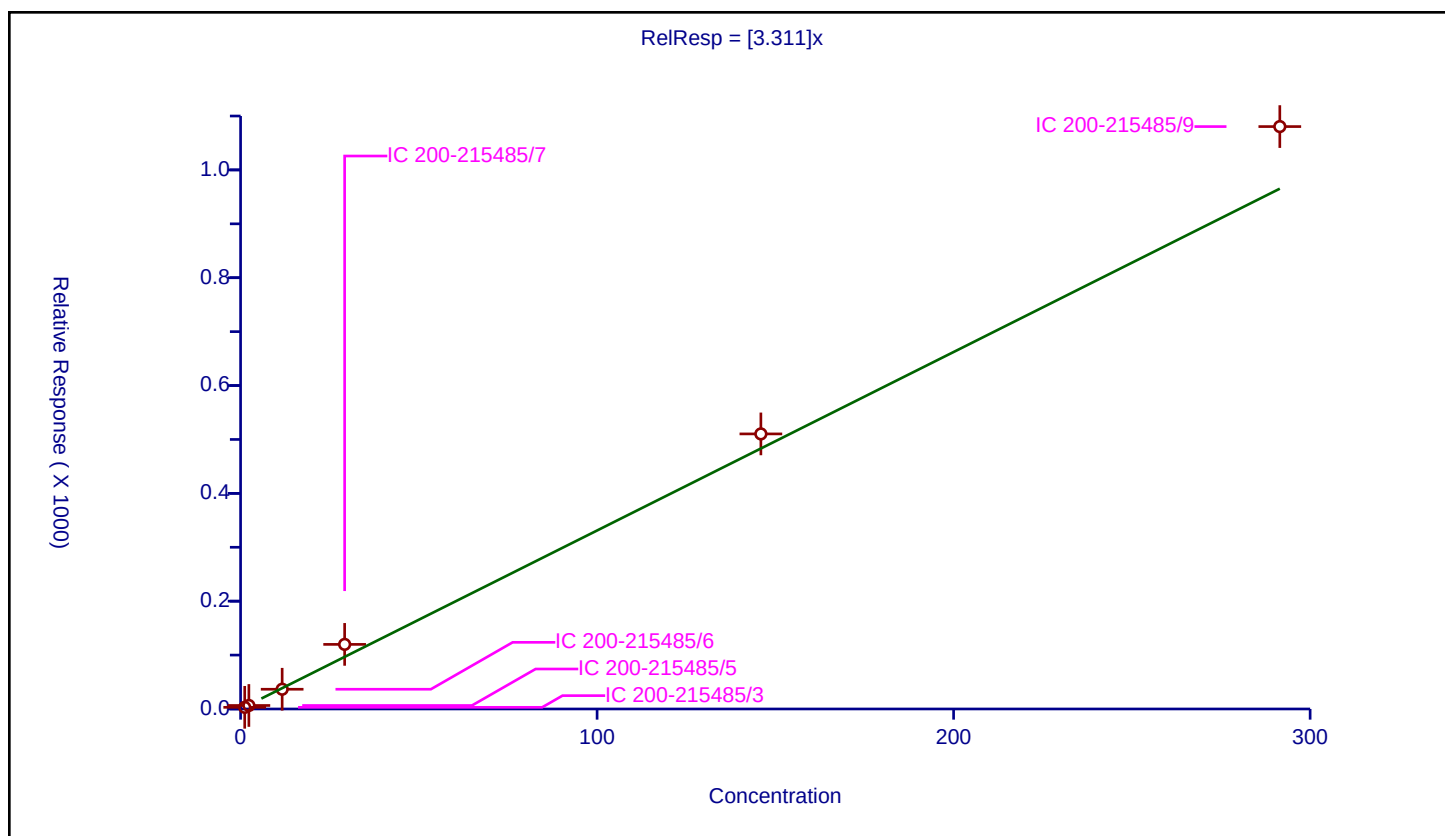
Curve Coefficients

Intercept: 0
Slope: 3.311

Error Coefficients

Relative Standard Deviation: 17.0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	1.166753	3.079503	480.94	896442.0	2.639378	Y
2	IC 200-215485/5	2.333506	6.480496	480.94	818797.0	2.77715	Y
3	IC 200-215485/6	11.667532	36.654819	480.94	786368.0	3.141609	Y
4	IC 200-215485/7	29.18771	119.834934	480.94	769677.0	4.105664	Y
5	ICIS 200-215485/8	145.938551	510.267045	480.94	821567.0	3.496451	Y
6	IC 200-215485/9	291.5	1080.422081	480.94	809441.0	3.706422	Y



Calibration

/ C9-C12 Aliphatics

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

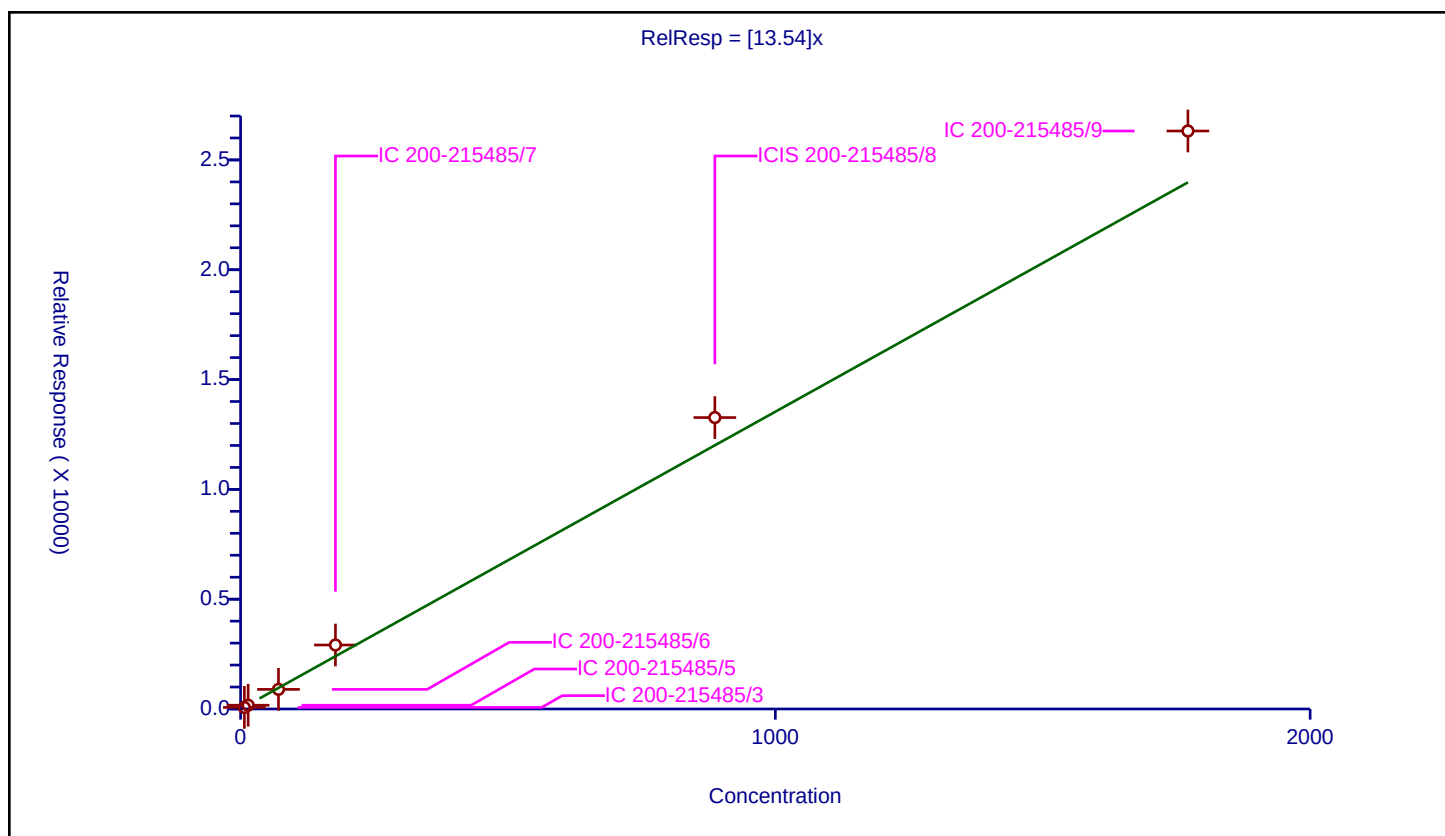
Curve Coefficients

Intercept: 0
Slope: 13.54

Error Coefficients

Relative Standard Deviation: 16.8

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	7.090578	72.640319	480.94	896442.0	10.244627	Y
2	IC 200-215485/5	14.181155	172.009514	480.94	818797.0	12.129443	Y
3	IC 200-215485/6	70.905775	893.158559	480.94	786368.0	12.596415	Y
4	IC 200-215485/7	177.379172	2913.524356	480.94	769677.0	16.425403	Y
5	ICIS 200-215485/8	886.89586	13269.619581	480.94	821567.0	14.961869	Y
6	IC 200-215485/9	1771.5	26317.813062	480.94	809441.0	14.856231	Y



Calibration

/ C9-C10 Aromatics (mz 134)

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

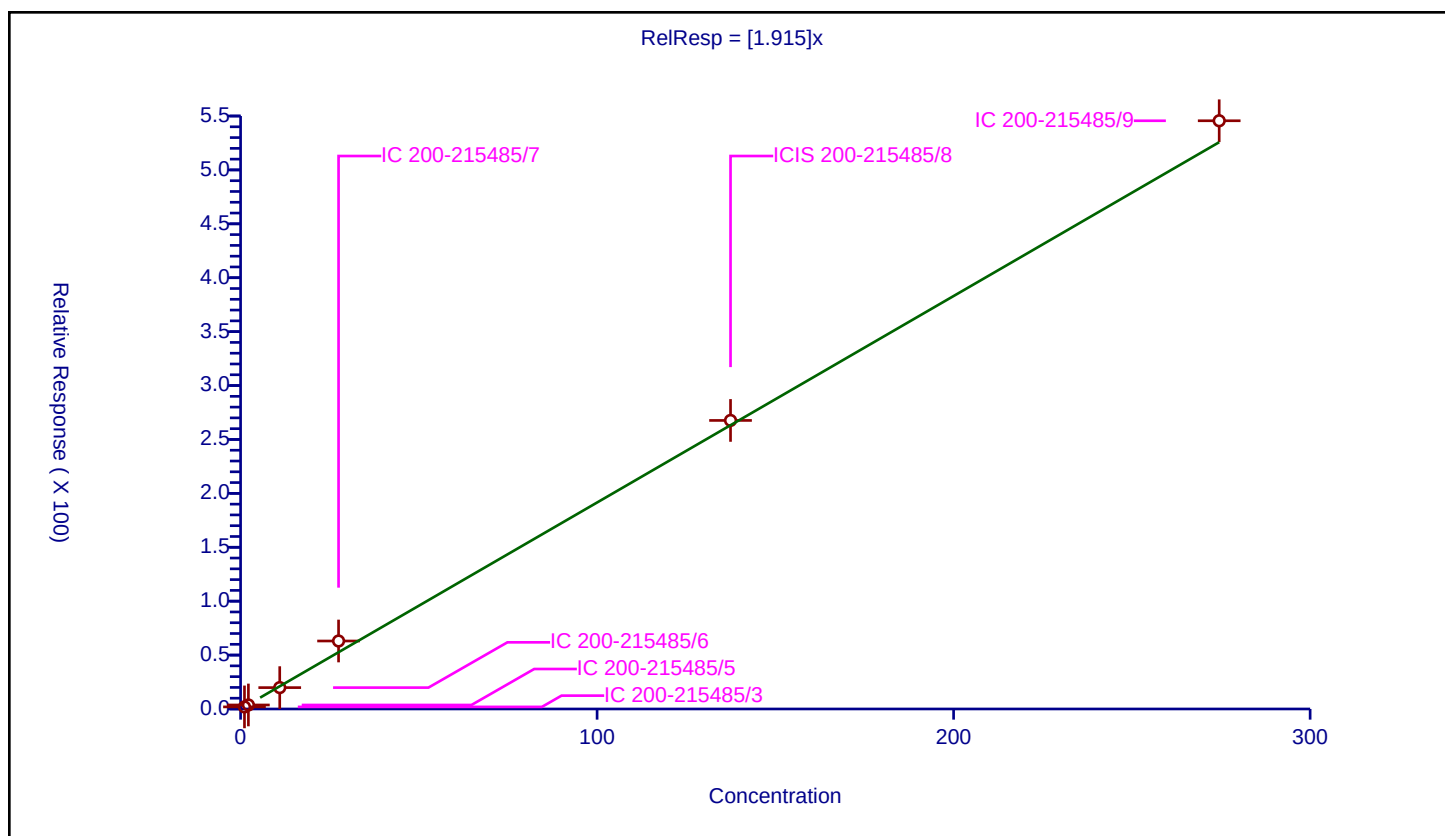
Curve Coefficients

Intercept: 0
Slope: 1.915

Error Coefficients

Relative Standard Deviation: 11.3

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	1.098709	1.937833	480.94	896442.0	1.763736	Y
2	IC 200-215485/5	2.197419	3.722776	480.94	818797.0	1.694159	Y
3	IC 200-215485/6	10.987093	19.818176	480.94	786368.0	1.803769	Y
4	IC 200-215485/7	27.485511	63.065197	480.94	769677.0	2.294489	Y
5	ICIS 200-215485/8	137.427555	267.638406	480.94	821567.0	1.947487	Y
6	IC 200-215485/9	274.5	545.585543	480.94	809441.0	1.987561	Y



Calibration

/ 4-Isopropyltoluene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

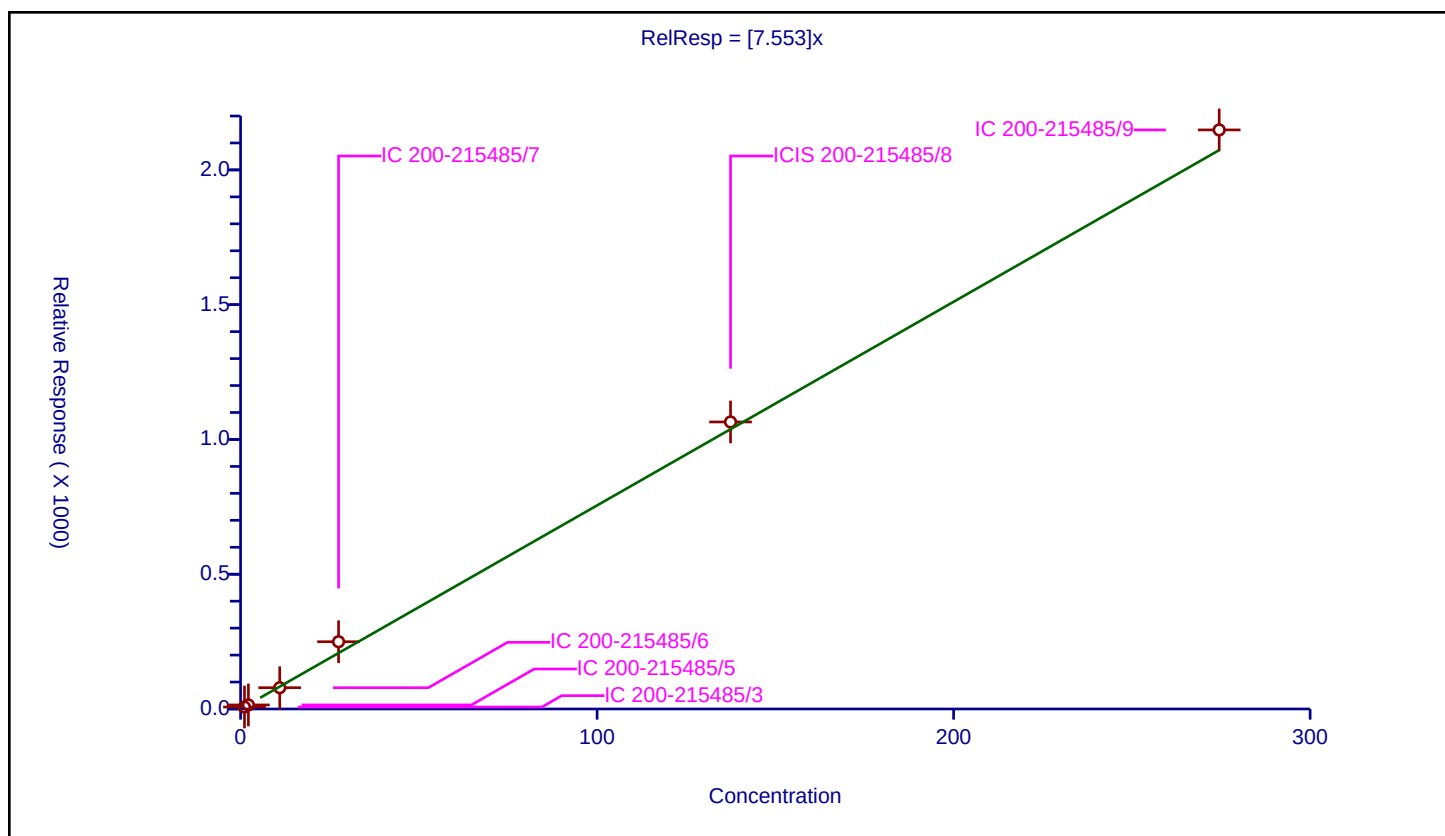
Curve Coefficients

Intercept: 0
Slope: 7.553

Error Coefficients

Relative Standard Deviation: 11.7

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	1.098709	7.294773	480.94	896442.0	6.639403	Y
2	IC 200-215485/5	2.197419	15.024437	480.94	818797.0	6.837312	Y
3	IC 200-215485/6	10.987093	78.980974	480.94	786368.0	7.188523	Y
4	IC 200-215485/7	27.485511	249.567017	480.94	769677.0	9.079948	Y
5	ICIS 200-215485/8	137.427555	1064.918041	480.94	821567.0	7.748941	Y
6	IC 200-215485/9	274.5	2148.443383	480.94	809441.0	7.826752	Y



Calibration

/ 1,2,3-Trimethylbenzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

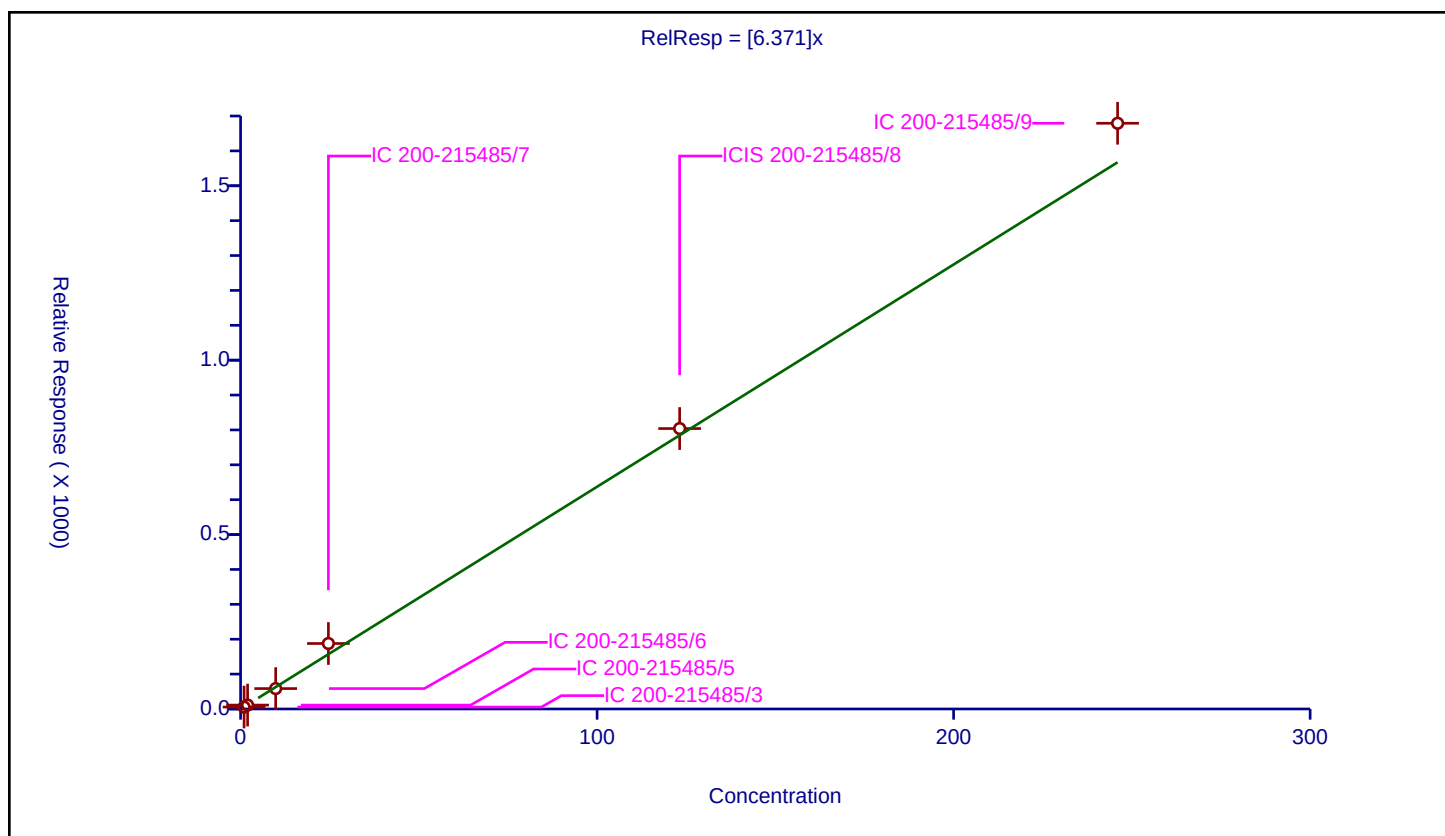
Curve Coefficients

Intercept: 0
Slope: 6.371

Error Coefficients

Relative Standard Deviation: 12.2

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	0.984636	5.527546	480.94	896442.0	5.613799	Y
2	IC 200-215485/5	1.969271	11.215905	480.94	818797.0	5.695459	Y
3	IC 200-215485/6	9.846357	58.488207	480.94	786368.0	5.940086	Y
4	IC 200-215485/7	24.631824	187.761537	480.94	769677.0	7.622722	Y
5	ICIS 200-215485/8	123.15912	804.006977	480.94	821567.0	6.528197	Y
6	IC 200-215485/9	246.0	1679.212556	480.94	809441.0	6.826067	Y



Calibration

/ Butylcyclohexane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

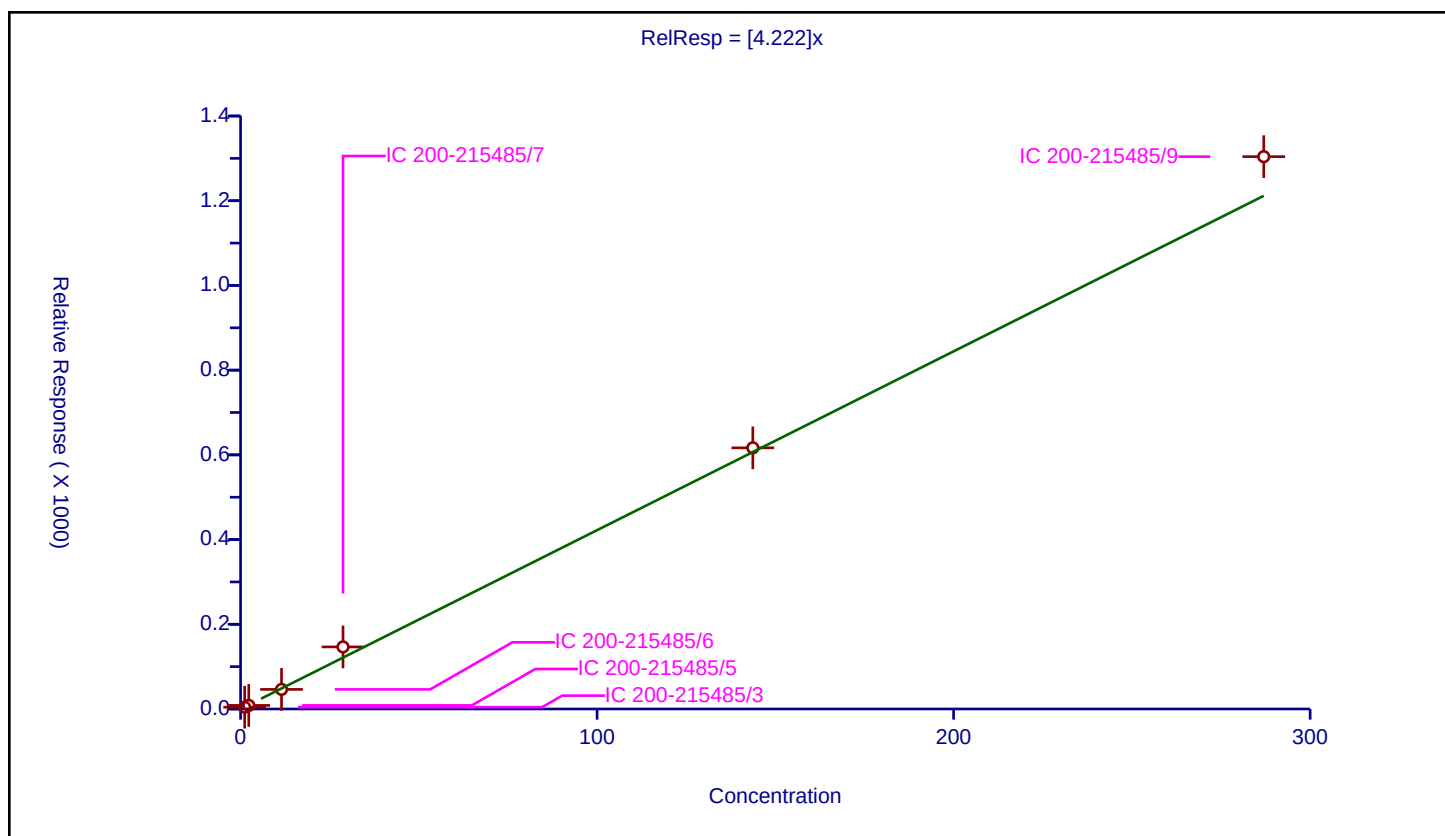
Curve Coefficients

Intercept: 0
 Slope: 4.222

Error Coefficients

Relative Standard Deviation: 12.9

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	1.148742	4.234048	480.94	896442.0	3.685814	Y
2	IC 200-215485/5	2.297483	8.464058	480.94	818797.0	3.684057	Y
3	IC 200-215485/6	11.487416	46.253828	480.94	786368.0	4.026478	Y
4	IC 200-215485/7	28.737128	146.525808	480.94	769677.0	5.098833	Y
5	ICIS 200-215485/8	143.68564	616.583289	480.94	821567.0	4.291196	Y
6	IC 200-215485/9	287.0	1304.05023	480.94	809441.0	4.543729	Y



Calibration

/ Undecane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

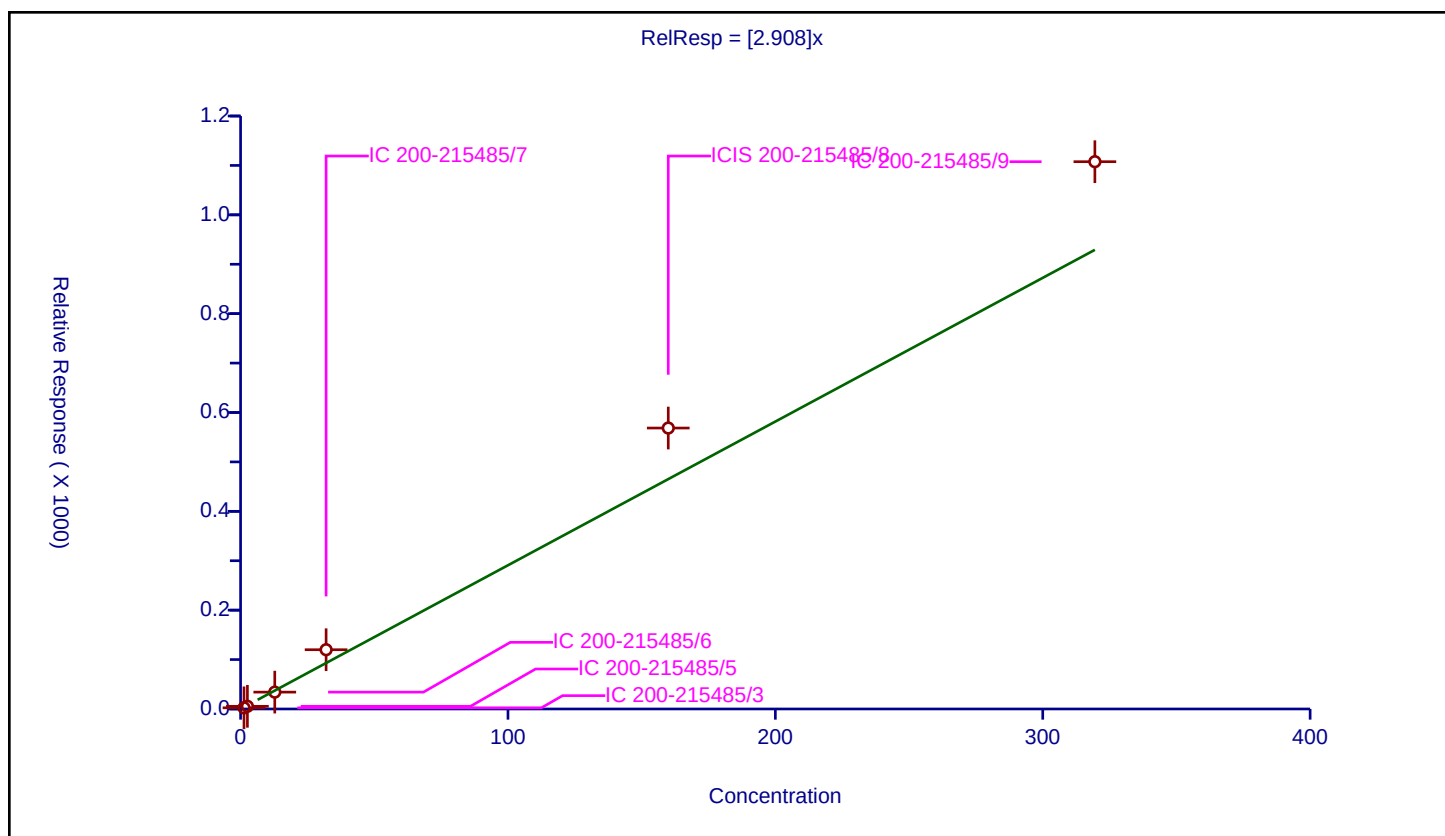
Curve Coefficients

Intercept: 0
Slope: 2.908

Error Coefficients

Relative Standard Deviation: 27.3

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	1.278826	2.414781	480.94	896442.0	1.88828	Y
2	IC 200-215485/5	2.557651	5.430272	480.94	818797.0	2.123148	Y
3	IC 200-215485/6	12.788256	34.120975	480.94	786368.0	2.668149	Y
4	IC 200-215485/7	31.991332	119.937411	480.94	769677.0	3.74906	Y
5	ICIS 200-215485/8	159.956662	568.530677	480.94	821567.0	3.554279	Y
6	IC 200-215485/9	319.5	1107.572365	480.94	809441.0	3.46658	Y



Calibration

/ Dodecane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

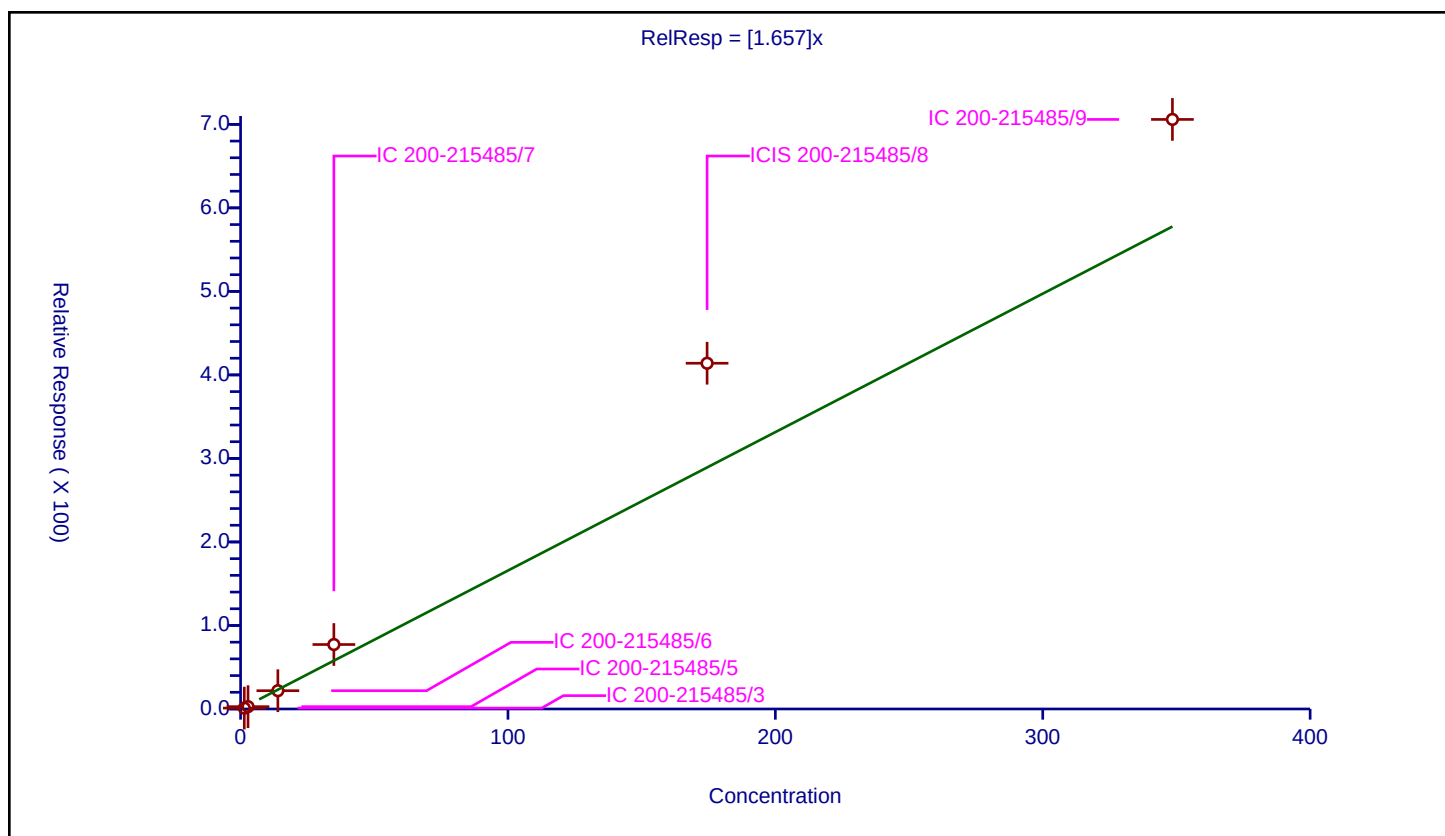
Curve Coefficients

Intercept: 0
 Slope: 1.657

Error Coefficients

Relative Standard Deviation: 40.0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	1.394901	1.062267	480.94	896442.0	0.761536	Y
2	IC 200-215485/5	2.789801	2.800011	480.94	818797.0	1.00366	Y
3	IC 200-215485/6	13.949005	21.892712	480.94	786368.0	1.569482	Y
4	IC 200-215485/7	34.895084	77.190146	480.94	769677.0	2.212064	Y
5	ICIS 200-215485/8	174.47542	413.966883	480.94	821567.0	2.372637	Y
6	IC 200-215485/9	348.5	705.928188	480.94	809441.0	2.025619	Y



Calibration

/ Naphthalene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

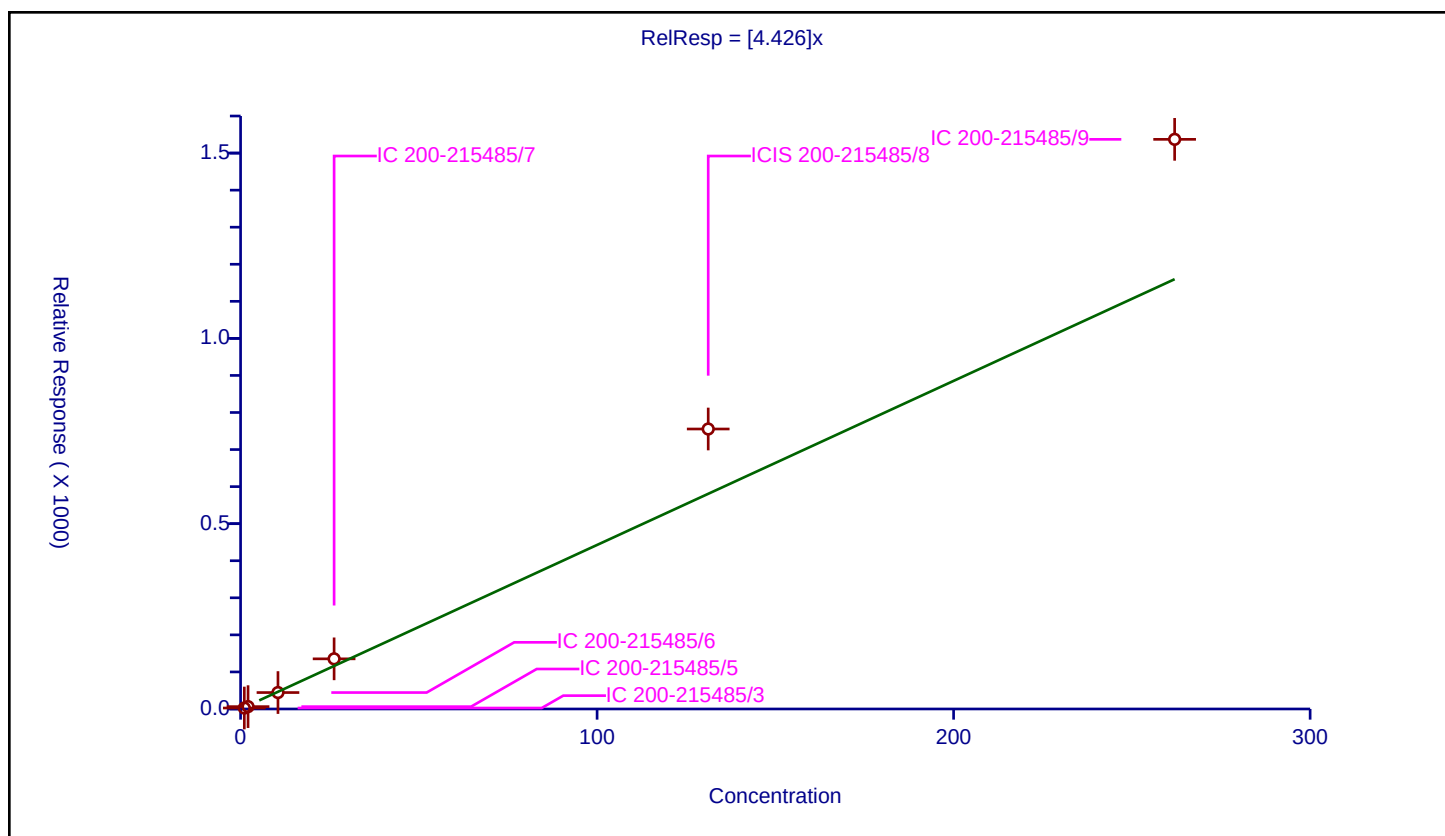
Curve Coefficients

Intercept: 0
Slope: 4.426

Error Coefficients

Relative Standard Deviation: 32.0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 200-215485/3	1.048677	2.628307	480.94	896442.0	2.506308	Y
2	IC 200-215485/5	2.097354	6.365958	480.94	818797.0	3.035233	Y
3	IC 200-215485/6	10.48677	44.387847	480.94	786368.0	4.232747	Y
4	IC 200-215485/7	26.233894	135.293333	480.94	769677.0	5.157196	Y
5	ICIS 200-215485/8	131.16947	755.488977	480.94	821567.0	5.75964	Y
6	IC 200-215485/9	262.0	1537.073286	480.94	809441.0	5.866692	Y



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 200-78136-1
 SDG No.: 200-78136-1
 Lab Sample ID: ICV 200-215485/11 Calibration Date: 04/24/2025 18:55
 Instrument ID: CHAE.i Calib Start Date: 04/24/2025 11:56
 GC Column: RTX-624 ID: 0.32 (mm) Calib End Date: 04/24/2025 17:11
 Lab File ID: 200-0064859-011.D Conc. Units: ug/m3 Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Butadiene	Ave	10.42	9.182		48.8	55.3	-11.9	30.0
Isopentane	Ave	12.88	9.936		57.0	73.8	-22.8	
Methyl tert-butyl ether	Ave	28.55	28.82		91.2	90.4	1.0	30.0
Hexane	Ave	2.585	2.493		85.2	88.4	-3.6	
C5-C8 Aliphatics	Ave	12.97	11.07		487	570	-14.7	30.0
Benzene	Ave	5.602	5.614		80.0	79.9	0.2	30.0
Cyclohexane	Ave	2.755	2.703		84.5	86.1	-1.9	
2,3-Dimethylpentane	Ave	2.628	2.630		103	103	0.0	
n-Heptane	Ave	2.629	2.679		105	103	1.9	30.0
Toluene	Ave	6.540	6.835		98.6	94.4	4.5	30.0
n-Octane	Ave	3.255	3.414		123	117	4.9	
Ethylbenzene	Ave	7.612	8.022		114	109	5.4	30.0
2,3-Dimethylheptane	Ave	4.599	4.662		133	131	1.4	
m-Xylene & p-Xylene	Ave	5.784	6.083		114	109	5.2	30.0
o-Xylene	Ave	6.126	6.461		115	109	5.5	30.0
n-Nonane	Ave	3.446	3.564		136	131	3.4	
Isopropylbenzene	Ave	7.896	8.307		130	123	5.2	
3-Ethyltoluene	Ave	7.127	7.791		135	123	9.3	
1,3,5-Trimethylbenzene	Ave	6.268	6.816		134	123	8.7	30.0
C9-C10 Aromatics (mz 120)	Ave	2.751	3.019		541	493	9.7	30.0
C9-C12 Aliphatics	Ave	13.54	14.98		982	887	10.7	30.0
n-Decane	Ave	3.311	3.799		167	146	14.7	30.0
4-Isopropyltoluene	Ave	7.553	8.592		156	137	13.8	
1,2,3-Trimethylbenzene	Ave	6.371	7.249		140	123	13.8	
Butylcyclohexane	Ave	4.222	4.662		159	144	10.4	
C9-C10 Aromatics (mz 134)	Ave	1.915	2.164		155	137	13.0	30.0
Undecane	Ave	2.908	3.485		192	160	19.8	
Dodecane	Ave	1.657	2.025		213	174	22.2	
Naphthalene	Ave	4.426	5.144		152	131	16.2	50.0

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-011.D
 Lims ID: icv
 Client ID:
 Sample Type: ICV
 Inject. Date: 24-Apr-2025 18:55:30 ALS Bottle#: 11 Worklist Smp#: 11
 Purge Vol: 250.000 mL Dil. Factor: 1.0000
 Sample Info: 200-0064859-011
 Operator ID: vtp Instrument ID: CHAE.i
 Sublist: chrom-MADEP_APH_1*sub1
 Method: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\MADEP_APH_1.m
 Limit Group: AIR_APH_Limits
 Last Update: 24-Apr-2025 20:42:59 Calib Date: 24-Apr-2025 17:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-009.D
 Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
 Process Host: CTX1613

First Level Reviewer: V0FK

Date: 24-Apr-2025 20:42:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/m3	OnCol Amt ug/m3	Flags
1 Butadiene	54	5.188	5.188	0.000	93	143300	55.3	48.8	
2 2-Methylbutane	43	6.940	6.940	0.000	92	207000	73.8	57.0	
3 Methyl tert-butyl ether	73	9.964	9.964	0.000	96	734712	90.4	91.2	
* 4 Chlorobromomethane	128	11.132	11.132	0.000	93	149288	529.2	529.2	
5 Hexane	57	11.181	11.181	0.000	93	396574	88.4	85.2	
A 12 C5-C8 Aliphatics	1	12.887	(6.840-18.933)		0	11368702	570.5	486.8	
A 13 C5-C8 Aliphatics (Raw)	1	12.887	(6.840-18.933)		0	29456618	570.5	1261.3	
6 Benzene	78	12.963	12.963	0.000	98	807087	79.9	80.0	
7 Cyclohexane	56	13.255	13.255	0.000	98	419099	86.1	84.5	
* 8 1,4-Difluorobenzene	114	13.419	13.419	0.000	99	840096	466.6	466.6	
9 2,3-Dimethylpentane	56	13.553	13.553	0.000	92	485925	102.6	102.7	
10 n-Heptane	43	14.520	14.520	0.000	93	495004	102.6	104.6	
11 Toluene	91	16.242	16.242	0.000	97	1032851	94.4	98.6	
14 n-Octane	43	17.197	17.197	0.000	92	718514	116.9	122.6	Ma
* 15 Chlorobenzene-d5	117	17.903	17.903	0.000	97	770137	480.9	480.9	
16 Ethylbenzene	91	18.250	18.250	0.000	99	1395510	108.6	114.5	
17 2,3-Dimethylheptane	43	18.304	18.304	0.000	94	981059	131.4	133.2	
18 m-Xylene & p-Xylene	91	18.402	18.402	0.000	98	1058304	108.6	114.3	
19 o-Xylene	91	18.785	18.785	0.000	98	1123963	108.6	114.6	
20 n-Nonane	43	18.943	18.943	0.000	90	750104	131.4	135.9	
* 21 4-Bromofluorobenzene	95	19.150	19.150	0.000	98	544465	715.8	715.8	
22 Isopropylbenzene	105	19.247	19.247	0.000	98	1638253	123.2	129.6	
23 3-Ethyltoluene	105	19.722	19.722	0.000	98	1536417	123.2	134.6	
24 1,3,5-Trimethylbenzene	105	19.813	19.813	0.000	98	1344249	123.2	133.9	
A 37 C9-C12 Aliphatics	1	20.174	(18.294-22.055)		0	21274190	886.9	981.5	
26 n-Decane	57	20.184	20.184	0.000	91	887786	145.9	167.4	
A 28 C9-C10 Aromatics (mz 134)	134	21.045	(18.885-21.928)		0	476272	137.4	155.3	
A 25 C9-C10 Aromatics (mz 120)	120	19.859	(18.885-21.928)		0	2381948	492.6	540.6	
A 34 C9-C12 Aliphatics (Raw)	1	20.449	(18.933-21.965)		0	37216000	886.9	1717.0	
27 4-Isopropyltoluene	119	20.452	20.452	0.000	95	1890893	137.4	156.3	
29 1,2,3-Trimethylbenzene	105	20.458	20.458	0.000	92	1429596	123.2	140.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/m3	OnCol Amt ug/m3	Flags
30 Butylcyclohexane	83	20.634	20.634	0.000	96	1072761	143.7	158.7	
31 Undecane	57	21.133	21.133	0.000	95	892724	160.0	191.7	
32 Dodecane	57	21.955	21.955	0.000	97	565772	174.5	213.2	
33 Naphthalene	128	22.028	22.028	0.000	99	1080386	131.2	152.4	
S 35 Xylenes, Total	1				0		217.3	228.8	
S 36 C9-C10 Aromatics	1				0		630.1	695.9	
S 38 C5-C8 Aliphatics (adjusted)	1				0		570.5	379.0	
S 39 C9-C12 Aliphatics (adjusted)	1				0		886.9	1021.1	
\$ 40 BFB									

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

APHLCSw_00065

Amount Added: 250.00

Units: mL

ATTO15AEISs_00003

Amount Added: 60.00

Units: mL

Run Reagent

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-011.D

Injection Date: 24-Apr-2025 18:55:30

Instrument ID: CHAE.i

Operator ID: vtp

Lims ID: icv

Worklist Smp#: 11

Client ID:

Purge Vol: 250.000 mL

Dil. Factor: 1.0000

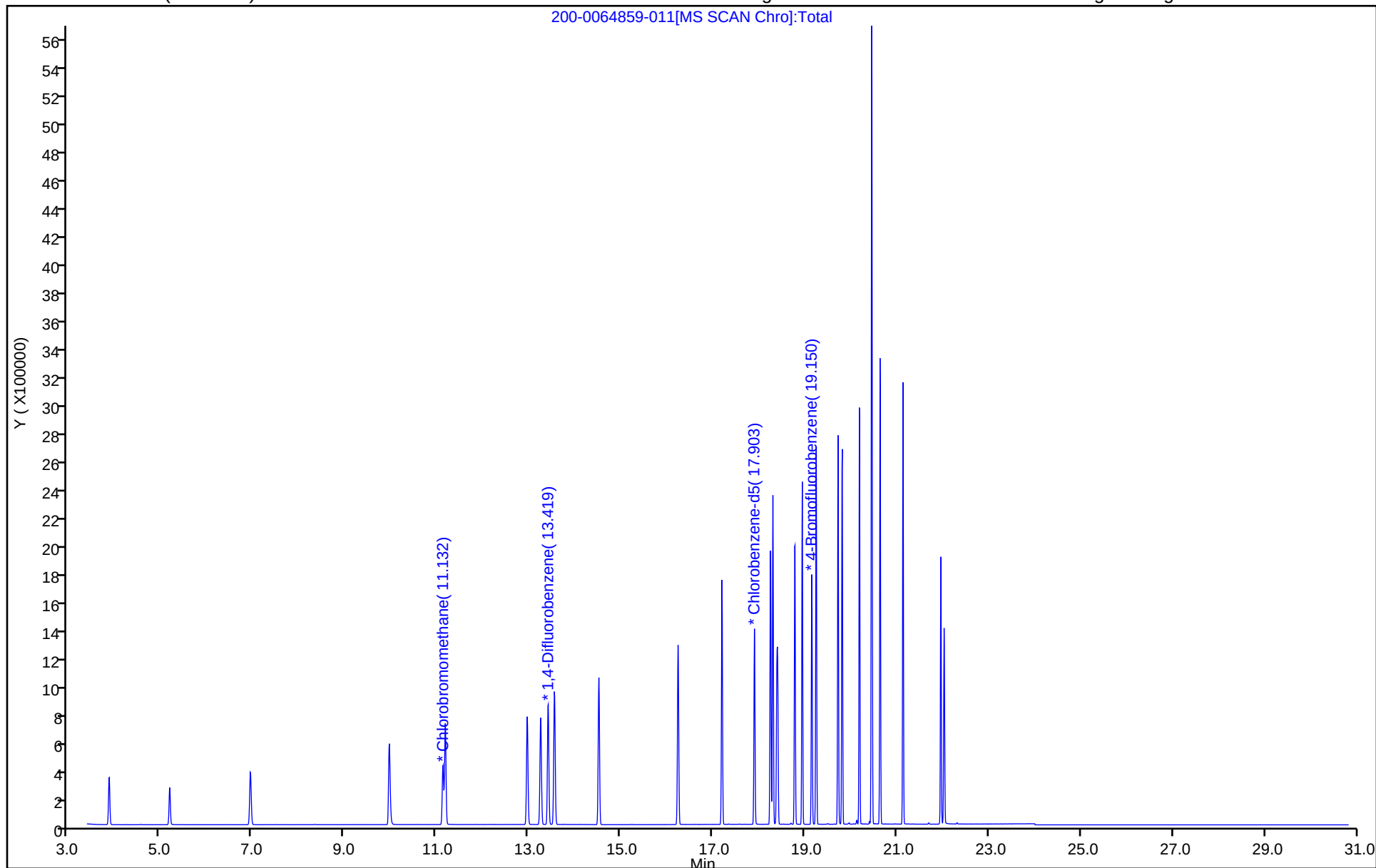
ALS Bottle#: 11

Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-011.D

Injection Date: 24-Apr-2025 18:55:30

Instrument ID: CHAE.i

Lims ID: icv

Client ID:

Operator ID: vtp

ALS Bottle#: 11

Worklist Smp#: 11

Purge Vol: 250.000 mL

Dil. Factor: 1.0000

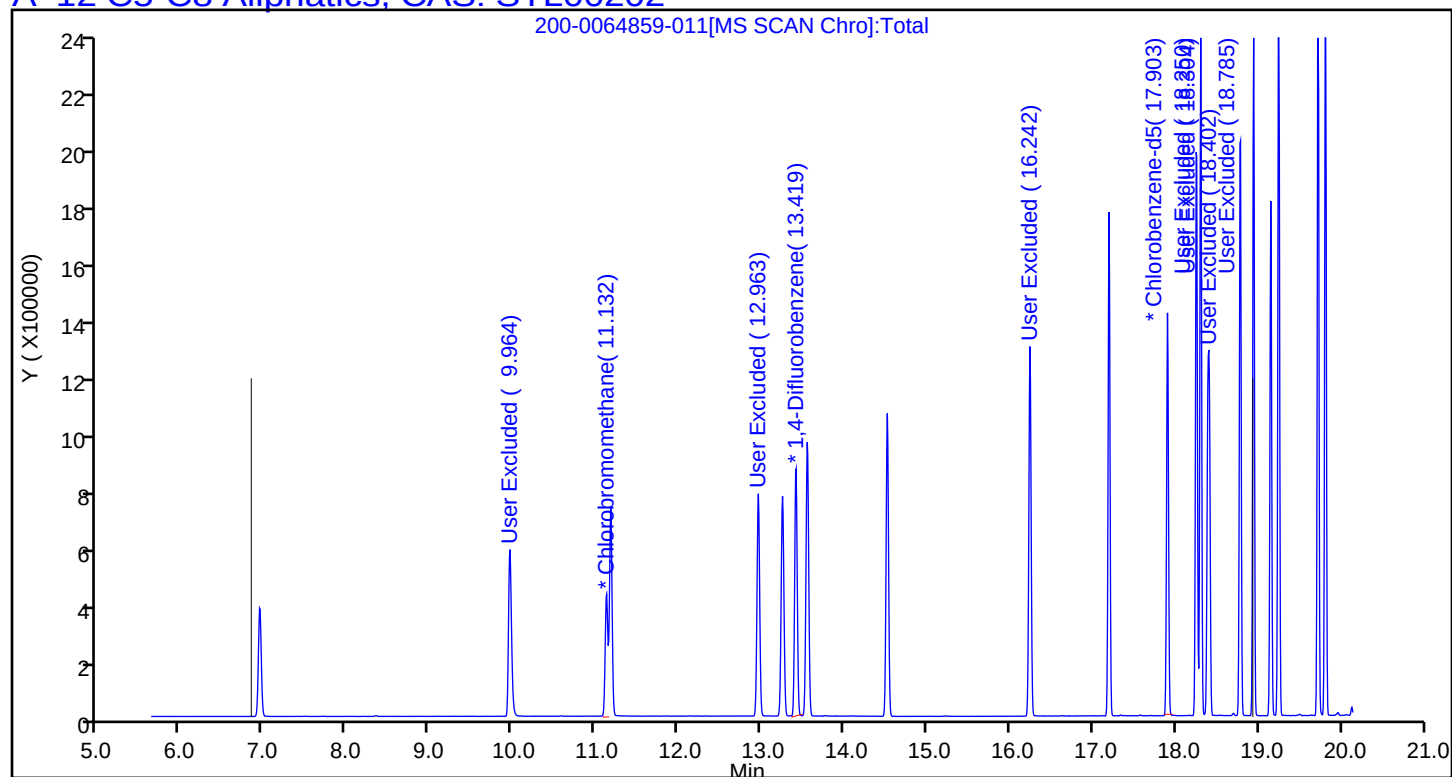
Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Detector: MS SCAN

A 12 C5-C8 Aliphatics, CAS: STL00202



Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-011.D

Injection Date: 24-Apr-2025 18:55:30

Instrument ID: CHAE.i

Lims ID: icv

Client ID:

Operator ID: vtp

ALS Bottle#: 11

Worklist Smp#: 11

Purge Vol: 250.000 mL

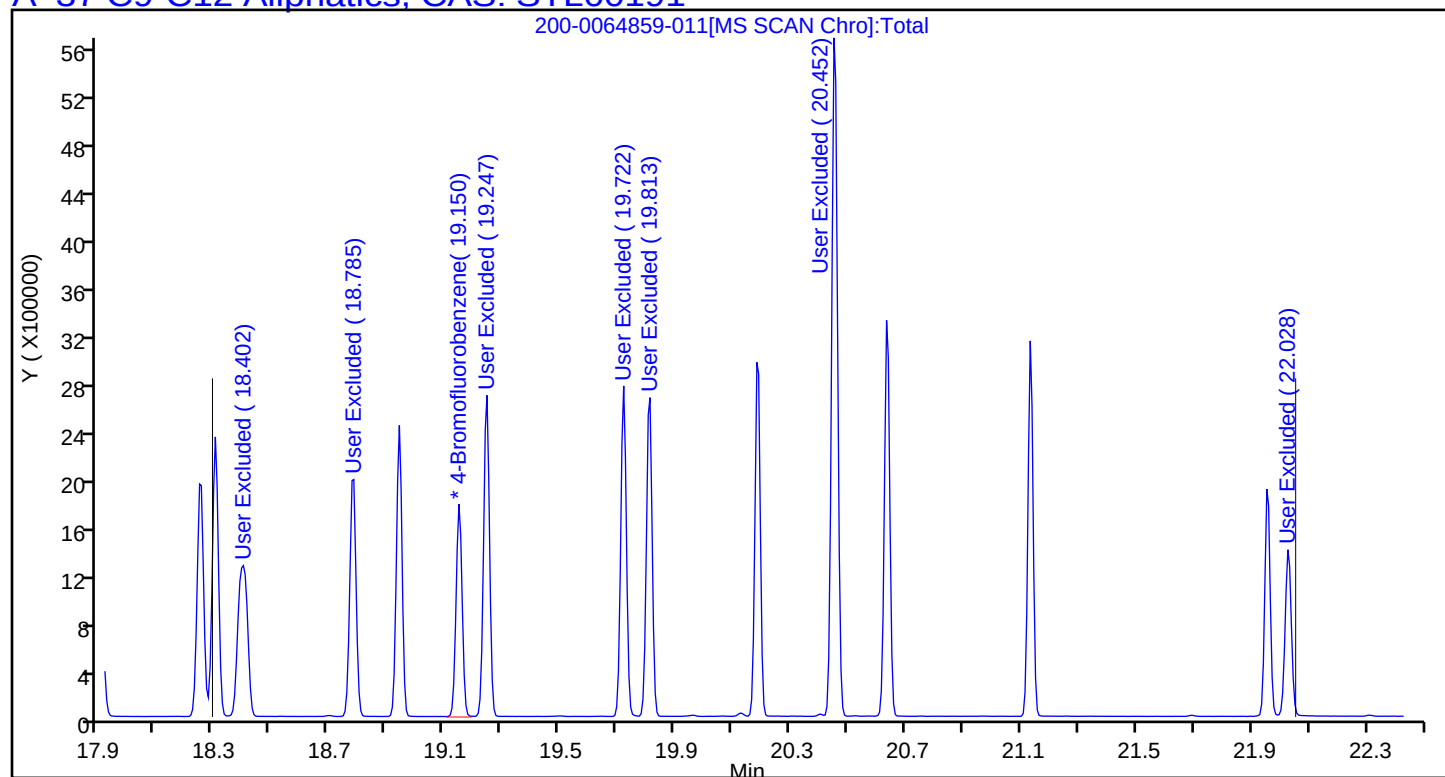
Dil. Factor: 1.0000

Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Detector: MS SCAN

A 37 C9-C12 Aliphatics, CAS: STL00191

Eurofins Burlington

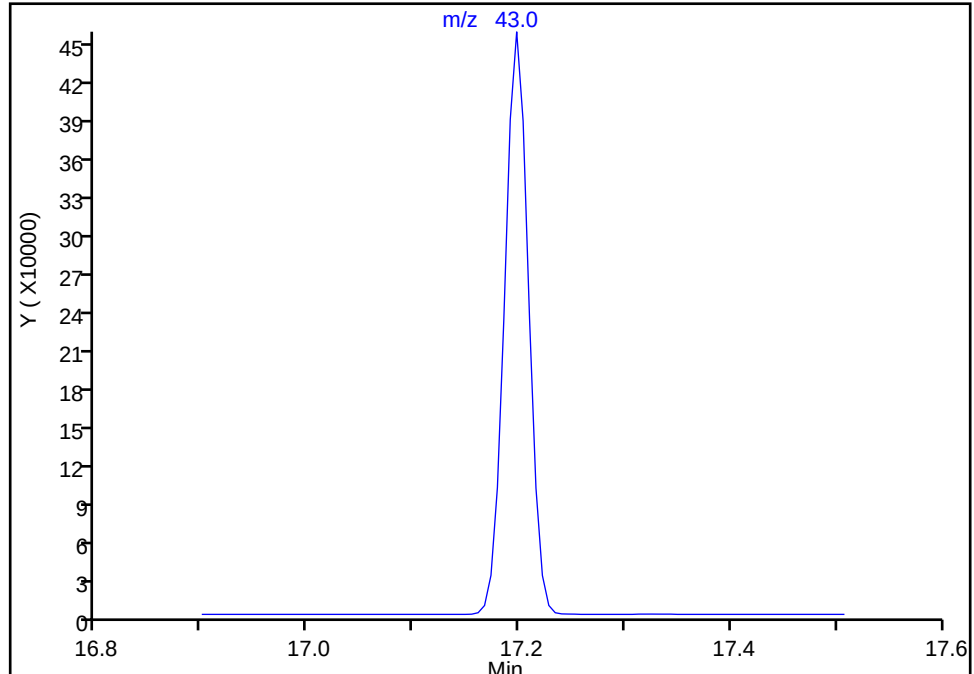
Data File:	\\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-011.D		
Injection Date:	24-Apr-2025 18:55:30	Instrument ID:	CHAE.i
Lims ID:	icv		
Client ID:			
Operator ID:	vtp	ALS Bottle#:	11
Purge Vol:	250.000 mL	Dil. Factor:	1.0000
Method:	MADEP_APH_1	Limit Group:	AIR_APH_Limits
Column:	RTX-624 (0.32 mm)	Detector:	MS SCAN
		Worklist Smp#:	11

14 n-Octane, CAS: 111-65-9

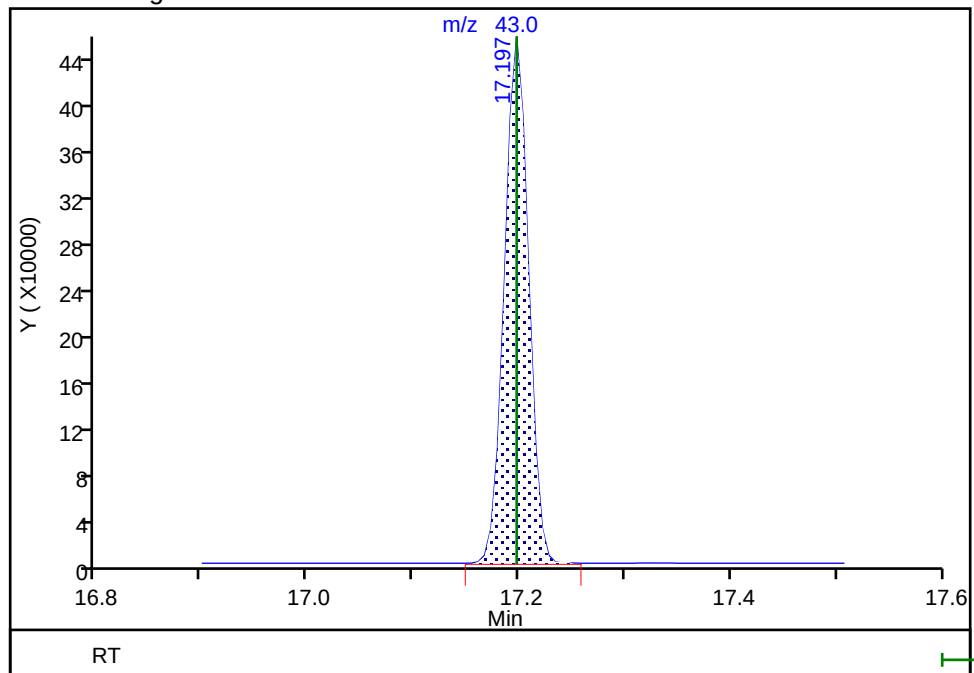
Signal: 1

Not Detected
Expected RT: 17.20

Processing Integration Results

RT: 17.20
Area: 718514
Amount: 122.6196
Amount Units: ug/m3

Manual Integration Results



Reviewer: V0FK, 24-Apr-2025 20:39:38 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 200-78136-1
 SDG No.: 200-78136-1
 Lab Sample ID: CCVIS 200-216493/2 Calibration Date: 05/23/2025 12:06
 Instrument ID: CHAE.i Calib Start Date: 04/24/2025 11:56
 GC Column: RTX-624 ID: 0.32 (mm) Calib End Date: 04/24/2025 17:11
 Lab File ID: 200-0065256-002.D Conc. Units: ug/m3 Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Butadiene	Ave	10.42	9.090		48.3	55.3	-12.7	30.0
Isopentane	Ave	12.88	9.947		57.0	73.8	-22.8	30.0
Methyl tert-butyl ether	Ave	28.55	30.48		96.5	90.4	6.8	30.0
Hexane	Ave	2.585	2.512		85.9	88.4	-2.8	30.0
C5-C8 Aliphatics	Ave	12.97	13.23		582	570	2.0	30.0
Benzene	Ave	5.602	5.676		80.9	79.9	1.3	30.0
Cyclohexane	Ave	2.755	2.712		84.8	86.1	-1.5	30.0
2,3-Dimethylpentane	Ave	2.628	2.591		101	103	-1.4	30.0
n-Heptane	Ave	2.629	2.561		100	103	-2.6	30.0
Toluene	Ave	6.540	7.167		103	94.4	9.6	30.0
n-Octane	Ave	3.255	3.238		116	117	-0.5	30.0
Ethylbenzene	Ave	7.612	8.651		123	109	13.7	30.0
2,3-Dimethylheptane	Ave	4.599	4.871		139	131	5.9	30.0
m-Xylene & p-Xylene	Ave	5.784	6.837		128	109	18.2	30.0
o-Xylene	Ave	6.126	7.173		127	109	17.1	30.0
n-Nonane	Ave	3.446	3.794		145	131	10.1	30.0
Isopropylbenzene	Ave	7.896	9.346		146	123	18.4	30.0
3-Ethyltoluene	Ave	7.127	8.573		148	123	20.3	30.0
1,3,5-Trimethylbenzene	Ave	6.268	7.690		151	123	22.7	30.0
C9-C10 Aromatics (mz 120)	Ave	2.751	3.358		601	493	22.0	30.0
C9-C12 Aliphatics	Ave	13.54	15.42		1010	887	13.9	30.0
n-Decane	Ave	3.311	3.888		171	146	17.4	30.0
4-Isopropyltoluene	Ave	7.553	9.433		172	137	24.9	30.0
1,2,3-Trimethylbenzene	Ave	6.371	8.038		155	123	26.2	30.0
Butylcyclohexane	Ave	4.222	4.972		169	144	17.8	30.0
C9-C10 Aromatics (mz 134)	Ave	1.915	2.344		168	137	22.4	30.0
Undecane	Ave	2.908	3.364		185	160	15.7	30.0
Dodecane	Ave	1.657	1.894		199	174	14.3	30.0
Naphthalene	Ave	4.426	4.886		145	131	10.4	30.0

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-002.D
 Lims ID: ccvis
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 23-May-2025 12:06:30 ALS Bottle#: 2 Worklist Smp#: 2
 Purge Vol: 250.000 mL Dil. Factor: 1.0000
 Sample Info: 200-0065256-002
 Operator ID: vtp Instrument ID: CHAE.i
 Sublist: chrom-MADEP_APH_1*sub1
 Method: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\MADEP_APH_1.m
 Limit Group: AIR_APH_Limits
 Last Update: 23-May-2025 13:32:10 Calib Date: 24-Apr-2025 17:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-009.D
 Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
 Process Host: CTX1724

First Level Reviewer: V0FK

Date: 23-May-2025 13:32:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/m3	OnCol Amt ug/m3	Flags
S 38 C5-C8 Aliphatics (adjusted)	1				0		570.5	440.8	
S 39 C9-C12 Aliphatics (adjusted)	1				0		886.9	1063.9	
\$ 40 BFB									
1 Butadiene	54	5.194	5.194	0.000	93	109033	55.3	48.3	Ma
2 2-Methylbutane	43	6.940	6.940	0.000	91	159263	73.8	57.0	Ma
3 Methyl tert-butyl ether	73	9.958	9.958	0.000	96	597091	90.4	96.5	Ma
* 4 Chlorobromomethane	128	11.120	11.120	0.000	95	114727	529.2	529.2	Ma
5 Hexane	57	11.168	11.168	0.000	93	304917	88.4	85.9	Ma
A 12 C5-C8 Aliphatics	1	12.881	(6.840-18.921)	0	10368526	570.5	581.8	M	
A 13 C5-C8 Aliphatics (Raw)	1	12.881	(6.840-18.921)	0	24674141	570.5	1384.5	M	
6 Benzene	78	12.951	12.951	0.000	98	622732	79.9	80.9	Ma
7 Cyclohexane	56	13.243	13.243	0.000	97	320898	86.1	84.8	Ma
* 8 1,4-Difluorobenzene	114	13.401	13.401	0.000	99	641081	466.6	466.6	Ma
9 2,3-Dimethylpentane	56	13.541	13.541	0.000	91	365274	102.6	101.2	Ma
10 n-Heptane	43	14.508	14.508	0.000	92	361063	102.6	100.0	Ma
11 Toluene	91	16.230	16.230	0.000	97	791134	94.4	103.4	Ma
14 n-Octane	43	17.185	17.185	0.000	92	520083	116.9	116.3	
* 15 Chlorobenzene-d5	117	17.891	17.891	0.000	97	562576	480.9	480.9	Ma
16 Ethylbenzene	91	18.243	18.243	0.000	99	1099361	108.6	123.5	
17 2,3-Dimethylheptane	43	18.292	18.292	0.000	93	748809	131.4	139.2	
18 m-Xylene & p-Xylene	91	18.389	18.389	0.000	98	868873	108.6	128.4	
19 o-Xylene	91	18.773	18.773	0.000	98	911528	108.6	127.2	
20 n-Nonane	43	18.931	18.931	0.000	89	583182	131.4	144.7	
* 21 4-Bromofluorobenzene	95	19.138	19.138	0.000	98	411300	715.8	715.8	
22 Isopropylbenzene	105	19.235	19.235	0.000	98	1346386	123.2	145.8	
23 3-Ethyltoluene	105	19.716	19.716	0.000	98	1235107	123.2	148.2	
24 1,3,5-Trimethylbenzene	105	19.801	19.801	0.000	98	1107807	123.2	151.1	
A 37 C9-C12 Aliphatics	1	20.168	(18.282-22.054)	0	15999451	886.9	1010.5		
26 n-Decane	57	20.178	20.178	0.000	91	663696	145.9	171.4	
A 28 C9-C10 Aromatics (mz 134)	134	21.042	(18.873-21.927)	0	376737	137.4	168.2		
A 25 C9-C10 Aromatics (mz 120)	120	19.850	(18.873-21.927)	0	1934967	492.6	601.2		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/m3	OnCol Amt ug/m3	Flags
A 34 C9-C12 Aliphatics (Raw)	1	20.443	(18.921-21.964)		0	29026307	886.9	1833.3	E
27 4-Isopropyltoluene	119	20.446	20.446	0.000	93	1516479	137.4	171.6	
29 1,2,3-Trimethylbenzene	105	20.452	20.452	0.000	93	1158045	123.2	155.4	
30 Butylcyclohexane	83	20.634	20.634	0.000	96	835603	143.7	169.2	
31 Undecane	57	21.133	21.133	0.000	94	629426	160.0	185.0	
32 Dodecane	57	21.954	21.954	0.000	98	386488	174.5	199.3	
33 Naphthalene	128	22.027	22.027	0.000	99	749617	131.2	144.8	
S 35 Xylenes, Total	1				0		217.3	255.6	
S 36 C9-C10 Aromatics	1				0		630.1	769.4	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

APHLvI3w_00066

Amount Added: 250.00

Units: mL

ATTO15AEISs_00003

Amount Added: 60.00

Units: mL

Run Reagent

Chrom Revision: 2.3 07-May-2025 18:53:14

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-002.D

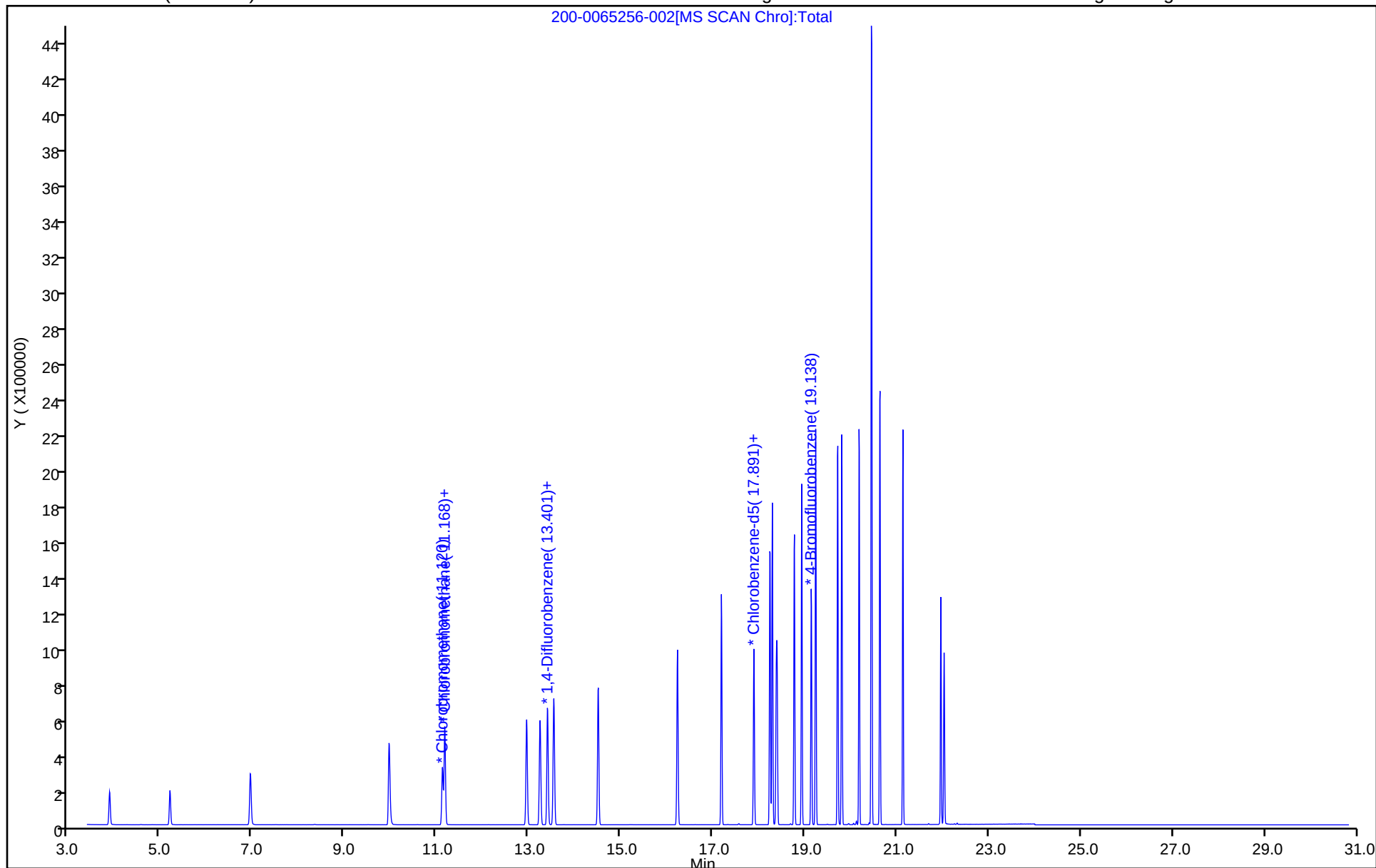
Operator ID: vtp

Worklist Smp#: 2

ALS Bottle#: 2

Limit Group: AIR APH Limits

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-002.D

Injection Date: 23-May-2025 12:06:30

Instrument ID: CHAE.i

Lims ID: ccvis

Client ID:

Operator ID: vtp

ALS Bottle#: 2

Worklist Smp#: 2

Purge Vol: 250.000 mL

Dil. Factor: 1.0000

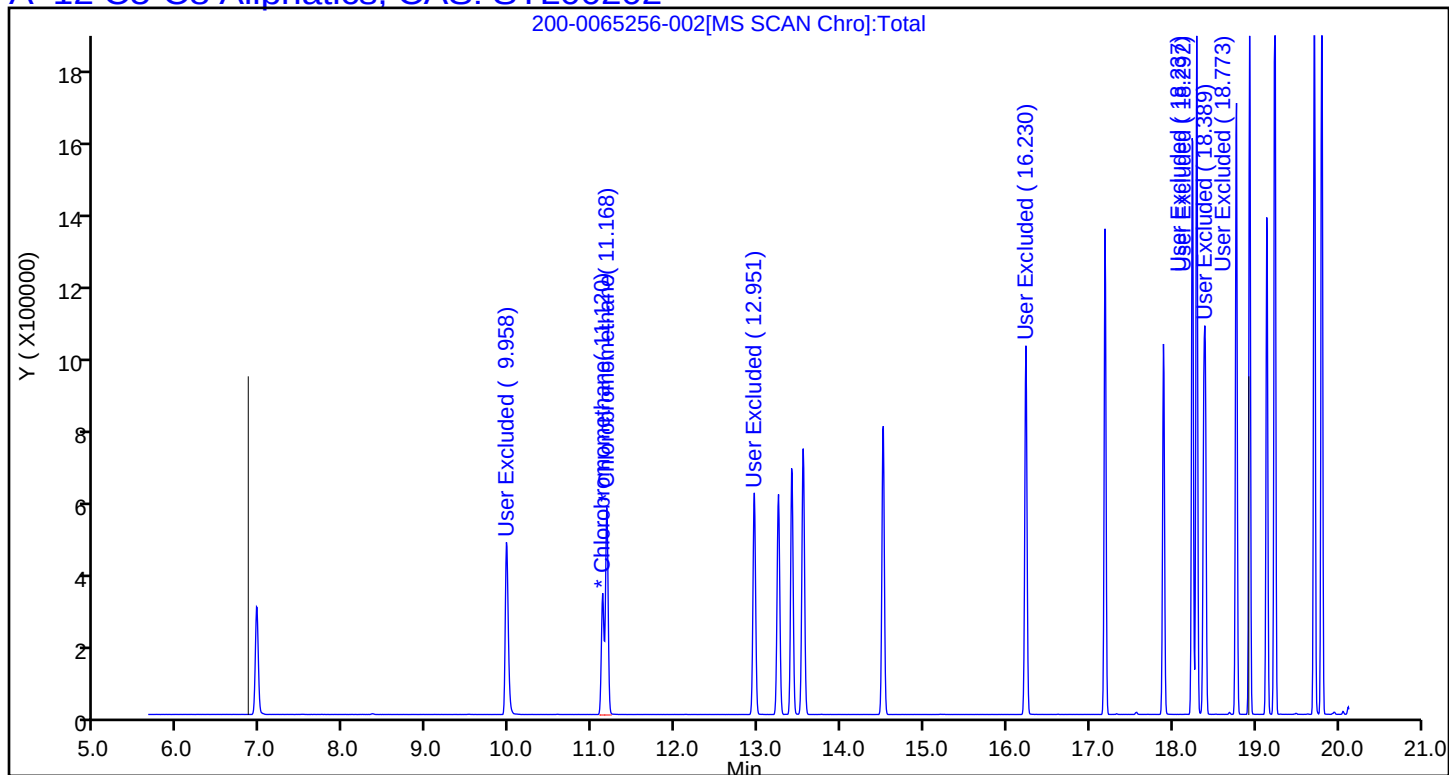
Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Detector: MS SCAN

A 12 C5-C8 Aliphatics, CAS: STL00202



Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-002.D

Injection Date: 23-May-2025 12:06:30

Instrument ID: CHAE.i

Lims ID: ccvis

Client ID:

Operator ID: vtp

ALS Bottle#:

2

Worklist Smp#:

2

Purge Vol: 250.000 mL

Dil. Factor:

1.0000

Method: MADEP_APH_1

Limit Group:

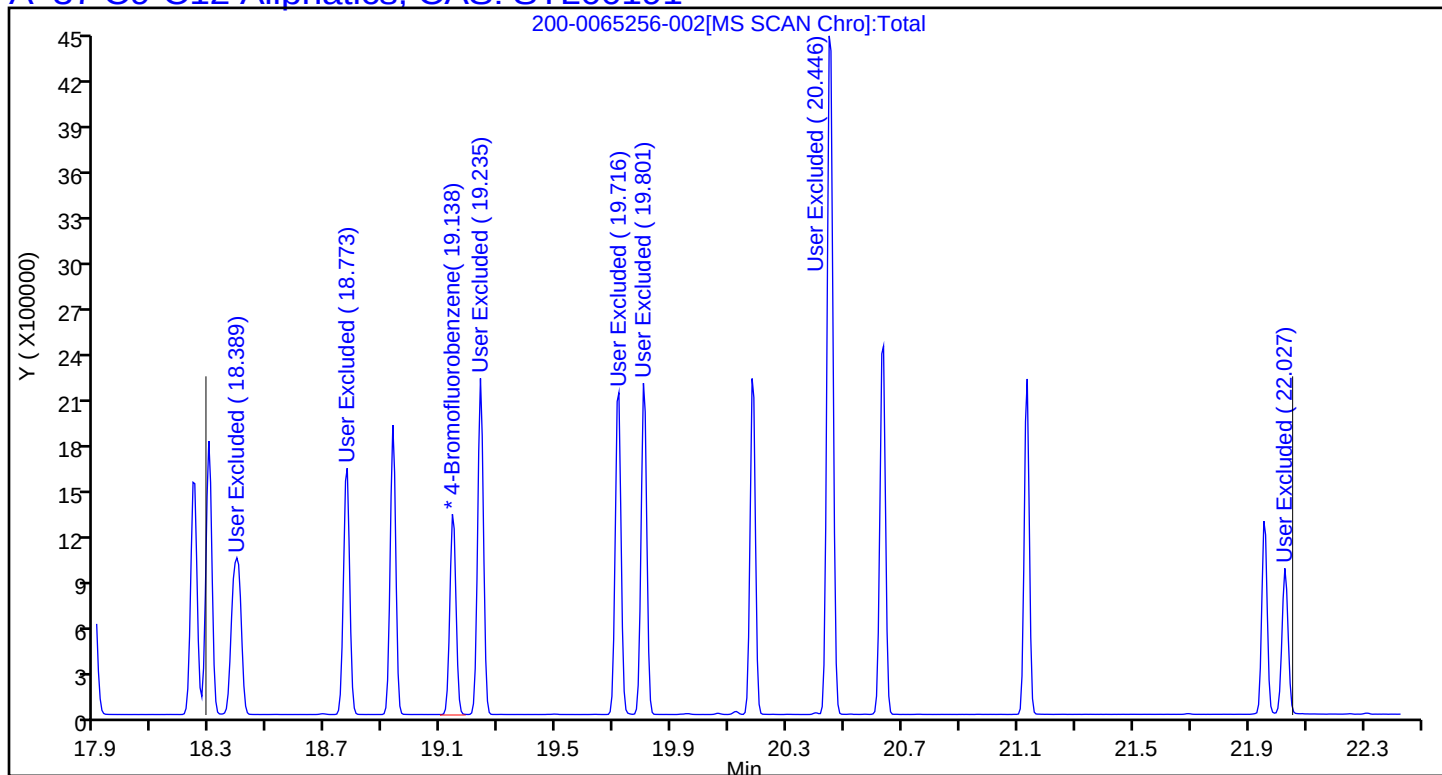
AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Detector

MS SCAN

A 37 C9-C12 Aliphatics, CAS: STL00191



Eurofins Burlington

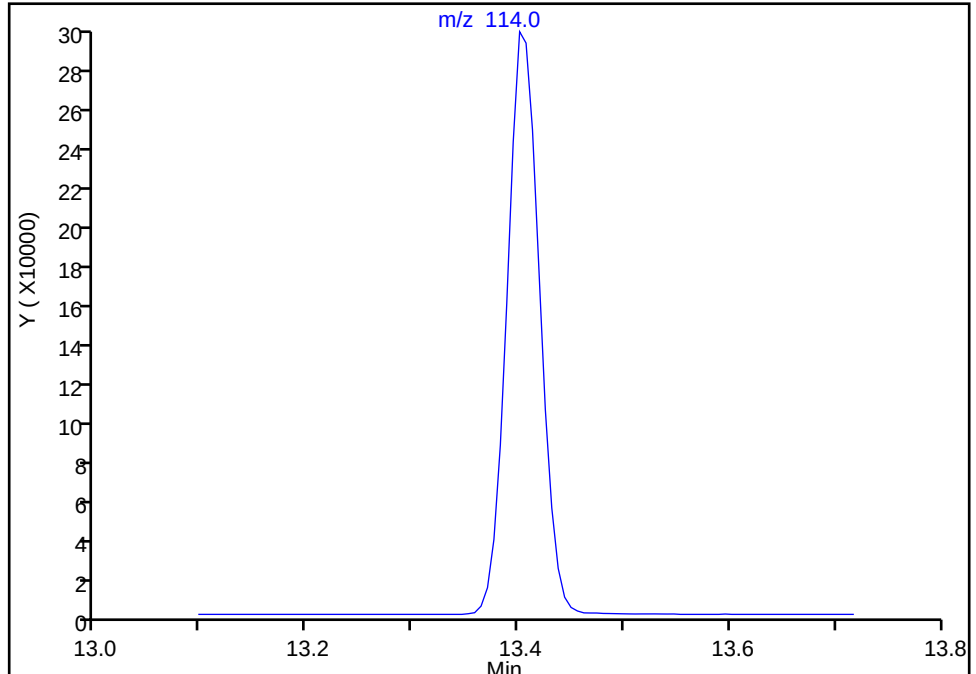
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Injection Date: 23-May-2025 12:06:30 Instrument ID: CHAE.i
Lims ID: ccvis
Client ID:
Operator ID: vtp ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Method: MADEP_APH_1 Limit Group: AIR_APH_Limits
Column: RTX-624 (0.32 mm) Detector: MS SCAN

* 8 1,4-Difluorobenzene, CAS: 540-36-3

Signal: 1

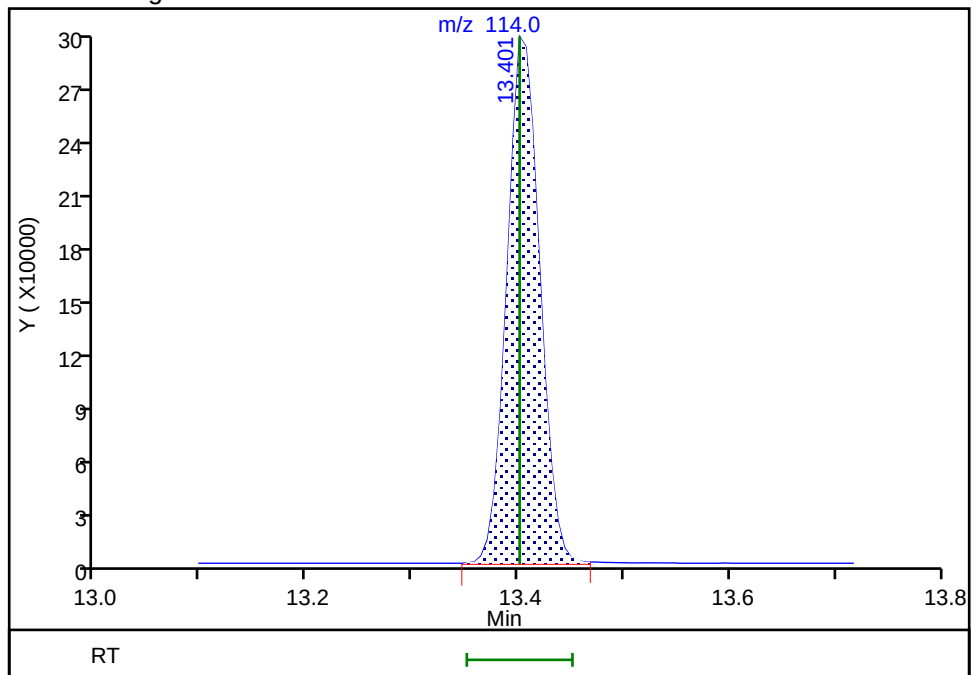
Not Detected
Expected RT: 13.40

Processing Integration Results



RT: 13.40
Area: 641081
Amount: 466.6300
Amount Units: ug/m3

Manual Integration Results



Reviewer: V0FK, 23-May-2025 12:43:42 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Burlington

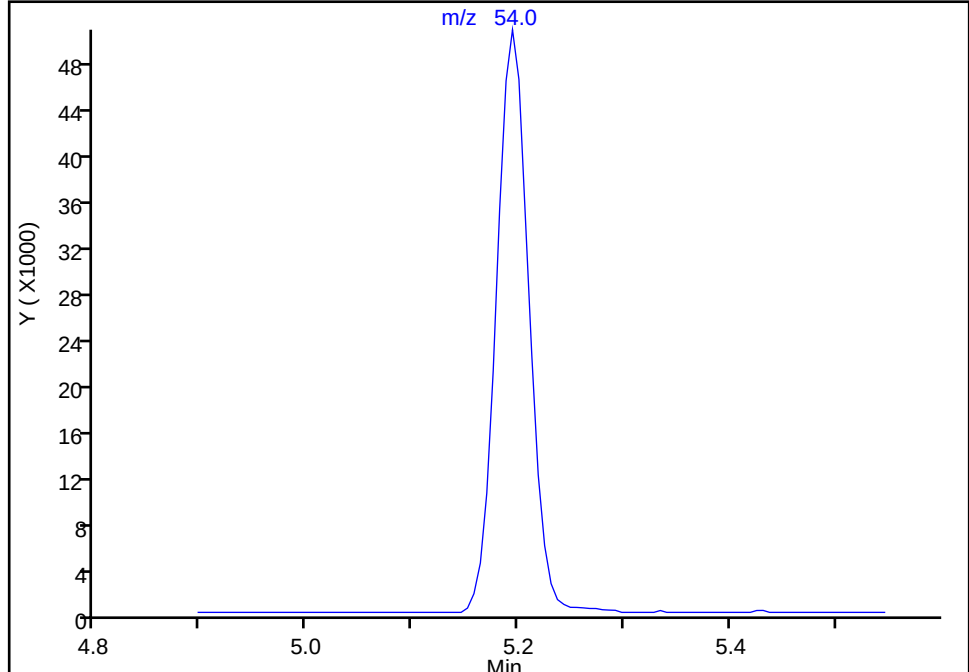
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Injection Date: 23-May-2025 12:06:30 Instrument ID: CHAE.i
Lims ID: ccvis
Client ID:
Operator ID: vtp ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Method: MADEP_APH_1 Limit Group: AIR_APH_Limits
Column: RTX-624 (0.32 mm) Detector: MS SCAN

1 Butadiene, CAS: 106-99-0

Signal: 1

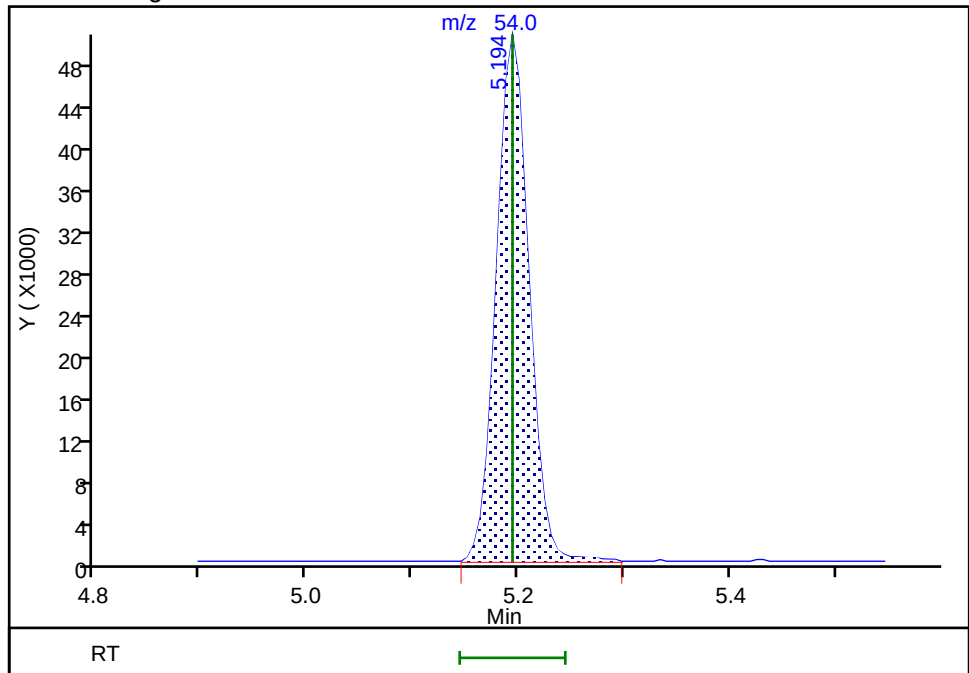
Not Detected
Expected RT: 5.19

Processing Integration Results



RT: 5.19
Area: 109033
Amount: 48.275734
Amount Units: ug/m3

Manual Integration Results



Reviewer: V0FK, 23-May-2025 12:43:59 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Burlington

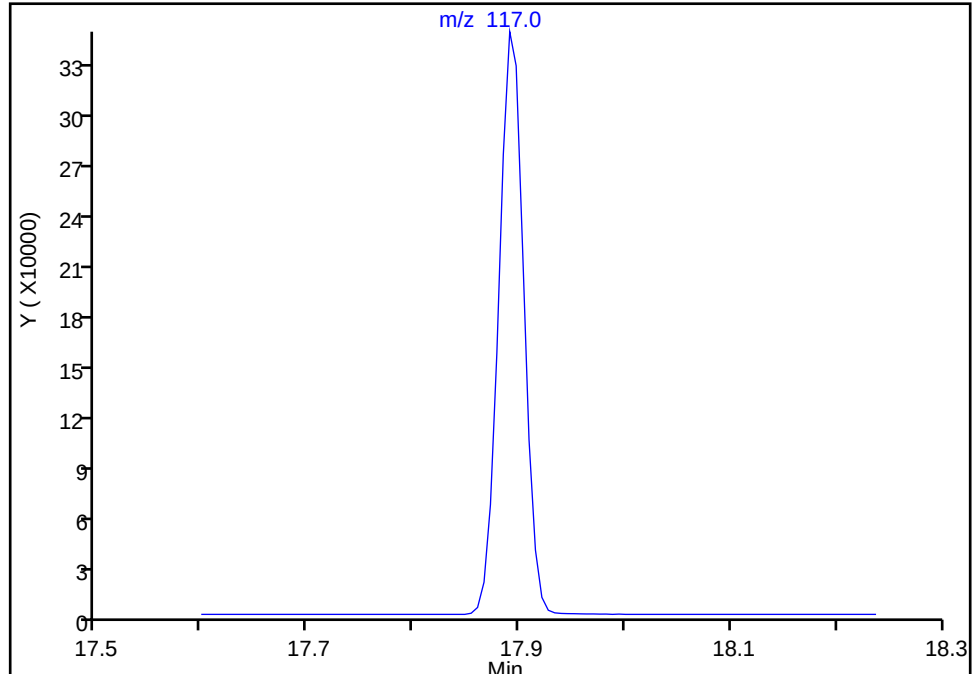
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Injection Date: 23-May-2025 12:06:30 Instrument ID: CHAE.i
Lims ID: ccvis
Client ID:
Operator ID: vtp ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Method: MADEP_APH_1 Limit Group: AIR_APH_Limits
Column: RTX-624 (0.32 mm) Detector: MS SCAN

* 15 Chlorobenzene-d5, CAS: 3114-55-4

Signal: 1

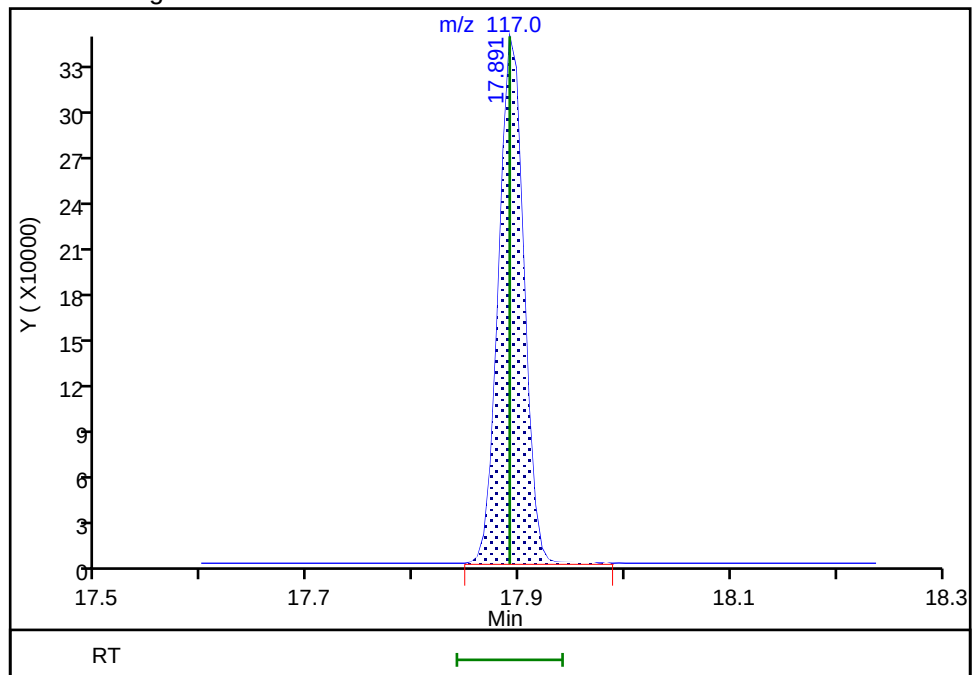
Not Detected
Expected RT: 17.89

Processing Integration Results



RT: 17.89
Area: 562576
Amount: 480.9400
Amount Units: ug/m3

Manual Integration Results



Reviewer: V0FK, 23-May-2025 12:43:46 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Burlington

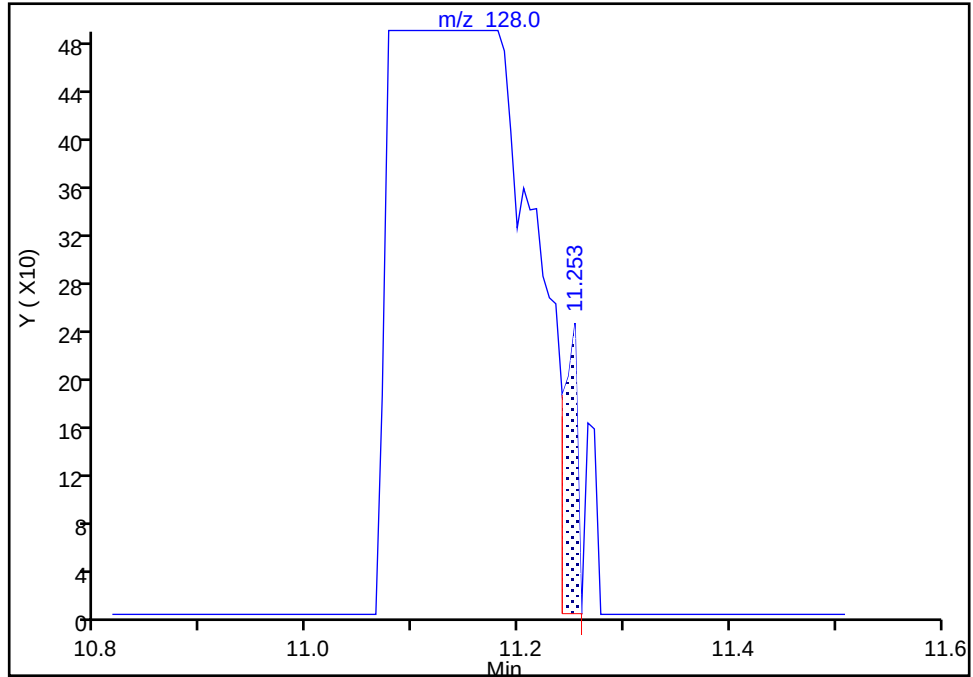
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Injection Date: 23-May-2025 12:06:30 Instrument ID: CHAE.i
Lims ID: ccvis
Client ID:
Operator ID: vtp ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Method: MADEP_APH_1 Limit Group: AIR_APH_Limits
Column: RTX-624 (0.32 mm) Detector: MS SCAN

* 4 Chlorobromomethane, CAS: 74-97-5

Signal: 1

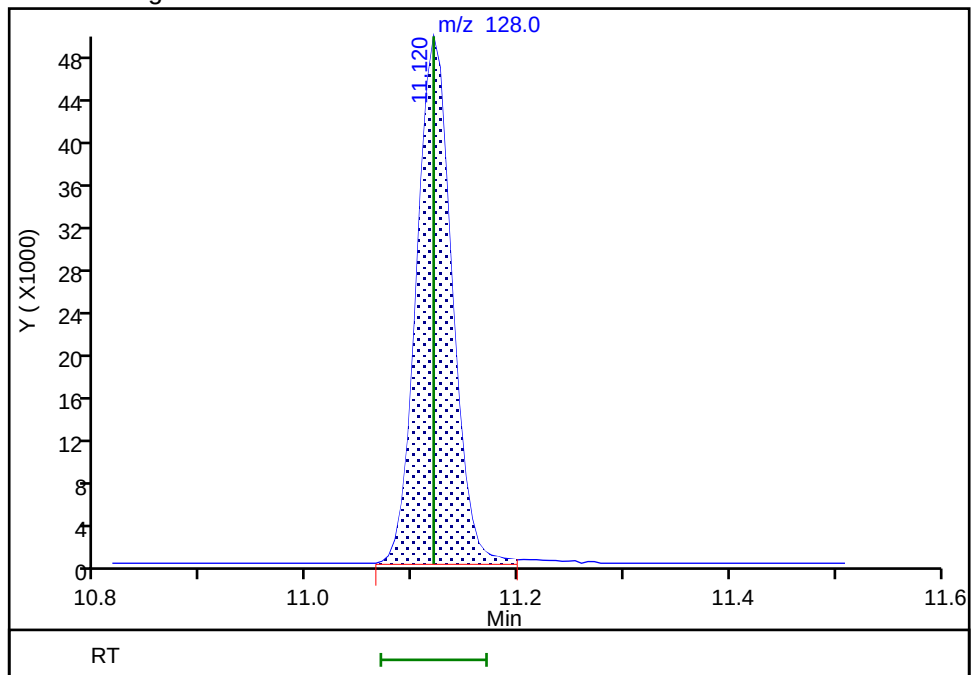
RT: 11.25
Area: 227
Amount: 529.1600
Amount Units: ug/m3

Processing Integration Results



RT: 11.12
Area: 114727
Amount: 529.1600
Amount Units: ug/m3

Manual Integration Results



Reviewer: V0FK, 23-May-2025 12:43:38 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Burlington

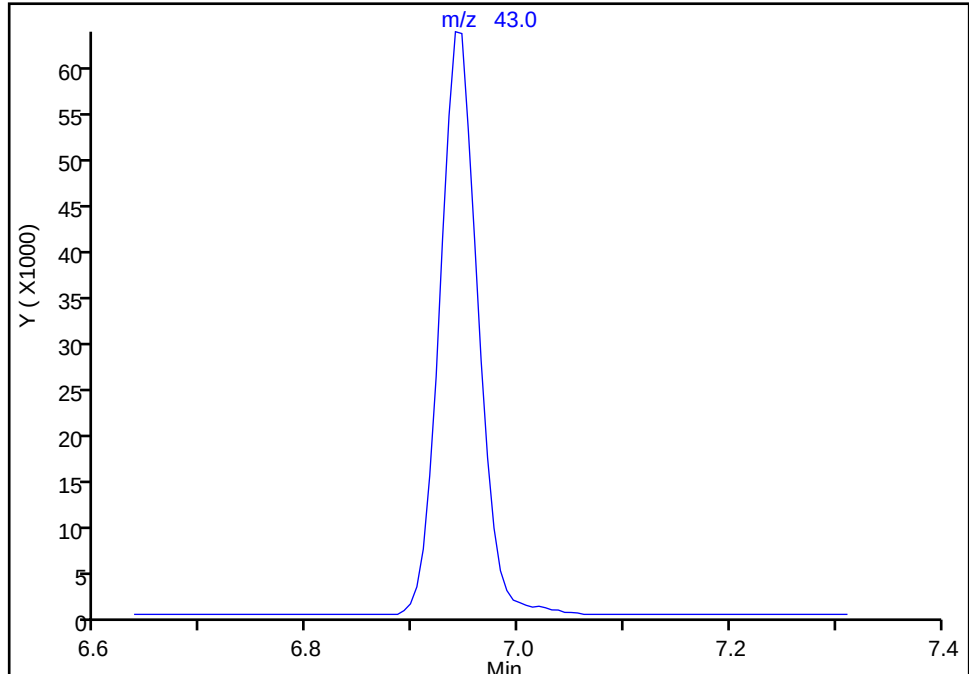
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Injection Date: 23-May-2025 12:06:30 Instrument ID: CHAE.i
Lims ID: ccvis
Client ID:
Operator ID: vtp ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Method: MADEP_APH_1 Limit Group: AIR_APH_Limits
Column: RTX-624 (0.32 mm) Detector: MS SCAN

2 2-Methylbutane, CAS: 78-78-4

Signal: 1

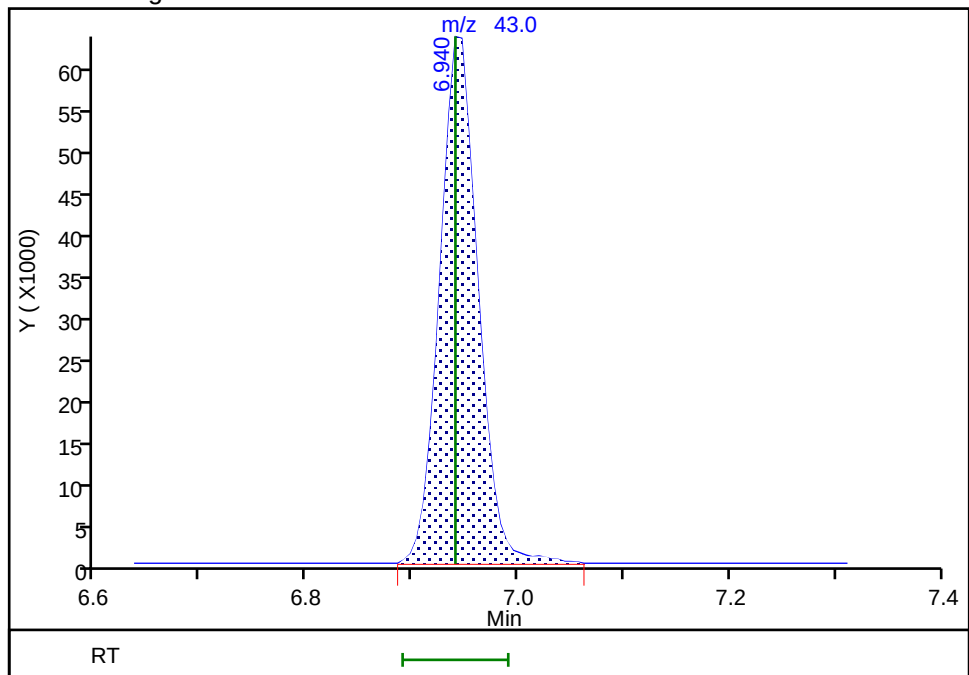
Not Detected
Expected RT: 6.94

Processing Integration Results



RT: 6.94
Area: 159263
Amount: 57.041239
Amount Units: ug/m3

Manual Integration Results



Reviewer: V0FK, 23-May-2025 12:44:03 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Burlington

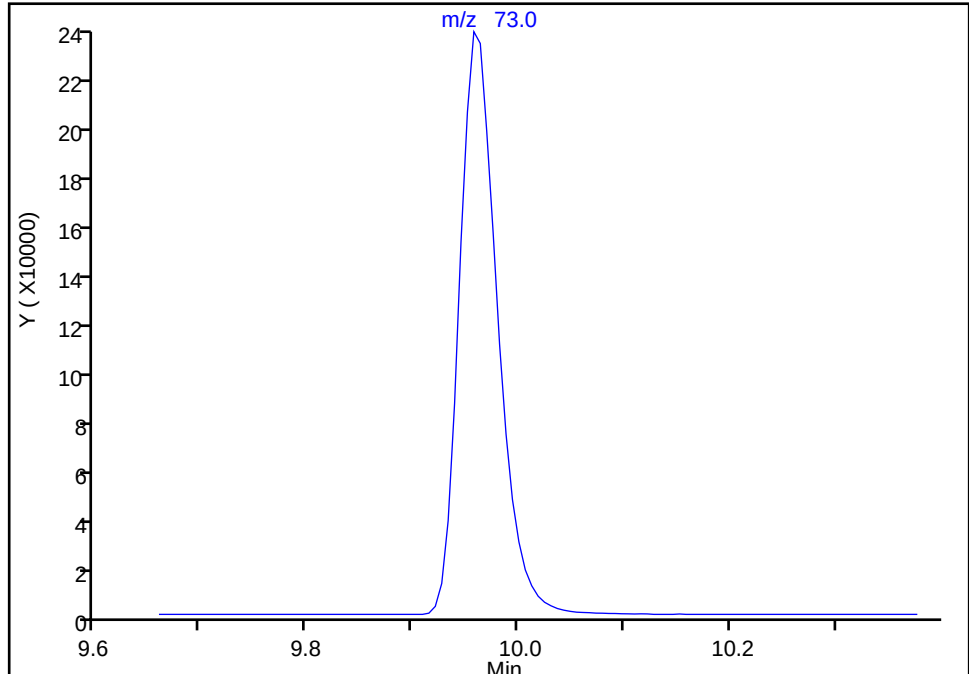
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Injection Date: 23-May-2025 12:06:30 Instrument ID: CHAE.i
Lims ID: ccvis
Client ID:
Operator ID: vtp ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Method: MADEP_APH_1 Limit Group: AIR_APH_Limits
Column: RTX-624 (0.32 mm) Detector: MS SCAN

3 Methyl tert-butyl ether, CAS: 1634-04-4

Signal: 1

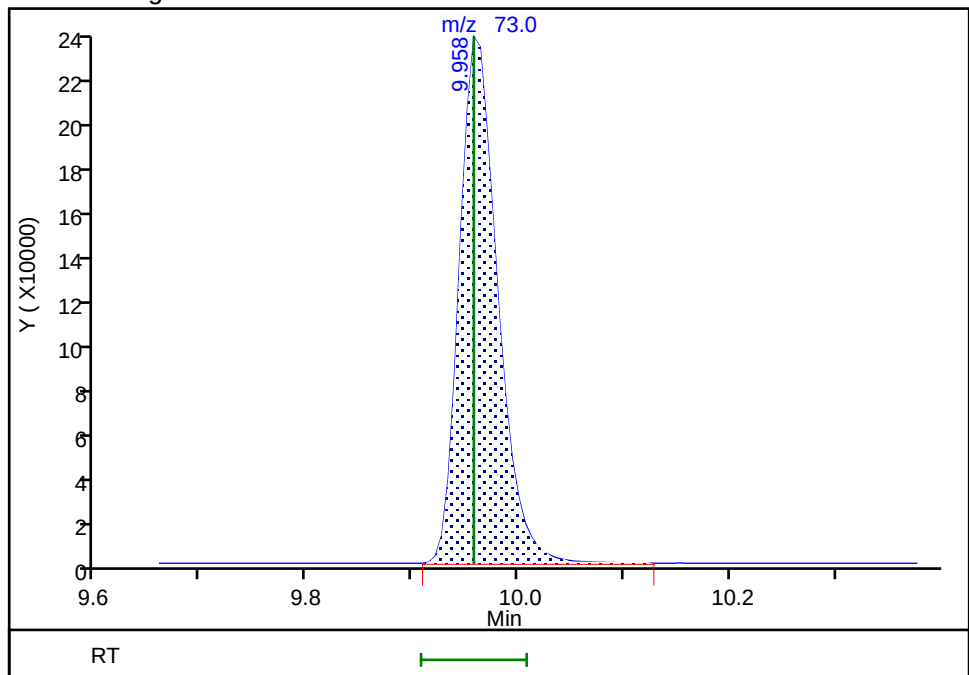
Not Detected
Expected RT: 9.96

Processing Integration Results



RT: 9.96
Area: 597091
Amount: 96.478768
Amount Units: ug/m3

Manual Integration Results



Reviewer: V0FK, 23-May-2025 12:44:06 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Burlington

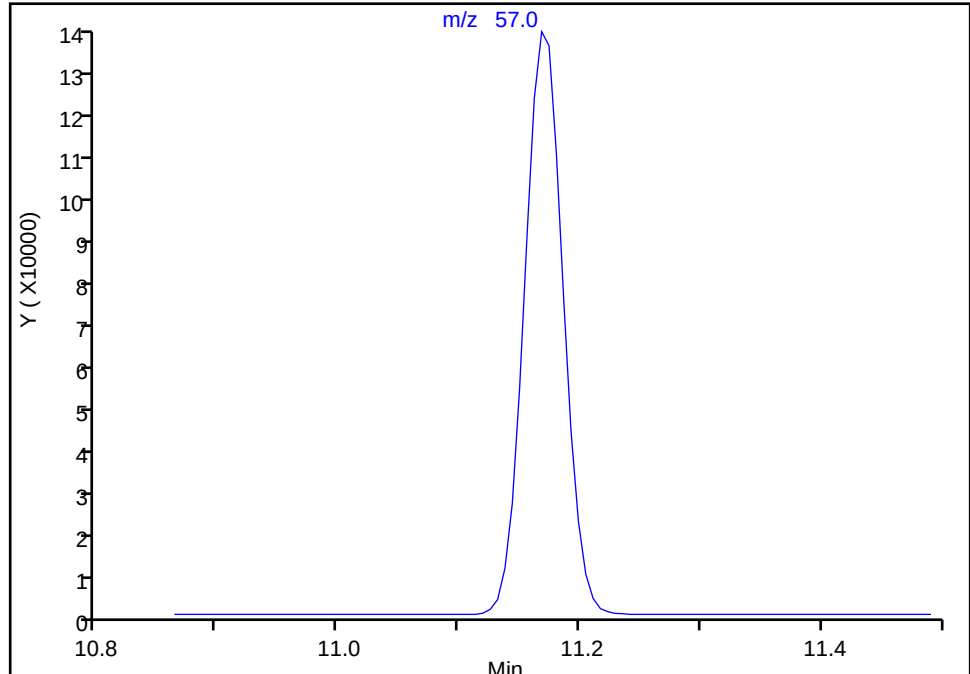
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Injection Date: 23-May-2025 12:06:30 Instrument ID: CHAE.i
Lims ID: ccvis
Client ID:
Operator ID: vtp ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Method: MADEP_APH_1 Limit Group: AIR_APH_Limits
Column: RTX-624 (0.32 mm) Detector: MS SCAN

5 Hexane, CAS: 110-54-3

Signal: 1

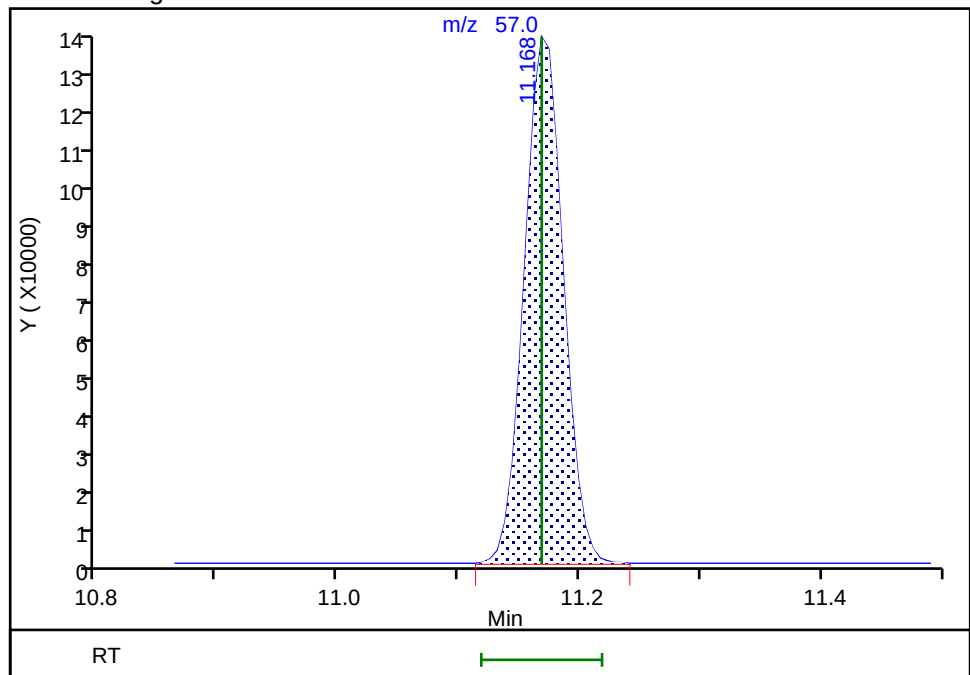
Not Detected
Expected RT: 11.17

Processing Integration Results



RT: 11.17
Area: 304917
Amount: 85.865317
Amount Units: ug/m3

Manual Integration Results



Reviewer: V0FK, 23-May-2025 12:44:11 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Burlington

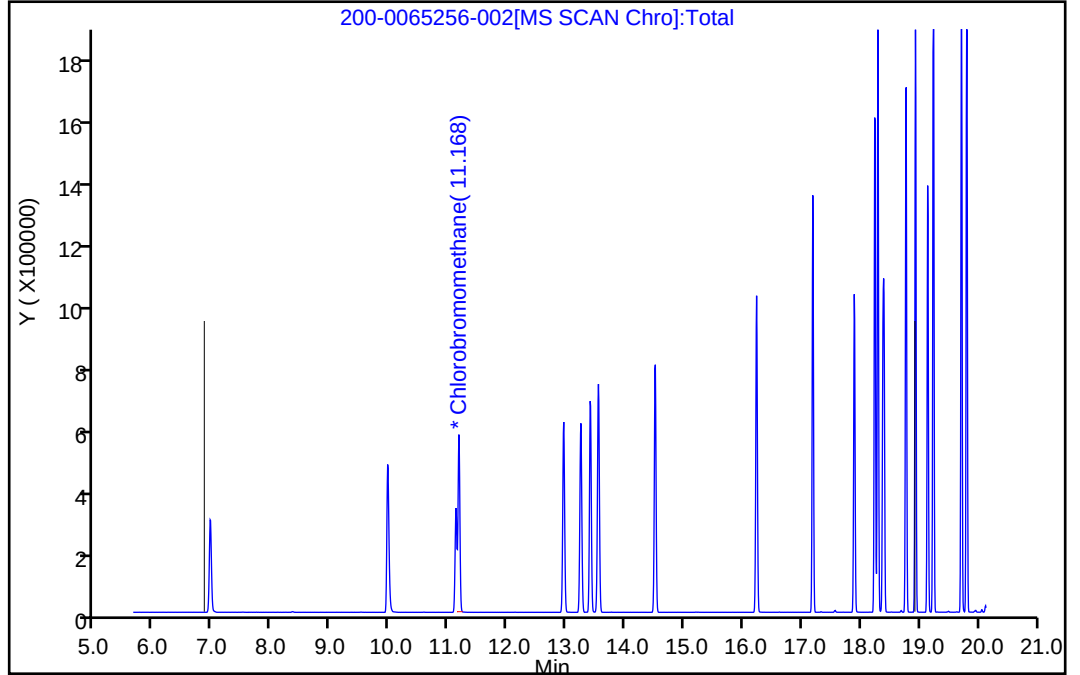
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Injection Date: 23-May-2025 12:06:30 Instrument ID: CHAE.i
Lims ID: ccvis
Client ID:
Operator ID: vtp ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Method: MADEP_APH_1 Limit Group: AIR_APH_Limits
Column: RTX-624 (0.32 mm) Detector: MS SCAN

A 12 C5-C8 Aliphatics, RT: 12.881, CAS: STL00202

Signal: 1

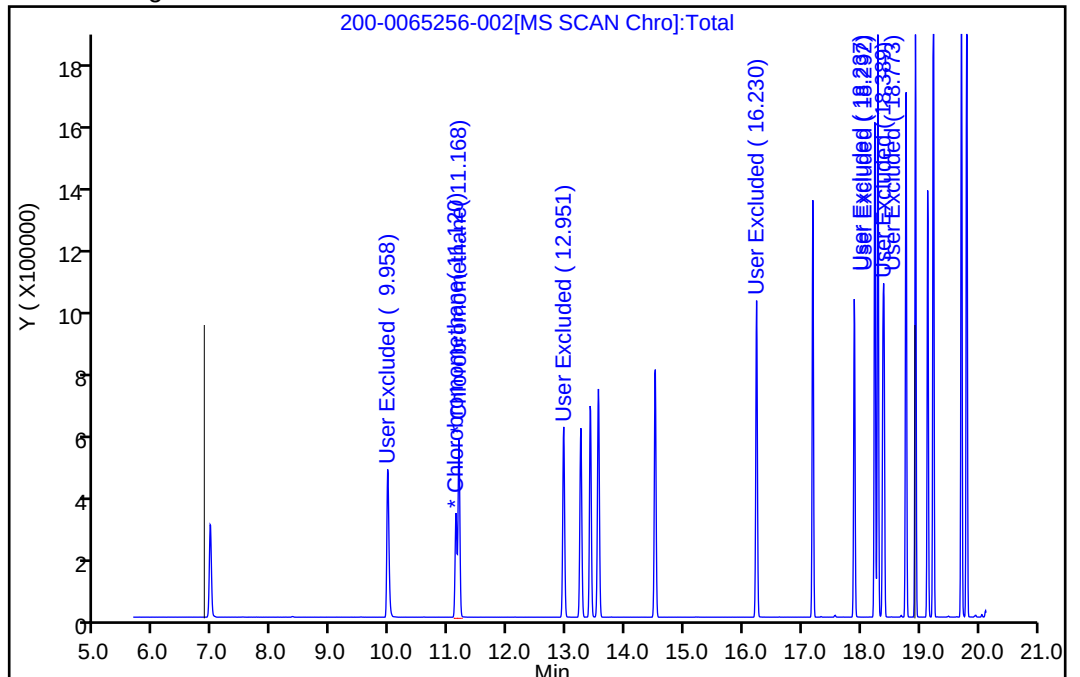
RT: 12.93
Response: 25360723
Amount: 0

Processing Integration Results



RT: 12.88
Response: 10368526
Amount: 581.8103

Manual Integration Results



Reviewer: V0FK, 23-May-2025 12:51:17 -04:00:00 (UTC)

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Burlington

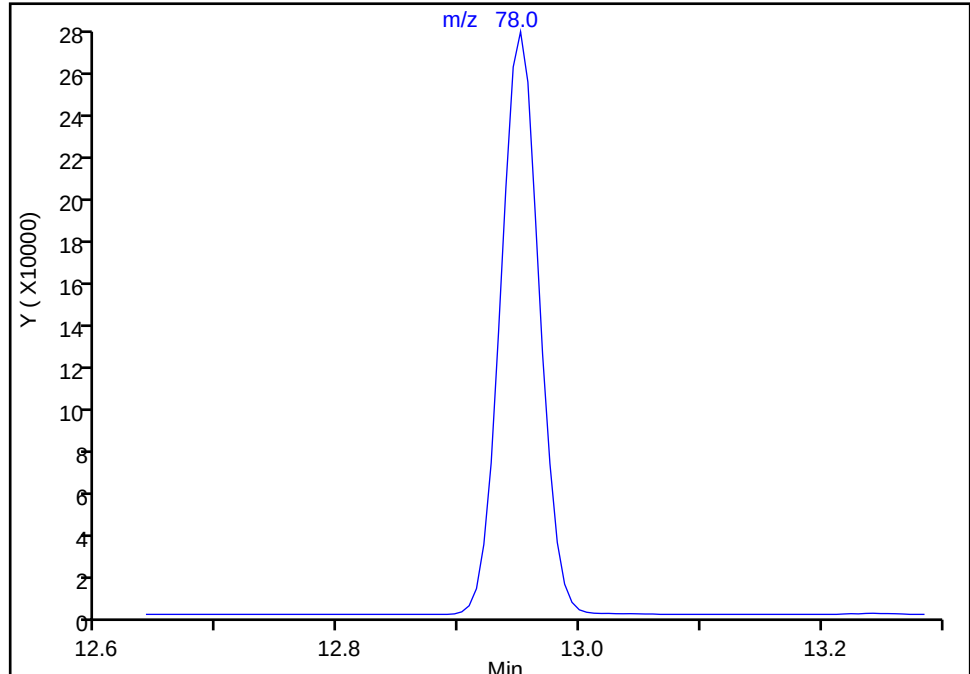
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Injection Date:	23-May-2025 12:06:30	Instrument ID:	CHAE.i
Lims ID:	ccvis		
Client ID:			
Operator ID:	vtp	ALS Bottle#:	2
Purge Vol:	250.000 mL	Dil. Factor:	1.0000
Method:	MADEP_APH_1	Limit Group:	AIR_APH_Limits
Column:	RTX-624 (0.32 mm)	Detector:	MS SCAN
		Worklist Smp#:	2

6 Benzene, CAS: 71-43-2

Signal: 1

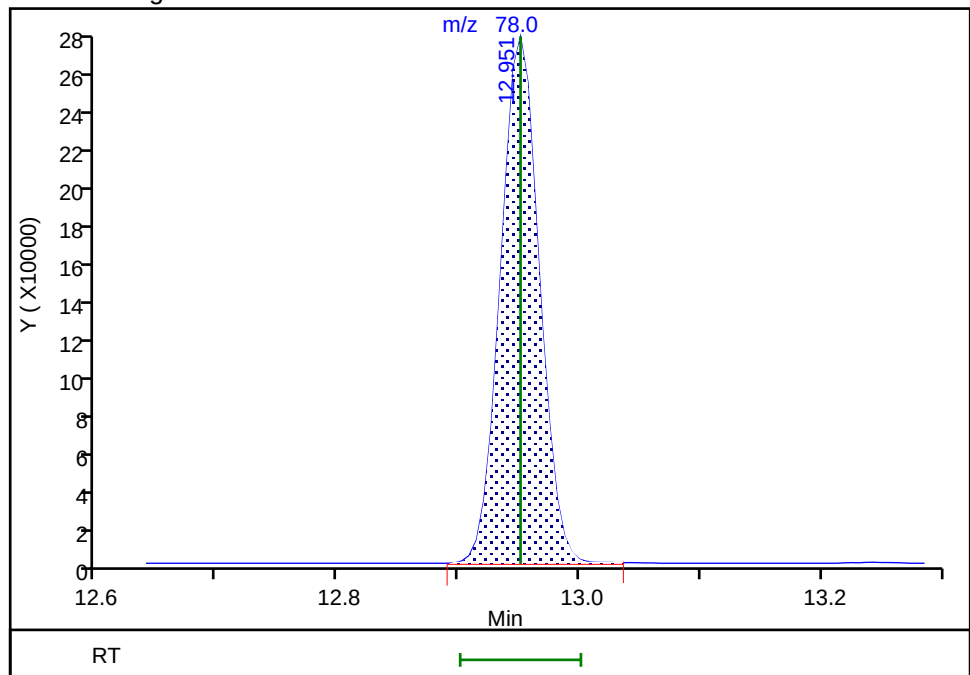
Not Detected
Expected RT: 12.95

Processing Integration Results



RT: 12.95
Area: 622732
Amount: 80.905697
Amount Units: ug/m3

Manual Integration Results



Reviewer: V0FK, 23-May-2025 12:44:16 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Burlington

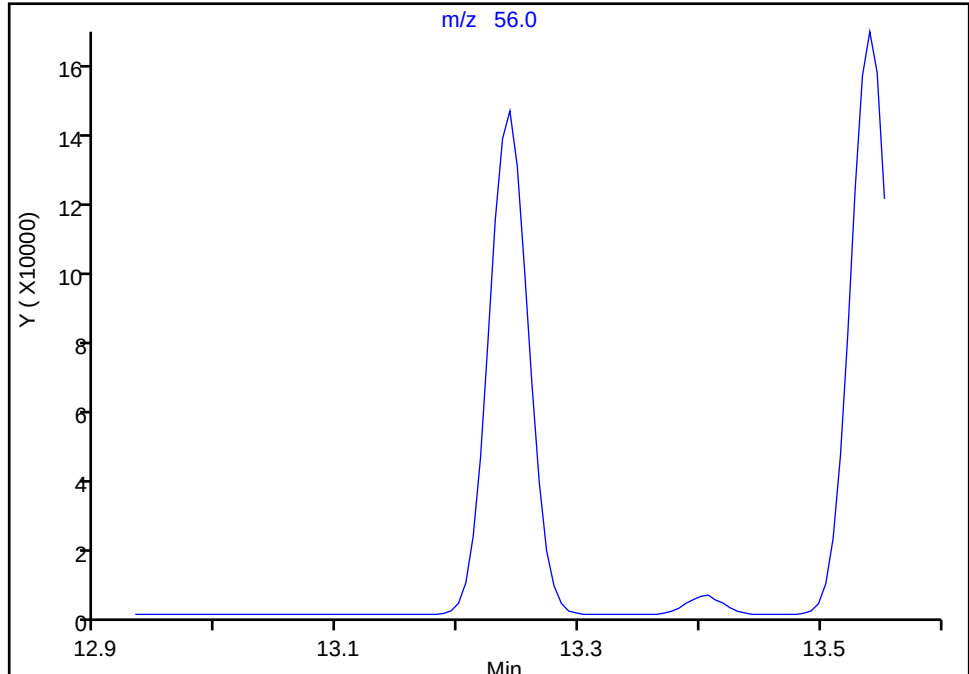
Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-002.D
Injection Date: 23-May-2025 12:06:30 Instrument ID: CHAE.i
Lims ID: ccvis
Client ID:
Operator ID: vtp ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Method: MADEP_APH_1 Limit Group: AIR_APH_Limits
Column: RTX-624 (0.32 mm) Detector: MS SCAN

7 Cyclohexane, CAS: 110-82-7

Signal: 1

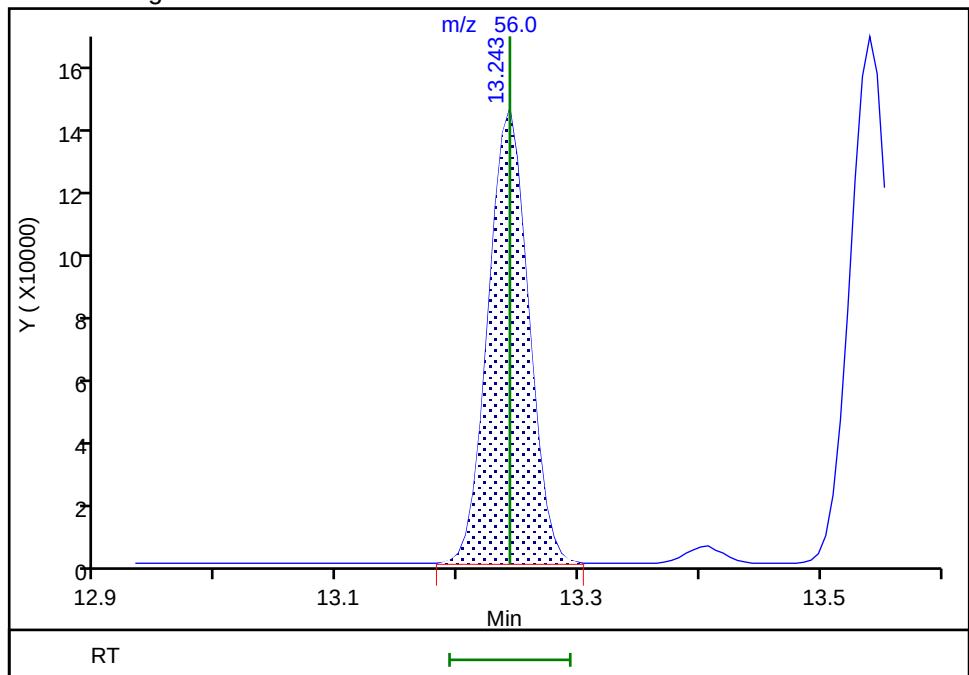
Not Detected
Expected RT: 13.24

Processing Integration Results



Manual Integration Results

RT: 13.24
Area: 320898
Amount: 84.795373
Amount Units: ug/m3



Reviewer: V0FK, 23-May-2025 12:44:19 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Burlington

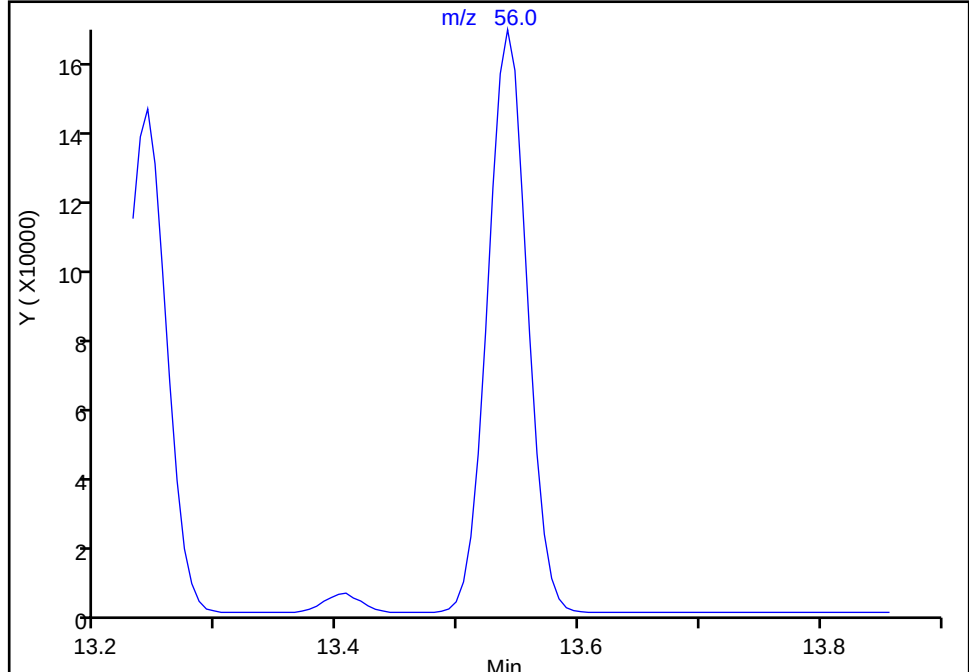
Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-002.D
Injection Date: 23-May-2025 12:06:30 Instrument ID: CHAE.i
Lims ID: ccvis
Client ID:
Operator ID: vtp ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Method: MADEP_APH_1 Limit Group: AIR_APH_Limits
Column: RTX-624 (0.32 mm) Detector: MS SCAN

9 2,3-Dimethylpentane, CAS: 565-59-3

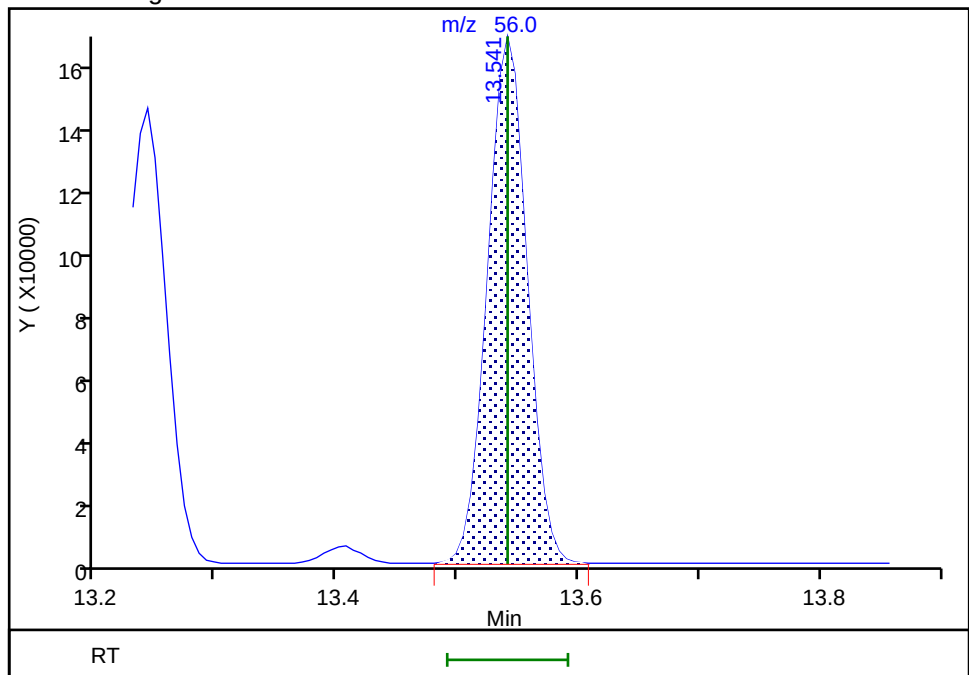
Signal: 1

Not Detected
Expected RT: 13.54

Processing Integration Results



Manual Integration Results



Reviewer: V0FK, 23-May-2025 12:44:25 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Burlington

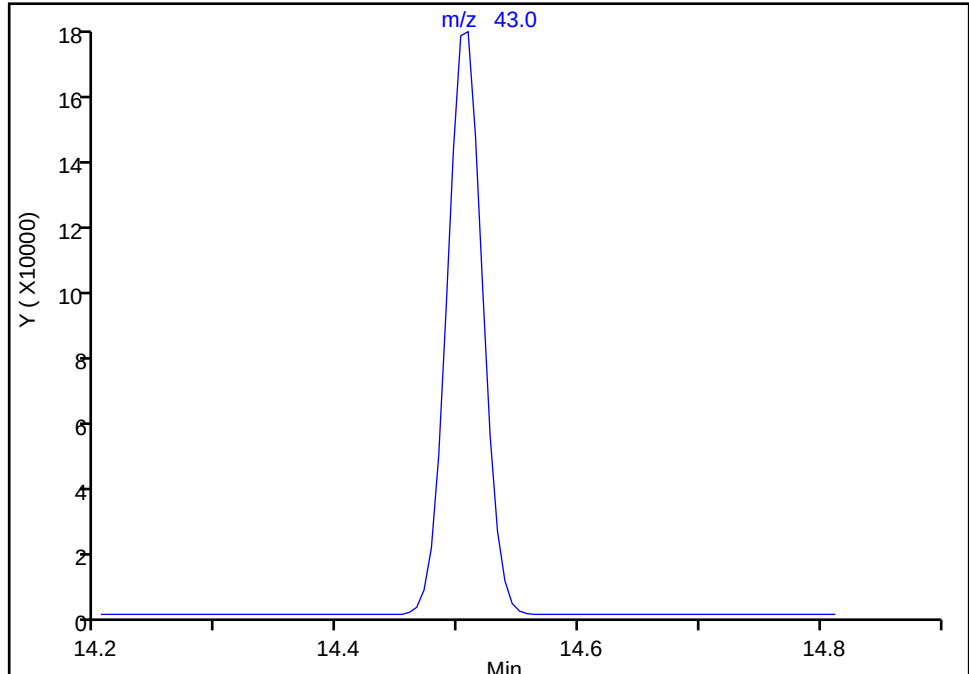
Data File:	\\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-002.D		
Injection Date:	23-May-2025 12:06:30	Instrument ID:	CHAE.i
Lims ID:	ccvis		
Client ID:			
Operator ID:	vtp	ALS Bottle#:	2
Purge Vol:	250.000 mL	Dil. Factor:	1.0000
Method:	MADEP_APH_1	Limit Group:	AIR_APH_Limits
Column:	RTX-624 (0.32 mm)	Detector:	MS SCAN
		Worklist Smp#:	2

10 n-Heptane, CAS: 142-82-5

Signal: 1

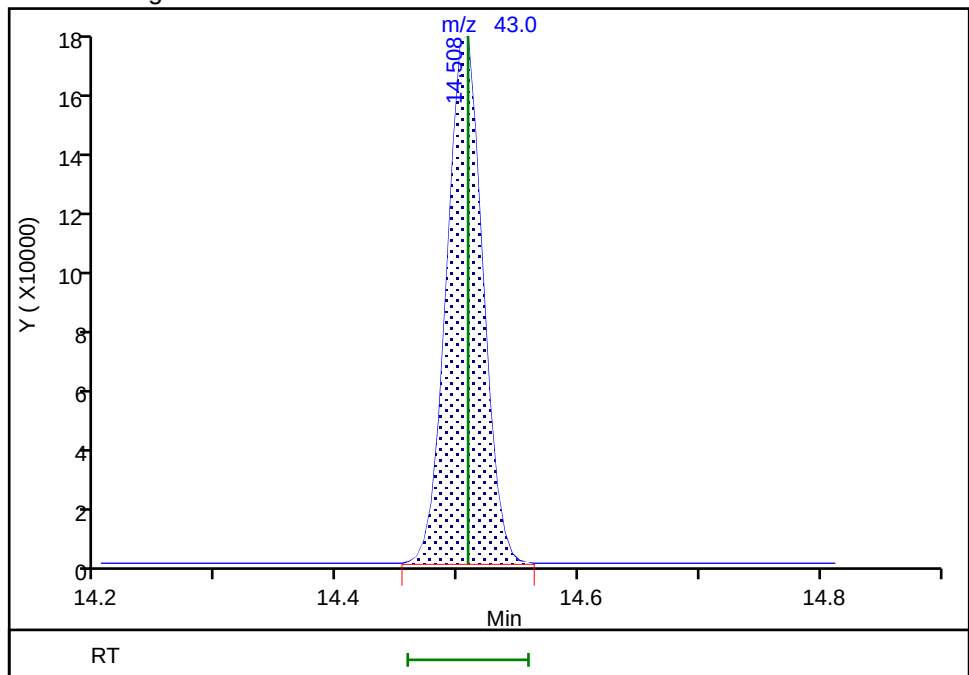
Not Detected
Expected RT: 14.51

Processing Integration Results



RT: 14.51
Area: 361063
Amount: 99.967797
Amount Units: ug/m3

Manual Integration Results



Reviewer: V0FK, 23-May-2025 12:44:29 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Burlington

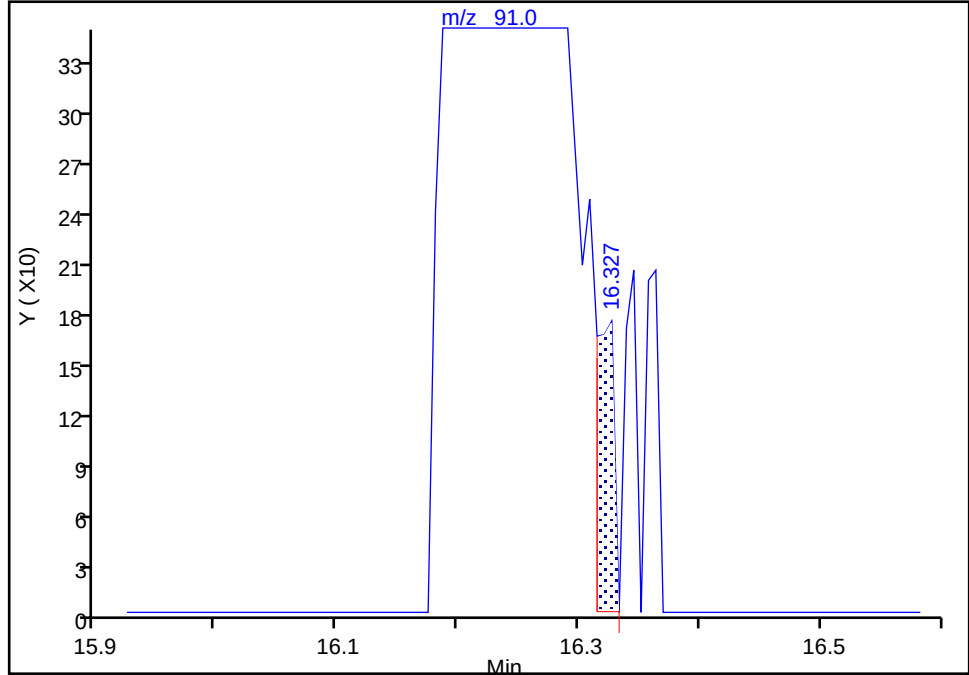
Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-002.D
Injection Date: 23-May-2025 12:06:30 Instrument ID: CHAE.i
Lims ID: ccvis
Client ID:
Operator ID: vtp ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 250.000 mL Dil. Factor: 1.0000
Method: MADEP_APH_1 Limit Group: AIR_APH_Limits
Column: RTX-624 (0.32 mm) Detector: MS SCAN

11 Toluene, CAS: 108-88-3

Signal: 1

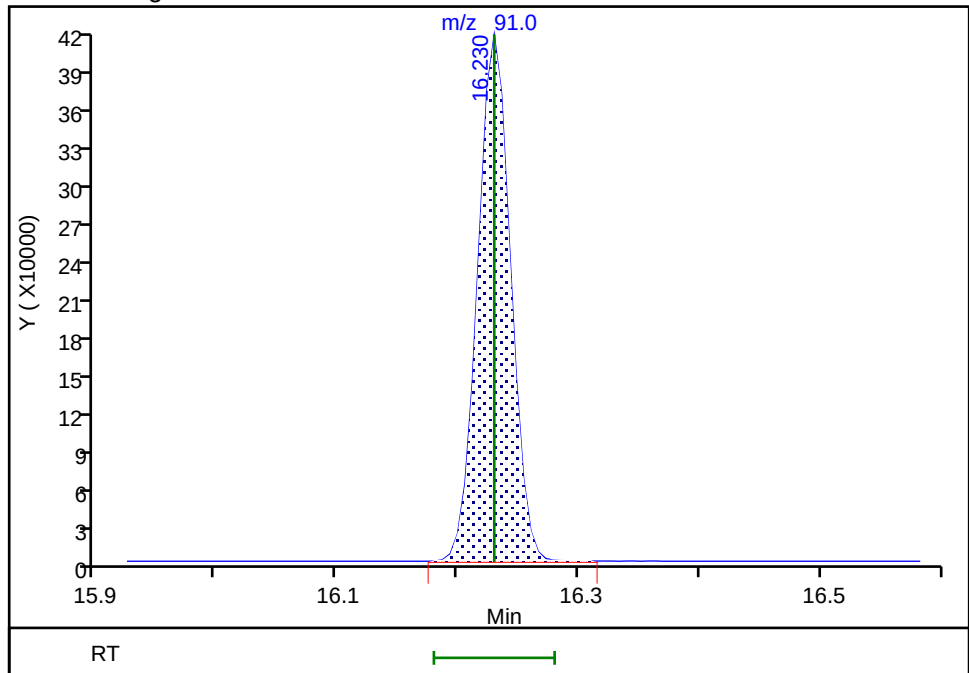
RT: 16.33
Area: 182
Amount: 0.023792
Amount Units: ug/m3

Processing Integration Results



RT: 16.23
Area: 791134
Amount: 103.4193
Amount Units: ug/m3

Manual Integration Results



Reviewer: V0FK, 23-May-2025 12:47:15 -04:00:00 (UTC)

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-001.D
 Lims ID: bfb
 Client ID:
 Sample Type: BFB
 Inject. Date: 24-Apr-2025 10:12:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 250.0 mL Dil. Factor: 1.0000
 Sample Info: 200-0064859-001
 Misc. Info.: bfb
 Operator ID: vtp Instrument ID: CHAE.i
 Method: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\MADEP_APH_1.m
 Limit Group: AIR_APH_Limits
 Last Update: 24-Apr-2025 18:02:32 Calib Date: 24-Apr-2025 17:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-009.D
 Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
 Process Host: CTX1669

First Level Reviewer: V0FK

Date: 24-Apr-2025 18:02:32

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/m3	OnCol Amt ug/m3	Flags
* 4 Chlorobromomethane	128		11.132				529.2	ND	
* 8 1,4-Difluorobenzene	114		13.419				466.6	ND	
* 15 Chlorobenzene-d5	117		17.903				480.9	ND	
* 21 4-Bromofluorobenzene	95		19.144				715.8	ND	
\$ 40 BFB									

QC Flag Legend

Processing Flags

Reagents:

ATTO15AEISS_00003

Amount Added: 60.00

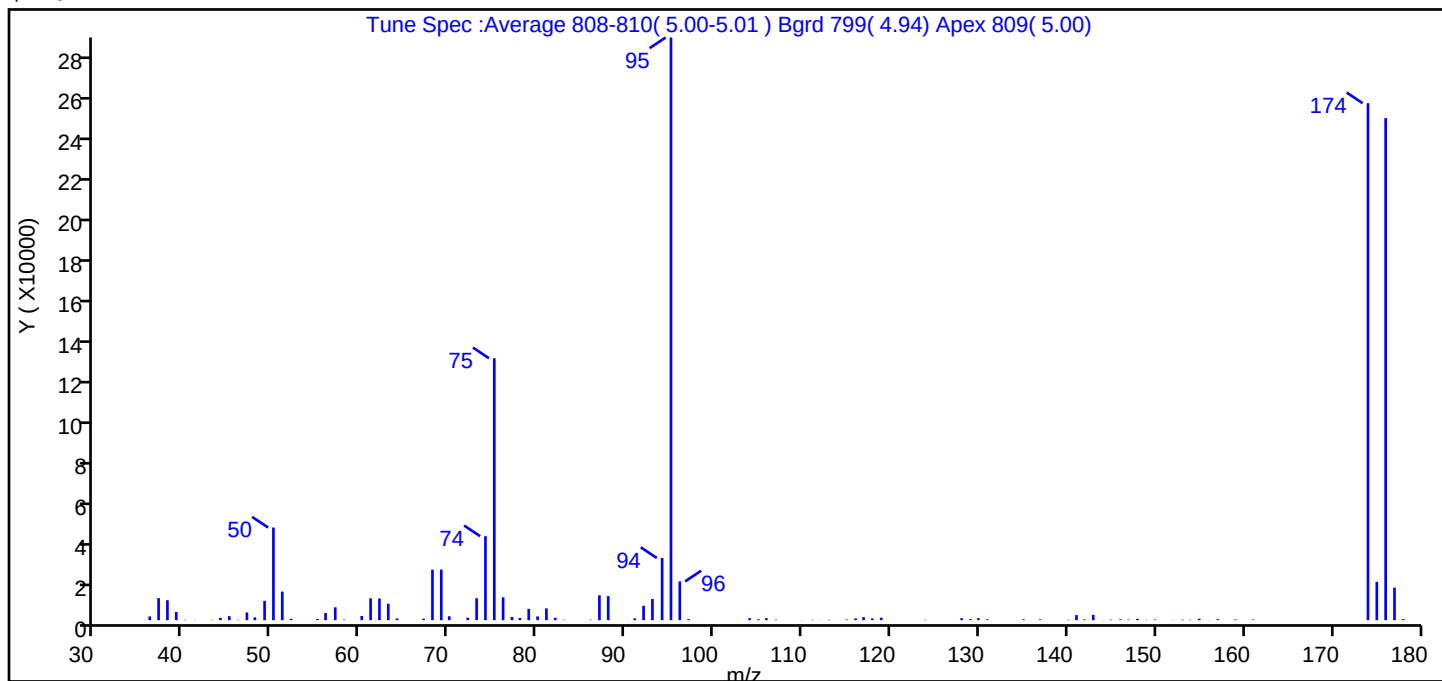
Units: mL

Run Reagent

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-001.D
Injection Date: 24-Apr-2025 10:12:30 Instrument ID: CHAE.i
Lims ID: bfb
Client ID:
Operator ID: vtp ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 250.0 mL Dil. Factor: 1.0000
Method: MADEP_APH_1 Limit Group: AIR_APH_Limits
Tune Method: BFB Method CLP OLM4.2

\$ 40 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	base peak, 100 percent relative abundance	100
50	8.0-40.0 percent of mass 95	15.9
75	30.0-66.0 percent of mass 95	44.9
96	5.0-9.0 percent of mass 95	6.6
173	less than 2.0 percent of mass 174	0.0 (0.0)
174	50.0-120.0 percent of mass 95	88.7
175	4.0-9.0 percent of mass 174	6.6 (7.4)
176	93.0-101.0 percent of mass 174	86.2 (97.1)
177	5.0-9.0 percent of mass 176	5.6 (6.5)

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-001.D\MADEP_APH_1.rslt\spe
Injection Date: 24-Apr-2025 10:12:30
Spectrum: Tune Spec :Average 808-810(5.00-5.01) Bgrd 799(4.94) Apex 809(5.00)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 95

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1840	64.00	834	95.00	287616	141.00	2509
37.00	10873	67.00	690	96.00	19120	142.00	366
38.00	9857	68.00	24912	97.00	512	143.00	2610
39.00	4030	69.00	24976	104.00	955	144.00	50
40.00	177	70.00	1926	105.00	441	145.00	234
41.00	60	72.00	1203	106.00	980	146.00	404
43.00	133	73.00	10777	107.00	245	147.00	224
44.00	1180	74.00	41440	110.00	52	148.00	645
45.00	1993	75.00	129280	111.00	170	149.00	132
46.00	176	76.00	11246	112.00	55	150.00	305
47.00	3764	77.00	1581	113.00	192	152.00	71
48.00	1378	78.00	1059	115.00	318	153.00	232
49.00	9523	79.00	5545	116.00	823	154.00	173
50.00	45712	80.00	1846	117.00	1471	155.00	687
51.00	14076	81.00	5811	118.00	848	156.00	52
52.00	681	82.00	1192	119.00	1227	157.00	470
55.00	613	83.00	199	124.00	175	159.00	328
56.00	3519	86.00	202	128.00	960	161.00	320
57.00	6336	87.00	12257	129.00	502	174.00	255168
58.00	267	88.00	11855	130.00	969	175.00	18904
60.00	2037	91.00	890	131.00	411	176.00	247808
61.00	10761	92.00	7096	135.00	384	177.00	16038
62.00	10686	93.00	10423	137.00	354	178.00	490
63.00	8102	94.00	30680	140.00	186		

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-001.D

Injection Date: 24-Apr-2025 10:12:30

Instrument ID: CHAE.i

Operator ID: vtp

Lims ID: bfb

Worklist Smp#: 1

Client ID:

Injection Vol: 250.0 mL

Dil. Factor: 1.0000

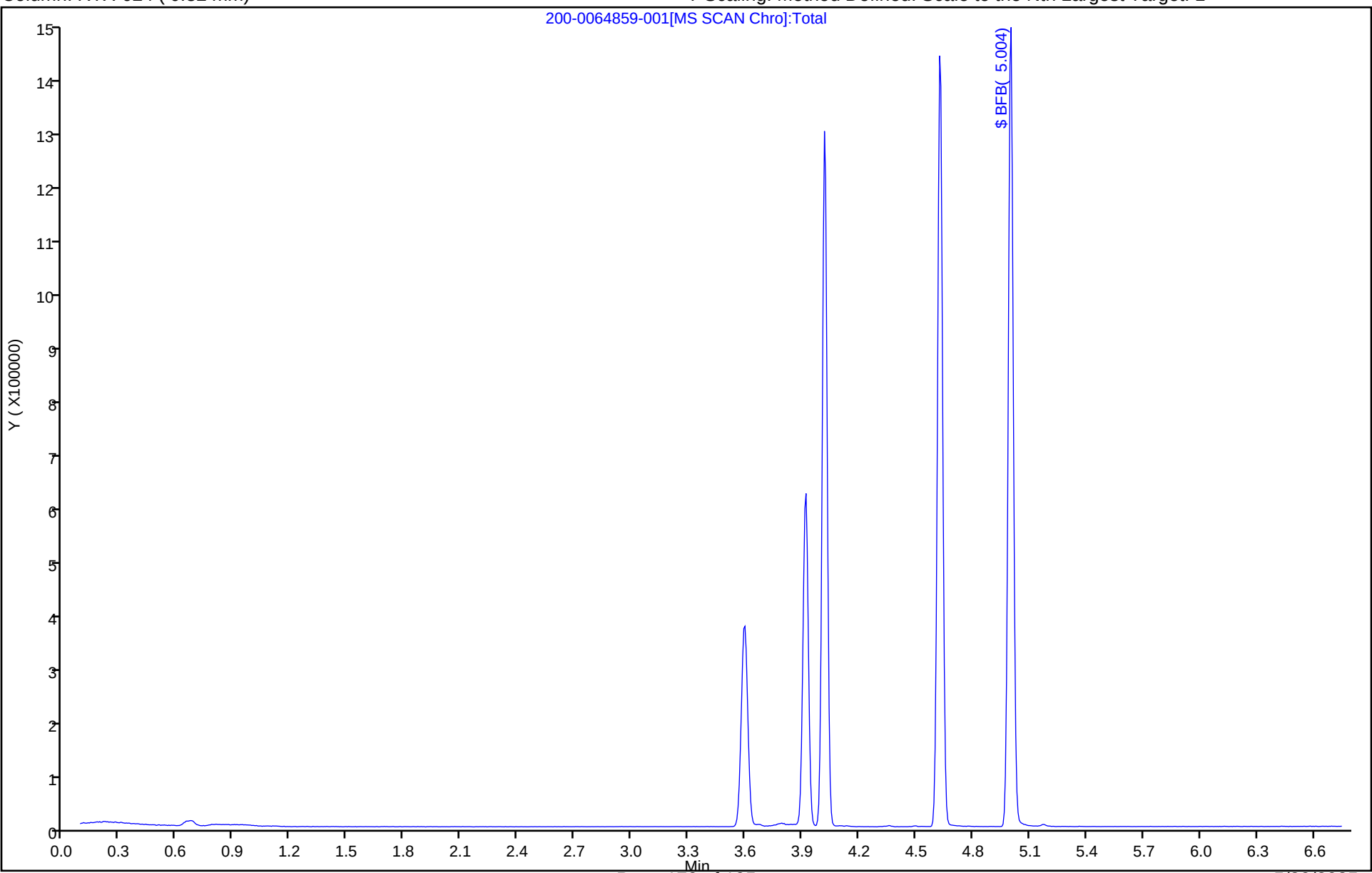
ALS Bottle#: 1

Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-001.D
 Lims ID: bfb
 Client ID:
 Sample Type: BFB
 Inject. Date: 23-May-2025 11:16:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 250.0 mL Dil. Factor: 1.0000
 Sample Info: 200-0065256-001
 Misc. Info.: bfb
 Operator ID: vtp Instrument ID: CHAE.i
 Method: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\MADEP_APH_1.m
 Limit Group: AIR_APH_Limits
 Last Update: 23-May-2025 13:32:24 Calib Date: 24-Apr-2025 17:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-009.D
 Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
 Process Host: CTX1724

First Level Reviewer: V0FK

Date: 23-May-2025 13:32:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/m3	OnCol Amt ug/m3	Flags
* 4 Chlorobromomethane	128		11.120				529.2	ND	
* 8 1,4-Difluorobenzene	114		13.401				466.6	ND	
* 15 Chlorobenzene-d5	117		17.891				480.9	ND	
* 21 4-Bromofluorobenzene	95		19.138				715.8	ND	
\$ 40 BFB									

QC Flag Legend

Processing Flags

Reagents:

ATTO15AEISs_00003

Amount Added: 60.00

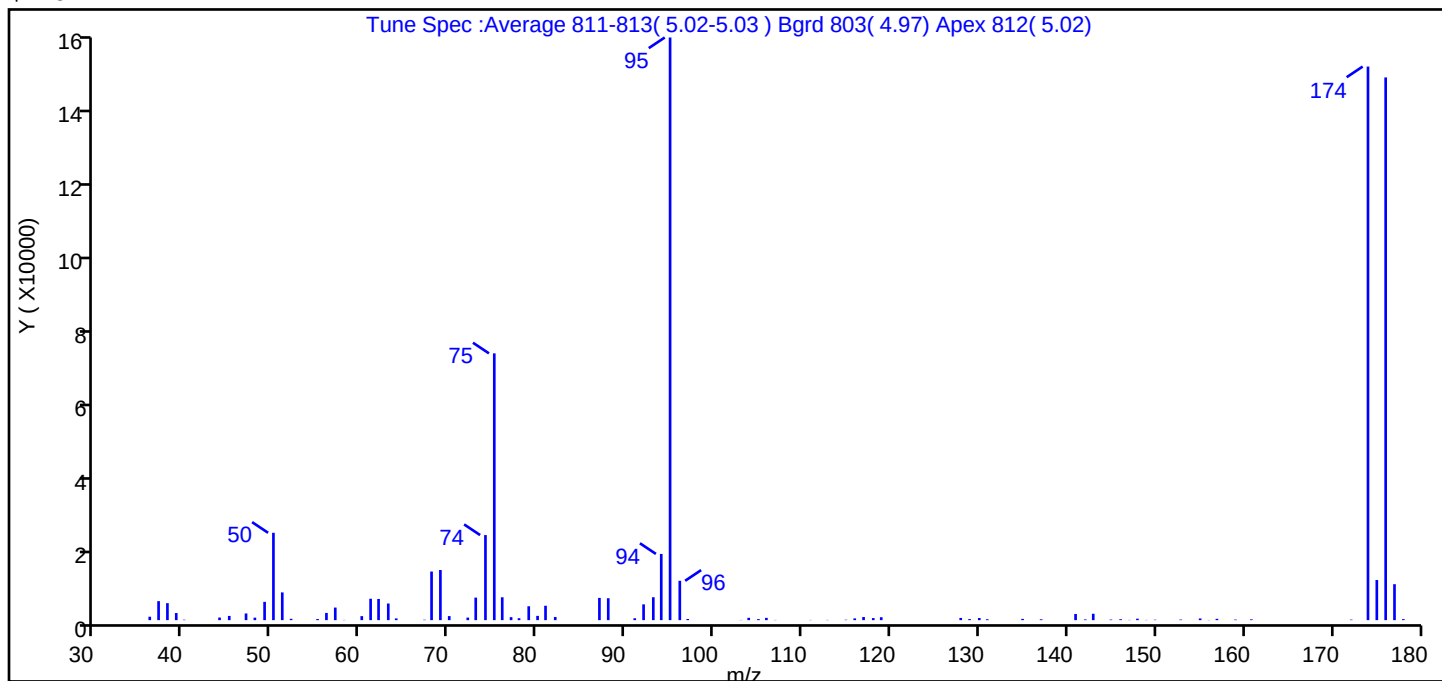
Units: mL

Run Reagent

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-001.D
Injection Date: 23-May-2025 11:16:30 Instrument ID: CHAE.i
Lims ID: bfb
Client ID:
Operator ID: vtp ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 250.0 mL Dil. Factor: 1.0000
Method: MADEP_APH_1 Limit Group: AIR_APH_Limits
Tune Method: BFB Method CLP OLM4.2

\$ 40 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	base peak, 100 percent relative abundance	100
50	8.0-40.0 percent of mass 95	15.0
75	30.0-66.0 percent of mass 95	45.8
96	5.0-9.0 percent of mass 95	6.8
173	less than 2.0 percent of mass 174	0.0 (0.0)
174	50.0-120.0 percent of mass 95	95.0
175	4.0-9.0 percent of mass 174	6.9 (7.2)
176	93.0-101.0 percent of mass 174	93.1 (98.0)
177	5.0-9.0 percent of mass 176	6.2 (6.6)

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-001.D\MADEP_APH_1.rslt\spe
Injection Date: 23-May-2025 11:16:30
Spectrum: Tune Spec :Average 811-813(5.02-5.03) Bgrd 803(4.97) Apex 812(5.02)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 85

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	929	67.00	113	96.00	10653	143.00	1732
37.00	5144	68.00	13156	97.00	312	145.00	158
38.00	4600	69.00	13570	103.00	50	146.00	248
39.00	1924	70.00	1098	104.00	634	147.00	55
40.00	115	72.00	693	105.00	283	148.00	387
44.00	705	73.00	6096	106.00	618	149.00	55
45.00	1139	74.00	23024	107.00	55	150.00	116
47.00	1810	75.00	72200	111.00	56	153.00	161
48.00	674	76.00	6192	113.00	63	155.00	452
49.00	4948	77.00	811	115.00	115	156.00	51
50.00	23640	78.00	522	116.00	477	157.00	358
51.00	7511	79.00	3759	117.00	846	159.00	158
52.00	363	80.00	1154	118.00	561	161.00	222
55.00	297	81.00	3897	119.00	795	172.00	140
56.00	1948	82.00	861	128.00	602	174.00	149824
57.00	3406	87.00	6022	129.00	284	175.00	10859
58.00	59	88.00	5931	130.00	573	176.00	146880
60.00	1089	91.00	510	131.00	246	177.00	9732
61.00	5792	92.00	4273	135.00	339	178.00	275
62.00	5732	93.00	6203	137.00	232		
63.00	4504	94.00	17920	141.00	1671		
64.00	467	95.00	157696	142.00	196		

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-001.D

Injection Date: 23-May-2025 11:16:30

Instrument ID: CHAE.i

Operator ID: vtp

Lims ID: bfb

Worklist Smp#: 1

Client ID:

Injection Vol: 250.0 mL

Dil. Factor: 1.0000

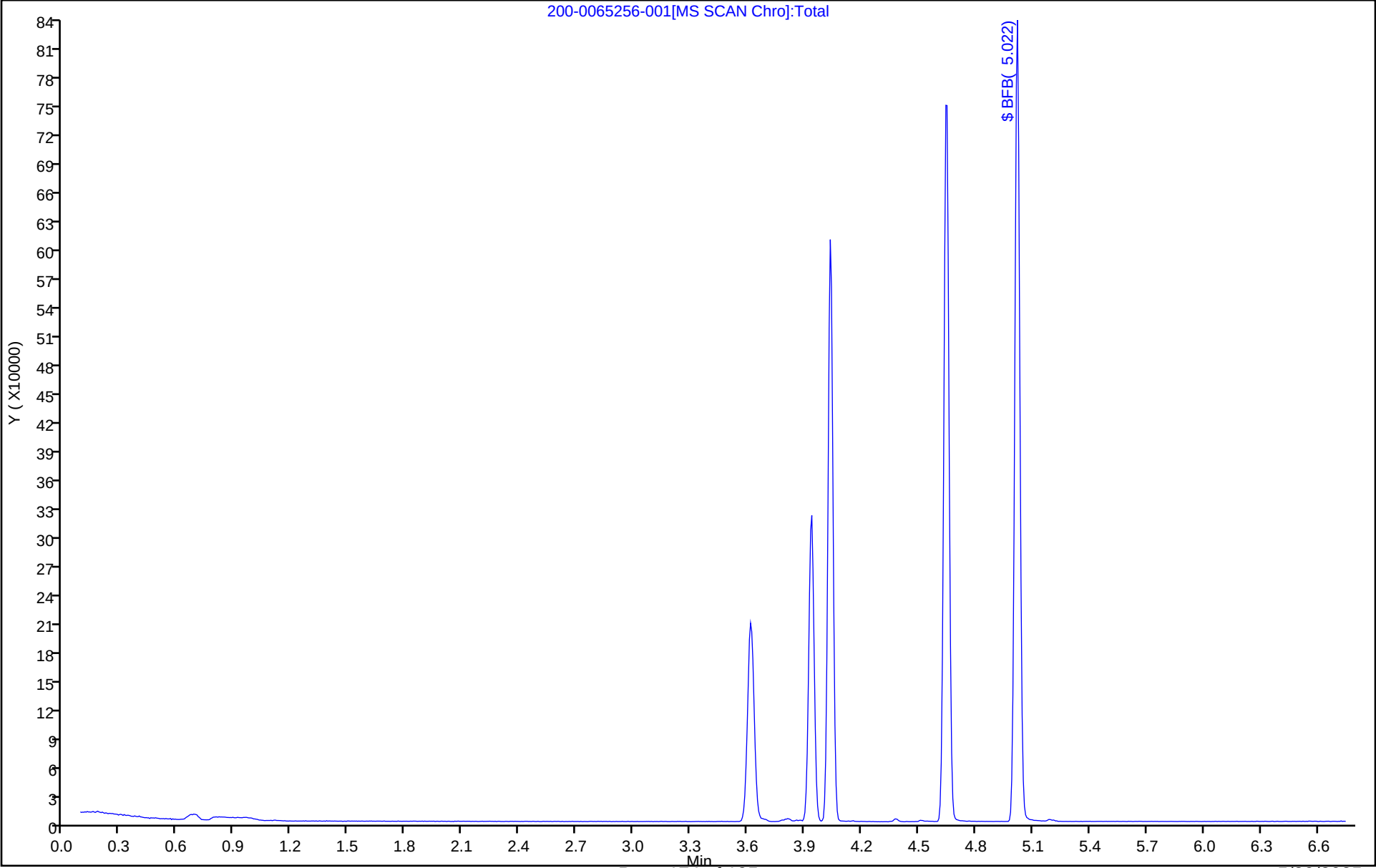
ALS Bottle#: 1

Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 200-78136-1
SDG No.: 200-78136-1
Client Sample ID: _____ Lab Sample ID: MB 200-216493/4
Matrix: Air Lab File ID: 200-0065256-004.D
Analysis Method: APH Date Collected: _____
Sample wt/vol: 250 (mL) Date Analyzed: 05/23/2025 13:50
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: RTX-624 ID: 0.32 (mm)
Purge Volume: _____ Heated Purge: (Y/N) _____ pH: _____
% Moisture: _____ % Solids: _____ Level: (low/med) Low
Analysis Batch No.: 216493 Units: ug/m3
Preparation Batch No.: _____ Instrument ID: CHAE.i

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
106-99-0	Butadiene	2.0	U	2.0	2.0
1634-04-4	Methyl tert-butyl ether	2.0	U	2.0	2.0
71-43-2	Benzene	2.0	U	2.0	2.0
108-88-3	Toluene	2.0	U	2.0	2.0
100-41-4	Ethylbenzene	2.0	U	2.0	2.0
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	2.0
95-47-6	o-Xylene	2.0	U	2.0	2.0
91-20-3	Naphthalene	2.0	U	2.0	2.0
STL00133	C9-C10 Aromatics	10	U	10	10
STL00041	C5-C8 Aliphatics (adjusted)	12	U	12	12
STL00106	C9-C12 Aliphatics (adjusted)	12	U	12	12

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-004.D
 Lims ID: mb
 Client ID:
 Sample Type: MB
 Inject. Date: 23-May-2025 13:50:30 ALS Bottle#: 4 Worklist Smp#: 4
 Purge Vol: 250.000 mL Dil. Factor: 1.0000
 Sample Info: 200-0065256-004
 Operator ID: vtp Instrument ID: CHAE.i
 Method: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\MADEP_APH_1.m
 Limit Group: AIR_APH_Limits
 Last Update: 23-May-2025 15:22:46 Calib Date: 24-Apr-2025 17:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-009.D
 Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
 Process Host: CTX1724

First Level Reviewer: V0FK

Date: 23-May-2025 15:31:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/m3	OnCol Amt ug/m3	Flags
1 Butadiene	54		5.200					ND	
2 2-Methylbutane	43		6.952					ND	
3 Methyl tert-butyl ether	73		9.970					ND	
* 4 Chlorobromomethane	128	11.132	11.132	0.000	93	98664	529.2	529.2	
5 Hexane	57		11.180					ND	
A 12 C5-C8 Aliphatics	1	12.893	(6.852-18.933)		0	52400		3.32	
A 13 C5-C8 Aliphatics (Raw)	1	12.893	(6.852-18.933)		0	52400		3.32	
6 Benzene	78		12.963					ND	
7 Cyclohexane	56		13.255					ND	
* 8 1,4-Difluorobenzene	114	13.419	13.419	0.000	99	568043	466.6	466.6	
9 2,3-Dimethylpentane	56		13.553					ND	
10 n-Heptane	43		14.514					ND	
11 Toluene	91		16.242					ND	MU
14 n-Octane	43		17.191					ND	
* 15 Chlorobenzene-d5	117	17.909	17.903	0.006	97	454561	480.9	480.9	
16 Ethylbenzene	91	18.256	18.250	0.006	92	926		0.1287	
17 2,3-Dimethylheptane	43		18.304					ND	
18 m-Xylene & p-Xylene	91	18.402	18.402	0.000	88	813		0.1487	
19 o-Xylene	91		18.779					ND	
20 n-Nonane	43		18.943					ND	
* 21 4-Bromofluorobenzene	95	19.150	19.150	0.000	98	243917	715.8	715.8	
22 Isopropylbenzene	105		19.247					ND	
23 3-Ethyltoluene	105	19.728	19.722	0.006	91	1205		0.1789	
24 1,3,5-Trimethylbenzene	105		19.813					ND	
A 37 C9-C12 Aliphatics	1	20.177	(18.294-22.061)		0	18908		1.48	
26 n-Decane	57		20.190					ND	
A 28 C9-C10 Aromatics (mz 134)	134	20.455	(18.879-21.934)		0	156		0.0862	
A 25 C9-C10 Aromatics (mz 120)	120	20.099	(18.879-21.934)		0	1194		0.4591	
A 34 C9-C12 Aliphatics (Raw)	1	20.452	(18.933-21.971)		0	18908		1.48	
27 4-Isopropyltoluene	119	20.458	20.452	0.006	77	981		0.1374	
29 1,2,3-Trimethylbenzene	105	20.464	20.458	0.006	84	1052		0.1747	
30 Butylcyclohexane	83		20.640					ND	MU

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/m3	OnCol Amt ug/m3	Flags
31 Undecane	57		21.139					ND	
32 Dodecane	57		21.961					ND	
33 Naphthalene	128		22.034					ND	
S 35 Xylenes, Total	1				0			0.1487	
S 36 C9-C10 Aromatics	1				0			0.5453	
S 38 C5-C8 Aliphatics (adjusted)	1				0			3.04	
S 39 C9-C12 Aliphatics (adjusted)	1				0			0.9327	

QC Flag Legend

Processing Flags

Review Flags

U - Marked Undetected

Reagents:

ATTO15AEISs_00003

Amount Added: 60.00

Units: mL

Run Reagent

Report Date: 23-May-2025 15:31:08

Chrom Revision: 2.3 07-May-2025 18:53:14

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-004.D

Injection Date: 23-May-2025 13:50:30

Instrument ID: CHAE.i

Operator ID: vtp

Lims ID: mb

Worklist Smp#: 4

Client ID:

Purge Vol: 250.000 mL

Dil. Factor: 1.0000

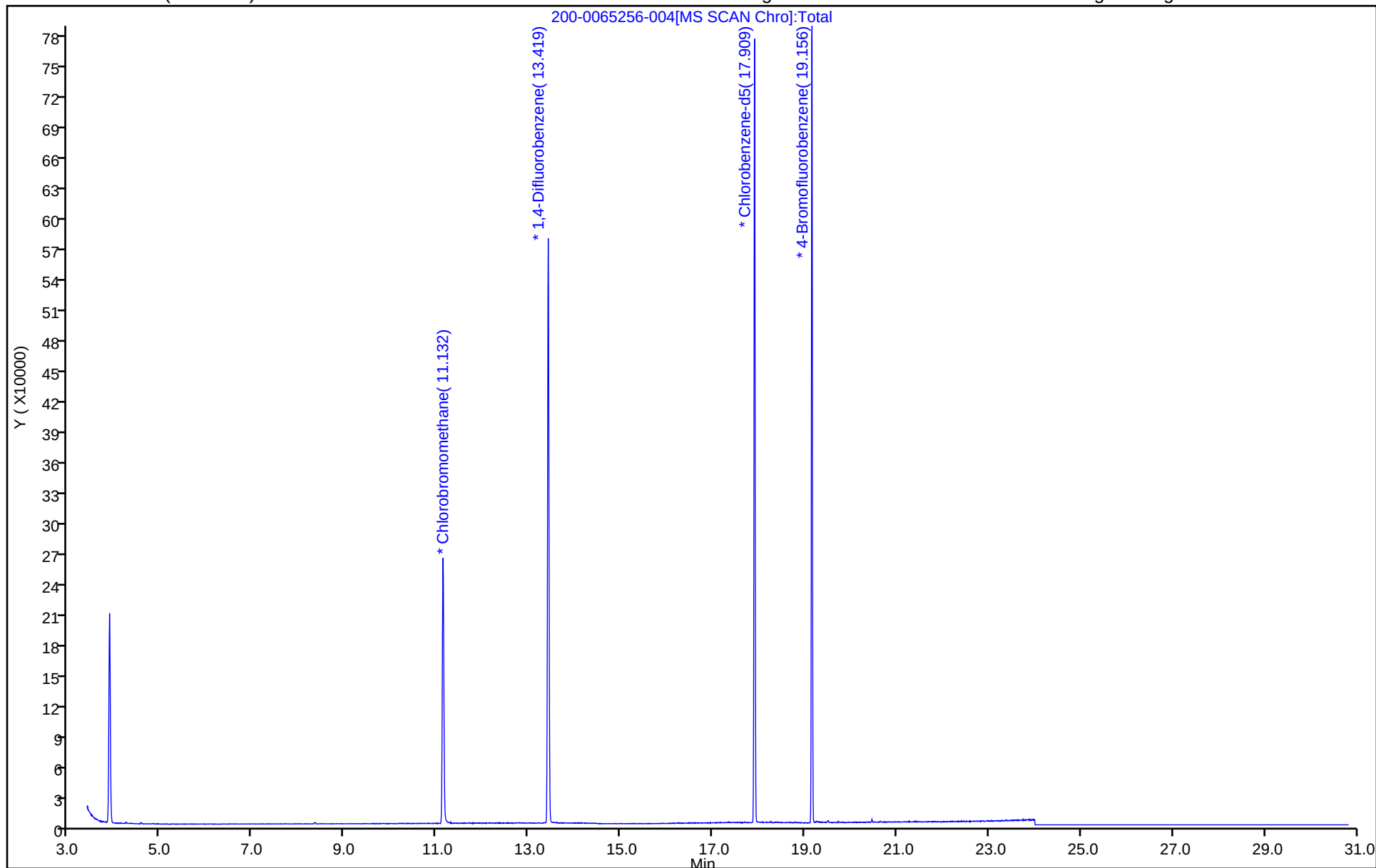
ALS Bottle#: 4

Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-004.D

Injection Date: 23-May-2025 13:50:30

Instrument ID: CHAE.i

Lims ID: mb

Client ID:

Operator ID: vtp

ALS Bottle#:

4

Worklist Smp#: 4

Purge Vol: 250.000 mL

Dil. Factor:

1.0000

Method: MADEP_APH_1

Limit Group:

AIR_APH_Limits

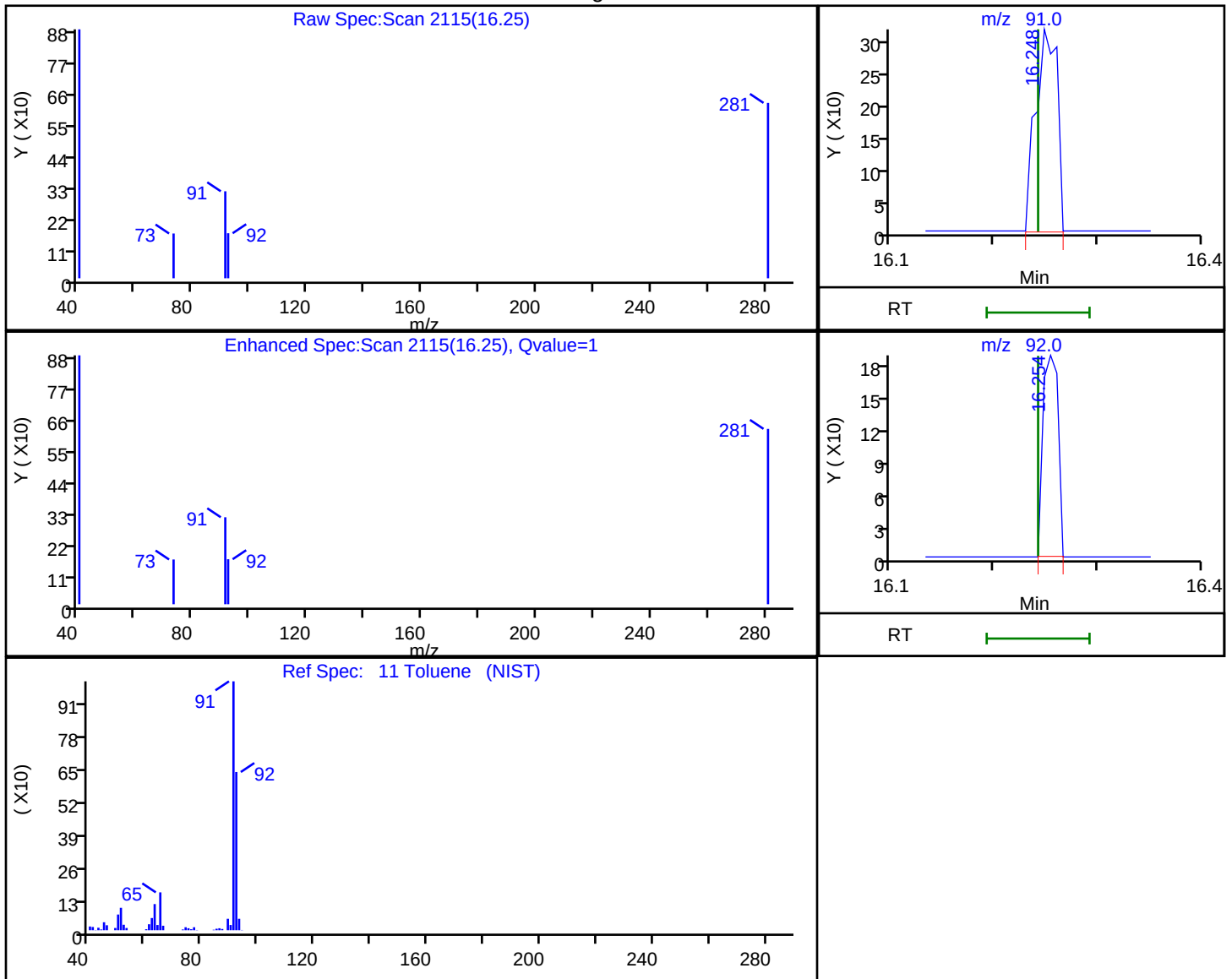
Column: RTX-624 (0.32 mm)

Detector

MS SCAN

11 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
16.25	91.00	448	0.072480
16.25	92.00	185	

Reviewer: V0FK, 23-May-2025 15:22:10 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>Eurofins Burlington</u>	Job No.: <u>200-78136-1</u>
SDG No.: <u>200-78136-1</u>	
Client Sample ID: _____	Lab Sample ID: <u>LCS 200-216493/3</u>
Matrix: <u>Air</u>	Lab File ID: <u>200-0065256-003.D</u>
Analysis Method: <u>APH</u>	Date Collected: _____
Sample wt/vol: <u>250 (mL)</u>	Date Analyzed: <u>05/23/2025 12:59</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>RTX-624</u> ID: <u>0.32 (mm)</u>
Purge Volume: _____	Heated Purge: (Y/N) _____ pH: _____
% Moisture: _____ % Solids: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>216493</u>	Units: <u>ug/m3</u>
Preparation Batch No.: _____	Instrument ID: <u>CHAE.i</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
106-99-0	Butadiene	44.7		2.0	2.0
1634-04-4	Methyl tert-butyl ether	93.3		2.0	2.0
71-43-2	Benzene	78.5		2.0	2.0
108-88-3	Toluene	99.8		2.0	2.0
100-41-4	Ethylbenzene	120		2.0	2.0
179601-23-1	m-Xylene & p-Xylene	125		2.0	2.0
95-47-6	o-Xylene	124		2.0	2.0
91-20-3	Naphthalene	153		2.0	2.0
STL00133	C9-C10 Aromatics	752		10	10
STL00041	C5-C8 Aliphatics (adjusted)	440		12	12
STL00106	C9-C12 Aliphatics (adjusted)	1050		12	12

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-003.D
 Lims ID: lcs
 Client ID:
 Sample Type: LCS
 Inject. Date: 23-May-2025 12:59:30 ALS Bottle#: 3 Worklist Smp#: 3
 Purge Vol: 250.000 mL Dil. Factor: 1.0000
 Sample Info: 200-0065256-003
 Operator ID: vtp Instrument ID: CHAE.i
 Method: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\MADEP_APH_1.m
 Limit Group: AIR_APH_Limits
 Last Update: 23-May-2025 15:21:59 Calib Date: 24-Apr-2025 17:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-009.D
 Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
 Process Host: CTX1724

First Level Reviewer: V0FK

Date: 23-May-2025 15:21:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/m3	OnCol Amt ug/m3	Flags
1 Butadiene	54	5.200	5.200	0.000	93	91962	55.3	44.7	
2 2-Methylbutane	43	6.952	6.952	0.000	91	125776	73.8	49.5	
3 Methyl tert-butyl ether	73	9.970	9.970	0.000	96	526166	90.4	93.3	
* 4 Chlorobromomethane	128	11.132	11.132	0.000	95	104491	529.2	529.2	
5 Hexane	57	11.180	11.180	0.000	92	264132	88.4	81.0	
A 12 C5-C8 Aliphatics	1	12.893	(6.852-18.933)	0	9100288	570.5	556.1		M
A 13 C5-C8 Aliphatics (Raw)	1	12.893	(6.852-18.933)	0	22065165	570.5	1348.4		M
6 Benzene	78	12.963	12.963	0.000	98	555117	79.9	78.5	
7 Cyclohexane	56	13.255	13.255	0.000	97	280365	86.1	80.7	
* 8 1,4-Difluorobenzene	114	13.419	13.419	0.000	99	588682	466.6	466.6	
9 2,3-Dimethylpentane	56	13.553	13.553	0.000	91	319859	102.6	96.5	
10 n-Heptane	43	14.514	14.514	0.000	91	316436	102.6	95.4	
11 Toluene	91	16.242	16.242	0.000	97	717303	94.4	99.8	
14 n-Octane	43	17.191	17.191	0.000	91	460204	116.9	112.1	
* 15 Chlorobenzene-d5	117	17.903	17.903	0.000	97	528450	480.9	480.9	
16 Ethylbenzene	91	18.250	18.250	0.000	99	1003729	108.6	120.0	
17 2,3-Dimethylheptane	43	18.304	18.304	0.000	92	663090	131.4	131.2	
18 m-Xylene & p-Xylene	91	18.402	18.402	0.000	97	794054	108.6	124.9	
19 o-Xylene	91	18.779	18.779	0.000	98	837714	108.6	124.5	
20 n-Nonane	43	18.943	18.943	0.000	88	515321	131.4	136.1	
* 21 4-Bromofluorobenzene	95	19.150	19.150	0.000	97	385800	715.8	715.8	
22 Isopropylbenzene	105	19.247	19.247	0.000	98	1229490	123.2	141.7	
23 3-Ethyltoluene	105	19.722	19.722	0.000	98	1132341	123.2	144.6	
24 1,3,5-Trimethylbenzene	105	19.813	19.813	0.000	98	1010025	123.2	146.6	
A 37 C9-C12 Aliphatics	1	20.177	(18.294-22.061)	0	14747789	886.9	991.6		
26 n-Decane	57	20.190	20.190	0.000	91	601584	145.9	165.4	
A 28 C9-C10 Aromatics (mz 134)	134	21.054	(18.879-21.934)	0	349854	137.4	166.2		
A 25 C9-C10 Aromatics (mz 120)	120	19.856	(18.879-21.934)	0	1771969	492.6	586.1		
A 34 C9-C12 Aliphatics (Raw)	1	20.452	(18.933-21.971)	0	26741315	886.9	1798.0		E
27 4-Isopropyltoluene	119	20.452	20.452	0.000	94	1401646	137.4	168.9	
29 1,2,3-Trimethylbenzene	105	20.458	20.458	0.000	92	1059457	123.2	151.3	
30 Butylcyclohexane	83	20.640	20.640	0.000	96	765257	143.7	165.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/m3	OnCol Amt ug/m3	Flags
31 Undecane	57	21.139	21.139	0.000	94	609056	160.0	190.6	
32 Dodecane	57	21.961	21.961	0.000	97	372439	174.5	204.5	
33 Naphthalene	128	22.034	22.034	0.000	99	744958	131.2	153.2	
S 35 Xylenes, Total	1				0		217.3	249.4	
S 36 C9-C10 Aromatics	1				0		630.1	752.4	
S 38 C5-C8 Aliphatics (adjusted)	1				0		570.5	439.9	
S 39 C9-C12 Aliphatics (adjusted)	1				0		886.9	1045.6	
\$ 40 BFB									

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

APHLCSw_00066

Amount Added: 250.00

Units: mL

ATTO15AEISs_00003

Amount Added: 60.00

Units: mL

Run Reagent

Report Date: 23-May-2025 15:22:00

Chrom Revision: 2.3 07-May-2025 18:53:14

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-003.D

Injection Date: 23-May-2025 12:59:30

Instrument ID: CHAE.i

Operator ID: vtp

Lims ID: lcs

Worklist Smp#: 3

Client ID:

Purge Vol: 250.000 mL

Dil. Factor: 1.0000

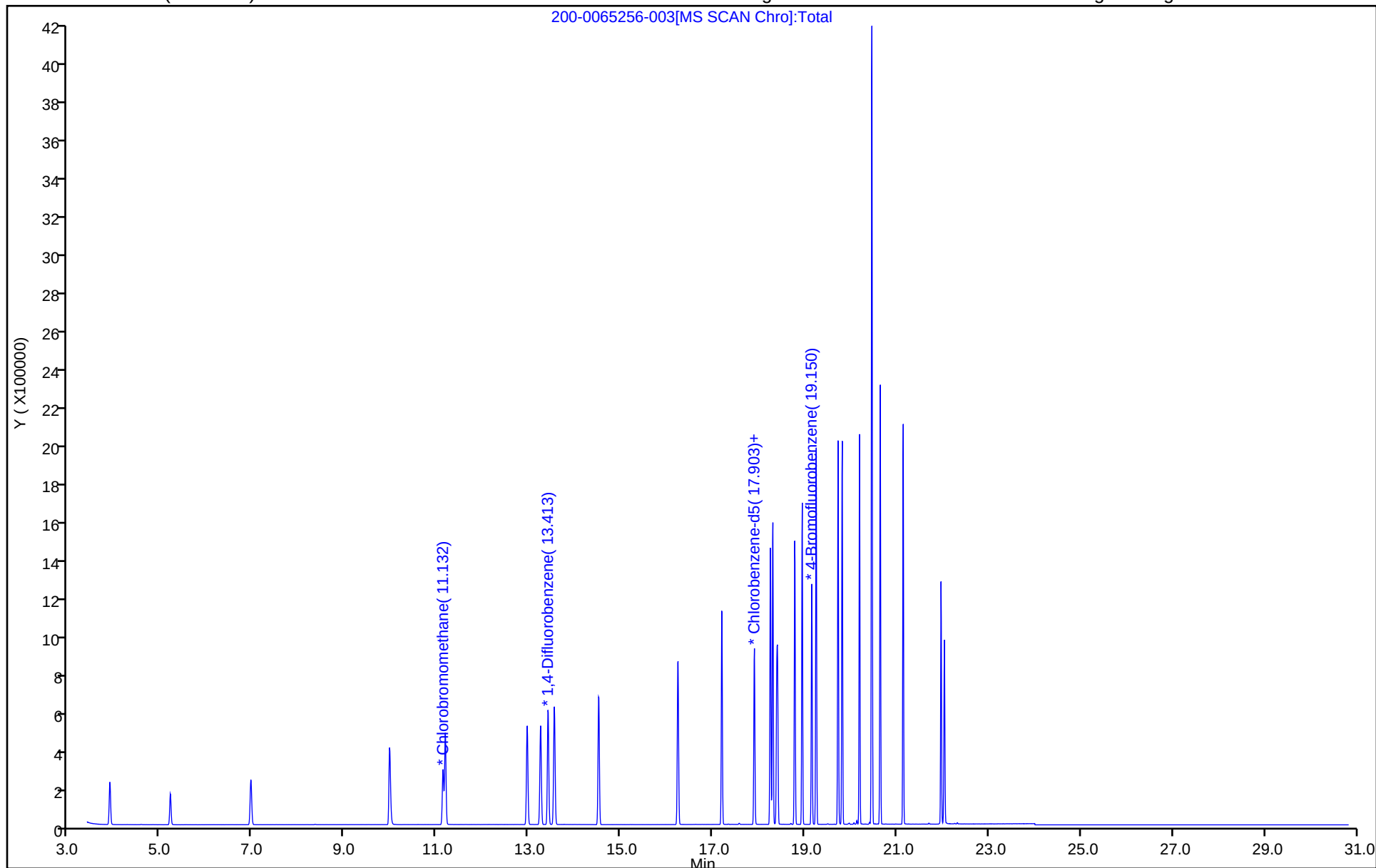
ALS Bottle#: 3

Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>Eurofins Burlington</u>	Job No.: <u>200-78136-1</u>
SDG No.: <u>200-78136-1</u>	
Client Sample ID: <u>SG-2_20250513 DU</u>	Lab Sample ID: <u>200-78136-3 DU</u>
Matrix: <u>Air</u>	Lab File ID: <u>200-0065256-009.D</u>
Analysis Method: <u>APH</u>	Date Collected: <u>05/13/2025 16:15</u>
Sample wt/vol: <u>330 (mL)</u>	Date Analyzed: <u>05/23/2025 18:12</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1.32</u>
Soil Extract Vol.: _____	GC Column: <u>RTX-624</u> ID: <u>0.32 (mm)</u>
Purge Volume: _____	Heated Purge: (Y/N) _____ pH: _____
% Moisture: _____ % Solids: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>216493</u>	Units: <u>ug/m3</u>
Preparation Batch No.: _____	Instrument ID: <u>CHAE.i</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
106-99-0	Butadiene	2.0	U	2.0	2.0
1634-04-4	Methyl tert-butyl ether	2.0	U	2.0	2.0
71-43-2	Benzene	2.0	U	2.0	2.0
108-88-3	Toluene	2.0	U	2.0	2.0
100-41-4	Ethylbenzene	2.0	U	2.0	2.0
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	2.0
95-47-6	o-Xylene	2.0	U	2.0	2.0
91-20-3	Naphthalene	2.0	U	2.0	2.0
STL00133	C9-C10 Aromatics	10	U	10	10
STL00041	C5-C8 Aliphatics (adjusted)	12	U	12	12
STL00106	C9-C12 Aliphatics (adjusted)	12	U	12	12

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-009.D
 Lims ID: 200-78136-A-3 DU
 Client ID:
 Sample Type: Client
 Inject. Date: 23-May-2025 18:12:30 ALS Bottle#: 9 Worklist Smp#: 9
 Purge Vol: 250.000 mL Dil. Factor: 1.3200
 Sample Info: 200-0065256-009
 Operator ID: vtp Instrument ID: CHAE.i
 Method: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\MADEP_APH_1.m
 Limit Group: AIR_APH_Limits
 Last Update: 28-May-2025 09:18:27 Calib Date: 24-Apr-2025 17:11:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Burlington\ChromData\CHAE.i\20250424-64859.b\200-0064859-009.D
 Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
 Process Host: CTX1653

First Level Reviewer: V0FK

Date: 28-May-2025 09:18:27

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/m3	Flags
1 Butadiene	54		5.200				ND	
3 Methyl tert-butyl ether	73		9.970				ND	
* 4 Chlorobromomethane	128	11.132	11.132	0.000	95	92720	529.2	
A 13 C5-C8 Aliphatics (Raw)	1	12.893	(6.852-18.933)		0	122660	8.74	
6 Benzene	78		12.963				ND	
* 8 1,4-Difluorobenzene	114	13.413	13.419	-0.006	99	505130	466.6	
10 n-Heptane	43		14.514				ND	
11 Toluene	91	16.242	16.242	0.000	93	726	0.1209	
* 15 Chlorobenzene-d5	117	17.903	17.903	0.000	97	441531	480.9	
16 Ethylbenzene	91		18.250				ND	
17 2,3-Dimethylheptane	43		18.304				ND	
18 m-Xylene & p-Xylene	91		18.402				ND	
19 o-Xylene	91		18.779				ND	
20 n-Nonane	43		18.943				ND	
* 21 4-Bromofluorobenzene	95	19.144	19.150	-0.006	96	301091	715.8	
24 1,3,5-Trimethylbenzene	105		19.813				ND	
26 n-Decane	57		20.190				ND	
A 28 C9-C10 Aromatics (mz 134)	134		(18.879-21.934)				ND	
A 25 C9-C10 Aromatics (mz 120)	120		(18.879-21.934)				ND	
A 34 C9-C12 Aliphatics (Raw)	1	20.452	(18.933-21.971)		0	30885	2.49	
33 Naphthalene	128		22.034				ND	MU
S 36 C9-C10 Aromatics	1		27.980				ND	
S 38 C5-C8 Aliphatics (adjusted)	1				0		8.61	
S 39 C9-C12 Aliphatics (adjusted)	1				0		2.49	

QC Flag Legend

Processing Flags

Review Flags

U - Marked Undetected

Reagents:

ATTO15AEISs_00003

Amount Added: 60.00

Units: mL

Run Reagent

Report Date: 28-May-2025 09:18:27

Chrom Revision: 2.3 07-May-2025 18:53:14

Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-009.D

Injection Date: 23-May-2025 18:12:30

Instrument ID: CHAE.i

Operator ID: vtp

Lims ID: 200-78136-A-3 DU

Lab Sample ID: 200-78136-3

Worklist Smp#: 9

Client ID:

Purge Vol: 250.000 mL

Dil. Factor: 1.3200

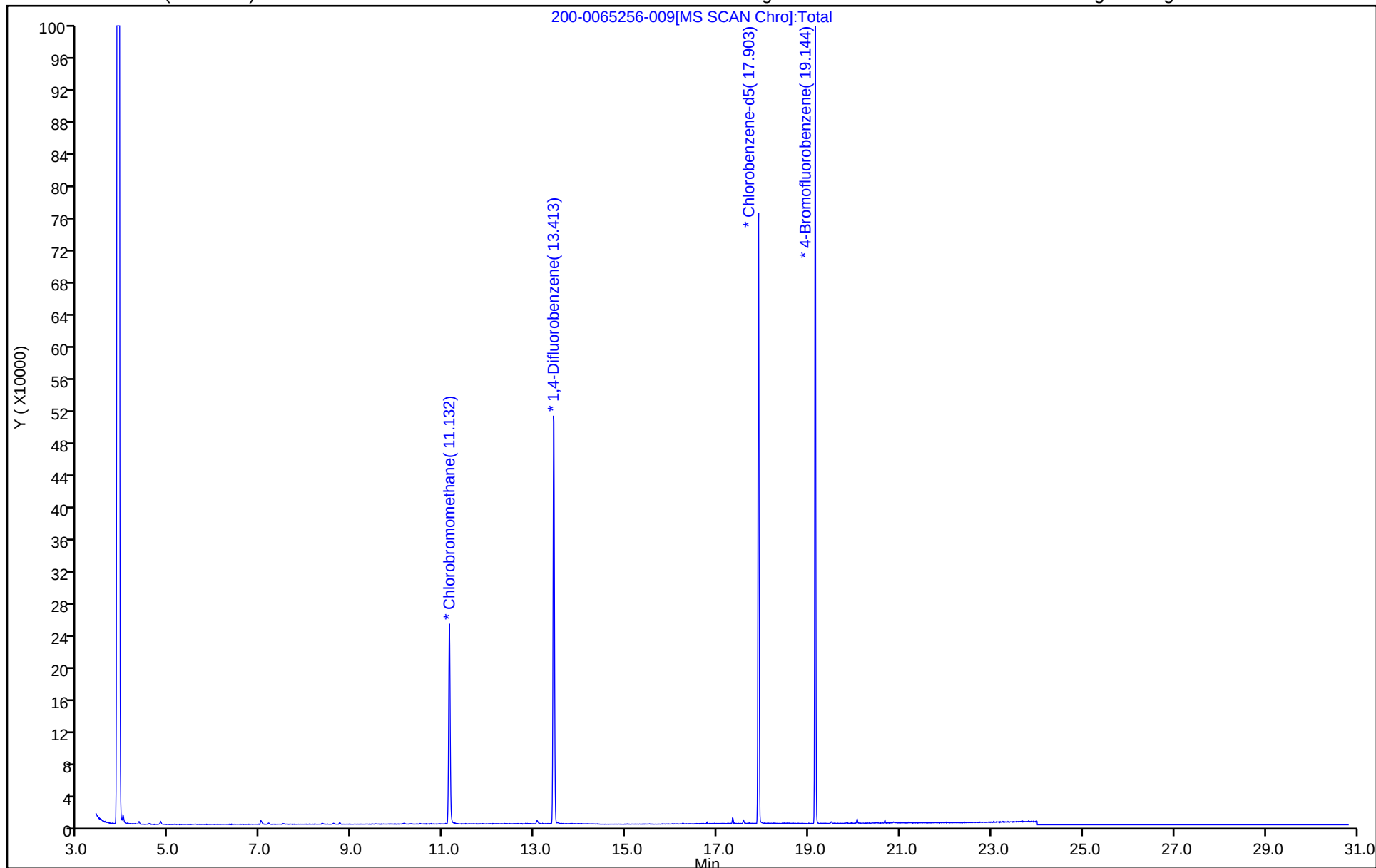
ALS Bottle#: 9

Method: MADEP_APH_1

Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Burlington

Data File: \\chromfs\Burlington\ChromData\CHAE.i\20250523-65256.b\200-0065256-009.D

Injection Date: 23-May-2025 18:12:30

Instrument ID: CHAE.i

Lims ID: 200-78136-A-3 DU

Lab Sample ID: 200-78136-3

Client ID:

Operator ID: vtp

ALS Bottle#:

9

Worklist Smp#: 9

Purge Vol: 250.000 mL

Dil. Factor: 1.3200

Method: MADEP_APH_1

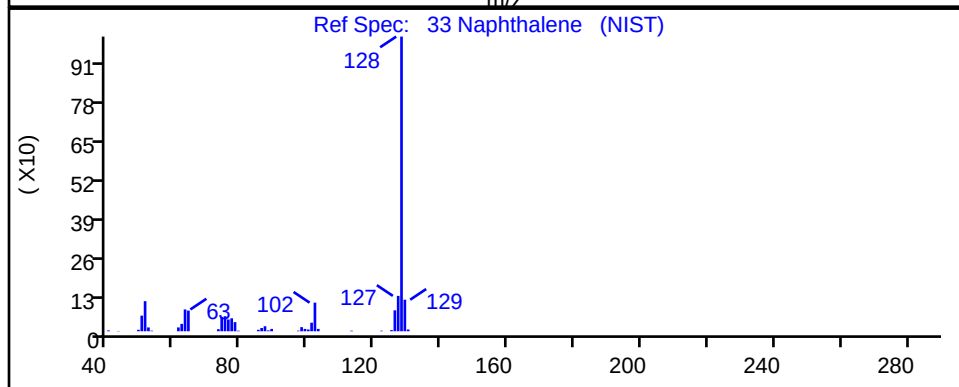
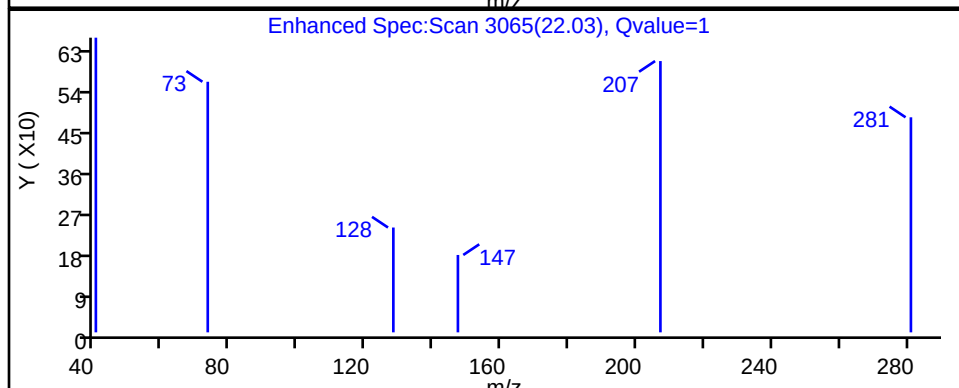
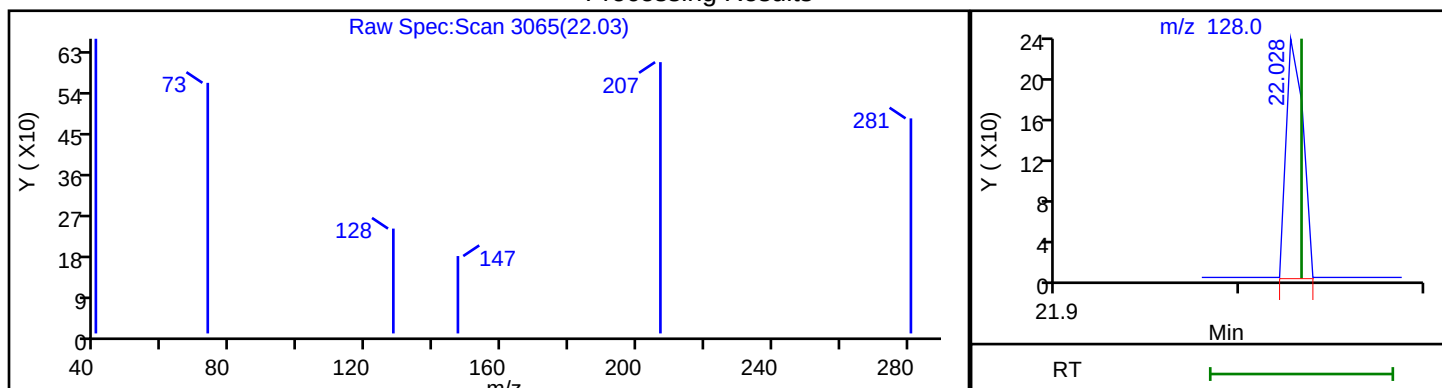
Limit Group: AIR_APH_Limits

Column: RTX-624 (0.32 mm)

Detector: MS SCAN

33 Naphthalene, CAS: 91-20-3

Processing Results



RT	Mass	Response	Amount
22.03	128.00	148	0.036421

Reviewer: V0FK, 28-May-2025 09:18:22 -04:00:00 (UTC)

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins BurlingtonJob No.: 200-78136-1SDG No.: 200-78136-1Instrument ID: CHAE.iStart Date: 04/24/2025 10:12Analysis Batch Number: 215485End Date: 04/25/2025 08:48

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-215485/1		04/24/2025 10:12	1	200-0064859-001 .D	RTX-624 0.32 (mm)
IC 200-215485/3		04/24/2025 11:56	1	200-0064859-003 .D	RTX-624 0.32 (mm)
IC 200-215485/5		04/24/2025 13:40	1	200-0064859-005 .D	RTX-624 0.32 (mm)
IC 200-215485/6		04/24/2025 14:35	1	200-0064859-006 .D	RTX-624 0.32 (mm)
IC 200-215485/7		04/24/2025 15:28	1	200-0064859-007 .D	RTX-624 0.32 (mm)
ICIS 200-215485/8		04/24/2025 16:19	1	200-0064859-008 .D	RTX-624 0.32 (mm)
IC 200-215485/9		04/24/2025 17:11	1	200-0064859-009 .D	RTX-624 0.32 (mm)
ICV 200-215485/11		04/24/2025 18:55	1	200-0064859-011 .D	RTX-624 0.32 (mm)
ZZZZZ (QC)		04/24/2025 19:47	1		RTX-624 0.32 (mm)
ZZZZZ (QC)		04/24/2025 20:39	1		RTX-624 0.32 (mm)
ZZZZZ (QC)		04/24/2025 22:24	1		RTX-624 0.32 (mm)
ZZZZZ (Client)		04/24/2025 23:16	1		RTX-624 0.32 (mm)
ZZZZZ (Client)		04/25/2025 00:08	1		RTX-624 0.32 (mm)
ZZZZZ (Client)		04/25/2025 01:00	1		RTX-624 0.32 (mm)
ZZZZZ (Client)		04/25/2025 01:52	1		RTX-624 0.32 (mm)
ZZZZZ (Client)		04/25/2025 02:44	1		RTX-624 0.32 (mm)
ZZZZZ (Client)		04/25/2025 03:36	1		RTX-624 0.32 (mm)
ZZZZZ (Client)		04/25/2025 04:28	1		RTX-624 0.32 (mm)
ZZZZZ (Client)		04/25/2025 05:20	1		RTX-624 0.32 (mm)
ZZZZZ (QC)		04/25/2025 06:12	1		RTX-624 0.32 (mm)
ZZZZZ (Client)		04/25/2025 07:04	1008.1 6		RTX-624 0.32 (mm)
ZZZZZ (Client)		04/25/2025 07:56	1		RTX-624 0.32 (mm)
ZZZZZ (Client)		04/25/2025 08:48	822.22		RTX-624 0.32 (mm)

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins BurlingtonJob No.: 200-78136-1SDG No.: 200-78136-1Instrument ID: CHAE.iStart Date: 05/23/2025 11:16Analysis Batch Number: 216493End Date: 05/23/2025 19:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 200-216493/1		05/23/2025 11:16	1	200-0065256-001.D	RTX-624 0.32 (mm)
CCVIS 200-216493/2		05/23/2025 12:06	1	200-0065256-002.D	RTX-624 0.32 (mm)
LCS 200-216493/3		05/23/2025 12:59	1	200-0065256-003.D	RTX-624 0.32 (mm)
MB 200-216493/4		05/23/2025 13:50	1	200-0065256-004.D	RTX-624 0.32 (mm)
200-78136-1	SG-4_20250513	05/23/2025 15:35	1.25	200-0065256-006.D	RTX-624 0.32 (mm)
ZZZZZ (Client)		05/23/2025 16:27	2282.17		RTX-624 0.32 (mm)
200-78136-3	SG-2_20250513	05/23/2025 17:19	1.32	200-0065256-008.D	RTX-624 0.32 (mm)
200-78136-3 DU	SG-2_20250513 DU	05/23/2025 18:12	1.32	200-0065256-009.D	RTX-624 0.32 (mm)
200-78136-2	SG-1_20250513	05/23/2025 19:04	1.35	200-0065256-010.D	RTX-624 0.32 (mm)

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 200-78136-1

SDG No.: 200-78136-1

Batch Number: 215485 Batch Start Date: 04/24/25 10:12 Batch Analyst: Pham, Vu T

Batch Method: APH Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	APHLCSw 00065	APHLv11w 00043	APHLv13w 00066	APHLv14 00011	ATTO15AEISS 00003	
BFB 200-215485/1		APH							60 mL	
IC 200-215485/3		APH				50 mL			60 mL	
IC 200-215485/5		APH				100 mL			60 mL	
IC 200-215485/6		APH				500 mL			60 mL	
IC 200-215485/7		APH					50 mL		60 mL	
ICIS 200-215485/8		APH					250 mL		60 mL	
IC 200-215485/9		APH						250 mL	60 mL	
ICV 200-215485/11		APH			250 mL				60 mL	

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

APH

Page 1 of 1

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Burlington Job No.: 200-78136-1

SDG No.: 200-78136-1

Batch Number: 216493 Batch Start Date: 05/23/25 11:16 Batch Analyst: Pham, Vu T

Batch Method: APH Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	APHLCSw 00066	APHLv13w 00066	ATTO15AEISS 00003			
BFB 200-216493/1		APH					60 mL			
CCVIS 200-216493/2		APH				250 mL	60 mL			
LCS 200-216493/3		APH			250 mL		60 mL			
MB 200-216493/4		APH					60 mL			
200-78136-A-1	SG-4_20250513	APH	Air	T			60 mL			
200-78136-A-3	SG-2_20250513	APH	Air	T			60 mL			
200-78136-A-3 DU	SG-2_20250513	APH		T			60 mL			
200-78136-A-2	SG-1_20250513	APH	Air	T			60 mL			

Batch Notes	

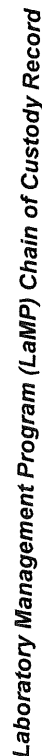
Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

APH

Page 1 of 1

Shipping and Receiving Documents



BP/RM Facility No:

ARCO Facility No. 00980

Lab Work Order Number:

Page 1 of 1

2505402

Lab Name Eurofins Air Toxics		BP/ARC Facility Address 10822 Roosevelt Way NE		Consultant/Contractor Antea Group											
Lab Address 180 Blue Ravine Road, Suite B, Folsom, CA, 95630		City, State, ZIP Code Seattle, WA		Consultant/Contractor Project No WA - 00980, Assessment (2) 2025 SVI Samp											
Lab PM Monica Tran		Lead Regulatory Agency Washington State Department of Ecology		Address: 18374-B Redmond Way, Redmond, WA											
Lab Phone 916 605 3408		California Global ID No NA		Consultant/Contractor PM Don Wyl											
Lab Shipping Acct NA		Enfos Proposal No 00C37-0002/WA1027162		Phone 1E+10											
Lab Bottle Order No NA		Accounting Mode ___ X ___ OOC-BU ___ OOC-RM ___		Email don.wyl@anteagroup.us											
Other Info Monica.Tran@reports.eurofinsus.com		Stage 70 Commercial-Site Activity		Send/Submit EDD to don.wyl@anteagroup.us											
BP/PM PM Wade Melton		116' Contracts Management		BP-RM ___ BP-ARC ___ X ___											
PM Phone 360-594-7978		Requested Analyses		Report Type & QC Level											
PM Email wade.melton@bp.com		Sample Details		Limited (Standard) Package X Limited Plus Package Full Package											
Lab No.	Sample Description	Canister Barcode #	Flow Controller Bar Code #	Start Sampling Information	Stop Sampling Information	Analysis	APH Fractions EC9-12 (Aliphatics) EC9-10 (Aromatics) by Method MA DEP APH	BTEX, MTBE, Naphthalene by Method TO-15 Hybrid SIM/SCAN	Oxygen, Carbon Dioxide, Methane, Helium by ASTM D1946	Initial (in Hg)	Receipt (in Hg)	Final (in ps) Gas N2/He	Comments		
														Date	Time
01A	SG-4-20150513	612478	2310	5/13 12:26	5/13 13:20		X	X	X	28	3.0		1-25	Can D.F.	
02A	SG-1-20150513	612229	2440	5/13 14:30	5/13 15:05		X	X	X	25	3.0		1-35		
03A	SG-2-20150513	612049	2324	5/13 16:30	5/13 16:15		X	X	X	31	3.0		1-32		
	Unused can	612239	24500												
Sampler's Name Murphy, Sineha Nachimuthu		Relinquished By / Affiliation		Date		Accepted By / Affiliation		Date		Time					
Sampler's Company Antea Group		Relinquished By / Affiliation Murphy / Antea Group		Date		Accepted By / Affiliation FEDEx		Date		Time					
Ship Method Fedex		Ship Date 5/14/25		Ship Date		Ship Date		Ship Date		Ship Date					
Shipment Tracking No		Shipment Tracking No		Shipment Tracking No		Shipment Tracking No		Shipment Tracking No		Shipment Tracking No					
Special Instructions: report total xylenes and total naphthalenes												Trip Blank: Yes / No		MSMSD Sample Submitted Yes / No	



200-78136 Chain of Custody

INITIAL °C: _____ OF: _____ FINAL °C: _____

PROF: _____ TIME STORED: _____

CUSTODY SEAL? YES NO
CARRIER: *Red* *20* **NONE**

Feed 52

Login Sample Receipt Checklist

Client: Eurofins Air Toxics, Inc.

Job Number: 200-78136-1

SDG Number: 200-78136-1

Login Number: 78136

List Source: Eurofins Burlington

List Number: 1

Creator: Khudaier, Zahraa

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	Seal present with no number.
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	N/A	Thermal preservation not required.
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	