

# SUBSURFACE INVESTIGATION REPORT

1700 Airport Way South, Seattle, WA

Prepared for: Evergreen Treatment Services

Project No. AS180043 • April 18, 2025 FINAL



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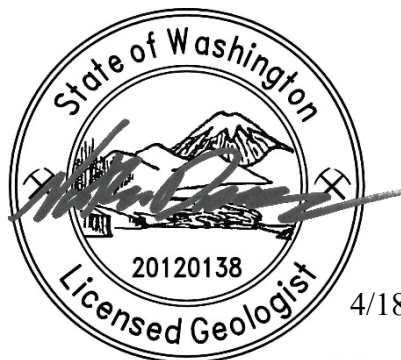
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Aspect Consulting, a Geosyntec Company



4/18/2025

Nathan W. Dickey

**Nathan Dickey, LG**  
Geologist  
Nathan.Dickey@aspectconsulting.com



**Dave Cook, LG, CPG**  
Senior Principal Geologist  
Dave.Cook@aspectconsulting.com

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## Acronyms

Aspect	Aspect Consulting
bgs	below ground surface
CUL	Cleanup level
Ecology	Washington State Department of Ecology
ETS	Environmental Treatment Services
µg/L	micrograms per liter
MTCA	Model Toxics Control Act
NFA	No Further Action
REC	Recognized Environmental Condition
TCE	trichloroethylene
TPH	total petroleum hydrocarbons
VOC	volatile organic compound

# 1 Introduction

Aspect Consulting, a Geosyntec Company (Aspect), presents this Subsurface Investigation Report for the property located at 1700 Airport Way South in Seattle, Washington (King County tax parcel number 766620-2855) herein referred to as the Site.

The Site is currently owned by Evergreen Treatment Services (ETS) and developed with one building with two wings connected via an open breezeway. The southern wing includes a former warehouse that has been converted into office space and treatment rooms used by ETS until a water line break in early 2024 rendered the building largely unusable. The northern wing is a predominantly an unoccupied warehouse partially used for temporary storage of support materials for ETS' operations. The building was constructed in 1914–1915 as a factory for the Western Blower Company, manufacturer of industrial blowers for sawmills and furnaces. The Site is shown relative to surrounding physical features on Figure 1.

ETS is expecting to receive grant funding from the U.S. Department of Housing and Urban Development (HUD) to support redevelopment of the Site, including demolition of the current facility. In preparation for environmental reviews required under the National Environmental Protection Act (NEPA), Washington State Environmental Protection Act (SEPA), and other applicable regulations, the City of Seattle has requested characterization of the nature and extent of contaminants in soil and groundwater that may be encountered on the Site during redevelopment activities. The City of Seattle has also requested assessment of radon risk via testing of indoor air.

Since 2018, Aspect has provided environmental support for ETS' acquisition of the property, evaluations of soil, groundwater, and soil gas, and advice regarding regulatory closure and potential redevelopment of the property. This Subsurface Investigation Report presents the results of sampling completed between October 2024 and December 2024 in combination with the results of previous investigations completed by previous occupants of the Site and by Aspect on behalf of ETS.

## 2 Background

### 2.1 Site Description

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The Site is located at 1700 Airport Way South in Township 24 North, Range 4 East, and Section 8 in Seattle, King County, Washington (Figure 1). It comprises tax parcel no. 766620-2855, covering approximately 32,516 square feet (0.75 acres), as indicated in tax assessor records. The Site is currently developed with an approximately 15,500-square-foot 2-story wood-framed building with two wings separated by a breezeway. Both wings feature a basement.

The south wing is a former warehouse which was converted for use by ETS in 1998. The wing has been largely unused since the building was severely damaged by a water line break in early 2024.

The north wing is a former warehouse that prior to ETS' use was used by Emerald Recycling, a subsidiary of Clean Harbors, as part of their used-oil recycling facility. The north wing is currently in partial use by ETS for storage of equipment and supplies. The central courtyard of the Site is used to provide addiction treatment services out of mobile medical units operated by ETS.

#### 2.1.1 Site History

The earliest available historical records reviewed by previous environmental reports indicate the Site was first developed with residential property as early as 1893 (Aspect, 2024d). At that time, present-day Airport Way South was a wood plank road at the eastern edge of the Elliott Bay tide flats, and the dwellings were possibly built on wharf-like structures supported by timber piles.

Records indicate Western Blower constructed the facility during 1914 and 1915. Historical documents indicate that in 1937, a 350-gallon fuel tank was installed to supply an oil-burning boiler in the central portion of the building. In 1942, the basement of the north wing featured a paint spray booth, metal shop, metal plating areas, and a sump. Western Blower occupied the property until the 1960s, and the Site was reportedly vacant in the 1970s.

Northwest EnviroService, Inc. (NWES) began operating a tank cleaning service north of the Site in the late 1970s and expanded operations to the Site in 1987. NWES' operations included storage and treatment of commercial hazardous waste until 1995. In 1995, NWES vacated the south wing of the Site building and began operating as Emerald Recycling in 1996. ETS began operating as a tenant of the south wing of the facility in 1997. Emerald Recycling (also known as Emerald Services<sup>1</sup>) vacated the north wing of the warehouse in 2020, and ETS acquired the Site from Emerald Services in 2021.

#### 2.1.2 Physical Setting

According to the Geologic Map of Seattle, produced by the U.S. Geological Survey (USGS) and the Pacific Northwest Center for Geological Mapping Studies, the Site and

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<sup>1</sup> Emerald Services was acquired by Clean Harbors, Inc., in 2016, but still operates on the north-adjointing property to the Site (1500 Airport Way South) as Emerald Recycling.

properties westward are underlain by tide flat deposits (Troost et al., 2005). The steep hillslope to the immediate east is underlain mainly by Quaternary continental glacial drift deposits from the Pleistocene, including pre-Fraser-age glaciation, about 70,000 to 20,000 years ago. Historical Sanborn maps reviewed for the 2021 Phase I ESA (Aspect, 2021) for the predevelopment Site vicinity indicate that the Elliott Bay tide flats were located at the Site, and Airport Way South was a plank road. The tide flats were artificially filled in the early 1900s. Today, the area west of the Site is generally flat and situated at approximate Elevation<sup>2</sup> 25 feet. The eastern boundary of the Site abuts a steep slope beneath current Interstate 5, separating the Site from northern Beacon Hill.

GeoEngineers, Inc. (GeoEngineers) completed a geotechnical investigation on the Site in 2023, based on multiple sources of soil data including Aspect soil boring logs from 2018 (GeoEngineers, 2023). Based on the geotechnical investigation, the Site is underlain by approximately 11 to 16 feet of undocumented imported fill. The fill overlies soft estuarine deposits ranging in thickness from 5 to 19 feet thick, thickening to the west with distance from the steep slopes east of the Site. The estuarine deposits consist of soft interbedded silt and clay, which are underlain by glacially consolidated soils consisting of very stiff to hard silt and clay. The top of these soils appears to slope to the west, increasing in depth from approximately 16 feet below ground surface (bgs; approximate Elevation 15 feet) on the eastern property boundary to approximately 30 feet bgs (approximate Elevation -5 feet) on the western property boundary. The glacially consolidated soils reportedly continue deeper than the maximum depth explored on the Site (approximately 35 feet bgs; approximate Elevation -10 feet).

### 2.1.3 Radon Risk

The United States Environmental Protection Agency (EPA) Radon Zone for King County is Zone 3 (EPA, 2024). The average indoor radon activity level in Zone 3 is less than 2 pCi/L.

The Washington State Department of Health (DOH) maintains a map of radon risk based on surface geology (DOH, 2025).<sup>3</sup> The map ranks radon risk as “high,” “medium,” or “guarded” depending on the geology. The categories correlate with EPA’s radon risk categories of Zone 1 (high), Zone 2 (medium), and Zone 3 (guarded). EPA’s radon risk categories are estimated based on measured radon activity reported to the agency, while DOH’s radon risk mapping is based on measured radon activity reported to the Washington Tracking Network and potential sources of radon in known geologic units.

The surficial geologic unit underlying the Site is categorized as posing “guarded” radon risk, but an area of high radon risk is mapped within 50 feet of the eastern Site boundary.

## 2.2 Previous Environmental Reports

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A total of ten previous environmental assessments and investigations have been completed on the Site:

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<sup>2</sup> Elevations in are reported in reference to the National Vertical Datum of 1988 (NAVD88).

<sup>3</sup> <https://doh.wa.gov/data-and-statistical-reports/washington-tracking-network-wtn/radon>

- 1) “Northwest EnviroService Inc. Interim Status Closure Plan, Western Blower Property” (1995 Closure Plan; NWES, 1995)
- 2) “Northwest EnviroService Inc. Western Blower Property RCRA Closure Sampling Results” (1996 Results Report; NWES, 1996)
- 3) “Phase I Environmental Site Assessment” (2019 Phase I ESA; Aspect, 2019a)
- 4) “Phase II Environmental Site Assessment” (Phase II ESA; Aspect 2019b)
- 5) “Sump Cleanout and Soil Gas Sampling Memorandum” (Sump and Soil Gas Memo; Aspect, 2020).
- 6) “Phase I Environmental Site Assessment” (2021 Phase I ESA; Aspect, 2021)
- 7) “Preconstruction Environmental Actions and Next Steps” (Preconstruction Memo; Aspect, 2024a)
- 8) “Subsurface Investigation Work Plan” (Aspect, 2024b)
- 9) “Analysis of Brownfields Cleanup Alternatives – Preliminary Evaluation” (ABCA; Aspect, 2024c)
- 10) “Phase I Environmental Site Assessment” (2024 Phase I ESA; Aspect, 2024d)

Copies of select reports are included in Appendix A.

### **2.2.1 Environmental Reports by Northwest EnviroService**

From 1987 to 1995, NWES operated a hazardous waste treatment and storage facility that occupied 1.3 acres between Airport Way South and Interstate 5, spanning from South Atlantic Street to the north and South Holgate Street to the south. The main treatment part of this facility occupied the property immediately north of the Site, but a part of the facility also extended onto and included the Site. Site operations were regulated by the Washington State Department of Ecology (Ecology) under the Resource Conservation and Recovery Act (RCRA).

In 1995, NWES discontinued its hazardous-waste operations and started RCRA closure of the hazardous-waste handling aspect of the facility. Since their use of the Site (known as the Western Blower Property) was limited, closure of this portion of the property was conducted separately from the remainder of the property to the north where more hazardous-waste handling (aka oil recycling) activities were focused. The following provides a summary of NWES’s use of the Site, as provided in the 1995 and 1996 NWES reports, and closure activities completed in 1995. The Closure Plan included assessment of the shed-like structure on the property north-adjointing the Site, but data on the north-adjointing property is not included in this report.

Little information is available in the 1995 and 1996 NWES reports providing specifics on site use, or chemical handling or storage. NWES states in the reports that Site use included “administrative and warehouse activities,” and “Sealed and containerized wastes were unloaded from trucks at the load/unload dock and transported to the north-adjacent NWES property for processing.” The loading dock near the center of the Site building was used for loading and unloading hazardous waste. Containerized waste was then transferred to the north-adjacent parcel, also owned by NWES, for processing. NWES

used the Site warehouse space to store pumps, hoses, and other equipment. The north warehouse included an area for repairing pumps and a parts washer.

A figure in the report refers to the north warehouse as the “Stores Building.” King County tax assessor records indicate that the southern portion of the south wing included laboratory space for organic and inorganic sample preparation, most likely for waste disposal characterization.

The 1995 Closure Plan stated the following activities were to be completed for facility closure:

- Remove waste inventory
- Decontamination of site concrete, sumps, tanks, and equipment
- Disposal of contaminated materials
- Collection of samples to certify completion of closure

The language in the 1995 Closure Plan does not provide details about specific storage tanks or sumps to be decontaminated on the Site. The 1996 Results Report provides results from the post-closure sample collection on the Site including three concrete samples, two shallow soil samples, and two groundwater samples from wells<sup>4</sup> MW-1 and MW-2. Sample locations are depicted on Figure 2. Samples were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCS), pesticides, polychlorinated biphenyls (PCBs), sulfide, total petroleum hydrocarbons (TPH), dioxins, metals, and cyanide.

In concrete samples, cadmium was detected at a concentration of 200 milligrams/kilogram (mg/kg), exceeding the Washington State Model Toxics Control Act (MTCA) cleanup level (CUL) for unrestricted land use (NWES, 1996). In soil samples, arsenic, TPH, and benzo(a)pyrene (BaP) were detected at concentrations less than the current MTCA Method A CULs (Figures 3a and 3b). In groundwater samples, manganese was detected at a concentration of 3,400 micrograms/liter (µg/L) in the sample from MW-2, which exceeded the drinking water standard at the time (2,200 µg/L), and exceeds the current drinking water standard (50 µg/L; DOH, 2023). Analytical results are included in a copy of the 1996 Results Report included in Appendix A (NWES, 1996).

In 1997, Ecology provided an opinion that No Further Action (NFA) or investigation would be required for site closure (at the Site; Ecology, 2017); however, a restrictive covenant would need to be placed on the property. The restrictive covenant has the following stipulations:

- *“The property shall be used in compliance with General Industrial 2 zoning classification per City of Seattle ordinances.”*

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<sup>4</sup> Monitoring wells were decommissioned or destroyed sometime between 1995 and 2010 (Aspect, 2024d)

- *Property groundwater shall not be used for domestic, agricultural, industrial, or any other use.*
- *Existing structures cannot be altered or modified in any manner that may result in the release or exposure to the environment of contaminated soils or concrete, without prior Ecology approval.*
- *Existing paved surface must be maintained to prevent the release or exposure to the environment of contaminated soils or concrete. Any activity that would pierce or damage the surface is prohibited, without prior Ecology approval."*

These environmental (aka restrictive) covenant requirements will need to be upheld and honored during redevelopment of the Site.

## **2.2.2 Previous Investigations by Aspect Consulting**

The Recognized Environmental Conditions (RECs) identified in the 2019 Phase I ESA (Aspect, 2019a) for the Site include historical manufacturing operations by Western Blower Company and hazardous and nonhazardous waste handling by NWES, as well as former used-oil waste handling in the northern warehouse of the Site. These property-use activities indicated a potential for petroleum, solvents, and metals contamination to soil and/or groundwater at the Site from on-property potential sources, and a risk for vapor encroachment or intrusion to the Site structures.

### **2.2.2.1 Phase II ESA – Aspect, 2019**

Based on the RECs identified in the 2019 Phase I ESA, Aspect completed the Phase II ESA (Aspect, 2019b) consisting of soil, groundwater, and soil gas sampling to evaluate

- the presence and nature of volatile contaminants of potential concern (COPCs) in soil gas beneath the Site,
- the potential presence of soil contamination associated with current or past sources of contamination on the Site or nearby adjacent properties, and
- the potential presence of groundwater contamination associated with current or past sources of contamination on the Site or nearby upgradient properties.

The Phase II ESA included installation of four permanent groundwater monitoring wells (AMW-1 through AMW-4; Figure 2) on and off the Site and completion of four temporary soil gas sampling points. Soil, groundwater, and soil gas samples were collected and submitted for laboratory analysis. Soil observed in the borings included fill material to maximum depths ranging from 15 to 19 feet bgs. Fill soils were underlain by a clay to sandy clay unit to the maximum depth explored, which were identified as historical tideflat deposits. Groundwater was encountered in all four monitoring wells at depths ranging from 4.5 to 5.7 feet bgs, indicating a westerly flow direction (Table 3a, Figure 5a).

A total of six soil samples were submitted for analysis based on field observations and analyzed for gasoline-, diesel-, and oil-range TPH (using methods NWTPH-Gx, and NWTPH-Dx), and metals (arsenic, cadmium, chromium, copper, lead, manganese, mercury, nickel, and zinc) using EPA Method 6020B. Additionally, two samples were submitted for analysis of VOCs using EPA Method 8260D and carcinogenic polycyclic aromatic hydrocarbons (cPAHs) using EPA Method 8270D/SIM. Soil results are

summarized in Tables 1a and 1b. Copies of laboratory reports are included in Appendix B. Contaminants of concern were either not detected at concentrations greater than laboratory reporting limits or were detected at concentrations less than the applicable MTCA Method A cleanup levels in soil except for the following:

- Arsenic and lead were detected in the soil sample collected from 12.5 feet bgs at location AMW-1 at concentrations exceeding the applicable MTCA Method A CULs (Figure 3a; Table 1a).

Four temporary subslab soil gas samples (SV-1 through SV-4; Figure 4) were collected and submitted for analysis of VOCs by EPA Method TO-15. These results are presented on Table 2 in comparison to current MTCA Method B subslab soil gas screening levels for unrestricted land use. Contaminants of concern were either not detected at concentrations greater than laboratory reporting limits or were detected at concentrations less than the MTCA Method B screening level except for the following:

- Benzene was detected in the samples from SV-3 and SV-4 at concentrations exceeding the MTCA Method B screening level.
- Trichloroethene (TCE) was detected in the samples from SV-1, SV-3, and SV-4 at concentrations exceeding the MTCA Method B screening level.
- Vinyl chloride was detected in the sample from SV-4 at a concentration exceeding the MTCA Method B screening level.
- Acrolein and 1,3-butadiene were detected in the sample from SV-3 at concentrations exceeding the applicable MTCA Method B screening levels. However, these analytes are commonly detected in samples of soil gas without a known source and are not representative of subslab soil gas conditions.<sup>5</sup>

Based on the concentrations of analytes detected in soil gas, Ecology guidance available at the time of the Phase II ESA report, and vapor intrusion modeling<sup>6</sup> using the Johnson-Ettinger Model for vapor intrusion (JEM), vinyl chloride and TCE were predicted to be potentially intruding into indoor air in the North Warehouse at concentrations exceeding the MTCA Method B CUL for indoor air. The model did not predict exceedances of contaminants in the south warehouse. Aspect recommended that the sump in the north warehouse (the suspected source of solvents) be cleaned, following which soil gas be resampled in the north wing of the building. The Phase II ESA recommendations also indicated that if “concentrations remain elevated in soil gas, mitigation measures may be necessary (such as active and/or passive venting systems) for that portion of the building

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<sup>5</sup> Eklund (2020) explains that post-sampling reactions can occur between ketone solvents and the summa canister lining material which produce acrolein. Eklund also explains that 1,3-butadiene is commonly associated with use of heavy tools during installation of subslab soil gas sampling points and is typically not found in follow-up testing.

<sup>6</sup> Completed in accordance with Ecology guidance documents available at the time of the Phase II ESA report (Ecology, 2018a; 2018b; and 2018c). These documents are incorporated into Ecology’s current guidance regarding vapor intrusion (Ecology, 2022).



to be occupied.” These results are presented on Table 2 in comparison to current MTCA Method B subslab soil gas screening levels for unrestricted land use.

Four groundwater samples were collected from the four wells installed during the Phase II ESA and submitted for analysis of gasoline-range TPH by Northwest Method NWTPH-Gx, diesel- and oil-range TPH by Northwest Method NTWPH-Dx, VOCs by EPA Method 8260D, dissolved metals (arsenic, cadmium, chromium, copper, lead, manganese, mercury, nickel, and zinc) by EPA Method 6020B, and total cyanide by EPA Method SM 4500-CN. Groundwater analytical results are summarized in Table 3b. Copies of laboratory reports are included in Appendix B. Contaminants of concern were either not detected at concentrations greater than laboratory reporting limits or were detected at concentrations less than cleanup levels in groundwater except for the following:

- Vinyl chloride was detected in groundwater at a concentration of 2.9 µg/L in off-property well AMW-1, exceeding the MTCA Method A CUL. Dissolved arsenic concentrations greater than the MTCA Method A CUL (5 µg/L) were detected in off-property wells AMW-1 and AMW-3 at concentrations of 11 and 20.3 µg/L, respectively (Figure 6a; Table 3b).

#### **2.2.2.2 Sump Cleanout and Soil Vapor Sampling – Aspect, 2021**

In 2020, the basement sump in the north warehouse, and on-site stormwater system (five catch basins around the Site), were cleaned (Aspect, 2021). After the sump and stormwater systems were cleaned, two subslab soil gas samples were collected and analyzed for VOCs and air-phase petroleum hydrocarbons. Based on the chemical analytical soil gas results, the following contaminants were detected at concentrations greater than the MTCA Method B screening levels: benzene, TPH, TCE, and vinyl chloride. Analytical results are summarized on Table 2 and Figure 4.

#### **2.2.2.3 Redevelopment Support – Aspect, 2024**

In 2024, ETS began the process of designing and planning for building demolition and then a multi-phased redevelopment. The initial phase of redevelopment will include construction of a clinical services building on the north portion of the Site followed by future support structures to facilitate ETS’ mission. In the Preconstruction Memo (Aspect, 2024a), Aspect provided a summary of the environmental conditions of the Site and next steps including development of a Subsurface Investigation Work Plan (Aspect, 2024b). In the ABCA (Aspect, 2024c), Aspect evaluated potential cleanup alternatives which could be implemented during redevelopment of the Site, ultimately recommending excavation of contaminated soil from the Site and construction of a protective cap to prevent potential contact between remnant contaminated media and Site occupants.

In the 2024 Phase I ESA (Aspect, 2024d), Aspect reviewed the RECs identified in previous Phase I ESAs and determined that most of the RECs had been addressed by actions completed in 2019 and 2020 or the existing covenant. Aspect determined the remaining REC (“Spills and releases to drains and sump from former property use by NWES/Emerald”) was “partially addressed” and noted that further investigation was in progress at the time of the report. The results of that investigation are described in Section 3.

### 3 Subsurface Investigation (Aspect, 2024)

As reviewed in Section 2, previous investigations identified the sump in the north warehouse as a potential source of contamination identified in soil gas and groundwater on the Site. From October 2024 to December 2024, Aspect completed or oversaw the completion of a supplemental subsurface investigation to assess the potential nature and extent of contamination shallow soil and groundwater in the vicinity of the sump in the basement of the north warehouse, to assess the current status of contamination in groundwater identified by previous investigations, and to assess potential radon activity in indoor air in the basements of both wings of the Site building.

This investigation included the following tasks::

- Advancement of seven soil borings via limited-access direct-push drilling
- Completion of one of the soil borings in the basement as a permanent monitoring well
- Collection and laboratory analysis of soil samples from the soil borings
- Measurement of depth to water in groundwater monitoring wells
- Collection and laboratory analysis of groundwater samples from five monitoring wells
- Sampling of radon activity in the north warehouse basement, south offices basement and ambient radon activity.

The work is described in detail in the subsections below.

#### 3.1 Subsurface Utility Clearance

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Prior to drilling activities, Aspect submitted a public utility locate ticket and subcontracted C-N-I Locates, Ltd. (CNI) to complete a geophysical survey and private utility locate to identify unmarked buried utilities and reinforcing steel in the concrete slab foundation. Subsurface investigation locates were shifted as needed to avoid overhead and subsurface obstacles.

#### 3.2 Soil Investigation

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The seven soil borings were completed to a maximum depth of 15 feet bgs to evaluate the condition of the surficial fill layer. Borings were terminated at refusal or when the top of the native estuarine deposits was encountered. Soil boring locations were selected as follows:

- Boring AB-01 was located approximately 30 feet south and approximately 10 feet west of the sump in the basement of the North Warehouse to assess the potential extent of impacts in soil between the sump and AMW-1. The soil boring was completed to a depth of 10 feet bgs.

- Boring AB-02 was located approximately 10 feet south of the sump to assess soil conditions immediately downgradient of the sump. The soil boring was completed to a depth of 12 feet bgs.
- Boring AB-03 was located approximately 8 feet west of the sump to assess soil conditions immediately cross-gradient of the sump. The soil boring met refusal at a depth of 8 feet bgs.
- Boring AB-04 was located outside of the North Warehouse, approximately 8 feet north of the sump. This boring was completed to assess soil conditions immediately upgradient of the sump. The soil boring was completed to a depth of 15 feet bgs.
- Boring AB-05 was located approximately 15 feet south and approximately 10 feet west of the sump to assess soil conditions between AB-01 and AB-05. The soil boring was completed to a depth of 14 feet bgs.
- Boring AB-06 was located approximately 30 feet south of the sump to assess soil conditions downgradient of the sump beyond AMW-5. The soil boring met refusal at a depth of 8.5 feet bgs.
- Boring AMW-5 was located approximately 15 feet south of the sump and was completed to a depth of 12 feet bgs. The soil boring was completed as a monitoring well featuring a 10-foot slotted screen. The boring and monitoring well were completed to assess soil and groundwater impacts downgradient of the sump.

The soil borings were advanced on October 31 to November 1, 2024, using a track-mounted GeoProbe® 6610DT direct-push drilling device operated by a licensed driller from Holocene Drilling of Puyallup, Washington. Soil samples were collected in continuous 2-foot cores from each location except AB-04, where soil samples were collected in continuous 5-foot cores. An Aspect field geologist observed and logged each soil core in general accordance with the Unified Soil Classification System (USCS). Soil samples were field screened for potential evidence of contamination via visual observations, sheen tests, and headspace vapor measurements using a photoionization detector (PID) to check for the presence of volatile compounds<sup>7</sup>. The soil classifications, visual observations, and PID readings observed during this subsurface investigation and previous Aspect investigations are recorded on the exploration boring logs in Appendix C.

Borings were advanced to depths ranging from approximately 8 to 15 feet bgs to characterize soil in the vicinity of the sump in the basement of the North Warehouse. Discrete soil samples were collected where field screening indicated the presence of contamination, or at select intervals if no field-screening indications of contamination were observed. Soil samples were collected from the sampler using clean, stainless-steel hand tools or new disposable sampling equipment. Reusable hand tools were decontaminated with a solution of potable water and detergent (Alconox® powdered cleaner) followed by a double rinse with clean water. Disposable sampling equipment was discarded and replaced after each sample was collected.

Each discrete soil sample was collected in laboratory-prepared glassware and labeled with unique sample identification numbers, date, and time of sample collection. Sample

<sup>7</sup> The PID was calibrated to 100 parts per million (ppm) isobutylene standard.

containers were placed in a chilled cooler immediately following sampling and were subsequently transported to an Ecology-accredited laboratory, Friedman & Bruya, Inc., of Seattle, Washington (the laboratory), under standard chain-of-custody protocols.

During this subsurface investigation, a total of 14 soil samples were analyzed for one or more of the following analytes by the indicated method:

- TPH as gasoline-range organics (TPH-GRO) by Northwest Method NWTPH-Gx
- TPH as diesel-range organics (TPH-DRO) and motor oil-range organics (TPH-ORO) by Northwest Method NWTPH-Dx
- VOCs by (EPA) Method 8260D
- Polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270E
- Total arsenic, cadmium, chromium, lead, and mercury by EPA Method 6020B

After drilling was completed, AB-01 through AB-06 were backfilled with bentonite in accordance with the requirements for decommissioning environmental investigation wells described in Washington Administrative Code (WAC) Chapter 173-160. The surface of each decommissioned borehole was patched with high-strength fast-setting concrete to match its surroundings.

### 3.3 Groundwater Investigation

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Soil boring AMW-5 was completed as a groundwater monitoring well in accordance with WAC section 173-160. The well was constructed of 2-inch-diameter schedule 40 PVC with threaded connections and screened from approximately 2 to 12 feet bgs with a pre-packed 0.010-inch (10-slot) well screen. The well was completed with a traffic-grade steel monument set flush with the ground surface. Following installation, the well was developed to remove fine-grained material from inside the well casing and filter pack, and to improve hydraulic communication between the well screen and the surrounding water-bearing formation.

The construction of AMW-5 expanded the network of monitoring wells associated with the Site to a total of five wells. On November 5, 2024, groundwater samples were collected from the five wells on the Site. Prior to collecting groundwater samples, the depth to water in each well was measured from the northside of the top of the well casing to the nearest 0.01 feet. Each well was purged following standard low-flow sampling methods using a peristaltic pump and dedicated tubing. Upon stabilization of field parameters, groundwater samples were collected from each well for analysis by the laboratory.

A total of five groundwater samples and one field duplicate were analyzed for one or more of the following analytes by the indicated method:

- TPH as gasoline-range organics (TPH-GRO) by Northwest Method NWTPH-Gx
- TPH as diesel-range organics (TPH-DRO) and motor oil-range organics (TPH-ORO) by Northwest Method NWTPH-Dx
- VOCs by EPA Method 8260D

- Polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270E
- Total and dissolved arsenic, cadmium, chromium, lead, and mercury by EPA Method 200.8

All soil cuttings, decontamination water, and purged groundwater generated by the investigation were placed into labeled and sealed U.S. Department of Transportation (USDOT)-approved 55-gallon steel drums and temporarily stored at the Site as investigation-derived waste (IDW) pending chemical analysis and disposal at an appropriately designated waste facility.

Previously, the monitoring well network had been surveyed relative to an arbitrary elevation datum. On December 5, 2024, the expanded well network was surveyed by a licensed land surveyor from True North Land Surveying, Inc. to allow for evaluation of groundwater elevation and flow direction in relation to elevations based on NAV88. The horizontal and vertical locations of each well were surveyed in relation to a Washington State Department of Transportation survey monument. Well construction details are included on the logs included in Appendix C. Surveyed elevation data relative to the North American Vertical Datum of 1988 (NAVD88) are summarized on Table 3a. Copies of survey reports are included in Appendix B.

### 3.4 Radon Investigation

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A radon investigation was completed during November 2024 and consisted of the placement of radon test devices in the basement of each wing of the Site building, and an ambient background sample was collected from the courtyard area of the Site. Radon testing was conducted by Nathan Dickey of Geosyntec, a Radon Measurement Professional licensed by the National Radon Proficiency Program (NRPP), license #114975-RMP.

#### 3.4.1 Radon Test Devices

The radon test devices used during this testing were liquid scintillation (LS) radon in air test canisters provided by Spruce Environmental Technologies, Inc., an operator of two laboratories (AccuStar and Air Chek) certified by the NRPP and the National Radon Safety Board (NRSB) and accredited by the National Environmental Laboratory Accreditation Program (the laboratory). Radon test devices were provided by the laboratory on November 25, 2024.

#### 3.4.2 Radon Test Locations and Conditions

Radon test locations are indicated on Figure 4. The radon test devices used during this testing were liquid scintillation (LS) radon in air test canisters provided by Spruce Environmental Technologies, Inc., an operator of two laboratories (AccuStar and Air Chek) certified by the NRPP and the National Radon Safety Board (NRSB) and accredited by the National Environmental Laboratory Accreditation Program (the laboratory).

Radon testing began at 8:00 AM on November 19, 2024, and concluded at 10:00 AM on November 21, 2024. Testing conditions were observed before and during the test in accordance with the American National Standards Institute (ANSI) and Indoor Environments Association (formerly the American Association of Radon Scientists and

Technologists; AARST) Protocol MA-MFLB-2023, *Protocol for Conducting Measurements of Radon and Radon Decay Products in Multifamily, School, Commercial and Mixed-Use Buildings*, effective December 1, 2023 (AARST, 2023). The radon test devices were shipped to the laboratory under chain-of-custody protocols and analyzed for radon activity. The chain of custody for test devices is included in the laboratory reports included in Appendix B.

## 3.5 Results

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This section summarizes the results of the subsurface investigation completed in 2024.

### 3.5.1 Geology and Hydrogeology

Soils observed during the 2024 investigation were consistent with past studies. Soil consisted primarily of fill soil overlying native estuarine sediments. The fill material was observed to generally be composed of reworked silty sand with gravel, with artificial debris including shards of glass, bricks, and wood. The observed estuarine sediments were composed of interbedded silty sand, sand with silt, sandy clay, and sand with gravel. Estuarine sediments included some seashell fragments and trace rootlets.

Groundwater was measured at depths ranging from 0.80 feet bgs<sup>8</sup> in AMW-5 to 6.55 feet bgs in AMW-4. Based on surveyed elevations of the wells, groundwater elevations ranged from Elevation 18.13 feet in AMW-1 to Elevation 19.75 feet at AMW-4. Based on calculated groundwater elevations, the hydrologic flow direction is westward, with a calculated hydraulic gradient of approximately 0.015 feet per foot.

### 3.5.2 Soil

The analytical results for soil samples are evaluated against the applicable MTCA Method A or Method B cleanup levels for unrestricted land use. Metals concentrations are also evaluated against naturally occurring metals background concentrations for the region (Ecology, 1994). The analytical results for soil are summarized in Tables 1a and 1b. Laboratory reports are provided in Appendix B.

Concentrations of cadmium, lead, or PAHs exceeding applicable cleanup levels were detected in soil representative of the surficial fill layer underlying the Site and were either not detected or detected at concentrations less than the applicable cleanup levels in samples presentative of estuarine deposits underlying the fill material. Other metals, including arsenic, chromium<sup>9</sup>, and mercury, either not detected or detected at concentrations less than the applicable cleanup level. Analytical results for metals and PAHs are summarized in Table 1a.

TPH-DRO was detected in several samples but at concentrations less than the MTCA Method A cleanup level. Additionally, the laboratory indicated the detected concentration

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<sup>8</sup> AMW-5 is located in the basement of the north warehouse, the floor of which is approximately 5 feet below Site grade.

<sup>9</sup> Detected concentrations of total chromium were less than the natural background concentration of chromium identified in the Puget Sound region, indicating a lack of artificial sources of chromium on the Site. Based on the lack of evidence of use of hexavalent chromium during historical use of the Site, the detected concentration of total chromium is compared to the MTCA Method A cleanup level for naturally occurring Chromium III (2,000 mg/kg).

of TPH-DRO did not match the fuel standard used for quantification, indicating the detected pattern of TPH is not representative of a recent release of diesel product. TPH results are summarized in Table 1b.

Chlorinated solvents including tetrachloroethylene (PCE) and its common degradation products<sup>10</sup> were detected in soil at various depths beneath the north warehouse. Specifically, PCE was detected in the soil sample from 10 feet bgs at AB-04 at a concentration less than the MTCA Method A cleanup level and was not detected in other samples. TCE was detected in multiple samples and detected at concentration exceeding the MTCA Method A cleanup level in samples from AB-01, AB-03, and AB-06. cDCE and tDCE were detected at concentrations less than the applicable MTCA Method A cleanup levels in samples from each boring location. Vinyl chloride was detected at a concentration exceeding the applicable MTCA Method A cleanup level in the sample from 12 feet bgs at AMW-5. Vinyl chloride was also detected at a concentration less than the MTCA Method A cleanup level in the sample from 9.5 feet bgs at AB-02, 7 feet bgs at AB-03, and 8.5 feet bgs at AB-06. Analytical results for VOCs including PCE, its degradation products, and other VOCs associated with TPH are summarized in Table 1b.

### 3.5.3 Groundwater

The analytical results for groundwater samples are evaluated against the applicable MTCA Method A or Method B cleanup levels for unrestricted land use. The analytical results for groundwater are summarized in Table 3b. Laboratory reports are provided in Appendix B.

Groundwater samples were analyzed for total metals in unfiltered samples and in laboratory-filtered samples<sup>11</sup>. Analysis of metals in the filtered samples represents the concentration of dissolved metals in the groundwater sample. The detected concentration of metals in the unfiltered samples are included in Table 3b for comparison purposes but are not considered representative of metals concentrations in water. Dissolved arsenic was detected at concentrations exceeding the applicable MTCA Method A cleanup level groundwater samples from AMW-1 and AMW-3.

TPH-DRO was detected in groundwater samples from AMW-2 and AMW-5 at concentrations less than the applicable MTCA Method A cleanup level. Similar to the soil results, the laboratory indicated the chromatographic pattern of the detected hydrocarbons did not match the fuel standard used for quantitation, indicating the detected pattern is not representative of a recent release of diesel product.

Vinyl chloride and cDCE were detected at concentrations exceeding the MTCA Method A cleanup level in the groundwater sample from AMW-5, which is located in the basement of the north warehouse immediately downgradient of the sump. Vinyl chloride was also detected at a concentration exceeding the cleanup level in the groundwater sample from AMW-1, which is located off-Site in the sidewalk of Airport Way South, which is owned by the City of Seattle. No other VOCs were detected at concentrations

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<sup>10</sup> The most common degradation products of PCE are TCE, cis-1,2-dichloroethene (cDCE), trans-1,2-dichloroethene (tDCE), and vinyl chloride

<sup>11</sup> The laboratory filtered an aliquot of each groundwater sample through a 500-micron filter to enable analysis of dissolved metals.

greater than the laboratory reporting limits in groundwater samples collected during the subsurface investigation.

### **3.5.4 Radon**

Radon activity is reported in pCi/L, which is a measurement of radioactivity in air due to the decay of radon and radon decay products (EPA, 2023). EPA has set an action level of 4.0 pCi/L.

No radon activity was detected in radon tests at levels greater than the laboratory reporting limit of 0.4 pCi/L. Based on conditions observed during the test, the measurements are considered to be reliable.



## 4 Conclusions

Previous investigation by NWES (1996) identified metals in concrete, metals and PAHs in soil, and manganese in groundwater at concentrations which motivated the implementation of an environmental covenant on the Site. The environmental covenant restricts the modification of surface features or structures in a manner that “may result in the release or exposure to the environment of contaminated soils or concrete without prior Ecology approval.” The environmental covenant also forbids the use of groundwater on the Site for any purpose.

Investigations by Aspect from 2019 through 2024 have confirmed the presence of metals and PAHs in fill soil at concentrations exceeding applicable MTCA Method A cleanup levels. Fill soils are present from ground surface to between 11 and 16 feet bgs across the Site.

Aspect’s investigations have identified additional contaminants of potential concern in soil and groundwater; specifically, certain chlorinated solvents including TCE, cDCE, and vinyl chloride. Benzene has been detected in subslab soil gas at concentrations exceeding screening levels set by Ecology for unrestricted land use, but benzene has not been detected in soil or groundwater at concentrations exceeding applicable MTCA Method A cleanup levels.

Previous work overseen by Aspect included cleanout of a sump and floor drains present in the basement of the North Warehouse, but the subsurface investigation completed in 2024 indicates concentrations of chlorinated solvents are still present in soil and groundwater at concentration exceeding applicable MTCA Method A cleanup levels. Additionally, the detected concentration of vinyl chloride in AMW-1, located off-Site in the northern sidewalk of Airport Way South (along the southern boundary of the ETS’ property) indicates that chlorinated solvents have migrated off-property; however, the detected concentration of vinyl chloride in 2024 (2.4 µg/L) is approximately 83% of the concentration detected in 2018 (2.9 µg/L), whereas the detected concentration of dissolved arsenic in AMW-1 in 2024 (12 µg/L) is similar to the concentration detected in AMW-1 in 2018 (11.4 µg/L). This indicates the concentration of chlorinated solvents on the Site may be naturally attenuating.

## 5 Recommendations

Aspect understands ETS is working towards redevelopment of the Site with a design intended to prevent exposure of Site occupants to environmental contaminants described in the current environmental covenant on the property; however, the environmental covenant does not address the presence of chlorinated solvents in soil, groundwater, and soil gas on the Site.

Based on the detected nature and extent of chlorinated solvents in soil and groundwater on the Site, Aspect recommends ETS implement cleanup of impacted soil and groundwater to the maximum extent practicable during redevelopment. Enrollment in Ecology's Expedited Voluntary Cleanup Program is recommended to facilitate effective engagement of Ecology on the accelerated timelines often required for redevelopment projects. If removal of all identified contaminated soil and groundwater is not feasible during development, engineering controls such as chemical treatment, soil gas mitigation, and/or natural attenuation or institutional controls such as an expanded environmental covenant may be viable cleanup options after redevelopment is complete.

Prior to redevelopment, Aspect recommends the development of an Environmental Construction Management Plan (ECMP) or a similar document to prepare for handling and disposal of contaminated soils during construction. The ECMP should also address construction contingencies such as managing removal of one or more potential undocumented heating oil underground storage tanks (USTs); identified in historical documents regarding the Site), removal of the sump in the basement of the North Warehouse, and handling of potential impacted or contaminated soils not found during this investigation.

Finally, if full remediation of the source of chemical vapors is not possible, then Aspect recommends inclusion of a chemical vapor barrier along the base and sidewalls in the design of the proposed subsurface parking garage to protect occupants of a future development from the intrusion of contaminated soil gas into the structure.

## 6 References

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## Limitations

Work for this project was performed for the Evergreen Treatment Services (Client), and this report was prepared in accordance with generally accepted professional practices for the nature and conditions of work completed in the same or similar localities, at the time the work was performed. This report does not represent a legal opinion. No other warranty, expressed or implied, is made.

All reports prepared by Aspect Consulting for the Client apply only to the services described in the Agreement(s) with the Client. Any use or reuse by any party other than the Client is at the sole risk of that party, and without liability to Aspect Consulting. Aspect Consulting's original files/reports shall govern in the event of any dispute regarding the content of electronic documents furnished to others.

**Please refer to Appendix D titled "Report Limitations and Guidelines for Use" for additional information governing the use of this report.**

# TABLES

Table 1a. Metals and PAHs in Soil

Project No. AS180043, Evergreen Treatment Services, Seattle, WA

				Location Name	AB-01	AB-01	AB-02	AB-02	AB-03	AB-03	AB-04	AB-04	AB-05	AB-05	AB-06	AB-06
				Sample Date	10/31/2024	10/31/2024	10/31/2024	10/31/2024	10/31/2024	10/31/2024	10/31/2024	10/31/2024	11/01/2024	11/01/2024	11/01/2024	11/01/2024
				Sample Name	AB-01-01.5	AB-01-09	AB-02-03	AB-02-09.5	AB-03-01	AB-03-07	AB-04-02.5	AB-04-10	AB-05-02.5	AB-05-13	AB-06-01	AB-06-08.5
				Depth (ft bgs)	1.5 ft	9 ft	3 ft	9.5 ft	1 ft	7 ft	2.5 ft	10 ft	2.5 ft	13 ft	1 ft	8.5 ft
Analyte	MTCA Method A CUL	MTCA Method B CUL	Puget Sound Background Soil Level <sup>1</sup>													
Metals																
Arsenic	20	0.67	7	4.5	4.6	3	18	9.2	3.6	4.8	3.4	7.6	3.3	6.5	4	
Cadmium	2	80	1	1.9	< 1 U	40	2.2	220	70	< 1 U	< 1 U	1.2	< 1 U	18	< 1 U	
Chromium	2000	0.38	48	32	23	16	37	13	32	19	16	39	19	24	31	
Copper	ne	3200	36	--	--	--	--	--	--	--	--	--	--	--	--	
Lead	250	ne	24	45	46	15	2900	19	75	29	60	73	46	68	32	
Mercury	2	ne	0.07	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	
Nickel	ne	1600	48	--	--	--	--	--	--	--	--	--	--	--	--	
Zinc	ne	24000	85	--	--	--	--	--	--	--	--	--	--	--	--	
Polycyclic Aromatic Hydrocarbons (PAHs)																
1-Methylnaphthalene	ne	20	na	0.11	0.019	< 0.005 U	0.085	< 0.005 U	< 0.005 U	0.012	0.011	< 0.005 U	< 0.005 U	0.036	0.17	
2-Methylnaphthalene	ne	320	na	0.18	0.0088	0.0054	0.13	0.0058	< 0.005 U	0.0098	0.02	< 0.005 U	0.0083	0.078	0.21	
Acenaphthene	ne	4800	na	0.3	0.18	< 0.005 U	0.063	0.011	< 0.005 U	0.016	< 0.005 U	0.025	< 0.005 U	0.15	0.014	
Acenaphthylene	ne	ne	na	0.0085	< 0.005 U	0.0056	0.05	< 0.005 U	< 0.005 U	0.016	< 0.005 U	0.0051	< 0.005 U	0.0079	0.0053	
Anthracene	ne	24000	na	0.33	< 0.005 U	< 0.005 U	0.086	0.012	< 0.005 U	0.03	< 0.005 U	0.017	< 0.005 U	0.14	< 0.005 U	
Benzo(g,h,i)perylene	ne	ne	na	0.35	0.022	0.079	0.28	0.057	0.012	0.28	0.026	0.17	0.0054 J	0.26	0.015 J	
Fluoranthene	ne	3200	na	4.3	0.09	0.058	0.8	0.11	0.033	0.63	0.031	0.33	0.019	0.97	0.1	
Fluorene	ne	3200	na	0.34 J	0.012	< 0.005 U	0.11	0.01	< 0.005 U	0.012	< 0.005 U	0.017	< 0.005 U	0.17	0.037	
Naphthalene	5	1600	na	0.78	0.025	0.0082	0.15	0.0065	0.0058	0.014	0.024	0.0051	0.0058	0.42	0.33	
Phenanthrene	ne	ne	na	1.9 J	0.061	0.022	0.6	0.079	0.018	0.32	0.022	0.06	0.014	0.53	0.18	
Pyrene	ne	2400	na	2.2	0.07	0.053	0.79	0.078	0.034	0.54	0.046	0.24	0.015	0.61	0.067	
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs)																
Benz(a)anthracene	ne	ne	na	0.88	0.036	0.05	0.29	0.053	0.017	0.22	0.036	0.13	0.0084	0.33	0.029	
Benzo(a)pyrene	0.1	0.19	na	0.46	0.026	0.078	0.3	0.06	0.012	0.29	0.022	0.16	0.0074 J	0.33	0.024 J	
Benzo(b)fluoranthene	ne	ne	na	0.91	0.03	0.09	0.44	0.09	0.022	0.33	0.031	0.24	0.01 J	0.49	0.033 J	
Benzo(k)fluoranthene	ne	ne	na	0.25	0.01	0.028	0.12	0.021 J	0.0065	0.11	0.0089	0.061	< 0.005 UJ	0.12	0.011 J	
Chrysene	ne	ne	na	1	0.059	0.055	0.36	0.058	0.021	0.3	0.036	0.14	0.012	0.51	0.057	
Dibenzo(a,h)anthracene	ne	ne	na	0.091	< 0.005 U	0.019	0.062	0.012 J	< 0.005 U	0.049	0.006	0.023 J	< 0.005 UJ	0.062	< 0.005 UJ	
Indeno(1,2,3-cd)pyrene	ne	ne	na	0.34	0.017	0.064	0.21	0.051	0.01	0.27	0.027	0.14	< 0.005 UJ	0.24	0.01 J	
Total cPAHs TEQ <sup>2</sup>	0.1	0.19	na	0.717	0.0361	0.104	0.416	0.0833 J	0.018	0.391	0.0333	0.221 J	0.0101 J	0.459	0.0331 J	

Notes and Definitions:

- <sup>1</sup> Natural background concentrations for the Puget Sound region, from Ecology (1994). See Report for details.
- <sup>2</sup> Total carcinogenic PAHs (cPAHs) calculated using toxicity equivalency factors (TEQs) in accordance with Ecology's Implementation Memorandum #10 (2015).
- ft bgs

feet below ground surface
- CUL

Cleanup Level
- ne

Indicated cleanup level is not yet established.
- Not analyzed.
- U

Analyte was not detected at a concentration greater than the indicated laboratory reporting limit.
- J

The reported concecentration is an estimate. See laboratory report for details.
- UJ

Analyte was not detected at a concentration greater than the indicated reporting limit and the reporting limit is estimated.
- Bold

Analyte detected at a concetration greater than the laboratory reporting limit.
- Red Bold

Detected concentration exceeds the Puget Sound Natural Background concentration.
- Blue Shaded

Detected concentration exceeds the MTCA Method A Cleanup Level or the MTCA Method B Cleanup Level if Method A is not established.

Table 1a. Metals and PAHs in Soil

Project No. AS180043, Evergreen Treatment Services, Seattle, WA

Location Name Sample Date Sample Name Depth (ft bgs)				AMW-1 12/09/2018 AMW-1-12.5 12.5 ft	AMW-2 12/09/2018 AMW-2-2.5 2.5 ft	AMW-2 12/09/2018 AMW-2-5.5 5.5 ft	AMW-3 12/09/2018 AMW-3-5.0 5 ft	AMW-4 12/09/2018 AMW-4-2.5 2.5 ft	AMW-4 12/10/2018 AMW-4-8.0 8 ft	AMW-5 10/31/2024 AMW-5-01 1 ft	AMW-5 11/01/2024 AMW-5-12 12 ft
Analyte	MTCA Method A CUL	MTCA Method B CUL	Puget Sound Background Soil Level <sup>1</sup>								
Metals											
Arsenic	20	0.67	7	27.8	6.93	--	5.39	5.59	< 1 U	5.9	16
Cadmium	2	80	1	2	< 1 U	--	< 1 U	< 1 U	< 1 U	53	1.2
Chromium	2000	0.38	48	22.2	42.6	--	34.1	18.2	23.4	39	12
Copper	ne	3200	36	404	28.7	--	29.8	22	11.4	--	--
Lead	250	ne	24	4720	35.3	--	5.21	32.1	7.35	160	1700
Mercury	2	ne	0.07	< 1 UJ	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Nickel	ne	1600	48	19.6	44	--	49.7	21.5	35.7	--	--
Zinc	ne	24000	85	911	66.8	--	48.8	71.2	25.7	--	--
Polycyclic Aromatic Hydrocarbons (PAHs)											
1-Methylnaphthalene	ne	20	na	--	--	--	--	--	--	0.013	0.0072
2-Methylnaphthalene	ne	320	na	--	--	--	--	--	--	0.022	0.0077
Acenaphthene	ne	4800	na	--	--	--	--	--	--	0.085	< 0.005 U
Acenaphthylene	ne	ne	na	--	--	--	--	--	--	0.02	< 0.005 U
Anthracene	ne	24000	na	--	--	--	--	--	--	0.11	< 0.005 U
Benzo(g,h,i)perylene	ne	ne	na	--	--	--	--	--	--	0.58	0.0074
Fluoranthene	ne	3200	na	--	--	--	--	--	--	1	0.022
Fluorene	ne	3200	na	--	--	--	--	--	--	0.11	< 0.005 U
Naphthalene	5	1600	na	< 0.05 U	--	--	--	--	< 0.05 U	0.034	0.017
Phenanthrene	ne	ne	na	--	--	--	--	--	--	0.56	0.02
Pyrene	ne	2400	na	--	--	--	--	--	--	0.79	0.019
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs)											
Benz(a)anthracene	ne	ne	na	--	--	--	< 0.01 U	0.013	--	0.36	0.011
Benzo(a)pyrene	0.1	0.19	na	--	--	--	< 0.01 U	0.02	--	0.59	0.01
Benzo(b)fluoranthene	ne	ne	na	--	--	--	< 0.01 U	0.028	--	0.78	0.012
Benzo(k)fluoranthene	ne	ne	na	--	--	--	< 0.01 U	< 0.01 U	--	0.28	< 0.005 U
Chrysene	ne	ne	na	--	--	--	< 0.01 U	0.017	--	0.47	0.011
Dibenzo(a,h)anthracene	ne	ne	na	--	--	--	< 0.01 U	< 0.01 U	--	0.1	< 0.005 U
Indeno(1,2,3-cd)pyrene	ne	ne	na	--	--	--	< 0.01 U	0.018	--	0.49	0.0051
Total cPAHs TEQ <sup>2</sup>	0.1	0.19	na	--	--	--	< 0.00755 U	0.02707	--	0.796	0.0134

Notes and Definitions:

<sup>1</sup> Natural background concentrations for the Puget Sound region, from Ecology (199

<sup>2</sup> Total carcinogenic PAHs (cPAHs) calculated using toxicity equivalency factors (TE  
ft bgs                      feet below ground surface

CUL                      Cleanup Level

ne                      Indicated cleanup level is not yet established.

--                      Not analyzed.

U                      Analyte was not detected at a concentration greater than th

J                      The reported concecentration is an estimate. See laboratory

UJ                      Analyte was not detected at a concentration greater than th

**Bold**                      Analyte detected at a concetration greater than the laboratc

**Red Bold**                      Detected concentration exceeds the Puget Sound Natural E

**Blue Shaded**                      Detected concentration exceeds the MTCA Method A Clear



Table 1b. TPH and VOCs in Soil

Project No. AS180043, Evergreen Treatment Services, Seattle, WA

			Location Name		AB-01		AB-02		AB-03		AB-04		AB-05		AB-06	
			Sample Date		10/31/2024	10/31/2024	10/31/2024	10/31/2024	10/31/2024	10/31/2024	10/31/2024	10/31/2024	11/01/2024	11/01/2024	11/01/2024	11/01/2024
			Sample Name		AB-01-01.5	AB-01-09	AB-02-03	AB-02-09.5	AB-03-01	AB-03-07	AB-04-02.5	AB-04-10	AB-05-02.5	AB-05-13	AB-06-01	AB-06-08.5
			Depth (ft bgs)		1.5 ft	9 ft	3 ft	9.5 ft	1 ft	7 ft	2.5 ft	10 ft	2.5 ft	13 ft	1 ft	8.5 ft
Analyte	MTCA Method A CUL	MTCA Method B CUL														
Petroleum Hydrocarbons (TPH)																
Gasoline Range Organics (GRO)	30	ne	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	8.3	< 5 U		
Diesel Range Organics (DRO)	2000	ne	170 X	83 X	< 50 U	100 X	< 50 U	< 50 U	< 50 U	210 X	75 X	< 50 U	71 X	310 X		
Motor Oil Range Organics (ORO)			< 250 U	< 250 U	< 250 U	< 250 U	< 250 U	< 250 U	< 250 U	360	< 250 U	< 250 U	< 250 U	530		
DRO and ORO			170 X	83 X	< 250 U	100 X	< 250 U	< 250 U	< 250 U	570 X	75 X	< 250 U	71 X	840 X		
Benzene, Toluene, Ethylbenzene, and Xylenes																
Benzene	0.03	18	< 0.002 U	< 0.002 U	0.0025	0.018	< 0.002 U	0.0079	< 0.002 U	< 0.002 U	0.0032	0.0036	0.0024	< 0.002 U		
Toluene	7	6400	0.0054	0.0043	0.0055	0.018	0.041	0.061	< 0.002 U	0.012	0.0029	0.0075	0.0085	0.009		
Ethylbenzene	6	8000	0.0034	< 0.002 U	< 0.002 U	0.0057	< 0.002 U	0.015	< 0.002 U	0.0026	< 0.002 U	0.0029	0.0036	0.012		
o-Xylene	ne	16000	0.0029	< 0.002 U	< 0.002 U	0.0065	< 0.002 U	0.0038	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	0.0028	0.0024		
m,p-Xylenes	ne	16000	0.0064	0.006	< 0.004 U	0.009	< 0.004 U	0.016	< 0.004 U	0.007	< 0.004 U	< 0.004 U	0.009	< 0.004 U		
Total Xylenes	9	16000	0.0093	0.006	< 0.004 U	0.0155	< 0.004 U	0.0198	< 0.004 U	0.007	< 0.004 U	< 0.004 U	0.0118	0.0024		
PCE and Degredation Products																
Tetrachloroethene (PCE)	0.05	480	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	0.0036	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U		
Trichloroethene (TCE)	0.03	12	0.013	0.064	0.012	< 0.002 U	0.058	0.16	< 0.002 U	0.019	0.0037	< 0.002 U	0.11	0.003		
cis-1,2-Dichloroethene (cDCE)	ne	160	0.0051	0.016	0.0051	0.31	0.035	0.14	< 0.002 U	0.01	0.011	< 0.002 U	0.018	0.038		
trans-1,2-Dichloroethene (tDCE)	ne	1600	< 0.002 U	0.0023	< 0.002 U	< 0.002 U	< 0.002 U	0.13	< 0.002 U	0.0028	0.0036	< 0.002 U	0.0068	< 0.002 U		
Vinyl Chloride (VC)	ne	0.67	< 0.002 U	< 0.002 U	< 0.002 U	0.51	< 0.002 U	0.017	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	0.0026		
Other Volatile Organic Compounds (VOCs)																
1,1,1,2-Tetrachloroethane	ne	38	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U		
1,1,1-Trichloroethane	2	160000	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U		
1,1,2,2-Tetrachloroethane	ne	5	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U		
1,1,2-Trichloroethane	ne	18	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U		
1,1-Dichloroethane	ne	180	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U		
1,1-Dichloroethene	ne	4000	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U		
1,1-Dichloropropene	ne	ne	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U		
1,2,3-Trichlorobenzene	ne	64	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U		
1,2,3-Trichloropropane	ne	0.0063	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U		
1,2,4-Trichlorobenzene	ne	34	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U		
1,2,4-Trimethylbenzene	ne	800	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U		
1,2-Dibromo-3-chloropropane	ne	0.23	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U		
1,2-Dibromoethane (EDB)	0.005	0.5	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U		
1,2-Dichlorobenzene	ne	7200	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U		
1,2-Dichloroethane (EDC)	ne	11	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U	< 0.003 U		
1,2-Dichloropropane	ne	27	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U		
1,3,5-Trimethylbenzene	ne	800	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U		
1,3-Dichlorobenzene	ne	ne	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U		
1,3-Dichloropropane	ne	1600	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U		
1,4-Dichlorobenzene	ne	190	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U		
2,2-Dichloropropane	ne	ne	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U		
2-Butanone	ne	48000	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U		
2-Chlorotoluene	ne	1600	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U		
2-Hexanone	ne	400	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U		
4-Chlorotoluene	ne	1600	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U		
4-Methyl-2-pentanone	ne	6400	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U		

Table 1b. TPH and VOCs in Soil

Project No. AS180043, Evergreen Treatment Services, Seattle, WA

Location Name Sample Date Sample Name Depth (ft bgs)			AB-01		AB-02		AB-03		AB-04		AB-05		AB-06	
			10/31/2024 AB-01-01.5 1.5 ft	10/31/2024 AB-01-09 9 ft	10/31/2024 AB-02-03 3 ft	10/31/2024 AB-02-09.5 9.5 ft	10/31/2024 AB-03-01 1 ft	10/31/2024 AB-03-07 7 ft	10/31/2024 AB-04-02.5 2.5 ft	10/31/2024 AB-04-10 10 ft	11/01/2024 AB-05-02.5 2.5 ft	11/01/2024 AB-05-13 13 ft	11/01/2024 AB-06-01 1 ft	11/01/2024 AB-06-08.5 8.5 ft
Analyte	MTCA Method A CUL	MTCA Method B CUL												
Other VOCs														
Acetone	ne	72000	< 5 UJ	< 5 UJ	< 5 UJ	< 5 UJ	< 5 UJ	< 5 UJ	< 5 UJ	< 5 UJ	< 5 UJ	< 5 UJ	< 5 UJ	< 5 UJ
Bromobenzene	ne	640	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
Bromodichloromethane	ne	16	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
Bromoform	ne	130	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
Bromomethane	ne	110	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Carbon Tetrachloride	ne	14	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
Chlorobenzene	ne	1600	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
Chloroethane	ne	ne	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Chloroform	ne	32	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
Chloromethane	ne	ne	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
cis-1,3-Dichloropropene	ne	ne	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
Dibromochloromethane	ne	12	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
Dibromomethane	ne	800	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
Dichlorodifluoromethane	ne	16000	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
Isopropylbenzene	ne	8000	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
Methyl tert-butyl ether (MTBE)	0.1	560	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U	< 0.002 U
Methylene Chloride	0.02	94	< 0.4 UJ	< 0.4 UJ	< 0.4 UJ	< 0.4 UJ	< 0.4 UJ	< 0.4 UJ	< 0.4 UJ	< 0.4 UJ	< 0.4 UJ	< 0.4 UJ	< 0.4 UJ	< 0.4 UJ
n-Hexane	ne	4800	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
n-Propylbenzene	ne	8000	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
p-Isopropyltoluene	ne		< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
sec-Butylbenzene	ne	8000	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
Styrene	ne	16000	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
tert-Butylbenzene	ne	8000	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
trans-1,3-Dichloropropene	ne	ne	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
Trichlorofluoromethane	ne	24000	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U

Table 1b. TPH and VOCs in Soil

Project No. AS180043, Evergreen Treatment Services, Seattle, WA

Location Name			AMW-1	AMW-2		AMW-3	AMW-4		AMW-5	
Sample Date			12/09/2018	12/09/2018	12/09/2018	12/09/2018	12/09/2018	12/10/2018	10/31/2024	11/01/2024
Sample Name			AMW-1-12.5	AMW-2-2.5	AMW-2-5.5	AMW-3-5.0	AMW-4-2.5	AMW-4-8.0	AMW-5-01	AMW-5-12
Depth (ft bgs)			12.5 ft	2.5 ft	5.5 ft	5 ft	2.5 ft	8 ft	1 ft	12 ft
Analyte	MTCA Method A CUL	MTCA Method B CUL								
Petroleum Hydrocarbons (TPH)										
Gasoline Range Organics (GRO)	30	ne	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Diesel Range Organics (DRO)	2000	ne	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	110 X	< 50 U
Motor Oil Range Organics (ORO)			< 250 U	< 250 U	< 250 U	< 250 U	< 250 U	< 250 U	< 250 U	< 250 U
DRO and ORO			--	--	--	--	--	--	110 X	< 250 U
Benzene, Toluene, Ethylbenzene, and Xylenes										
Benzene	0.03	18	< 0.03 U	--	--	--	--	< 0.03 U	0.0047	0.03
Toluene	7	6400	< 0.05 U	--	--	--	--	< 0.05 U	0.008	0.026
Ethylbenzene	6	8000	< 0.05 U	--	--	--	--	< 0.05 U	0.0066	0.0072
o-Xylene	ne	16000	< 0.05 U	--	--	--	--	< 0.05 U	0.005	0.0052
m,p-Xylenes	ne	16000	< 0.1 U	--	--	--	--	< 0.1 U	0.0097	0.0064
Total Xylenes	9	16000	< 0.1 U	--	--	--	--	< 0.1 U	0.0147	0.0116
PCE and Degredation Products										
Tetrachloroethene (PCE)	0.05	480	< 0.025 U	--	--	--	--	< 0.025 U	< 0.002 U	< 0.002 U
Trichloroethene (TCE)	0.03	12	< 0.02 U	--	--	--	--	< 0.02 U	0.03	< 0.002 U
cis-1,2-Dichloroethene (cDCE)	ne	160	< 0.05 U	--	--	--	--	< 0.05 U	0.0024	0.95
trans-1,2-Dichloroethene (tDCE)	ne	1600	< 0.05 U	--	--	--	--	< 0.05 U	< 0.002 U	0.002
Vinyl Chloride (VC)	ne	0.67	< 0.05 U	--	--	--	--	< 0.05 U	< 0.002 U	1.7
Other Volatile Organic Compounds (VOCs)										
1,1,1,2-Tetrachloroethane	ne	38	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
1,1,1-Trichloroethane	2	160000	< 0.05 U	--	--	--	--	< 0.05 U	< 0.002 U	< 0.002 U
1,1,2,2-Tetrachloroethane	ne	5	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
1,1,2-Trichloroethane	ne	18	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
1,1-Dichloroethane	ne	180	< 0.05 U	--	--	--	--	< 0.05 U	< 0.002 U	< 0.002 U
1,1-Dichloroethene	ne	4000	< 0.05 U	--	--	--	--	< 0.05 U	< 0.002 U	< 0.002 U
1,1-Dichloropropene	ne	ne	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
1,2,3-Trichlorobenzene	ne	64	< 0.25 U	--	--	--	--	< 0.25 U	< 0.25 U	< 0.25 U
1,2,3-Trichloropropane	ne	0.0063	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
1,2,4-Trichlorobenzene	ne	34	< 0.25 U	--	--	--	--	< 0.25 U	< 0.25 U	< 0.25 U
1,2,4-Trimethylbenzene	ne	800	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
1,2-Dibromo-3-chloropropane	ne	0.23	< 0.5 U	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U
1,2-Dibromoethane (EDB)	0.005	0.5	< 0.05 U	--	--	--	--	< 0.05 U	< 0.005 U	< 0.005 U
1,2-Dichlorobenzene	ne	7200	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
1,2-Dichloroethane (EDC)	ne	11	< 0.05 U	--	--	--	--	< 0.05 U	< 0.003 U	< 0.003 U
1,2-Dichloropropane	ne	27	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
1,3,5-Trimethylbenzene	ne	800	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
1,3-Dichlorobenzene	ne	ne	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
1,3-Dichloropropane	ne	1600	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
1,4-Dichlorobenzene	ne	190	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
2,2-Dichloropropane	ne	ne	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
2-Butanone	ne	48000	< 0.5 U	--	--	--	--	< 0.5 U	< 1 U	< 1 U
2-Chlorotoluene	ne	1600	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
2-Hexanone	ne	400	< 0.5 U	--	--	--	--	< 0.5 U	< 1 U	< 1 U
4-Chlorotoluene	ne	1600	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
4-Methyl-2-pentanone	ne	6400	< 0.5 U	--	--	--	--	< 0.5 U	< 1 U	< 1 U

Table 1b. TPH and VOCs in Soil

Project No. AS180043, Evergreen Treatment Services, Seattle, WA

Location Name Sample Date Sample Name Depth (ft bgs)			AMW-1 12/09/2018 AMW-1-12.5 12.5 ft	AMW-2 12/09/2018 AMW-2-2.5 2.5 ft		AMW-3 12/09/2018 AMW-3-5.0 5 ft	AMW-4 12/09/2018 AMW-4-2.5 2.5 ft		AMW-5 10/31/2024 AMW-5-01 1 ft	
Analyte			MTCA Method A CUL	MTCA Method B CUL						
Other VOCs										
Acetone	ne	72000	< 0.5 U	--	--	--	--	< 0.5 U	< 5 UJ	< 5 UJ
Bromobenzene	ne	640	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
Bromodichloromethane	ne	16	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
Bromoform	ne	130	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
Bromomethane	ne	110	< 0.5 U	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U
Carbon Tetrachloride	ne	14	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
Chlorobenzene	ne	1600	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
Chloroethane	ne	ne	< 0.5 U	--	--	--	--	< 0.5 U	< 0.1 U	< 0.1 U
Chloroform	ne	32	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
Chloromethane	ne	ne	< 0.5 U	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U
cis-1,3-Dichloropropene	ne	ne	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
Dibromochloromethane	ne	12	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
Dibromomethane	ne	800	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
Dichlorodifluoromethane	ne	16000	< 0.5 U	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U
Isopropylbenzene	ne	8000	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
Methyl tert-butyl ether (MTBE)	0.1	560	< 0.05 U	--	--	--	--	< 0.05 U	< 0.002 U	< 0.002 U
Methylene Chloride	0.02	94	< 0.5 U	--	--	--	--	< 0.5 U	< 0.4 UJ	< 0.4 UJ
n-Hexane	ne	4800	< 0.25 U	--	--	--	--	< 0.25 U	< 0.25 U	< 0.25 U
n-Propylbenzene	ne	8000	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
p-Isopropyltoluene	ne		< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
sec-Butylbenzene	ne	8000	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
Styrene	ne	16000	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
tert-Butylbenzene	ne	8000	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
trans-1,3-Dichloropropene	ne	ne	< 0.05 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U
Trichlorofluoromethane	ne	24000	< 0.5 U	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U

Notes and Definitions:

ft bgs                      feet below ground surface

MTCA                      Model Toxics Control Act

CUL                        Cleanup Level

ne                          Indicated cleanup level is not yet established.

--                          Not analyzed.

U                            Analyte was not detected at a concentration greater than the indicated laboratory reporting limit.

J                            The reported concecntration is an estimate. See laboratory report for details.

UJ                           Analyte was not detected at a concentration greater than the indicated reporting limit and the reporting limit is estimated.

X                            The laboratory indicated the chromatographic pattern of detected TPH does not match the fuel standard used for quantitation.

**Bold**                        Analyte detected at a concetration greater than the laboratory reporting limit.

**Red Bold**                Detected concentration exceeds the Model Toxics Control Act (MTCA) Method B Cleanup Level but not the MTCA Method B Cleanup Level.

**Blue Shaded**            Detected concentration exceeds the Model Toxics Control Act (MTCA) Method A Cleanup Level, or the MTCA Method B Cleanup Level if Method A is n

Table 2. Soil Gas Results

Project No. 180043, Evergreen Treatment Services, Seattle, Washington

Location Name		SV-1	SV-2	SV-3		SV-4	SV-5
Sample Date		12/10/2018	12/10/2018	12/10/2018	09/10/2020	12/10/2018	09/17/2020
Sample Name		SV-1-181210	SV-2-181210	SV-3-181210	SV-3-091020	SV-4-181210	SV-5-091720
Leak Testing Results (% Helium):		< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U
	MTCA Method B Subslab Soil Gas Screening Levels - Unrestricted Use*	Results in micrograms per cubic meter (ug/m³)					
Analyte							
Air-Phase Hydrocarbons (APH)							
C5 - C8 Aliphatic Hydrocarbons	ne	--	--	--	3100	--	29000 E
C9 - C12 Aliphatic Hydrocarbons		--	--	--	860	--	22000
C9 - C10 Aromatic Hydrocarbons		--	--	--	< 420 U	--	< 1000 U
Total APH**	1500	--	--	--	4,389	--	52,135 E
Polcyclic Aromatic Hydrocarbons							
Naphthalene	2.5	< 0.73 U	< 0.79 U	< 0.79 U	< 4.5 U	1.2	< 11 U
Benzene, Toluene, Ethylbenzene, and Xylenes							
Benzene	11	3.8	4.1	19	29	150	170
Toluene	76000	25	25	39	< 320 U	260	< 790 U
Ethylbenzene	15000	5.6	5	6.7	< 7.4 U	11	< 18 U
m,p-Xylenes	1500	20	18	20	20	24	< 36 U
o-Xylene		7	6.2	7.1	< 7.4 U	18	37
Total Xylenes		27	24.2	27.1	20	42	37
PCE and Degredation Products							
Tetrachloroethene (PCE)	320	< 9.5 U	< 10 U	< 10 U	< 120 U	< 10 U	< 280 U
Trichloroethene (TCE)	11	26	< 0.4 U	14	40	43	61
cis-1,2-Dichloroethene (cDCE)	610	< 0.56 U	< 0.59 U	2.9	35	220	70
trans-1,2-Dichloroethene (tDCE)	610	< 0.56 U	< 0.59 U	< 0.59 U	< 6.7 U	43	110
Vinyl Chloride (VC)	9.5	< 0.36 U	< 0.38 U	< 0.38 U	< 4.3 U	320 E	280
Volatile Organic Compounds							
1,1,1-Trichloroethane	76000	< 0.76 U	< 0.82 U	< 0.82 U	< 9.3 U	< 0.82 U	< 23 U
1,1,2,2-Tetrachloroethane	1.4	< 0.19 U	< 0.21 U	< 0.21 U	< 2.3 U	< 0.21 U	< 5.8 U
1,1,2-Trichloroethane	3	< 0.15 U	< 0.16 U	< 0.16 U	< 1.9 U	< 0.16 U	< 2.3 U
1,1,2-Trichlorotrifluoroethane	76000	< 1.1 U	< 1.1 U	2.1	< 13 U	< 1.1 U	< 32 U
1,1-Dichloroethane	52	< 0.57 U	< 0.61 U	1.7	< 6.9 U	0.91	< 17 U
1,1-Dichloroethene	3000	< 0.56 U	< 0.59 U	0.62	< 6.7 U	5.1	< 17 U
1,2,4-Trichlorobenzene	30	< 1 U	< 1.1 U	< 1.1 U	< 13 U	< 1.1 U	< 31 U
1,2,4-Trimethylbenzene	910	< 3.4 U	< 3.7 U	< 3.7 U	< 42 U	5.8	< 100 U
1,2-Dibromoethane (EDB)	0.14	< 0.11 U	< 0.12 U	< 0.12 U	< 1.3 U	< 0.12 U	< 3.2 U
1,2-Dichlorobenzene	3000	< 0.84 U	< 0.9 U	< 0.9 U	< 10 U	< 0.9 U	< 25 U
1,2-Dichloroethane (EDC)	3.2	< 0.057 U	< 0.061 U	< 0.061 U	< 0.69 U	< 0.061 U	< 1.7 U
1,2-Dichloropropane	23	0.9	0.85	0.58	< 3.9 U	0.57	< 9.7 U
1,3,5-Trimethylbenzene	910	< 3.4 U	< 3.7 U	< 3.7 U	< 42 U	5.6	< 100 U
1,3-Dichlorobenzene	ne	< 0.84 U	< 0.9 U	< 0.9 U	< 10 U	< 0.9 U	< 25 U
1,4-Dichlorobenzene	7.6	< 0.34 U	< 0.36 U	< 0.36 U	< 3.9 U	< 0.36 U	< 9.7 U
1-Propene	ne	< 1 U	< 1 U	52	180	1700 E	2100 E
2-Butanone	76000	17	13	30	< 50 U	24	< 120 U
2-Chlorotoluene	ne	< 7.2 U	< 7.8 U	< 7.8 U	< 88 U	< 7.8 U	< 220 U
2-Hexanone	460	< 5.7 U	< 6.1 U	< 6.1 U	< 70 U	< 6.1 U	< 170 U
4-Methyl-2-pentanone	46000	< 5.7 U	< 6.1 U	< 6.1 U	< 70 U	< 6.1 U	< 170 U
Acetone	ne	130	160	430 E	640	780 E	< 600 U
Acrolein	0.3	< 1.3 U	< 1.4 U	3.8	< 35 U	< 1.4 U	< 87 U
Allyl Chloride	14	< 1.8 U	< 1.9 U	< 1.9 U	< 27 U	< 1.9 U	< 66 U
Bromodichloromethane	2.3	< 0.094 U	< 0.1 U	< 0.1 U	< 1.1 U	< 0.1 U	< 2.8 U
Bromoform	76	< 2.9 U	< 3.1 U	< 3.1 U	< 35 U	< 3.1 U	< 87 U
Bromomethane	76	< 2.2 U	< 2.3 U	< 2.3 U	< 40 U	< 2.3 U	< 98 U
Butane	ne	15	19	44	400	2000 E	2000
Carbon Disulfide	11000	< 8.7 U	< 9.3 U	< 9.3 U	< 110 U	< 9.3 U	< 260 U
Carbon Tetrachloride	14	< 0.88 U	< 0.94 U	< 0.94 U	< 5.3 U	< 0.94 U	< 13 U
Chlorobenzene	760	< 0.64 U	< 0.69 U	< 0.69 U	< 7.8 U	< 0.69 U	< 19 U
Chloroethane	150000	< 3.7 U	< 4 U	< 4 U	< 45 U	7.9	< 110 U
Chloroform	3.6	0.46	0.61	0.7	1.7	< 0.074 U	< 2.1 U
Chloromethane	1400	< 2.9 U	< 3.1 U	< 3.1 U	< 63 U	< 3.1 U	< 160 U
cis-1,3-Dichloropropene	ne	< 0.64 U	< 0.68 U	< 0.68 U	< 7.7 U	< 0.68 U	< 19 U
Cyclohexane	91000	< 9.6 U	< 10 U	12	< 120 U	150	< 290 U
Dibromochloromethane	ne	< 0.12 U	< 0.13 U	< 0.13 U	< 1.4 U	< 0.13 U	< 3.6 U
Dichlorodifluoromethane	1500	2.9	2.9	2.9	< 8.4 U	< 0.74 U	< 21 U
Ethanol	ne	280 E	140	450 E	570	250 E	< 320 U
Ethyl acetate	1100	< 10 U	< 11 U	< 11 U	< 120 U	< 11 U	< 300 U
Isopropyl Alcohol	ne	66	64	70	< 150 U	79	< 360 U
Isopropylbenzene	6100	< 3.4 U	< 3.7 U	< 3.7 U	< 42 U	8.8	< 100 U
Methyl Methacrylate	11000	< 5.7 U	< 6.1 U	< 6.1 U	< 70 U	< 6.1 U	< 170 U
Methyl tert-butyl ether (MTBE)	320	< 2.5 U	< 2.7 U	< 2.7 U	< 31 U	< 2.7 U	< 76 U
Methylene Chloride	2200	< 120 U	< 130 U	< 130 U	< 590 UJ	< 130 U	< 1500 UJ
n-Hexane	11000	13	18	29	79	290 E	360
Nonane	ne	< 7.3 U	< 7.9 U	< 7.9 U	< 89 U	52 J	< 220 U
n-Propylbenzene	15000	< 3.4 U	< 3.7 U	< 3.7 U	< 42 U	< 3.7 U	< 100 U
Pentane	ne	12	16	32	190	850 E	870
Styrene	15000	< 1.2 U	< 1.3 U	1.5	< 14 U	< 1.3 U	< 36 U
t-Butyl alcohol (TBA)	ne	< 17 U	< 18 U	< 18 U	< 210 U	< 18 U	< 510 U
Tetrahydrofuran	30000	21 J	21 J	16 J	28	16 J	18
trans-1,3-Dichloropropene	ne	< 0.64 U	< 0.68 U	< 0.68 U	< 7.7 U	< 0.68 U	< 19 U
Trichlorofluoromethane	11000	< 3.1 U	< 3.4 U	< 3.4 U	< 38 U	< 3.4 U	< 94 U
Vinyl Acetate	3000	< 9.9 U	< 11 U	< 11 U	< 120 U	< 11 U	< 300 U
Vinyl Bromide	5.6	< 0.61 U	< 0.66 U	< 0.66 U	< 7.4 U	< 0.66 U	< 18 U
1,3-Butadiene	2.8	< 0.03 U	< 0.03 U	12	< 0.75 U	< 0.03 U	< 1.9 U



Table 2. Soil Gas Results

Project No. 180043, Evergreen Treatment Services, Seattle, Washington

Location Name		SV-1	SV-2	SV-3		SV-4	SV-5
Sample Date		12/10/2018	12/10/2018	12/10/2018	09/10/2020	12/10/2018	09/17/2020
Sample Name		SV-1-181210	SV-2-181210	SV-3-181210	SV-3-091020	SV-4-181210	SV-5-091720
Leak Testing Results (% Helium):		< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U	< 0.6 U
Analyte	MTCA Method B Subslab Soil Gas Screening Levels - Unrestricted Use*	Results in micrograms per cubic meter (ug/m³)					
Volatile Organic Compounds (Continued)							
2,2,4-Trimethylpentane	ne	< 6.5 U	< 7 U	< 7 U	< 79 U	380 E	460
4-Ethyltoluene	ne	< 3.4 U	< 3.7 U	< 3.7 U	< 42 U	< 3.7 U	< 100 U
alpha-Chlorotoluene	1.7	< 0.072 U	< 0.078 U	< 0.078 U	< 0.88 U	< 0.078 U	< 2.2 U
Freon 114	ne	< 0.98 U	< 1 U	< 1 U	< 12 U	< 1 U	< 29 U
Heptane	6100	11	17	32	< 70 U	140	< 170 U

Notes and Definitions:

\* Minimum of carcinogenic and noncarcinogenic soil gas Model Toxics Control Act (MTCA) Method B Screening Levels for subslab soil gas.

\*\* Total APH calculated with nondetect concentrations as 1/2 of indicated reporting limit.

MTCA                Model Toxics Control Act

ne                   Screening level is not yet established.

--                  Not analyzed.

U                   Analyte was not detected at a concentration greater than the indicated laboratory reporting limit.

J                   The reported concecntration is an estimate. See laboratory report for details.

UJ                  Analyte was not detected at a concentration greater than the indicated reporting limit and the reporting limit is estimated.

E                   Detected concentration exceeded the laboratory instrument calibration range. Reported value is an estimate.

**Bold**              Analyte detected at a concetratation greater than the laboratory reporting limit.

**Blue Shaded**    Detected concentration exceeds the MTCA Method B screening level.

## Table 3a. Groundwater Measurements

Project No. AS180043, Evergreen Treatment Services, Seattle, WA

		AMW-1	AMW-2	AMW-3	AMW-4	AMW-5
<b>Well Construction Data</b>						
Date Constructed		12/10/2018	12/10/2018	12/10/2018	12/10/2018	11/1/2025
Ecology Tag ID		BKF 905	BKF 906	BKF 907	BKF 908	BPK 160
Constructed Well Depth (ft bgs)		15	14	15	14	12
Constructed Top of Screen Depth (ft bgs)		5	4	5	4	2
Top of Monument Elevation (ft NAVD88)		24.137	23.813	23.226	25.642	19.890
TOC Elevation (ft NAVD88)		23.800	23.398	22.836	25.267	19.593
Top of Screen Elevation (ft NAVD88)		19.137	19.813	18.226	21.642	17.89
Bottom of Well Elevation (ft NAVD88)		9.137	9.813	8.226	11.642	7.89
<b>Measured Groundwater Elevations</b>						
12/17/2018	Depth to Water (ft bTOC)	5.56	4.88	4.50	5.73	<i>Not Present</i>
	Elevation (ft NAVD88)	18.24	18.52	18.34	19.54	
11/5/2025	Depth to Water (ft bTOC)	5.67	4.90	4.55	5.55	0.80
	Elevation (ft NAVD88)	18.13	18.50	18.29	19.72	18.79

### Notes:

ft = feet

NAVD88 = North American Vertical Datum of 1988

bgs = below ground surface

bTOC = below top of well casing, measured from the north edge.

Elevations provided by True North Land Surveying, Inc., dated December 11, 2024, collected using a Leica LS10.

Survey based on Washington State Department of Transportation Monument # GP17005-231

## Table 3a

Subsurface Investigation

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Aspect Consulting

4/15/2025

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Table 3b. Groundwater Analytical Results

Project No. AS180043, Evergreen Treatment Services, Seattle, WA

Location Name Sample Date				AMW-1		AMW-2		AMW-3		AMW-4		AMW-5
				12/17/2018	11/05/2024	12/17/2018	11/05/2024	12/17/2018	11/05/2024	12/17/2018	11/05/2024	11/05/2024
Analyte	Fraction	MTCA Method A CUL	MTCA Method B CUL	Results in micrograms per liter (ug/L)								
Metals												
Arsenic	D	5	0.058	11.4	12	4.33	2.4	20.3	14	< 1 U	< 1 U	4.3
	T			--	12	--	9.5	--	18	--	1.1	4.8
Cadmium	D	5	8	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	T			--	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U	< 1 U
Chromium	D	50	ne	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	T			--	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U	1.6
Copper	D	ne	640	< 5 U	--	< 5 U	--	< 5 U	--	< 5 U	--	--
Lead	D	15	ne	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	T			--	1.9	--	7.4	--	< 1 U	--	< 1 U	26
Manganese	D	ne	750	575	--	302	--	680	--	485	--	--
Mercury	D	2	ne	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	T			--	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U	< 1 U
Nickel	D	ne	320	1.31	--	3.8	--	2.22	--	2.24	--	--
Zinc	D	ne	4800	< 5 U	--	< 5 U	--	< 5 U	--	< 5 U	--	--
Conventionals												
Cyanide (total)	T	ne	0.005	< 0.05 U	--	< 0.05 U	--	< 0.05 U	--	< 0.05 U	--	--
Petroleum Hydrocarbons (TPH)												
Gasoline Range Organics (GRO)	T	1000	ne	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Diesel Range Organics (DRO)	T	500	ne	< 50 U	< 50 U	73 X	57 X	< 50 U	< 50 U	< 50 U	< 50 U	95 X
Motor Oil Range Organics (ORO)	T			< 250 U	< 250 U	< 250 U	< 250 U	< 250 U	< 250 U	< 250 U	< 250 U	< 250 U
DRO and ORO	T			< 250 U	< 250 U	73 X	57 X	< 250 U	< 250 U	< 250 U	< 250 U	95 X
Benzene, Toluene, Ethylbenzene, and Xylenes												
Benzene	T	5	0.8	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U
Toluene	T	1000	640	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Ethylbenzene	T	700	800	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Total Xylenes	T	1000	1600	< 1 U	< 2 U	< 1 U	< 2 U	< 1 U	< 2 U	< 1 U	< 2 U	< 2 U
PCE and Degredation Products												
Tetrachloroethene (PCE)	T	5	21	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Trichloroethene (TCE)	T	5	0.54	< 1 U	< 0.5 U	< 1 U	< 0.5 U	< 1 U	< 0.5 U	< 1 U	< 0.5 U	< 0.5 U
cis-1,2-Dichloroethene (cDCE)	T	ne	16	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	22
trans-1,2-Dichloroethene (tDCE)	T	ne	160	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Vinyl Chloride (VC)	T	0.2	0.029	2.9	2.4	< 0.2 U	< 0.02 U	< 0.2 U	< 0.02 U	< 0.2 U	< 0.02 U	23
Other Volatile Organic Compounds (VOCs)												
1,1,1,2-Tetrachloroethane	T	ne	1.7	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,1-Trichloroethane	T	200	16000	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2,2-Tetrachloroethane	T	ne	0.22	< 1 U	< 0.2 U	< 1 U	< 0.2 U	< 1 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U
1,1,2-Trichloroethane	T	ne	0.77	< 1 U	< 0.5 U	< 1 U	< 0.5 U	< 1 U	< 0.5 U	< 1 U	< 0.5 U	< 0.5 U
1,1-Dichloroethane	T	ne	7.7	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethene	T	ne	400	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloropropene	T	ne		< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2,3-Trichlorobenzene	T	ne	6.4	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2,3-Trichloropropane	T	ne	0.00038	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2,4-Trichlorobenzene	T	ne	1.5	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2,4-Trimethylbenzene	T	ne	80	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U



Table 3b. Groundwater Analytical Results

Project No. AS180043, Evergreen Treatment Services, Seattle, WA

Location Name Sample Date				AMW-1		AMW-2		AMW-3		AMW-4		AMW-5
				12/17/2018	11/05/2024	12/17/2018	11/05/2024	12/17/2018	11/05/2024	12/17/2018	11/05/2024	11/05/2024
Analyte	Fraction	MTCA Method A CUL	MTCA Method B CUL	Results in micrograms per liter (ug/L)								
Other VOCs (continued)												
1,2-Dibromo-3-chloropropane	T	ne	0.014	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
1,2-Dibromoethane (EDB)	T	0.01	0.022	< 1 U	< 0.01 U	< 1 U	< 0.01 U	< 1 U	< 0.01 U	< 1 U	< 0.01 U	< 0.01 U
1,2-Dichlorobenzene	T	ne	720	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethane (EDC)	T	5	0.48	< 1 U	< 0.2 U	< 1 U	< 0.2 U	< 1 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U
1,2-Dichloropropane	T	ne	1.2	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,3,5-Trimethylbenzene	T	ne	80	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,3-Dichlorobenzene	T	ne	ne	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,3-Dichloropropane	T	ne	160	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,4-Dichlorobenzene	T	ne	8.1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
2,2-Dichloropropane	T	ne	ne	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
2-Butanone	T	ne	4800	< 10 U	< 20 U	< 10 U	< 20 U	< 10 U	< 20 U	< 10 U	< 20 U	< 20 U
2-Chlorotoluene	T	ne	160	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
2-Hexanone	T	ne	40	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
4-Chlorotoluene	T	ne	160	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
4-Methyl-2-pentanone	T	ne	640	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Acetone	T	ne	7200	< 50 U	< 50 UJ	< 50 U	< 50 UJ	< 50 U	< 50 UJ	< 50 U	< 50 UJ	< 50 UJ
Bromobenzene	T	ne	64	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromodichloromethane	T	ne	0.71	< 1 U	< 0.5 U	< 1 U	< 0.5 U	< 1 U	< 0.5 U	< 1 U	< 0.5 U	< 0.5 U
Bromoform	T	ne	5.5	< 1 U	< 5 U	< 1 U	< 5 U	< 1 U	< 5 U	< 1 U	< 5 U	< 5 U
Bromomethane	T	ne	11	< 1 U	< 5 U	< 1 U	< 5 U	< 1 U	< 5 U	< 1 U	< 5 U	< 5 U
Carbon Tetrachloride	T	ne	0.63	< 1 U	< 0.5 U	< 1 U	< 0.5 U	< 1 U	< 0.5 U	< 1 U	< 0.5 U	< 0.5 U
Chlorobenzene	T	ne	160	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroethane	T	ne	ne	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroform	T	ne	1.4	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloromethane	T	ne	ne	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
cis-1,3-Dichloropropene	T	ne	ne	< 1 U	< 0.4 U	< 1 U	< 0.4 U	< 1 U	< 0.4 U	< 1 U	< 0.4 U	< 0.4 U
Dibromochloromethane	T	ne	0.52	< 1 U	< 0.5 U	< 1 U	< 0.5 U	< 1 U	< 0.5 U	< 1 U	< 0.5 U	< 0.5 U
Dibromomethane	T	ne	80	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Dichlorodifluoromethane	T	ne	1600	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Isopropylbenzene	T	ne	800	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
m,p-Xylenes	T	ne	1600	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Methyl tert-butyl ether (MTBE)	T	20	24	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Methylene Chloride	T	5	5.8	< 5 U	< 5 UJ	< 5 U	< 5 UJ	< 5 U	< 5 UJ	< 5 U	< 5 UJ	< 5 UJ
n-Hexane	T	ne	480	< 1 U	< 5 U	< 1 U	< 5 U	< 1 U	< 5 U	< 1 U	< 5 U	< 5 U
n-Propylbenzene	T	ne	800	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
o-Xylene	T	ne	1600	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
p-Isopropyltoluene	T	ne	ne	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
sec-Butylbenzene	T	ne	800	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Styrene	T	ne	1600	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
tert-Butylbenzene	T	ne	800	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,3-Dichloropropene	T	ne	ne	< 1 U	< 0.4 U	< 1 U	< 0.4 U	< 1 U	< 0.4 U	< 1 U	< 0.4 U	< 0.4 U
Trichlorofluoromethane	T	ne	2400	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
PAHs												
Naphthalene	T	160	160	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U

Table 3b. Groundwater Analytical Results

Project No. AS180043, Evergreen Treatment Services, Seattle, WA

Location Name Sample Date				AMW-1 12/17/2018   11/05/2024		AMW-2 12/17/2018   11/05/2024		AMW-3 12/17/2018   11/05/2024		AMW-4 12/17/2018   11/05/2024		AMW-5 11/05/2024
Analyte	Fraction	MTCA Method A CUL	MTCA Method B CUL	Results in micrograms per liter (ug/L)								

Notes and Definitions:

MTCA	Model Toxics Control Act
CUL	Cleanup Level
ne	Indicated cleanup level is not yet established.
--	Not analyzed.
U	Analyte was not detected at a concentration greater than the indicated laboratory reporting limit.
J	The reported concecentration is an estimate. See laboratory report for details.
UJ	Analyte was not detected at a concentration greater than the indicated reporting limit and the reporting limit is estimated.
<b>Bold</b>	Analyte detected at a concetration greater than the laboratory reporting limit.
<b>Red Bold</b>	Detected concentration exceeds the Model Toxics Control Act (MTCA) Method B Cleanup Level but not the MTCA Method B Cleanup Level.
<b>Blue Shaded</b>	Detected concentration exceeds the Model Toxics Control Act (MTCA) Method A Cleanup Level, or the MTCA Method B Cleanup Level if Method A is not established.

## Table 4. Summary of Radon Test Results

Project No. AS180043, Evergreen Treatment Services, Seattle, Washington

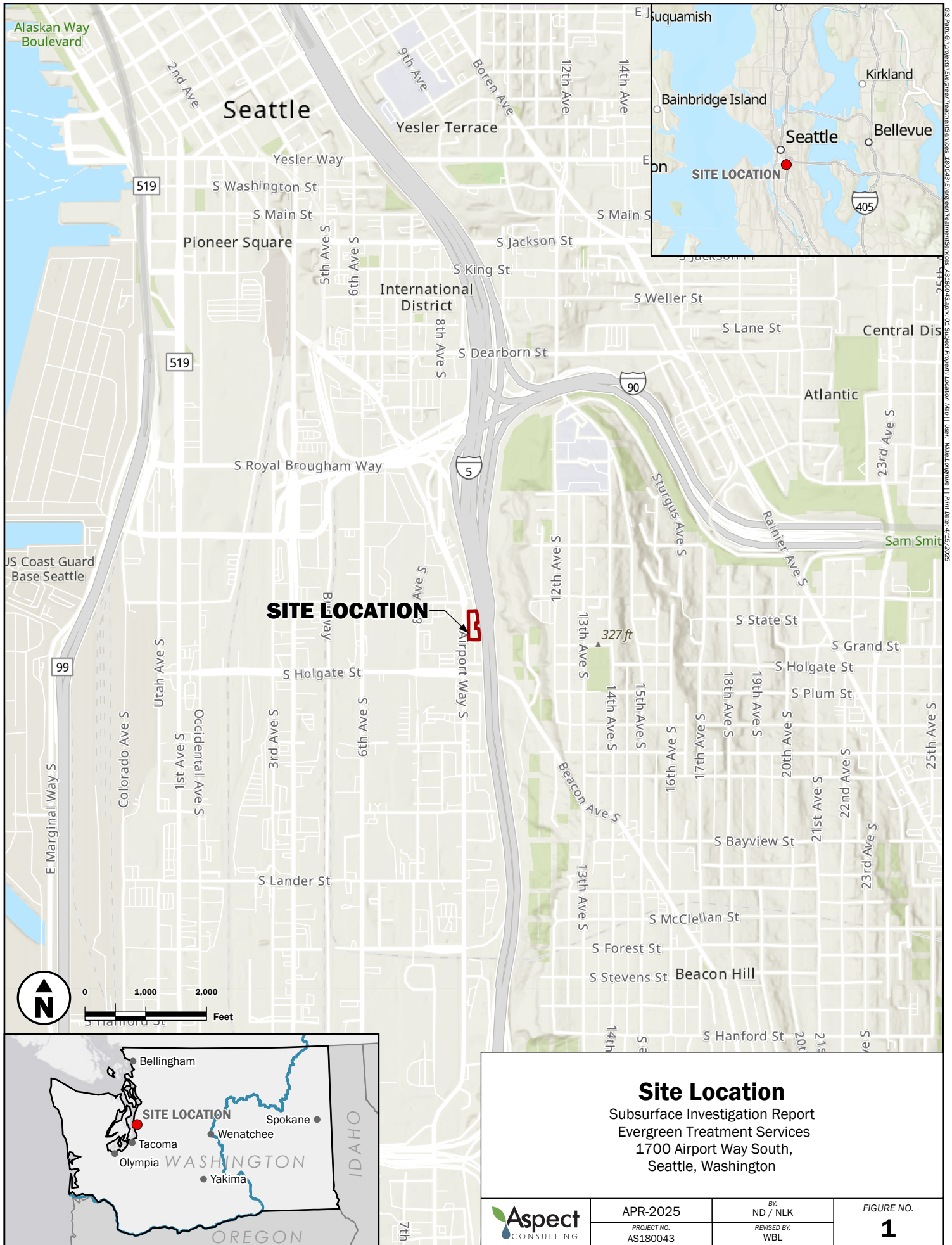
Location	Test Area	Radon Test Device Number	Test Start	Test End	Total Time (Hours)	Result (pCi/L)
<b>Preliminary Radon Test</b>						
1700 Airport Way S	North Warehouse Basement	5071311	11/19/24 8:00 AM	11/21/2024 10:00AM	50.0	< 0.4
	South Warehouse Basement	5110881	11/19/24 8:00 AM	11/21/2024 10:00AM	50.0	< 0.4
	Courtyard (Outdoors)	5110880	11/19/24 8:00 AM	11/21/2024 10:00AM	50.0	< 0.4
<b>United States Environmental Protection Agency (EPA) Action Level: 4.0</b>						

### Notes and Definitions:

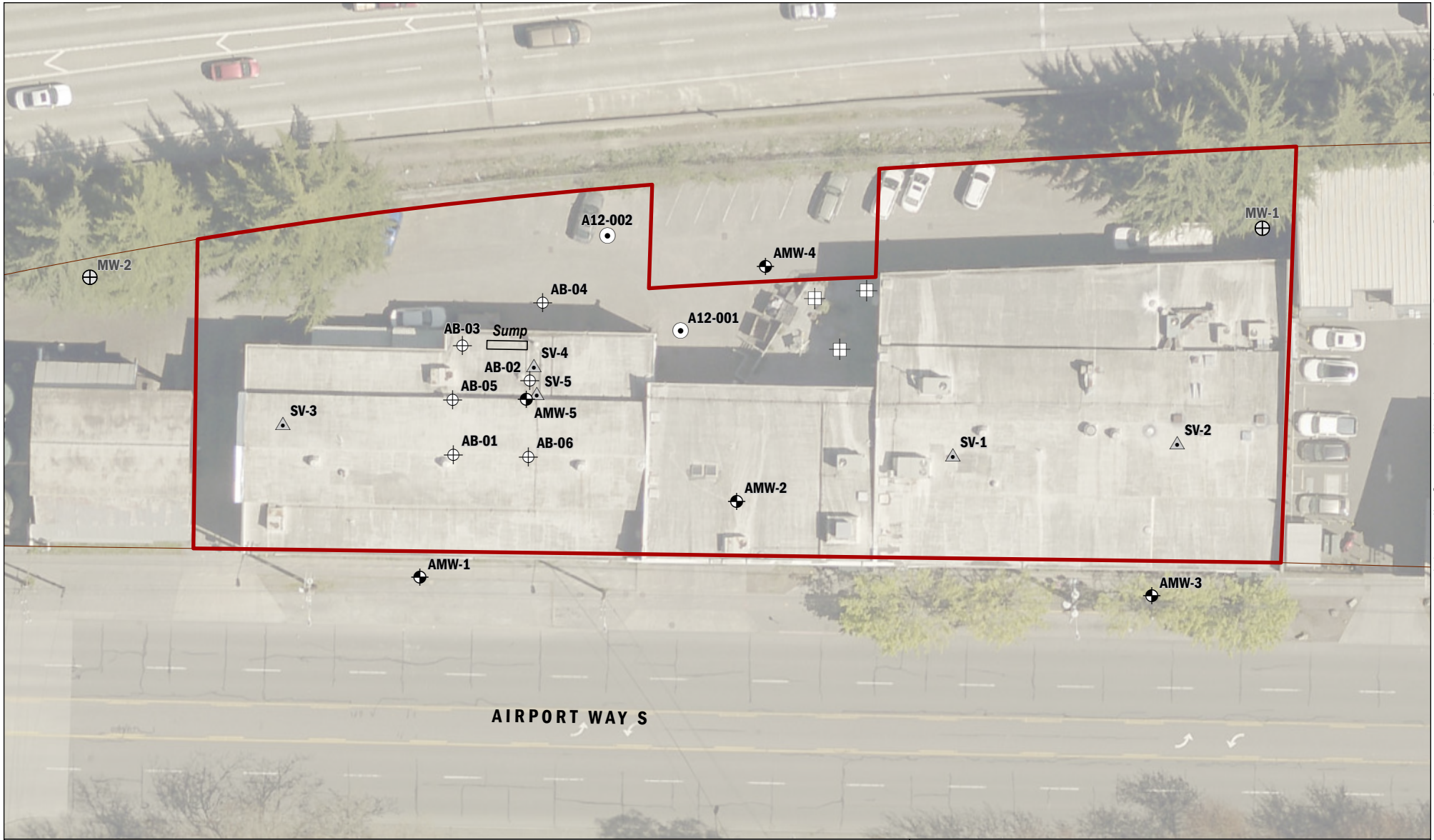
pCi/L      picocuries per liter

<          Detected radon activity was less than the indicated laboratory reporting limit.

# FIGURES







Soil Gas Sample Location  
(Aspect, 2018-2020)

Concrete Sample Location  
(NWES, 1995)

Shallow Soil Sample Location  
(NWES, 1995)

Groundwater Monitoring Well Location  
(Aspect, 2018-2024)

Soil Boring  
(Aspect, 2024)

Decommissioned Well  
(NWES, 1995)

Sump

Subject Property

King County Tax Parcel

N

02040

Feet

Data source credits: None || Basemap Service Layer Credits: EagleView Technologies, Inc.

### Site Map

Subsurface Investigation Report  
Evergreen Treatment Services  
1700 Airport Way South  
Seattle, Washington

APR-2025

PROJECT NO.  
AS180043

BY:  
ND / HMD

REVISED BY:  
WBL

FIGURE NO.

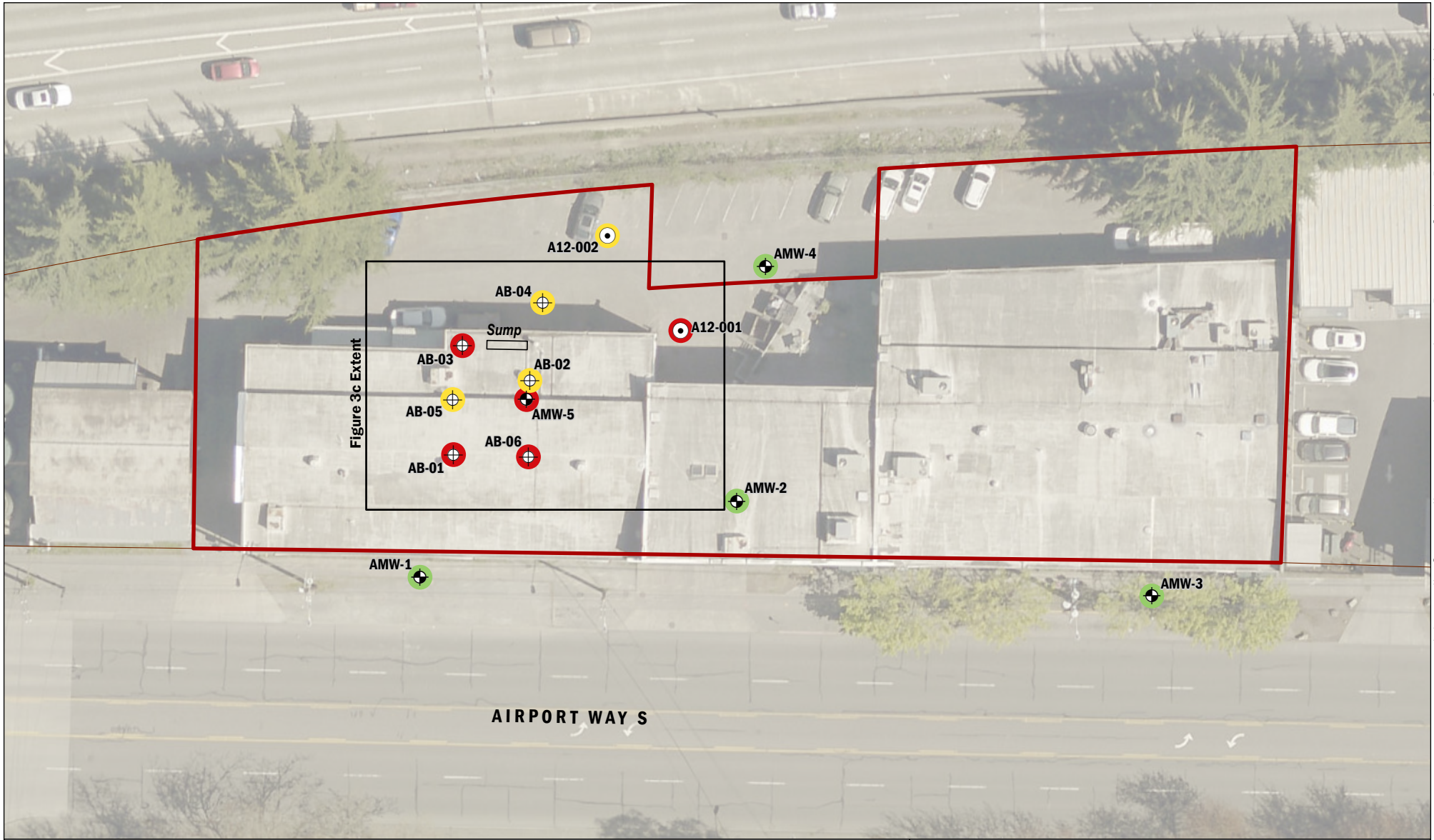
2

GIS Path: G:\Project\EvergreenTreatmentServices\_AS180043\EvergreenTreatmentServices\_AS180043.aprx 02 Site Map (Phase 1) | User: Mike Longstre | Print Date: 4/15/2025



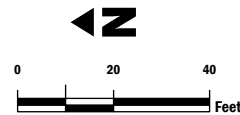






- Shallow Soil Sample Location (1995)
- Groundwater Monitoring Well Location
- Monitoring Well, Complete; Boring, Current
- One or More Analytes Exceed Screening Level
- One or More Analytes Detected, No Screening Level Exceedance
- No Analytes Detected

- Sump
- Subject Property
- King County Tax Parcel



Note:  
 - TPH = Total Petroleum Hydrocarbons  
 - VOCs = Volatile Organic Compounds  
 - See Report for details regarding analytes and chosen screening levels.

## Soil Analytical Results TPH and VOCs

Subsurface Investigation Report  
 Evergreen Treatment Services  
 1700 Airport Way South  
 Seattle, Washington

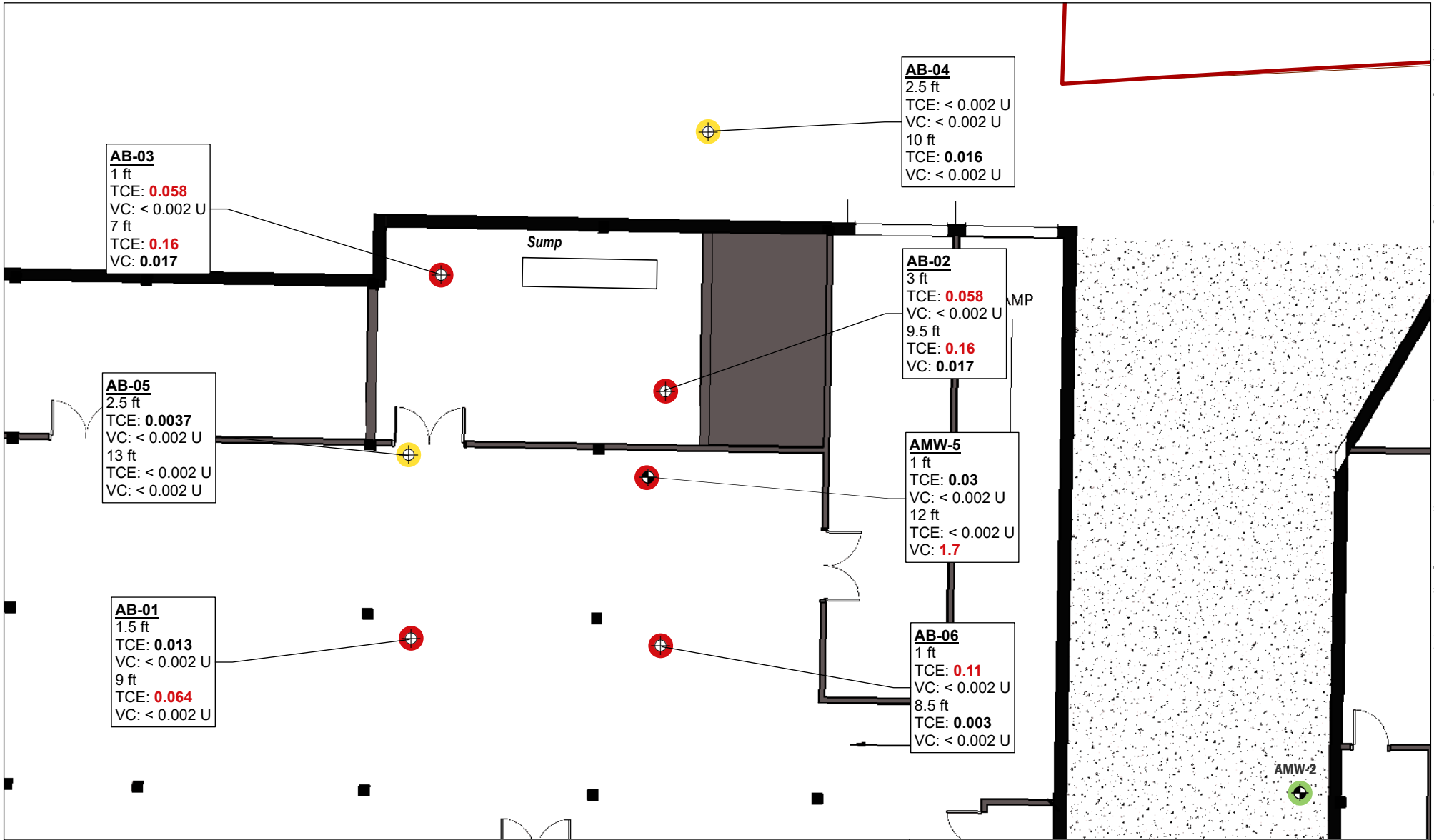


APR-2025  
 PROJECT NO.  
 AS180043

BY:  
 ND / NLK  
 REVISED BY:  
 WBL

FIGURE NO.  
**3b**





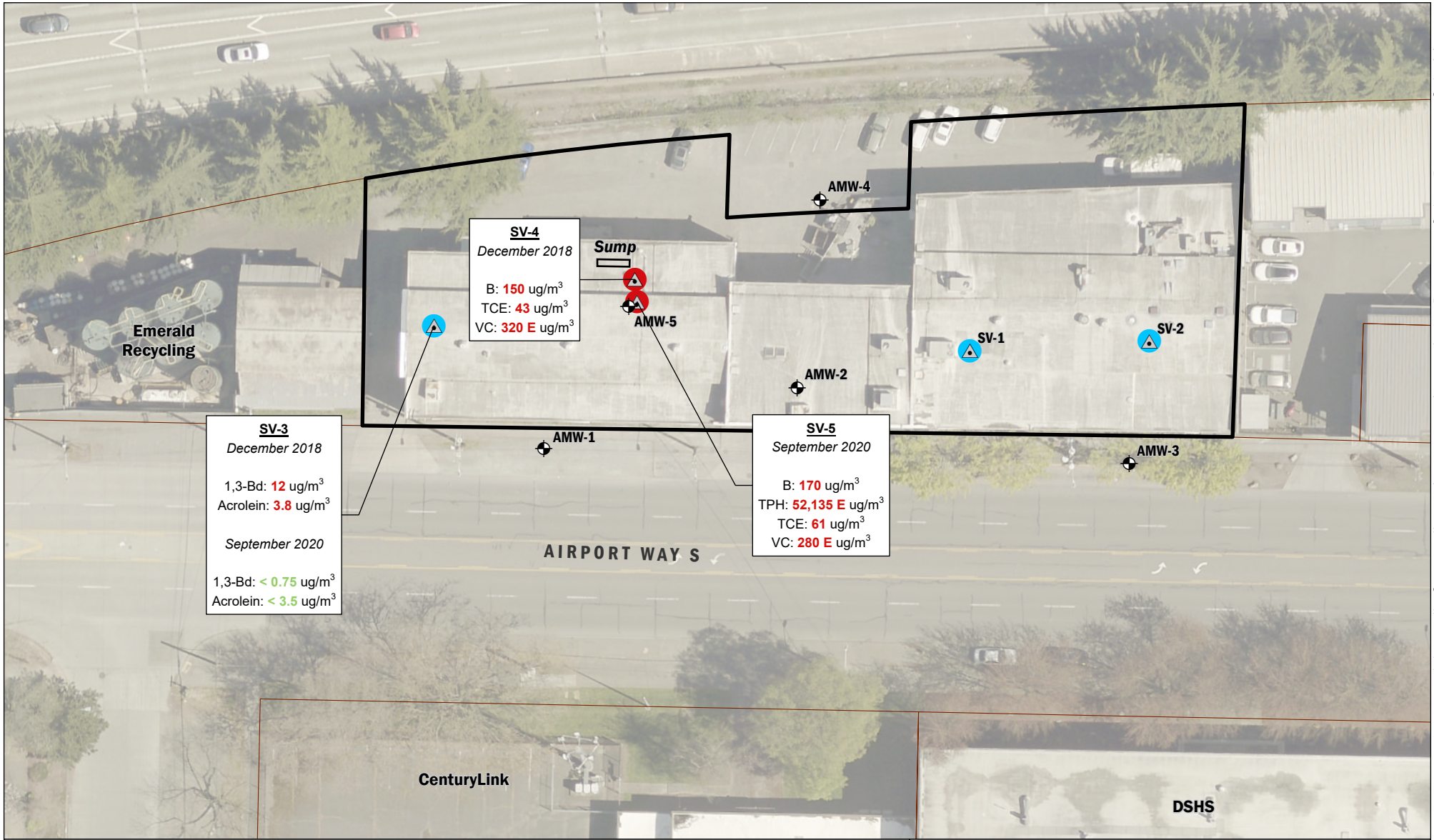
**Legend:**

- Groundwater Monitoring Well (Aspect, 2018; 2024)
- Soil Boring (Aspect, 2024)
- One or More Analytes Exceed Screening Level
- One or More Analytes Detected, No Screening Level Exceedance
- No Analytes Detected
- Sump
- Subject Property
- King County Tax Parcel

**Soil Analytical Results**  
**North Warehouse – VOCs**  
 Subsurface Investigation Report  
 Evergreen Treatment Services  
 1700 Airport Way South  
 Seattle, Washington

**Aspect CONSULTING**

APR-2025	BY: ND / NLK	FIGURE NO. <b>3c</b>
PROJECT NO. AS180043	REVISED BY: WBL	



Soil Gas Sample Location  
(Aspect, 2018-2020)

Groundwater Monitoring Well Location  
(Aspect, 2018-2024)

One or More Analytes Exceed  
Screening Level

One or More Analytes Detected,  
No Screening Level Exceedance

No Analytes Detected

Sump

Subject Property

King County Tax Parcel

Notes:

- B: Benzene

- TPH: Total Air-Phase Petroleum Hydrocarbons

- TCE: Trichloroethene

- VC: Vinyl Chloride

- 1,3-Bd: 1,3-Butadiene

## Summary of Soil Gas Chemical Analytical Results

Subsurface Investigation Report  
Evergreen Treatment Services  
1700 Airport Way South  
Seattle, Washington

APR-2025

PROJECT NO.  
AS180043

BY:  
ND / NLK

REVISED BY:  
WBL

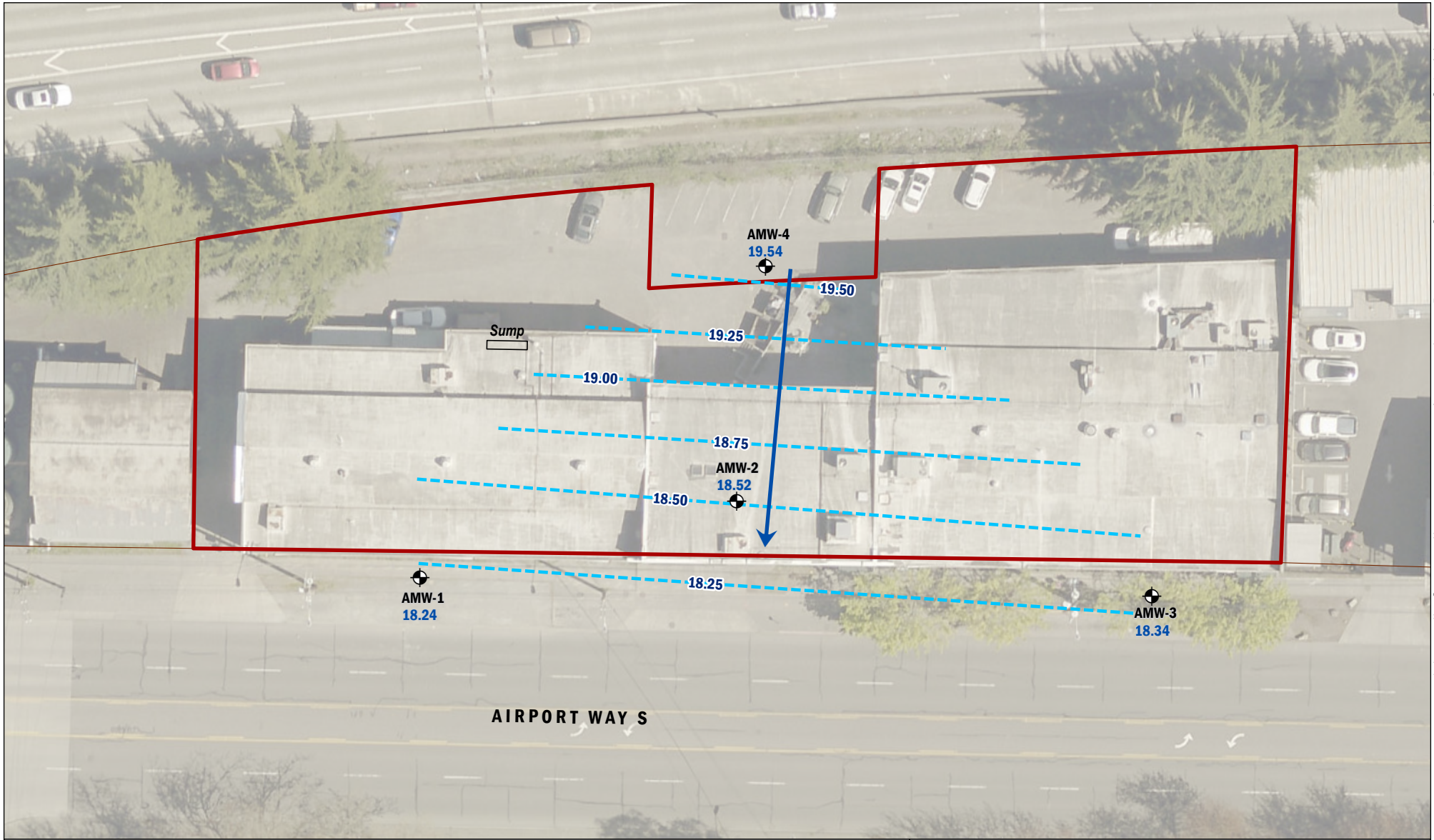
FIGURE NO.







4

Data source credits: DLC / EAC / SOC || Basemap Service Layer Credits: EagleView Technologies, Inc.

GIS Path: G:\Project\Environmental\AS180043 EvergreenTreatmentServices\AS180043.aprx OA Summary of Soil Gas Chemical Analytical Results | User: WBL\Longme | Print Date: 4/15/2025



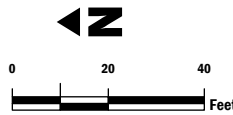


-  Groundwater Monitoring Well Location (Aspect, 2018)
-  GW Contour
-  GW Flow Direction
-  Sump
-  Subject Property
-  King County Tax Parcel

AMW-2  
18.52

Exploration Number

Groundwater Elevation (ft)



## Groundwater Elevations December 2018

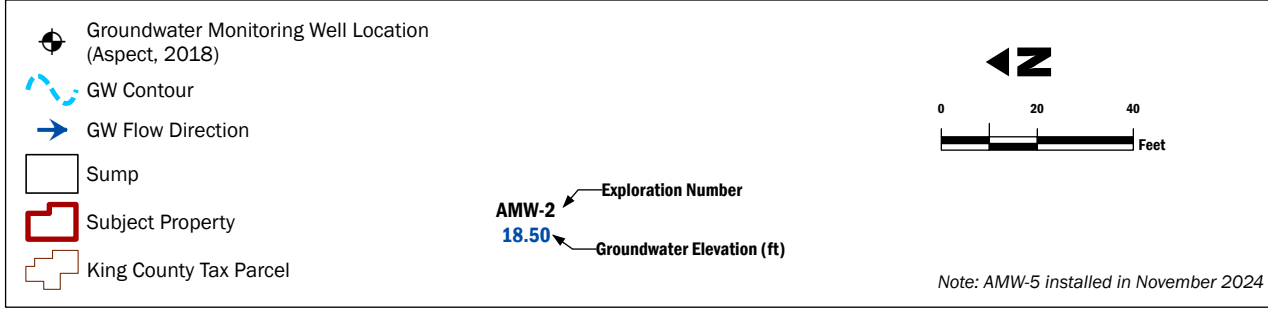
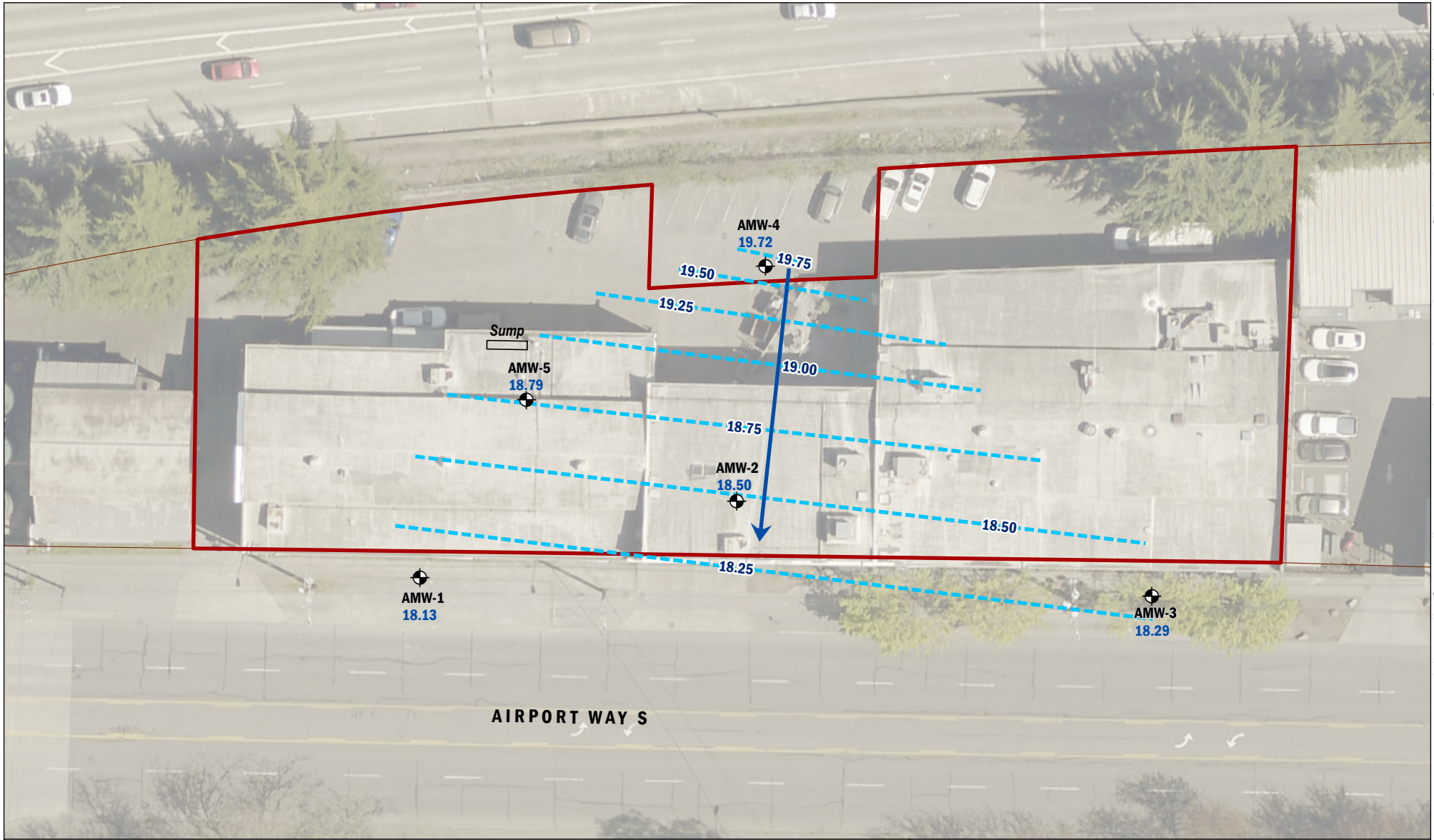
Subsurface Investigation Report  
Evergreen Treatment Services  
1700 Airport Way South  
Seattle, Washington



APR-2025  
PROJECT NO.  
AS180043

BY:  
ND / NLK  
REVISED BY:  
WBL

FIGURE NO.  
**5a**



## Groundwater Elevations November 2024

Subsurface Investigation Report  
Evergreen Treatment Services  
1700 Airport Way South  
Seattle, Washington

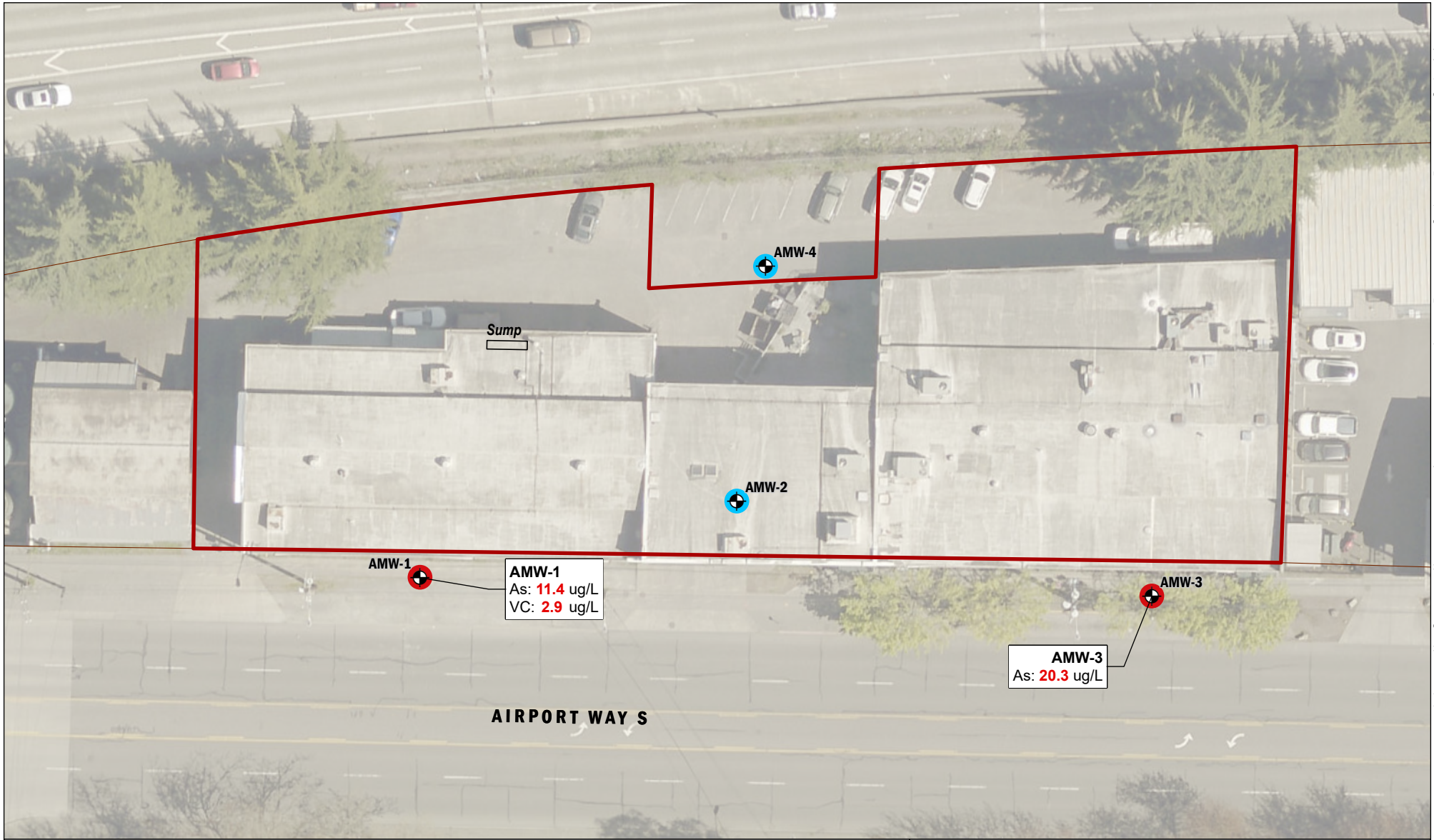






APR-2025  
PROJECT NO.  
AS180043




BY:  
ND / NLK  
REVISED BY:  
WBL

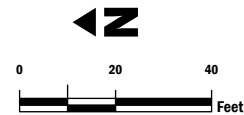
FIGURE NO.  
**5b**





-  Groundwater Monitoring Well Location (Aspect, 2018)
-  One or More Analytes Exceed Screening Level
-  One or More Analytes Detected, No Screening Level Exceedance
-  No Analytes Detected


-  Sump
-  Subject Property
-  King County Tax Parcel

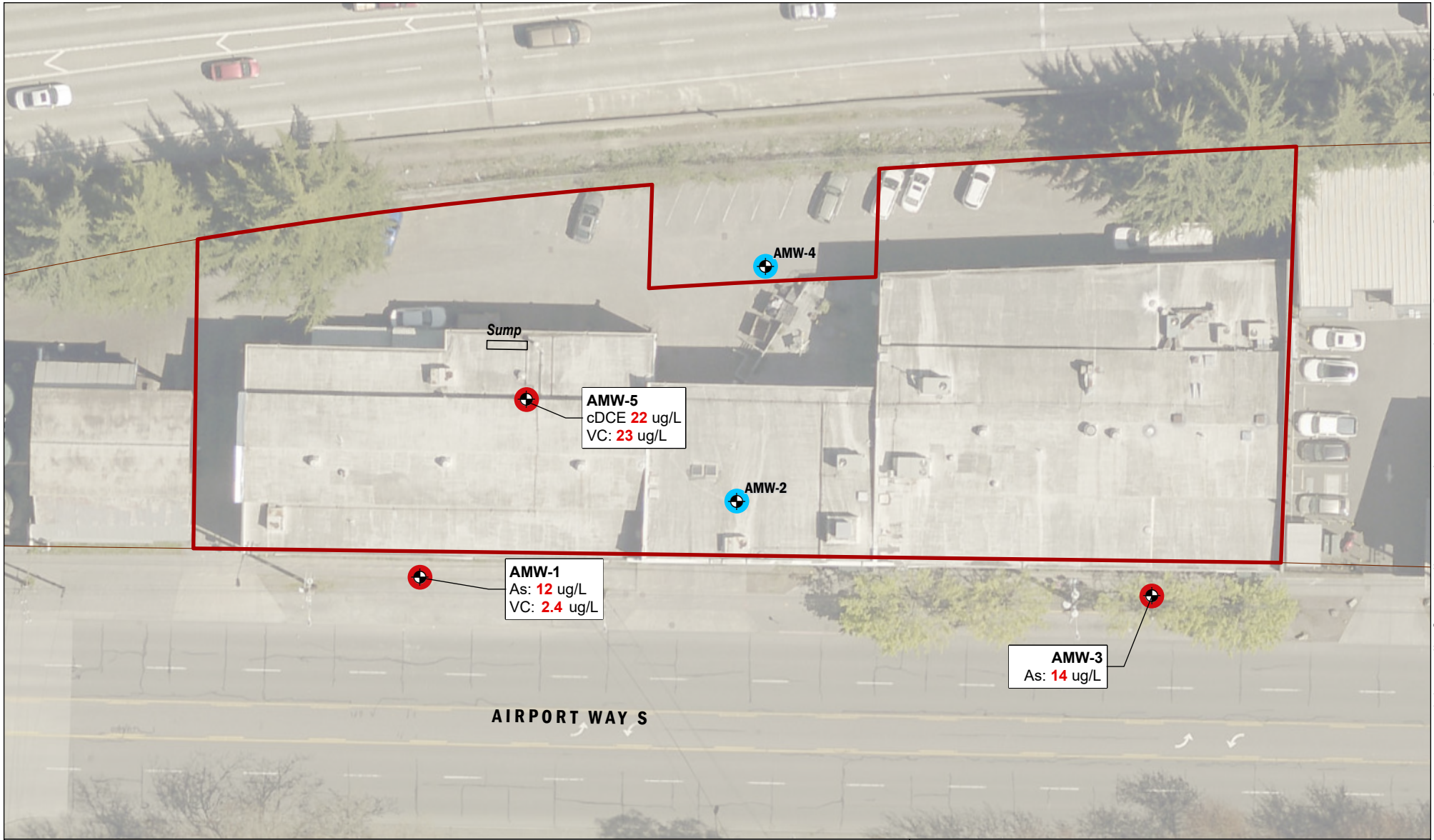


Notes:  
 Only analytical results which exceed the screening level are displayed.  
 - As = Dissolved Arsenic  
 - VC = Vinyl Chloride

## Groundwater Chemical Analytical Results December 2018

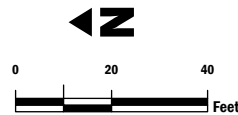
Subsurface Investigation Report  
 Evergreen Treatment Services  
 1700 Airport Way South  
 Seattle, Washington

	APR-2025	BY: ND / NLK	FIGURE NO. <b>6a</b>
	PROJECT NO. AS180043	REVISED BY: WBL	



- Groundwater Monitoring Well Location (Aspect, 2018)
- One or More Analytes Exceed Screening Level
- One or More Analytes Detected, No Screening Level Exceedance
- No Analytes Detected

- Sump
- Subject Property
- King County Tax Parcel



Notes:  
Only analytical results which exceed the screening level are displayed.  
- As = Dissolved Arsenic  
- cDCE = cis-1,2-Dichloroethene  
- VC = Vinyl Chloride

## Groundwater Chemical Analytical Results November 2024

Subsurface Investigation Report  
Evergreen Treatment Services  
1700 Airport Way South  
Seattle, Washington

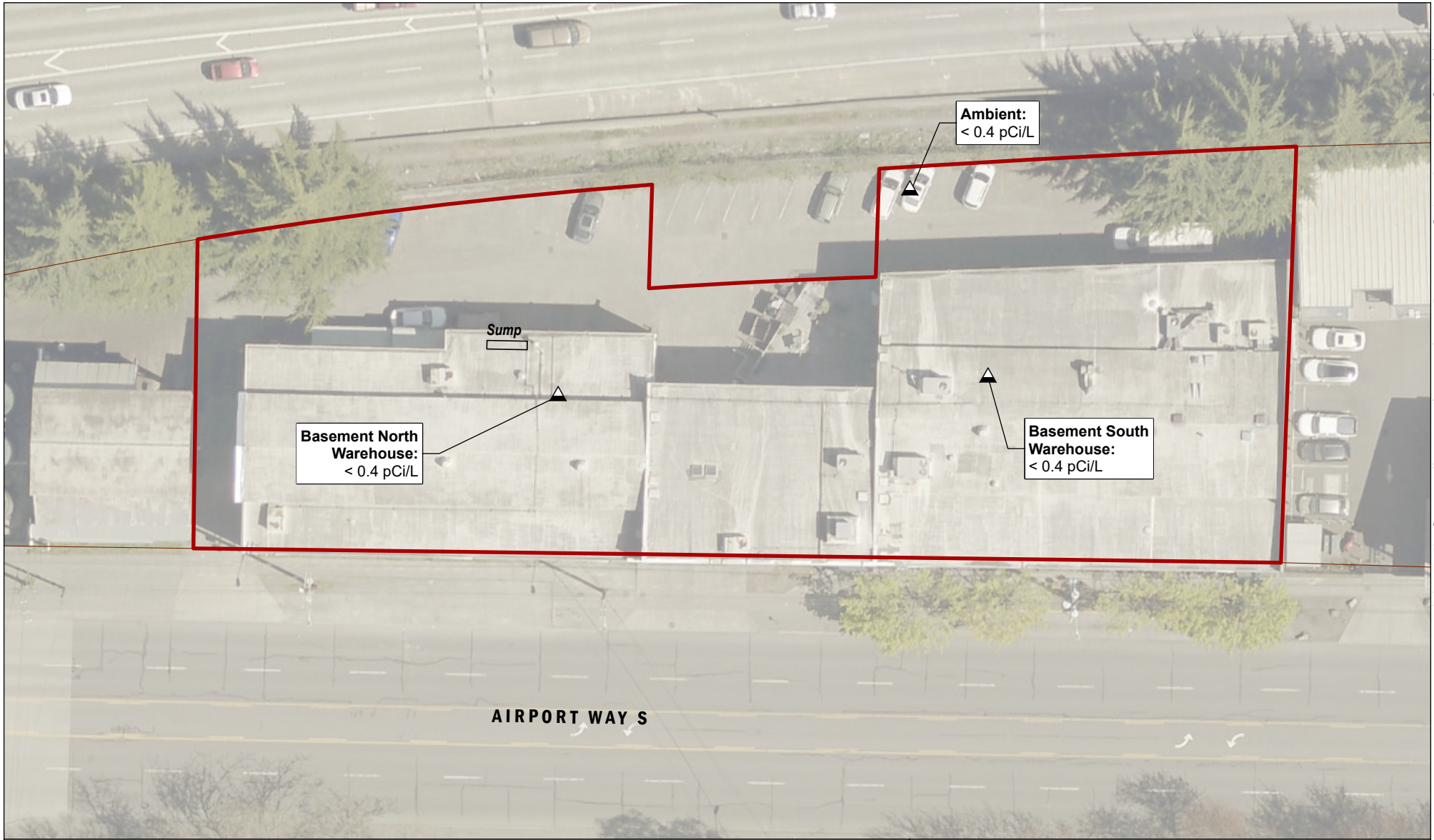


APR-2025  
PROJECT NO.  
AS180043

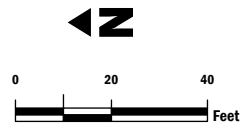
BY:  
ND / NLK  
REVISED BY:  
WBL

FIGURE NO.  
**6b**






- ▲ Radon Sample
- Sump
- ▭ Subject Property
- ⊕ King County Tax Parcel



Notes:  
- pCi/L = picocuries per liter

## Summary of Radon Results

Subsurface Investigation Report  
Evergreen Treatment Services  
1700 Airport Way South  
Seattle, Washington

	APR-2025	BY: ND / HMD	FIGURE NO. <b>7</b>
	PROJECT NO. AS180043	REVISED BY: WBL	

## **APPENDIX A**

### **Previous Environmental Reports**



## **APPENDIX B**

### **Laboratory and Survey Reports**

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Yelena Aravkina, M.S.  
Michael Erdahl, B.S.  
Arina Podnozova, B.S.  
Eric Young, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
(206) 285-8282  
fbi@isomedia.com  
www.friedmanandbruya.com

December 19, 2018

Dana Cannon, Project Manager  
Aspect Consulting, LLC  
401 2<sup>nd</sup> Ave S, Suite 201  
Seattle, WA 98104

Dear Ms Cannon:

Included are the results from the testing of material submitted on December 11, 2018 from the Evergreen Treatment Services 180043, F&BI 812129 project. There are 23 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures

c: Data Aspect, Kristin Beck  
ASP1219R.DOC

# FRIEDMAN & BRUYA, INC.

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## ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on December 11, 2018 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Evergreen Treatment Services 180043, F&BI 812129 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Aspect Consulting, LLC</u>
812129 -01	AMW-1-2.5
812129 -02	AMW-1-12.5
812129 -03	AMW-2-2.5
812129 -04	AMW-2-5.5
812129 -05	AMW-2-19.5
812129 -06	AMW-3-5.0
812129 -07	AMW-3-10.0
812129 -08	AMW-3-15.0
812129 -09	AMW-4-2.5
812129 -10	AMW-4-8.0
812129 -11	AMW-4-14.0
812129 -12	AMW-4-19.0

A 6020A internal standard failed the acceptance criteria for sample AMW-1-12.5 due to matrix interferences. The data were flagged accordingly. The sample was diluted and reanalyzed.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/19/18

Date Received: 12/11/18

Project: Evergreen Treatment Services 180043, F&BI 812129

Date Extracted: 12/12/18

Date Analyzed: 12/12/18

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE  
USING METHOD NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate (% Recovery) (Limit 50-150)
AMW-1-12.5 812129-02	<5	87
AMW-2-2.5 812129-03	<5	83
AMW-2-5.5 812129-04	<5	83
AMW-3-5.0 812129-06	<5	85
AMW-4-2.5 812129-09	<5	82
AMW-4-8.0 812129-10	<5	83
Method Blank 08-2777 MB	<5	87

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/19/18

Date Received: 12/11/18

Project: Evergreen Treatment Services 180043, F&BI 812129

Date Extracted: 12/12/18

Date Analyzed: 12/12/18

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL AND MOTOR OIL  
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C <sub>10</sub> -C <sub>25</sub> )	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 53-144)
AMW-1-12.5 812129-02	<50	<250	83
AMW-2-2.5 812129-03	<50	<250	91
AMW-2-5.5 812129-04	<50	<250	90
AMW-3-5.0 812129-06	<50	<250	84
AMW-4-2.5 812129-09	<50	<250	83
AMW-4-8.0 812129-10	<50	<250	91
Method Blank 08-2786 MB	<50	<250	95

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-1-12.5	Client:	Aspect Consulting, LLC
Date Received:	12/11/18	Project:	Evergreen Treatment Services
Date Extracted:	12/14/18	Lab ID:	812129-02
Date Analyzed:	12/14/18	Data File:	812129-02.093
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	27.8
Cadmium	2.00
Chromium	22.2
Copper	404
Lead	3,740 ve J
Mercury	<1 J
Nickel	19.6
Zinc	911

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-1-12.5	Client:	Aspect Consulting, LLC
Date Received:	12/11/18	Project:	Evergreen Treatment Services
Date Extracted:	12/14/18	Lab ID:	812129-02 x25
Date Analyzed:	12/17/18	Data File:	812129-02 x25.033
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Lead	4,720
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# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-2-2.5	Client:	Aspect Consulting, LLC
Date Received:	12/11/18	Project:	Evergreen Treatment Services
Date Extracted:	12/14/18	Lab ID:	812129-03
Date Analyzed:	12/14/18	Data File:	812129-03.094
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	6.93
Cadmium	<1
Chromium	42.6
Copper	28.7
Lead	35.3
Mercury	<1
Nickel	44.0
Zinc	66.8



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-3-5.0	Client:	Aspect Consulting, LLC
Date Received:	12/11/18	Project:	Evergreen Treatment Services
Date Extracted:	12/14/18	Lab ID:	812129-06
Date Analyzed:	12/14/18	Data File:	812129-06.095
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.39
Cadmium	<1
Chromium	34.1
Copper	29.8
Lead	5.21
Mercury	<1
Nickel	49.7
Zinc	48.8

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-4-2.5	Client:	Aspect Consulting, LLC
Date Received:	12/11/18	Project:	Evergreen Treatment Services
Date Extracted:	12/14/18	Lab ID:	812129-09
Date Analyzed:	12/14/18	Data File:	812129-09.108
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.59
Cadmium	<1
Chromium	18.2
Copper	22.0
Lead	32.1
Mercury	<1
Nickel	21.5
Zinc	71.2

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-4-8.0	Client:	Aspect Consulting, LLC
Date Received:	12/11/18	Project:	Evergreen Treatment Services
Date Extracted:	12/14/18	Lab ID:	812129-10
Date Analyzed:	12/14/18	Data File:	812129-10.109
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Cadmium	<1
Chromium	23.4
Copper	11.4
Lead	7.35
Mercury	<1
Nickel	35.7
Zinc	25.7

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	NA	Project:	Evergreen Treatment Services
Date Extracted:	12/14/18	Lab ID:	I8-860 mb
Date Analyzed:	12/14/18	Data File:	I8-860 mb.057
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Cadmium	<1
Chromium	<1
Copper	<5
Lead	<1
Mercury	<1
Nickel	<1
Zinc	<5

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	AMW-3-5.0	Client:	Aspect Consulting, LLC
Date Received:	12/11/18	Project:	Evergreen Treatment Services
Date Extracted:	12/14/18	Lab ID:	812129-06 1/5
Date Analyzed:	12/14/18	Data File:	121407.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	76	31	163
Benzo(a)anthracene-d12	73	24	168

Compounds:	Concentration mg/kg (ppm)
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	AMW-4-2.5	Client:	Aspect Consulting, LLC
Date Received:	12/11/18	Project:	Evergreen Treatment Services
Date Extracted:	12/14/18	Lab ID:	812129-09 1/5
Date Analyzed:	12/14/18	Data File:	121408.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	84	31	163
Benzo(a)anthracene-d12	89	24	168

Compounds:	Concentration mg/kg (ppm)
Benz(a)anthracene	0.013
Chrysene	0.017
Benzo(a)pyrene	0.020
Benzo(b)fluoranthene	0.028
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	0.018
Dibenz(a,h)anthracene	<0.01

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	Not Applicable	Project:	Evergreen Treatment Services
Date Extracted:	12/14/18	Lab ID:	08-2796 mb 1/5
Date Analyzed:	12/14/18	Data File:	121406.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	81	31	163
Benzo(a)anthracene-d12	83	24	168

Compounds:	Concentration mg/kg (ppm)
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	AMW-1-12.5	Client:	Aspect Consulting, LLC
Date Received:	12/11/18	Project:	Evergreen Treatment Services
Date Extracted:	12/12/18	Lab ID:	812129-02
Date Analyzed:	12/12/18	Data File:	121208.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	62	142
Toluene-d8	97	55	145
4-Bromofluorobenzene	103	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<0.5	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	AMW-4-8.0	Client:	Aspect Consulting, LLC
Date Received:	12/11/18	Project:	Evergreen Treatment Services
Date Extracted:	12/12/18	Lab ID:	812129-10
Date Analyzed:	12/12/18	Data File:	121209.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	62	142
Toluene-d8	100	55	145
4-Bromofluorobenzene	106	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<0.5	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	Not Applicable	Project:	Evergreen Treatment Services
Date Extracted:	12/12/18	Lab ID:	08-2753 mb2
Date Analyzed:	12/12/18	Data File:	121207.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	97	55	145
4-Bromofluorobenzene	101	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<0.5	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/19/18

Date Received: 12/11/18

Project: Evergreen Treatment Services 180043, F&BI 812129

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES  
FOR TPH AS GASOLINE  
USING METHOD NWTPH-Gx**

Laboratory Code: 812139-28 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	mg/kg (ppm)	20	105	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/19/18

Date Received: 12/11/18

Project: Evergreen Treatment Services 180043, F&BI 812129

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL  
SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 812129-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	88	100	64-133	13

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	94	58-147

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 12/19/18

Date Received: 12/11/18

Project: Evergreen Treatment Services 180043, F&BI 812129

### **QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 6020B**

Laboratory Code: 812190-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	4.23	110	107	75-125	3
Cadmium	mg/kg (ppm)	10	<1	109	104	75-125	5
Chromium	mg/kg (ppm)	50	6.42	102	101	75-125	1
Copper	mg/kg (ppm)	50	<5	97	96	75-125	1
Lead	mg/kg (ppm)	50	3.91	107	104	75-125	3
Mercury	mg/kg (ppm)	5	<1	108	108	75-125	0
Nickel	mg/kg (ppm)	25	5.06	101	96	75-125	5
Zinc	mg/kg (ppm)	50	10.8	96	91	75-125	5

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	104	80-120
Cadmium	mg/kg (ppm)	10	107	80-120
Chromium	mg/kg (ppm)	50	110	80-120
Copper	mg/kg (ppm)	50	109	80-120
Lead	mg/kg (ppm)	50	109	80-120
Mercury	mg/kg (ppm)	5	108	80-120
Nickel	mg/kg (ppm)	25	113	80-120
Zinc	mg/kg (ppm)	50	101	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/19/18

Date Received: 12/11/18

Project: Evergreen Treatment Services 180043, F&BI 812129

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL  
SAMPLES FOR PAHS BY EPA METHOD 8270D SIM**

Laboratory Code: 812129-09 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Benz(a)anthracene	mg/kg (ppm)	0.17	0.012	93	23-144
Chrysene	mg/kg (ppm)	0.17	0.016	88	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.026	107	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	98	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	0.019	100	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	0.018	89	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	87	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Benz(a)anthracene	mg/kg (ppm)	0.17	89	89	51-115	0
Chrysene	mg/kg (ppm)	0.17	92	92	55-129	0
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	101	101	56-123	0
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	99	97	54-131	2
Benzo(a)pyrene	mg/kg (ppm)	0.17	88	86	51-118	2
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	98	95	49-148	3
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	97	97	50-141	0

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 12/19/18

Date Received: 12/11/18

Project: Evergreen Treatment Services 180043, F&BI 812129

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 812128-09 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	26	27	10-142	4
Chloromethane	mg/kg (ppm)	2.5	<0.5	53	53	10-126	0
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	58	61	10-138	5
Bromomethane	mg/kg (ppm)	2.5	<0.5	61	67	10-163	9
Chloroethane	mg/kg (ppm)	2.5	<0.5	69	71	10-176	3
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	67	68	10-176	1
Acetone	mg/kg (ppm)	12.5	<0.5	85	84	10-163	1
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	76	76	10-160	0
Hexane	mg/kg (ppm)	2.5	<0.25	63	65	10-137	3
Methylene chloride	mg/kg (ppm)	2.5	<0.5	103	106	10-156	3
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	89	90	21-145	1
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	84	84	14-137	0
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	87	88	19-140	1
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	86	87	10-158	1
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	89	90	25-135	1
Chloroform	mg/kg (ppm)	2.5	<0.05	92	93	21-145	1
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	88	87	19-147	1
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	92	92	12-160	0
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	91	92	10-156	1
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	88	89	17-140	1
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	98	99	9-164	1
Benzene	mg/kg (ppm)	2.5	<0.03	86	87	29-129	1
Trichloroethene	mg/kg (ppm)	2.5	<0.02	85	86	21-139	1
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	93	95	30-135	2
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	97	98	23-155	1
Dibromomethane	mg/kg (ppm)	2.5	<0.05	89	89	23-145	0
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	96	97	24-155	1
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	94	94	28-144	0
Toluene	mg/kg (ppm)	2.5	<0.05	88	88	35-130	0
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	93	93	26-149	0
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	91	92	10-205	1
2-Hexanone	mg/kg (ppm)	12.5	<0.5	93	93	15-166	0
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	94	95	31-137	1
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	86	87	20-133	1
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	103	104	28-150	1
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	91	91	28-142	0
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	90	91	32-129	1
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	90	91	32-137	1
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	99	99	31-143	0
m,p-Xylene	mg/kg (ppm)	5	<0.1	88	89	34-136	1
o-Xylene	mg/kg (ppm)	2.5	<0.05	91	91	33-134	0
Styrene	mg/kg (ppm)	2.5	<0.05	91	92	35-137	1
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	92	92	31-142	0
Bromoform	mg/kg (ppm)	2.5	<0.05	107	107	21-156	0
n-Propylbenzene	mg/kg (ppm)	2.5	<0.05	94	95	23-146	1
Bromobenzene	mg/kg (ppm)	2.5	<0.05	93	94	34-130	1
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	94	95	18-149	1
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	95	97	28-140	2
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	95	96	25-144	1
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	92	93	31-134	1
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	93	95	31-136	2
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	92	93	30-137	1
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	92	94	10-182	2
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.05	92	93	23-145	1
p-Isopropyltoluene	mg/kg (ppm)	2.5	<0.05	93	94	21-149	1
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	90	92	30-131	2
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	90	92	29-129	2
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	90	91	31-132	1
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	95	97	11-161	2
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	86	89	22-142	3
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	89	90	10-142	1
Naphthalene	mg/kg (ppm)	2.5	<0.05	86	87	14-157	1
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	85	87	20-144	2

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 12/19/18

Date Received: 12/11/18

Project: Evergreen Treatment Services 180043, F&BI 812129

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	52	10-146
Chloromethane	mg/kg (ppm)	2.5	70	27-133
Vinyl chloride	mg/kg (ppm)	2.5	80	22-139
Bromomethane	mg/kg (ppm)	2.5	77	38-114
Chloroethane	mg/kg (ppm)	2.5	88	10-163
Trichlorofluoromethane	mg/kg (ppm)	2.5	90	10-196
Acetone	mg/kg (ppm)	12.5	94	52-141
1,1-Dichloroethene	mg/kg (ppm)	2.5	92	47-128
Hexane	mg/kg (ppm)	2.5	87	43-142
Methylene chloride	mg/kg (ppm)	2.5	99	42-132
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	101	60-123
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	97	67-127
1,1-Dichloroethane	mg/kg (ppm)	2.5	100	68-115
2,2-Dichloropropane	mg/kg (ppm)	2.5	100	52-170
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	102	72-113
Chloroform	mg/kg (ppm)	2.5	104	66-120
2-Butanone (MEK)	mg/kg (ppm)	12.5	96	57-123
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	104	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	106	62-131
1,1-Dichloropropene	mg/kg (ppm)	2.5	102	69-128
Carbon tetrachloride	mg/kg (ppm)	2.5	115	60-139
Benzene	mg/kg (ppm)	2.5	98	68-114
Trichloroethene	mg/kg (ppm)	2.5	97	64-117
1,2-Dichloropropane	mg/kg (ppm)	2.5	104	72-127
Bromodichloromethane	mg/kg (ppm)	2.5	108	72-130
Dibromomethane	mg/kg (ppm)	2.5	100	70-120
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	106	45-145
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	103	75-136
Toluene	mg/kg (ppm)	2.5	98	66-126
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	102	72-132
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	101	75-113
2-Hexanone	mg/kg (ppm)	12.5	101	33-152
1,3-Dichloropropane	mg/kg (ppm)	2.5	105	72-130
Tetrachloroethene	mg/kg (ppm)	2.5	96	72-114
Dibromochloromethane	mg/kg (ppm)	2.5	114	74-125
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	102	74-132
Chlorobenzene	mg/kg (ppm)	2.5	101	76-111
Ethylbenzene	mg/kg (ppm)	2.5	100	64-123
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	110	69-135
m,p-Xylene	mg/kg (ppm)	5	97	78-122
o-Xylene	mg/kg (ppm)	2.5	100	77-124
Styrene	mg/kg (ppm)	2.5	102	74-126
Isopropylbenzene	mg/kg (ppm)	2.5	101	76-127
Bromoform	mg/kg (ppm)	2.5	119	56-132
n-Propylbenzene	mg/kg (ppm)	2.5	103	74-124
Bromobenzene	mg/kg (ppm)	2.5	102	72-122
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	103	76-126
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	106	56-143
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	105	61-137
2-Chlorotoluene	mg/kg (ppm)	2.5	101	74-121
4-Chlorotoluene	mg/kg (ppm)	2.5	103	75-122
tert-Butylbenzene	mg/kg (ppm)	2.5	102	73-130
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	101	76-125
sec-Butylbenzene	mg/kg (ppm)	2.5	103	71-130
p-Isopropyltoluene	mg/kg (ppm)	2.5	102	70-132
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	100	75-121
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	99	74-117
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	100	76-121
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	108	58-138
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	96	64-135
Hexachlorobutadiene	mg/kg (ppm)	2.5	98	50-153
Naphthalene	mg/kg (ppm)	2.5	96	63-140
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	95	63-138



**Data Qualifiers & Definitions**

- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The compound is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs - Headspace was present in the container used for analysis.
- ht - The analysis was performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

812129

SAMPLE CHAIN OF CUSTODY

ME 12/11/18

135/223

Report To Dana Cannon & Kristin Beck

Company Aspect Consulting

Address 710 2nd Ave, Suite 550

City, State, ZIP Seattle, WA 98104

Phone \_\_\_\_\_ Email \_\_\_\_\_

SAMPLERS (signature) Kristin Beck

PROJECT NAME

Evergreen Treatment Service

PO #

180043

REMARKS

Please hold

INVOICE TO

Accts payable

Page # 1 of 2

TURNAROUND TIME

☒ Standard Turnaround

☐ RUSH

Rush charges authorized by: \_\_\_\_\_

SAMPLE DISPOSAL

☒ Dispose after 30 days

☐ Archive Samples

☐ Other \_\_\_\_\_

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8280C	SVOCs by 8270D	PAHs 8270D SIM	cPAHs	Metals	
AMW-1-2.5	01A-E	12/9/18	1025	Soil	5										(As, Cd, Cr, Cu, Hg, Pb, Ni, Zn)
AMW-1-8.5			1445												CO2 12-11-18
AMW-1-12.5	02A-E		1208			X	X		X				X		# did not receive
AMW-2-2.5	03		1450			X	X						X		X-pvdc
AMW-2-5.5	04		1505			X	X								12/11/18
AMW-2-19.5	05		1528												ML
AMW-3-5.0	06		0930			X	X						X		
AMW-3-10.0	07		0956												
AMW-3-15.0	08		1009												
AMW-4-2.5	09		1550			X	X						X		3 °C

SIGNATURE

Relinquished by: [Signature]

PRINT NAME

Kristin Beck

COMPANY

Aspect

DATE

12/11/18

TIME

0825

Received by:

[Signature]

Michelle Langston

FBT

12/11/18

0825



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Yelena Aravkina, M.S.  
Michael Erdahl, B.S.  
Arina Podnozova, B.S.  
Eric Young, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
(206) 285-8282  
fbi@isomedia.com  
www.friedmanandbruya.com

December 19, 2018

Dana Cannon, Project Manager  
Aspect Consulting, LLC  
401 2<sup>nd</sup> Ave S, Suite 201  
Seattle, WA 98104

Dear Ms Cannon:

Included are the results from the testing of material submitted on December 11, 2018 from the Evergreen Treatment Services 180043, F&BI 812130 project. There are 11 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures

c: Data Aspect, Kristin Beck  
ASP1219R.DOC

# FRIEDMAN & BRUYA, INC.

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## ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on December 11, 2018 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Evergreen Treatment Services 180043, F&BI 812130 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Aspect Consulting, LLC</u>
812130 -01	SV-1
812130 -02	SV-2
812130 -03	SV-3
812130 -04	SV-4

The TO-15 ethanol concentration for sample SV-1, ethanol and acetone for sample SV-3, and several other compounds for sample SV-4 exceeded the calibration range. In addition, calibration standard for tetrahydrofuran did not pass the acceptance criteria. The data were flagged accordingly.

All other quality control requirements were acceptable.

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID: SV-1	Client: Aspect Consulting, LLC
Date Received: 12/11/18	Project: Evergreen Treatment Services 180043
Date Collected: 12/10/18	Lab ID: 812130-01 1/1.4
Date Analyzed: 12/12/18	Data File: 121120.D
Matrix: Air	Instrument: GCMS7
Units: ug/m3	Operator: BAT/MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:		
4-Bromofluorobenzene	114	70	130		
Concentration					
Concentration					
Compounds:	ug/m3	ppbv	Compounds:	ug/m3	ppbv
Propene	<1	<0.56	1,2-Dichloropropane	0.90	0.19
Dichlorodifluoromethane	2.9	0.60	1,4-Dioxane	<0.5	<0.14
Chloromethane	<2.9	<1.4	2,2,4-Trimethylpentane	<6.5	<1.4
F-114	<0.98	<0.14	Methyl methacrylate	<5.7	<1.4
Vinyl chloride	<0.36	<0.14	Heptane	11	2.6
1,3-Butadiene	<0.03	<0.04	Bromodichloromethane	<0.094	<0.014
Butane	15	6.5	Trichloroethene	26	4.9
Bromomethane	<2.2	<0.56	cis-1,3-Dichloropropene	<0.64	<0.14
Chloroethane	<3.7	<1.4	4-Methyl-2-pentanone	<5.7	<1.4
Vinyl bromide	<0.61	<0.14	trans-1,3-Dichloropropene	<0.64	<0.14
Ethanol	280 ve	150 ve	Toluene	25	6.7
Acrolein	<1.3	<0.56	1,1,2-Trichloroethane	<0.15	<0.028
Pentane	12	4.2	2-Hexanone	<5.7	<1.4
Trichlorofluoromethane	<3.1	<0.56	Tetrachloroethene	<9.5	<1.4
Acetone	130	54	Dibromochloromethane	<0.12	<0.014
2-Propanol	66	27	1,2-Dibromoethane (EDB)	<0.11	<0.014
1,1-Dichloroethene	<0.56	<0.14	Chlorobenzene	<0.64	<0.14
trans-1,2-Dichloroethene	<0.56	<0.14	Ethylbenzene	5.6	1.3
Methylene chloride	<120	<35	1,1,2,2-Tetrachloroethane	<0.19	<0.028
t-Butyl alcohol (TBA)	<17	<5.6	Nonane	<7.3	<1.4
3-Chloropropene	<1.8	<0.56	Isopropylbenzene	<3.4	<0.7
CFC-113	<1.1	<0.14	2-Chlorotoluene	<7.2	<1.4
Carbon disulfide	<8.7	<2.8	Propylbenzene	<3.4	<0.7
Methyl t-butyl ether (...)	<2.5	<0.7	4-Ethyltoluene	<3.4	<0.7
Vinyl acetate	<9.9	<2.8	m,p-Xylene	20	4.6
1,1-Dichloroethane	<0.57	<0.14	o-Xylene	7.0	1.6
cis-1,2-Dichloroethene	<0.56	<0.14	Styrene	<1.2	<0.28
Hexane	13	3.8	Bromoform	<2.9	<0.28
Chloroform	0.46	0.095	Benzyl chloride	<0.072	<0.014
Ethyl acetate	<10	<2.8	1,3,5-Trimethylbenzene	<3.4	<0.7
Tetrahydrofuran	21 ca	7.0 ca	1,2,4-Trimethylbenzene	<3.4	<0.7
2-Butanone (MEK)	17	5.6	1,3-Dichlorobenzene	<0.84	<0.14
1,2-Dichloroethane (EDC)	<0.057	<0.014	1,4-Dichlorobenzene	<0.34	<0.056
1,1,1-Trichloroethane	<0.76	<0.14	1,2-Dichlorobenzene	<0.84	<0.14
Carbon tetrachloride	<0.88	<0.14	1,2,4-Trichlorobenzene	<1	<0.14
Benzene	3.8	1.2	Naphthalene	<0.73	<0.14
Cyclohexane	<9.6	<2.8	Hexachlorobutadiene	<0.3	<0.028

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID: SV-2	Client: Aspect Consulting, LLC
Date Received: 12/11/18	Project: Evergreen Treatment Services 180043
Date Collected: 12/10/18	Lab ID: 812130-02 1/1.5
Date Analyzed: 12/12/18	Data File: 121121.D
Matrix: Air	Instrument: GCMS7
Units: ug/m3	Operator: BAT/MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:		
4-Bromofluorobenzene	98	70	130		
	Concentration				
Compounds:	Concentration		Compounds:		
	ug/m3	ppbv		ug/m3	ppbv
Propene	<1	<0.6	1,2-Dichloropropane	0.85	0.18
Dichlorodifluoromethane	2.9	0.59	1,4-Dioxane	<0.54	<0.15
Chloromethane	<3.1	<1.5	2,2,4-Trimethylpentane	<7	<1.5
F-114	<1	<0.15	Methyl methacrylate	<6.1	<1.5
Vinyl chloride	<0.38	<0.15	Heptane	17	4.1
1,3-Butadiene	<0.03	<0.015	Bromodichloromethane	<0.1	<0.015
Butane	19	7.8	Trichloroethene	<0.4	<0.075
Bromomethane	<2.3	<0.6	cis-1,3-Dichloropropene	<0.68	<0.15
Chloroethane	<4	<1.5	4-Methyl-2-pentanone	<6.1	<1.5
Vinyl bromide	<0.66	<0.15	trans-1,3-Dichloropropene	<0.68	<0.15
Ethanol	140	75	Toluene	25	6.7
Acrolein	<1.4	<0.6	1,1,2-Trichloroethane	<0.16	<0.03
Pentane	16	5.4	2-Hexanone	<6.1	<1.5
Trichlorofluoromethane	<3.4	<0.6	Tetrachloroethene	<10	<1.5
Acetone	160	66	Dibromochloromethane	<0.13	<0.015
2-Propanol	64	26	1,2-Dibromoethane (EDB)	<0.12	<0.015
1,1-Dichloroethene	<0.59	<0.15	Chlorobenzene	<0.69	<0.15
trans-1,2-Dichloroethene	<0.59	<0.15	Ethylbenzene	5.0	1.2
Methylene chloride	<130	<37	1,1,2,2-Tetrachloroethane	<0.21	<0.03
t-Butyl alcohol (TBA)	<18	<6	Nonane	<7.9	<1.5
3-Chloropropene	<1.9	<0.6	Isopropylbenzene	<3.7	<0.75
CFC-113	<1.1	<0.15	2-Chlorotoluene	<7.8	<1.5
Carbon disulfide	<9.3	<3	Propylbenzene	<3.7	<0.75
Methyl t-butyl ether (...)	<2.7	<0.75	4-Ethyltoluene	<3.7	<0.75
Vinyl acetate	<11	<3	m,p-Xylene	18	4.2
1,1-Dichloroethane	<0.61	<0.15	o-Xylene	6.2	1.4
cis-1,2-Dichloroethene	<0.59	<0.15	Styrene	<1.3	<0.3
Hexane	18	5.2	Bromoform	<3.1	<0.3
Chloroform	0.61	0.12	Benzyl chloride	<0.078	<0.015
Ethyl acetate	<11	<3	1,3,5-Trimethylbenzene	<3.7	<0.75
Tetrahydrofuran	21 ca	7.0 ca	1,2,4-Trimethylbenzene	<3.7	<0.75
2-Butanone (MEK)	13	4.4	1,3-Dichlorobenzene	<0.9	<0.15
1,2-Dichloroethane (EDC)	<0.061	<0.015	1,4-Dichlorobenzene	<0.36	<0.06
1,1,1-Trichloroethane	<0.82	<0.15	1,2-Dichlorobenzene	<0.9	<0.15
Carbon tetrachloride	<0.94	<0.15	1,2,4-Trichlorobenzene	<1.1	<0.15
Benzene	4.1	1.3	Naphthalene	<0.79	<0.15
Cyclohexane	<10	<3	Hexachlorobutadiene	<0.32	<0.03

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID: SV-3	Client: Aspect Consulting, LLC
Date Received: 12/11/18	Project: Evergreen Treatment Services 180043
Date Collected: 12/10/18	Lab ID: 812130-03 1/1.5
Date Analyzed: 12/12/18	Data File: 121122.D
Matrix: Air	Instrument: GCMS7
Units: ug/m3	Operator: BAT/MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:		
4-Bromofluorobenzene	106	70	130		
	Concentration				
Compounds:	Concentration ug/m3	ppbv	Compounds:	ug/m3	ppbv
Propene	52	30	1,2-Dichloropropane	0.58	0.13
Dichlorodifluoromethane	2.9	0.58	1,4-Dioxane	<0.54	<0.15
Chloromethane	<3.1	<1.5	2,2,4-Trimethylpentane	<7	<1.5
F-114	<1	<0.15	Methyl methacrylate	<6.1	<1.5
Vinyl chloride	<0.38	<0.15	Heptane	32	7.8
1,3-Butadiene	12	5.6	Bromodichloromethane	<0.1	<0.015
Butane	44	19	Trichloroethene	14	2.6
Bromomethane	<2.3	<0.6	cis-1,3-Dichloropropene	<0.68	<0.15
Chloroethane	<4	<1.5	4-Methyl-2-pentanone	<6.1	<1.5
Vinyl bromide	<0.66	<0.15	trans-1,3-Dichloropropene	<0.68	<0.15
Ethanol	450 ve	240 ve	Toluene	39	10
Acrolein	3.8	1.7	1,1,2-Trichloroethane	<0.16	<0.03
Pentane	32	11	2-Hexanone	<6.1	<1.5
Trichlorofluoromethane	<3.4	<0.6	Tetrachloroethene	<10	<1.5
Acetone	430 ve	180 ve	Dibromochloromethane	<0.13	<0.015
2-Propanol	70	28	1,2-Dibromoethane (EDB)	<0.12	<0.015
1,1-Dichloroethene	0.62	0.16	Chlorobenzene	<0.69	<0.15
trans-1,2-Dichloroethene	<0.59	<0.15	Ethylbenzene	6.7	1.5
Methylene chloride	<130	<37	1,1,2,2-Tetrachloroethane	<0.21	<0.03
t-Butyl alcohol (TBA)	<18	<6	Nonane	<7.9	<1.5
3-Chloropropene	<1.9	<0.6	Isopropylbenzene	<3.7	<0.75
CFC-113	2.1	0.28	2-Chlorotoluene	<7.8	<1.5
Carbon disulfide	<9.3	<3	Propylbenzene	<3.7	<0.75
Methyl t-butyl ether (...)	<2.7	<0.75	4-Ethyltoluene	<3.7	<0.75
Vinyl acetate	<11	<3	m,p-Xylene	20	4.7
1,1-Dichloroethane	1.7	0.43	o-Xylene	7.1	1.6
cis-1,2-Dichloroethene	2.9	0.73	Styrene	1.5	0.36
Hexane	29	8.1	Bromoform	<3.1	<0.3
Chloroform	0.70	0.14	Benzyl chloride	<0.078	<0.015
Ethyl acetate	<11	<3	1,3,5-Trimethylbenzene	<3.7	<0.75
Tetrahydrofuran	16 ca	5.3 ca	1,2,4-Trimethylbenzene	<3.7	<0.75
2-Butanone (MEK)	30	10	1,3-Dichlorobenzene	<0.9	<0.15
1,2-Dichloroethane (EDC)	<0.061	<0.015	1,4-Dichlorobenzene	<0.36	<0.06
1,1,1-Trichloroethane	<0.82	<0.15	1,2-Dichlorobenzene	<0.9	<0.15
Carbon tetrachloride	<0.94	<0.15	1,2,4-Trichlorobenzene	<1.1	<0.15
Benzene	19	5.8	Naphthalene	<0.79	<0.15
Cyclohexane	12	3.5	Hexachlorobutadiene	<0.32	<0.03



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID: SV-4	Client: Aspect Consulting, LLC
Date Received: 12/11/18	Project: Evergreen Treatment Services 180043
Date Collected: 12/10/18	Lab ID: 812130-04 1/1.5
Date Analyzed: 12/12/18	Data File: 121123.D
Matrix: Air	Instrument: GCMS7
Units: ug/m3	Operator: BAT/MS

Surrogates:		% Recovery:	Lower Limit:	Upper Limit:		
4-Bromofluorobenzene		104	70	130		
		Concentration				
		Concentration				
Compounds:	ug/m3	ppbv	Compounds:	ug/m3	ppbv	
Propene	1,700 ve	990 ve	1,2-Dichloropropane	0.57	0.12	
Dichlorodifluoromethane	<0.74	<0.15	1,4-Dioxane	<0.54	<0.15	
Chloromethane	<3.1	<1.5	2,2,4-Trimethylpentane	380 ve	80 ve	
F-114	<1	<0.15	Methyl methacrylate	<6.1	<1.5	
Vinyl chloride	320 ve	120 ve	Heptane	140	35	
1,3-Butadiene	<0.03	<0.015	Bromodichloromethane	<0.1	<0.015	
Butane	2,000 ve	850 ve	Trichloroethene	43	8.1	
Bromomethane	<2.3	<0.6	cis-1,3-Dichloropropene	<0.68	<0.15	
Chloroethane	7.9	3.0	4-Methyl-2-pentanone	<6.1	<1.5	
Vinyl bromide	<0.66	<0.15	trans-1,3-Dichloropropene	<0.68	<0.15	
Ethanol	250 ve	140 ve	Toluene	260	69	
Acrolein	<1.4	<0.6	1,1,2-Trichloroethane	<0.16	<0.03	
Pentane	850 ve	290 ve	2-Hexanone	<6.1	<1.5	
Trichlorofluoromethane	<3.4	<0.6	Tetrachloroethene	<10	<1.5	
Acetone	780 ve	330 ve	Dibromochloromethane	<0.13	<0.015	
2-Propanol	79	32	1,2-Dibromoethane (EDB)	<0.12	<0.015	
1,1-Dichloroethene	5.1	1.3	Chlorobenzene	<0.69	<0.15	
trans-1,2-Dichloroethene	43	11	Ethylbenzene	11	2.5	
Methylene chloride	<130	<37	1,1,2,2-Tetrachloroethane	<0.21	<0.03	
t-Butyl alcohol (TBA)	<18	<6	Nonane	52	9.9	
3-Chloropropene	<1.9	<0.6	Isopropylbenzene	8.8	1.8	
CFC-113	<1.1	<0.15	2-Chlorotoluene	<7.8	<1.5	
Carbon disulfide	<9.3	<3	Propylbenzene	<3.7	<0.75	
Methyl t-butyl ether (...)	<2.7	<0.75	4-Ethyltoluene	<3.7	<0.75	
Vinyl acetate	<11	<3	m,p-Xylene	24	5.5	
1,1-Dichloroethane	0.91	0.22	o-Xylene	18	4.2	
cis-1,2-Dichloroethene	220	55	Styrene	<1.3	<0.3	
Hexane	290 ve	83 ve	Bromoform	<3.1	<0.3	
Chloroform	<0.074	<0.015	Benzyl chloride	<0.078	<0.015	
Ethyl acetate	<11	<3	1,3,5-Trimethylbenzene	5.6	1.1	
Tetrahydrofuran	16 ca	5.5 ca	1,2,4-Trimethylbenzene	5.8	1.2	
2-Butanone (MEK)	24	8.0	1,3-Dichlorobenzene	<0.9	<0.15	
1,2-Dichloroethane (EDC)	<0.061	<0.015	1,4-Dichlorobenzene	<0.36	<0.06	
1,1,1-Trichloroethane	<0.82	<0.15	1,2-Dichlorobenzene	<0.9	<0.15	
Carbon tetrachloride	<0.94	<0.15	1,2,4-Trichlorobenzene	<1.1	<0.15	
Benzene	150	48	Naphthalene	1.2	0.23	
Cyclohexane	150	45	Hexachlorobutadiene	<0.32	<0.03	

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	Not Applicable	Project:	Evergreen Treatment Services 180043
Date Collected:	Not Applicable	Lab ID:	08-2755 mb
Date Analyzed:	12/12/18	Data File:	121111.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	BAT/MS

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	87	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<0.69	<0.4	1,2-Dichloropropane	<0.23	<0.05
Dichlorodifluoromethane	<0.49	<0.1	1,4-Dioxane	<0.36	<0.1
Chloromethane	<2.1	<1	2,2,4-Trimethylpentane	<4.7	<1
F-114	<0.7	<0.1	Methyl methacrylate	<4.1	<1
Vinyl chloride	<0.26	<0.1	Heptane	<4.1	<1
1,3-Butadiene	<0.022	<0.01	Bromodichloromethane	<0.067	<0.01
Butane	<2.4	<1	Trichloroethene	<0.27	<0.05
Bromomethane	<1.6	<0.4	cis-1,3-Dichloropropene	<0.45	<0.1
Chloroethane	<2.6	<1	4-Methyl-2-pentanone	<4.1	<1
Vinyl bromide	<0.44	<0.1	trans-1,3-Dichloropropene	<0.45	<0.1
Ethanol	<7.5	<4	Toluene	<0.38	<0.1
Acrolein	<0.92	<0.4	1,1,2-Trichloroethane	<0.11	<0.02
Pentane	<3	<1	2-Hexanone	<4.1	<1
Trichlorofluoromethane	<2.2	<0.4	Tetrachloroethene	<6.8	<1
Acetone	<4.8	<2	Dibromochloromethane	<0.085	<0.01
2-Propanol	<8.6	<3.5	1,2-Dibromoethane (EDB)	<0.077	<0.01
1,1-Dichloroethene	<0.4	<0.1	Chlorobenzene	<0.46	<0.1
trans-1,2-Dichloroethene	<0.4	<0.1	Ethylbenzene	<0.43	<0.1
Methylene chloride	<87	<25	1,1,2,2-Tetrachloroethane	<0.14	<0.02
t-Butyl alcohol (TBA)	<12	<4	Nonane	<5.2	<1
3-Chloropropene	<1.3	<0.4	Isopropylbenzene	<2.5	<0.5
CFC-113	<0.77	<0.1	2-Chlorotoluene	<5.2	<1
Carbon disulfide	<6.2	<2	Propylbenzene	<2.5	<0.5
Methyl t-butyl ether (MTBE)	<1.8	<0.5	4-Ethyltoluene	<2.5	<0.5
Vinyl acetate	<7	<2	m,p-Xylene	<0.87	<0.2
1,1-Dichloroethane	<0.4	<0.1	o-Xylene	<0.43	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1	Styrene	<0.85	<0.2
Hexane	<3.5	<1	Bromoform	<2.1	<0.2
Chloroform	<0.049	<0.01	Benzyl chloride	<0.052	<0.01
Ethyl acetate	<7.2	<2	1,3,5-Trimethylbenzene	<2.5	<0.5
Tetrahydrofuran	<0.29	<0.1	1,2,4-Trimethylbenzene	<2.5	<0.5
2-Butanone (MEK)	<2.9	<1	1,3-Dichlorobenzene	<0.6	<0.1
1,2-Dichloroethane (EDC)	<0.04	<0.01	1,4-Dichlorobenzene	<0.24	<0.04
1,1,1-Trichloroethane	<0.55	<0.1	1,2-Dichlorobenzene	<0.6	<0.1
Carbon tetrachloride	<0.63	<0.1	1,2,4-Trichlorobenzene	<0.74	<0.1
Benzene	<0.32	<0.1	Naphthalene	<0.52	<0.1
Cyclohexane	<6.9	<2	Hexachlorobutadiene	<0.21	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/19/18

Date Received: 12/11/18

Project: Evergreen Treatment Services 180043, F&BI 812130

Date Extracted: 12/17/18

Date Analyzed: 12/17/18

**RESULTS FROM THE ANALYSIS OF AIR SAMPLES  
FOR HELIUM USING METHOD ASTM D1946**

Results Reported as % Helium

<u>Sample ID</u> Laboratory ID	<u>Helium</u>
SV-1 812130-01	<0.6
SV-2 812130-02	<0.6
SV-3 812130-03	<0.6
SV-4 812130-04	<0.6
Method Blank	<0.6

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 12/19/18

Date Received: 12/11/18

Project: Evergreen Treatment Services 180043, F&BI 812130

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Propene	ppbv	5	121	70-130
Dichlorodifluoromethane	ppbv	5	102	70-130
Chloromethane	ppbv	5	119	70-130
F-114	ppbv	5	99	70-130
Vinyl chloride	ppbv	5	99	70-130
1,3-Butadiene	ppbv	5	109	70-130
Butane	ppbv	5	123	70-130
Bromomethane	ppbv	5	119	70-130
Chloroethane	ppbv	5	101	70-130
Vinyl Bromide	ppbv	5	90	70-130
Ethanol	ppbv	5	113	70-130
Acrolein	ppbv	5	110	70-130
Pentane	ppbv	5	114	70-130
Trichlorofluoromethane	ppbv	5	103	70-130
Acetone	ppbv	5	107	70-130
2-Propanol	ppbv	5	117	70-130
1,1-Dichloroethene	ppbv	5	101	70-130
trans-1,2-Dichloroethene	ppbv	5	104	70-130
Methylene chloride	ppbv	5	105	70-130
t-Butyl alcohol (TBA)	ppbv	5	112	70-130
3-Chloropropene	ppbv	5	130	70-130
CFC-113	ppbv	5	100	70-130
Carbon disulfide	ppbv	5	108	70-130
Methyl t-butyl ether (MTBE)	ppbv	5	109	70-130
Vinyl acetate	ppbv	5	149 vo	70-130
1,1-Dichloroethane	ppbv	5	120	70-130
cis-1,2-Dichloroethene	ppbv	5	105	70-130
Hexane	ppbv	5	113	70-130
Chloroform	ppbv	5	117	70-130
Ethyl acetate	ppbv	5	134 vo	70-130
Tetrahydrofuran	ppbv	5	134 vo	70-130
2-Butanone (MEK)	ppbv	5	114	70-130
1,2-Dichloroethane (EDC)	ppbv	5	127	70-130
1,1,1-Trichloroethane	ppbv	5	115	70-130
Carbon tetrachloride	ppbv	5	110	70-130
Benzene	ppbv	5	112	70-130
Cyclohexane	ppbv	5	103	70-130
1,2-Dichloropropane	ppbv	5	110	70-130
1,4-Dioxane	ppbv	5	109	70-130
2,2,4-Trimethylpentane	ppbv	5	119	70-130
Methyl methacrylate	ppbv	5	137 vo	70-130

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 12/19/18

Date Received: 12/11/18

Project: Evergreen Treatment Services 180043, F&BI 812130

### **QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Heptane	ppbv	5	127	70-130
Bromodichloromethane	ppbv	5	116	70-130
Trichloroethene	ppbv	5	106	70-130
cis-1,3-Dichloropropene	ppbv	5	106	70-130
4-Methyl-2-pentanone	ppbv	5	94	70-130
trans-1,3-Dichloropropene	ppbv	5	108	70-130
Toluene	ppbv	5	95	70-130
1,1,2-Trichloroethane	ppbv	5	103	70-130
2-Hexanone	ppbv	5	133 vo	70-130
Tetrachloroethene	ppbv	5	92	70-130
Dibromochloromethane	ppbv	5	104	70-130
1,2-Dibromoethane (EDB)	ppbv	5	103	70-130
Chlorobenzene	ppbv	5	97	70-130
Ethylbenzene	ppbv	5	106	70-130
1,1,2,2-Tetrachloroethane	ppbv	5	106	70-130
Nonane	ppbv	5	142 vo	70-130
Isopropylbenzene	ppbv	5	110	70-130
2-Chlorotoluene	ppbv	5	101	70-130
Propylbenzene	ppbv	5	109	70-130
4-Ethyltoluene	ppbv	5	106	70-130
m,p-Xylene	ppbv	10	99	70-130
o-Xylene	ppbv	5	102	70-130
Styrene	ppbv	5	104	70-130
Bromoform	ppbv	5	96	70-130
Benzyl chloride	ppbv	5	102	70-130
1,3,5-Trimethylbenzene	ppbv	5	101	70-130
1,2,4-Trimethylbenzene	ppbv	5	94	70-130
1,3-Dichlorobenzene	ppbv	5	90	70-130
1,4-Dichlorobenzene	ppbv	5	88	70-130
1,2-Dichlorobenzene	ppbv	5	88	70-130
1,2,4-Trichlorobenzene	ppbv	5	79	70-130
Naphthalene	ppbv	5	92	70-130
Hexachlorobutadiene	ppbv	5	80	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/19/18

Date Received: 12/11/18

Project: Evergreen Treatment Services 180043, F&BI 812130

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR HELIUM  
USING METHOD ASTM D1946**

Laboratory Code: 812130-04 (Duplicate)

Analyte	Sample Result (%)	Duplicate Result (%)	Relative Percent Difference	Acceptance Criteria
Helium	<0.6	<0.6	nm	0-20

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The compound is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs - Headspace was present in the container used for analysis.
- ht - The analysis was performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

# SAMPLE CHAIN OF CUSTODY

ME 12/11/18

Page # 1 of 1

Report To Dana Cannon & Kristin Beck  
 Company Aspect Consulting  
 Address 710 Second Ave, Suite 550  
 City, State, ZIP Seattle, WA 98104  
 Phone \_\_\_\_\_ Email \_\_\_\_\_

SAMPLERS (signature) <u>Kristin Beck</u>		PO # <u>180043</u>
PROJECT NAME <u>Evergreen Treatment Services</u>		INVOICE TO <u>Acct payable</u>
REPORTING LEVEL <input type="checkbox"/> Indoor Air <input checked="" type="checkbox"/> Sub Slab/Soil Gas <input type="checkbox"/> Deep Soil Gas <input type="checkbox"/> SVE/Grab		

TURNAROUND TIME <input checked="" type="checkbox"/> Standard <input type="checkbox"/> RUSH Rush charges authorized by: _____	SAMPLE DISPOSAL <input checked="" type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Archive Samples <input type="checkbox"/> Other
---	--

## ANALYSIS REQUESTED

Sample Name	Lab ID	Canister ID	Flow Contr. ID	Date Sampled	Field Initial Press. (Hg)	Field Initial Time	Field Final Press. (Hg)	Field Final Time	TO-15 Full Scan	TO-15 BTEXN	TO-15 cVOCs	Notes
SV-1	01	24933	102	12/6/18	36	0748	4	0752	X		Helium	PID=1.1 ppm
SV-2	02	3668	106	1	30	0835	5	0839	X			PID=1.4 ppm
SV-3	03	3412	257	1	29	0957	4	1002	X			PID=2.1 ppm
SV-4	04	2299	255	↓	30	1145	5	1149	X			PID=0.1 ppm

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Kristin Beck</u>	<u>Kristin Beck</u>	<u>Aspect</u>	<u>12/11/18</u>	<u>0830</u>
Received by: <u>Kristin Beck</u>	<u>Kristin Beck</u>	<u>Aspect</u>	<u>12/11/18</u>	<u>0830</u>
Relinquished by: <u>Kristin Beck</u>	<u>Kristin Beck</u>	<u>Aspect</u>	<u>12/11/18</u>	<u>0830</u>
Received by: <u>Kristin Beck</u>	<u>Kristin Beck</u>	<u>Aspect</u>	<u>12/11/18</u>	<u>0830</u>

Friedman & Bruya, Inc.  
 3012 16th Avenue West  
 Seattle, WA 98119-2029  
 Ph. (206) 285-8282  
 Fax (206) 283-5044  
 FORMS.COC.COCTO-15.DOC

Samples received at 17 °C



FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Yelena Aravkina, M.S.  
Michael Erdahl, B.S.  
Arina Podnozova, B.S.  
Eric Young, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
(206) 285-8282  
fbi@isomedia.com  
www.friedmanandbruya.com

December 27, 2018

Dana Cannon, Project Manager  
Aspect Consulting, LLC  
401 2<sup>nd</sup> Ave S, Suite 201  
Seattle, WA 98104

Dear Ms Cannon:

Included are the results from the testing of material submitted on December 18, 2018 from the Evergreen 180043, F&BI 812250 project. There are 19 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
c: Data Aspect  
ASP1227R.DOC

# FRIEDMAN & BRUYA, INC.

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## ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on December 18, 2018 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Evergreen 180043, F&BI 812250 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Aspect Consulting, LLC</u>
812250 -01	AMW-1-121718
812250 -02	AMW-2-121718
812250 -03	AMW-3-121718
812250 -04	AMW-4-121718

The samples were sent to Fremont Analytical for cyanide analysis. The report will be forwarded upon receipt.

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/27/18

Date Received: 12/18/18

Project: Evergreen 180043, F&BI 812250

Date Extracted: 12/18/18

Date Analyzed: 12/18/18

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE  
USING METHOD NWTPH-Gx**

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate (% Recovery) (Limit 51-134)
AMW-1-121718 812250-01	<100	84
AMW-2-121718 812250-02	<100	82
AMW-3-121718 812250-03	<100	84
AMW-4-121718 812250-04	<100	83
Method Blank 08-2807 MB	<100	88

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/27/18

Date Received: 12/18/18

Project: Evergreen 180043, F&BI 812250

Date Extracted: 12/19/18

Date Analyzed: 12/19/18

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL AND MOTOR OIL  
USING METHOD NWTPH-Dx**  
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C <sub>10</sub> -C <sub>25</sub> )	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 47-140)
AMW-1-121718 812250-01	<50	<250	111
AMW-2-121718 812250-02	73 x	<250	121
AMW-3-121718 812250-03	<50	<250	116
AMW-4-121718 812250-04	<50	<250	119
Method Blank 08-2871 MB	<50	<250	104

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	AMW-1-121718	Client:	Aspect Consulting, LLC
Date Received:	12/18/18	Project:	Evergreen 180043, F&BI 812250
Date Extracted:	12/21/18	Lab ID:	812250-01
Date Analyzed:	12/21/18	Data File:	812250-01.063
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	11.4
Cadmium	<1
Chromium	<1
Copper	<5
Lead	<1
Manganese	575
Mercury	<1
Nickel	1.31
Zinc	<5

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	AMW-2-121718	Client:	Aspect Consulting, LLC
Date Received:	12/18/18	Project:	Evergreen 180043, F&BI 812250
Date Extracted:	12/21/18	Lab ID:	812250-02
Date Analyzed:	12/21/18	Data File:	812250-02.086
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	4.33
Cadmium	<1
Chromium	<1
Copper	<5
Lead	<1
Manganese	302
Mercury	<1
Nickel	3.80
Zinc	<5

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	AMW-3-121718	Client:	Aspect Consulting, LLC
Date Received:	12/18/18	Project:	Evergreen 180043, F&BI 812250
Date Extracted:	12/21/18	Lab ID:	812250-03
Date Analyzed:	12/21/18	Data File:	812250-03.087
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	20.3
Cadmium	<1
Chromium	<1
Copper	<5
Lead	<1
Manganese	680
Mercury	<1
Nickel	2.22
Zinc	<5

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	AMW-4-121718	Client:	Aspect Consulting, LLC
Date Received:	12/18/18	Project:	Evergreen 180043, F&BI 812250
Date Extracted:	12/21/18	Lab ID:	812250-04
Date Analyzed:	12/21/18	Data File:	812250-04.088
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1
Cadmium	<1
Chromium	<1
Copper	<5
Lead	<1
Manganese	485
Mercury	<1
Nickel	2.24
Zinc	<5



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	NA	Project:	Evergreen 180043, F&BI 812250
Date Extracted:	12/21/18	Lab ID:	I8-879 mb
Date Analyzed:	12/21/18	Data File:	I8-879 mb.051
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1
Cadmium	<1
Chromium	<1
Copper	<5
Lead	<1
Manganese	<1
Mercury	<1
Nickel	<1
Zinc	<5

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	AMW-1-121718	Client:	Aspect Consulting, LLC
Date Received:	12/18/18	Project:	Evergreen 180043, F&BI 812250
Date Extracted:	12/18/18	Lab ID:	812250-01
Date Analyzed:	12/20/18	Data File:	122012.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	97	50	150
4-Bromofluorobenzene	95	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	2.9	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<1	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<1
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<1
2-Butanone (MEK)	<10	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<1	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<1	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<1	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<1	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<1	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<1
trans-1,3-Dichloropropene	<1	Naphthalene	<1
1,1,2-Trichloroethane	<1	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	AMW-2-121718	Client:	Aspect Consulting, LLC
Date Received:	12/18/18	Project:	Evergreen 180043, F&BI 812250
Date Extracted:	12/18/18	Lab ID:	812250-02
Date Analyzed:	12/18/18	Data File:	121822.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	98	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<1	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<1
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<1
2-Butanone (MEK)	<10	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<1	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<1	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<1	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<1	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<1	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<1
trans-1,3-Dichloropropene	<1	Naphthalene	<1
1,1,2-Trichloroethane	<1	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	AMW-3-121718	Client:	Aspect Consulting, LLC
Date Received:	12/18/18	Project:	Evergreen 180043, F&BI 812250
Date Extracted:	12/18/18	Lab ID:	812250-03
Date Analyzed:	12/18/18	Data File:	121823.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<1	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<1
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<1
2-Butanone (MEK)	<10	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<1	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<1	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<1	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<1	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<1	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<1
trans-1,3-Dichloropropene	<1	Naphthalene	<1
1,1,2-Trichloroethane	<1	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	AMW-4-121718	Client:	Aspect Consulting, LLC
Date Received:	12/18/18	Project:	Evergreen 180043, F&BI 812250
Date Extracted:	12/18/18	Lab ID:	812250-04
Date Analyzed:	12/18/18	Data File:	121824.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<1	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<1
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<1
2-Butanone (MEK)	<10	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<1	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<1	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<1	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<1	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<1	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<1
trans-1,3-Dichloropropene	<1	Naphthalene	<1
1,1,2-Trichloroethane	<1	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	Not Applicable	Project:	Evergreen 180043, F&BI 812250
Date Extracted:	12/18/18	Lab ID:	08-2769 mb
Date Analyzed:	12/18/18	Data File:	121808.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	97	50	150
4-Bromofluorobenzene	95	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<1	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<1
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<1
2-Butanone (MEK)	<10	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<1	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<1	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<1	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<1	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<1	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<1
trans-1,3-Dichloropropene	<1	Naphthalene	<1
1,1,2-Trichloroethane	<1	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/27/18

Date Received: 12/18/18

Project: Evergreen 180043, F&BI 812250

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER  
SAMPLES FOR TPH AS GASOLINE  
USING METHOD NWTPH-Gx**

Laboratory Code: 812240-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	ug/L (ppb)	1,000	94	69-134

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/27/18

Date Received: 12/18/18

Project: Evergreen 180043, F&BI 812250

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER  
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	96	88	61-133	9



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 12/27/18

Date Received: 12/18/18

Project: Evergreen 180043, F&BI 812250

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR DISSOLVED METALS USING EPA METHOD 6020B

Laboratory Code: 812294-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	1.83	113	110	75-125	3
Cadmium	ug/L (ppb)	5	<1	103	102	75-125	1
Chromium	ug/L (ppb)	20	<1	104	103	75-125	1
Copper	ug/L (ppb)	20	<5	94	94	75-125	0
Lead	ug/L (ppb)	10	<1	92	92	75-125	0
Manganese	ug/L (ppb)	20	219	173 b	101 b	75-125	53 b
Mercury	ug/L (ppb)	5	<1	94	95	75-125	1
Nickel	ug/L (ppb)	20	<1	96	97	75-125	1
Zinc	ug/L (ppb)	50	<5	94	95	75-125	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	108	80-120
Cadmium	ug/L (ppb)	5	105	80-120
Chromium	ug/L (ppb)	20	105	80-120
Copper	ug/L (ppb)	20	105	80-120
Lead	ug/L (ppb)	10	111	80-120
Manganese	ug/L (ppb)	20	105	80-120
Mercury	ug/L (ppb)	5	104	80-120
Nickel	ug/L (ppb)	20	105	80-120
Zinc	ug/L (ppb)	50	103	80-120

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 12/27/18

Date Received: 12/18/18

Project: Evergreen 180043, F&BI 812250

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 812231-21 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	ug/L (ppb)	50	<1	113	55-137
Chloromethane	ug/L (ppb)	50	<10	93	61-120
Vinyl chloride	ug/L (ppb)	50	0.57	95	61-139
Bromomethane	ug/L (ppb)	50	<1	96	20-265
Chloroethane	ug/L (ppb)	50	<1	100	55-149
Trichlorofluoromethane	ug/L (ppb)	50	<1	95	71-128
Acetone	ug/L (ppb)	250	<50	86	48-149
1,1-Dichloroethene	ug/L (ppb)	50	<1	96	71-123
Hexane	ug/L (ppb)	50	<1	88	44-139
Methylene chloride	ug/L (ppb)	50	<5	86	61-126
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	<1	96	68-125
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	95	72-122
1,1-Dichloroethane	ug/L (ppb)	50	<1	91	79-113
2,2-Dichloropropane	ug/L (ppb)	50	<1	85	48-157
cis-1,2-Dichloroethene	ug/L (ppb)	50	39	88 b	63-126
Chloroform	ug/L (ppb)	50	<1	90	77-117
2-Butanone (MEK)	ug/L (ppb)	250	20	89	70-135
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	93	70-119
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	89	75-121
1,1-Dichloropropene	ug/L (ppb)	50	<1	95	67-121
Carbon tetrachloride	ug/L (ppb)	50	<1	89	70-132
Benzene	ug/L (ppb)	50	<0.35	90	75-114
Trichloroethene	ug/L (ppb)	50	<1	92	73-122
1,2-Dichloropropane	ug/L (ppb)	50	<1	97	80-111
Bromodichloromethane	ug/L (ppb)	50	<1	93	78-117
Dibromomethane	ug/L (ppb)	50	<1	90	73-125
4-Methyl-2-pentanone	ug/L (ppb)	250	15	110	79-140
cis-1,3-Dichloropropene	ug/L (ppb)	50	<1	94	76-120
Toluene	ug/L (ppb)	50	<1	89	73-117
trans-1,3-Dichloropropene	ug/L (ppb)	50	<1	91	75-122
1,1,2-Trichloroethane	ug/L (ppb)	50	<1	89	81-116
2-Hexanone	ug/L (ppb)	250	<10	94	74-127
1,3-Dichloropropane	ug/L (ppb)	50	<1	94	80-113
Tetrachloroethene	ug/L (ppb)	50	<1	92	72-113
Dibromochloromethane	ug/L (ppb)	50	<1	94	69-129
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	<1	95	79-120
Chlorobenzene	ug/L (ppb)	50	<1	90	75-115
Ethylbenzene	ug/L (ppb)	50	<1	93	66-124
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	<1	90	76-130
m,p-Xylene	ug/L (ppb)	100	<2	95	63-128
o-Xylene	ug/L (ppb)	50	<1	100	64-129
Styrene	ug/L (ppb)	50	<1	99	56-142
Isopropylbenzene	ug/L (ppb)	50	<1	98	74-122
Bromoform	ug/L (ppb)	50	<1	94	49-138
n-Propylbenzene	ug/L (ppb)	50	<1	93	65-129
Bromobenzene	ug/L (ppb)	50	<1	93	70-121
1,3,5-Trimethylbenzene	ug/L (ppb)	50	<1	98	60-138
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	<1	92	79-120
1,2,3-Trichloropropane	ug/L (ppb)	50	<1	88	62-125
2-Chlorotoluene	ug/L (ppb)	50	<1	92	40-159
4-Chlorotoluene	ug/L (ppb)	50	<1	91	76-122
tert-Butylbenzene	ug/L (ppb)	50	<1	99	74-125
1,2,4-Trimethylbenzene	ug/L (ppb)	50	<1	96	59-136
sec-Butylbenzene	ug/L (ppb)	50	<1	95	69-127
p-Isopropyltoluene	ug/L (ppb)	50	<1	97	64-132
1,3-Dichlorobenzene	ug/L (ppb)	50	<1	92	77-113
1,4-Dichlorobenzene	ug/L (ppb)	50	<1	86	75-110
1,2-Dichlorobenzene	ug/L (ppb)	50	<1	90	70-120
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	<10	96	69-129
1,2,4-Trichlorobenzene	ug/L (ppb)	50	<1	98	66-123
Hexachlorobutadiene	ug/L (ppb)	50	<1	91	53-136
Naphthalene	ug/L (ppb)	50	<1	99	60-145
1,2,3-Trichlorobenzene	ug/L (ppb)	50	<1	93	59-130

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 12/27/18

Date Received: 12/18/18

Project: Evergreen 180043, F&BI 812250

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	50	123	123	50-157	0
Chloromethane	ug/L (ppb)	50	99	96	62-130	3
Vinyl chloride	ug/L (ppb)	50	98	97	70-128	1
Bromomethane	ug/L (ppb)	50	97	98	62-188	1
Chloroethane	ug/L (ppb)	50	100	102	66-149	2
Trichlorofluoromethane	ug/L (ppb)	50	98	98	70-132	0
Acetone	ug/L (ppb)	250	88	87	44-145	1
1,1-Dichloroethene	ug/L (ppb)	50	100	98	75-119	2
Hexane	ug/L (ppb)	50	95	93	51-153	2
Methylene chloride	ug/L (ppb)	50	87	85	63-132	2
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	96	96	70-122	0
trans-1,2-Dichloroethene	ug/L (ppb)	50	95	95	76-118	0
1,1-Dichloroethane	ug/L (ppb)	50	92	90	77-119	2
2,2-Dichloropropane	ug/L (ppb)	50	93	93	62-141	0
cis-1,2-Dichloroethene	ug/L (ppb)	50	91	90	76-119	1
Chloroform	ug/L (ppb)	50	90	90	78-117	0
2-Butanone (MEK)	ug/L (ppb)	250	92	89	49-147	3
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	94	93	78-114	1
1,1,1-Trichloroethane	ug/L (ppb)	50	91	90	80-116	1
1,1-Dichloropropene	ug/L (ppb)	50	97	95	78-119	2
Carbon tetrachloride	ug/L (ppb)	50	92	91	72-128	1
Benzene	ug/L (ppb)	50	91	90	75-116	1
Trichloroethene	ug/L (ppb)	50	94	93	72-119	1
1,2-Dichloropropane	ug/L (ppb)	50	99	97	79-121	2
Bromodichloromethane	ug/L (ppb)	50	94	93	76-120	1
Dibromomethane	ug/L (ppb)	50	91	89	79-121	2
4-Methyl-2-pentanone	ug/L (ppb)	250	110	108	54-153	2
cis-1,3-Dichloropropene	ug/L (ppb)	50	98	96	76-128	2
Toluene	ug/L (ppb)	50	90	89	79-115	1
trans-1,3-Dichloropropene	ug/L (ppb)	50	95	92	76-128	3
1,1,2-Trichloroethane	ug/L (ppb)	50	91	88	78-120	3
2-Hexanone	ug/L (ppb)	250	95	92	49-147	3
1,3-Dichloropropane	ug/L (ppb)	50	95	94	81-115	1
Tetrachloroethene	ug/L (ppb)	50	95	92	78-109	3
Dibromochloromethane	ug/L (ppb)	50	96	95	63-140	1
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	97	94	82-118	3
Chlorobenzene	ug/L (ppb)	50	91	90	80-113	1
Ethylbenzene	ug/L (ppb)	50	94	93	83-111	1
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	91	89	76-125	2
m,p-Xylene	ug/L (ppb)	100	96	93	84-112	3
o-Xylene	ug/L (ppb)	50	102	100	81-117	2
Styrene	ug/L (ppb)	50	101	98	83-121	3
Isopropylbenzene	ug/L (ppb)	50	99	97	81-122	2
Bromoform	ug/L (ppb)	50	97	95	40-161	2
n-Propylbenzene	ug/L (ppb)	50	95	93	81-115	2
Bromobenzene	ug/L (ppb)	50	95	94	80-113	1
1,3,5-Trimethylbenzene	ug/L (ppb)	50	99	98	83-117	1
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	92	91	79-118	1
1,2,3-Trichloropropane	ug/L (ppb)	50	90	88	74-116	2
2-Chlorotoluene	ug/L (ppb)	50	94	93	79-112	1
4-Chlorotoluene	ug/L (ppb)	50	92	91	80-116	1
tert-Butylbenzene	ug/L (ppb)	50	100	101	81-119	1
1,2,4-Trimethylbenzene	ug/L (ppb)	50	97	96	81-121	1
sec-Butylbenzene	ug/L (ppb)	50	96	96	83-123	0
p-Isopropyltoluene	ug/L (ppb)	50	99	99	81-122	0
1,3-Dichlorobenzene	ug/L (ppb)	50	94	93	80-115	1
1,4-Dichlorobenzene	ug/L (ppb)	50	87	86	77-112	1
1,2-Dichlorobenzene	ug/L (ppb)	50	91	89	79-115	2
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	94	93	62-133	1
1,2,4-Trichlorobenzene	ug/L (ppb)	50	99	99	75-119	0
Hexachlorobutadiene	ug/L (ppb)	50	95	95	70-116	0
Naphthalene	ug/L (ppb)	50	100	99	72-131	1
1,2,3-Trichlorobenzene	ug/L (ppb)	50	93	93	74-122	0

**Data Qualifiers & Definitions**

- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The compound is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs - Headspace was present in the container used for analysis.
- ht - The analysis was performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



**Fremont**  
*Analytical*

3600 Fremont Ave. N.  
Seattle, WA 98103  
T: (206) 352-3790  
F: (206) 352-7178  
info@fremontanalytical.com

**Friedman & Bruya**  
Michael Erdahl  
3012 16th Ave. W.  
Seattle, WA 98119

**RE: 812250**  
**Work Order Number: 1812267**

December 26, 2018

**Attention Michael Erdahl:**

Fremont Analytical, Inc. received 4 sample(s) on 12/18/2018 for the analyses presented in the following report.

***Cyanide by SM 4500-CN C, E***

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Mike Ridgeway  
Laboratory Director

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**CLIENT:** Friedman & Bruya  
**Project:** 812250  
**Work Order:** 1812267

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**Work Order Sample Summary**

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<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Date/Time Collected</b>	<b>Date/Time Received</b>
1812267-001	AMW-1-121718	12/17/2018 2:15 PM	12/18/2018 12:20 PM
1812267-002	AMW-2-121718	12/17/2018 4:35 PM	12/18/2018 12:20 PM
1812267-003	AMW-3-121718	12/17/2018 3:25 PM	12/18/2018 12:20 PM
1812267-004	AMW-4-121718	12/17/2018 1:15 PM	12/18/2018 12:20 PM

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**CLIENT:** Friedman & Bruya**Project:** 812250

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**I. SAMPLE RECEIPT:**

Samples receipt information is recorded on the attached Sample Receipt Checklist.

**II. GENERAL REPORTING COMMENTS:**

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

**III. ANALYSES AND EXCEPTIONS:**

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

**Qualifiers:**

- \* - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

**Acronyms:**

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate





## Analytical Report

Work Order: 1812267

Date Reported: 12/26/2018

CLIENT: Friedman & Bruya

Project: 812250

Lab ID: 1812267-001

Client Sample ID: AMW-1-121718

Collection Date: 12/17/2018 2:15:00 PM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Cyanide by SM 4500-CN C, E

Batch ID: 23064

Analyst: WF

Cyanide, Total	ND	0.0500		mg/L	1	12/26/2018 12:22:00 PM
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Lab ID: 1812267-002

Client Sample ID: AMW-2-121718

Collection Date: 12/17/2018 4:35:00 PM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Cyanide by SM 4500-CN C, E

Batch ID: 23064

Analyst: WF

Cyanide, Total	ND	0.0500		mg/L	1	12/26/2018 12:36:00 PM
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Lab ID: 1812267-003

Client Sample ID: AMW-3-121718

Collection Date: 12/17/2018 3:25:00 PM

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Cyanide by SM 4500-CN C, E

Batch ID: 23064

Analyst: WF

Cyanide, Total	ND	0.0500		mg/L	1	12/26/2018 12:40:00 PM
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Work Order: 1812267

Date Reported: 12/26/2018

**CLIENT:** Friedman & Bruya

**Project:** 812250

**Lab ID:** 1812267-004

**Collection Date:** 12/17/2018 1:15:00 PM

**Client Sample ID:** AMW-4-121718

**Matrix:** Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Cyanide by SM 4500-CN C, E**

Batch ID: 23064

Analyst: WF

Cyanide, Total	ND	0.0500		mg/L	1	12/26/2018 12:43:00 PM
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Date: 12/26/2018

Work Order: 1812267  
CLIENT: Friedman & Bruya  
Project: 812250

**QC SUMMARY REPORT**  
**Cyanide by SM 4500-CN C, E**

Sample ID	MB-23064	SampType:	MBLK	Units:	mg/L	Prep Date:	12/26/2018	RunNo:	48552			
Client ID:	MBLKW	Batch ID:	23064			Analysis Date:	12/26/2018	SeqNo:	951593			
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Cyanide, Total ND 0.0500

Sample ID	LCS-23064	SampType:	LCS	Units:	mg/L	Prep Date:	12/26/2018	RunNo:	48552		
Client ID:	LCSW	Batch ID:	23064			Analysis Date:	12/26/2018	SeqNo:	951594		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Cyanide, Total 0.262 0.0500 0.2500 0 105 80 120

Sample ID	1812267-001ADUP	SampType:	DUP	Units:	mg/L	Prep Date:	12/26/2018	RunNo:	48552			
Client ID:	AMW-1-121718	Batch ID:	23064			Analysis Date:	12/26/2018	SeqNo:	951596			
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Cyanide, Total ND 0.0500 0 20

Sample ID	1812267-001AMS	SampType:	MS	Units:	mg/L	Prep Date:	12/26/2018	RunNo:	48552			
Client ID:	AMW-1-121718	Batch ID:	23064			Analysis Date:	12/26/2018	SeqNo:	951597			
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Cyanide, Total 0.294 0.0500 0.2500 0 118 80 120

Sample ID	1812267-001AMSD	SampType:	MSD	Units:	mg/L	Prep Date:	12/26/2018	RunNo:	48552			
Client ID:	AMW-1-121718	Batch ID:	23064			Analysis Date:	12/26/2018	SeqNo:	951598			
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Cyanide, Total 0.281 0.0500 0.2500 0 112 80 120 0.2941 4.63 30

Client Name: **FB**  
 Logged by: **Clare Griggs**

Work Order Number: **1812267**  
 Date Received: **12/18/2018 12:20:00 PM**

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐  
 2. How was the sample delivered? FedEx

### Log In

3. Coolers are present? Yes ☐ No ☒ NA ☐  
**No cooler present.**  
 4. Shipping container/cooler in good condition? Yes ☒ No ☐  
 5. Custody Seals present on shipping container/cooler?  
 (Refer to comments for Custody Seals not intact) Yes ☐ No ☐ Not Required ☒  
 6. Was an attempt made to cool the samples? Yes ☐ No ☒ NA ☐  
**Unknown prior to receipt.**  
 7. Were all items received at a temperature of >0°C to 10.0°C \* Yes ☐ No ☒ NA ☐  
**Refer to item information.**  
 8. Sample(s) in proper container(s)? Yes ☒ No ☐  
 9. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐  
 10. Are samples properly preserved? Yes ☒ No ☐  
 11. Was preservative added to bottles? Yes ☐ No ☒ NA ☐  
 12. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒  
 13. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐  
 14. Does paperwork match bottle labels? Yes ☒ No ☐  
 15. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐  
 16. Is it clear what analyses were requested? Yes ☒ No ☐  
 17. Were all holding times able to be met? Yes ☒ No ☐

### Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

19. Additional remarks:

### Item Information

Item #	Temp °C
Sample	10.7

\* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

1812247

## TURNAROUND TIME

Phone # (206) 285-8282 Fax # (206) 283-5044

Page # \_\_\_\_\_ of \_\_\_\_\_

**TURNAROUND TIME**

☒ Standard (2 Weeks)

☐ RUSH \_\_\_\_\_

Rush charges authorized by: \_\_\_\_\_

\_\_\_\_\_

**SAMPLE DISPOSAL**

☐ Dispose after 30 days

☐ Return samples

☐ Will call with instructions

[illegible]

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
				

Relinquished by	Michael Erdahl	Friedman & Brya	12/14/16	11:00 AM
-----------------	----------------	-----------------	----------	----------

Received by DAVID 12/18/11 1224

Reinforced by:

Received by:		
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Yelena Aravkina, M.S.  
Michael Erdahl, B.S.  
Arina Podnozova, B.S.  
Eric Young, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
(206) 285-8282  
fbi@isomedia.com  
www.friedmanandbruya.com

September 17, 2020

Andrew Yonkofski, Project Manager  
Aspect Consulting, LLC  
710 2<sup>nd</sup> Ave S, Suite 550  
Seattle, WA 98104

Dear Mr Yonkofski:

Included are the results from the testing of material submitted on September 10, 2020 from the Evergreen Treatment Services 1700 Airport Way South, Seattle, WA PO 180043, F&BI 009183 project. There are 13 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
c: Aspect Data  
ASP0917R.DOC

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 10, 2020 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Evergreen Treatment Services 1700 Airport Way South, Seattle, WA PO 180043, F&BI 009183 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Aspect Consulting, LLC</u>
009183 -01	SV-3-091020

The TO-15 calibration standard failed the acceptance criteria for methylene chloride. The data were flagged accordingly.

All other quality control requirements were acceptable.



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SV-3-091020	Client:	Aspect Consulting, LLC
Date Received:	09/10/20	Project:	Evergreen Treatment Services, Seattle, WA
Date Collected:	09/10/20	Lab ID:	009183-01 1/17
Date Analyzed:	09/15/20	Data File:	091430.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	108	70	130

	Concentration
Compounds:	ug/m3
APH EC5-8 aliphatics	3,100
APH EC9-12 aliphatics	860
APH EC9-10 aromatics	<420

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	Not Applicable	Project:	Evergreen Treatment Services, Seattle, WA
Date Collected:	Not Applicable	Lab ID:	00-2043 MB
Date Analyzed:	09/14/20	Data File:	091421.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	110	70	130

Compounds:	Concentration ug/m3
APH EC5-8 aliphatics	<40
APH EC9-12 aliphatics	<50
APH EC9-10 aromatics	<25

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SV-3-091020	Client:	Aspect Consulting, LLC
Date Received:	09/10/20	Project:	Evergreen Treatment Services, Seattle, WA
Date Collected:	09/10/20	Lab ID:	009183-01 1/17
Date Analyzed:	09/15/20	Data File:	091430.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	105	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	180	110	1,2-Dichloropropane	<3.9	<0.85
Dichlorodifluoromethane	<8.4	<1.7	1,4-Dioxane	<6.1	<1.7
Chloromethane	<63	<31	2,2,4-Trimethylpentane	<79	<17
F-114	<12	<1.7	Methyl methacrylate	<70	<17
Vinyl chloride	<4.3	<1.7	Heptane	<70	<17
1,3-Butadiene	<0.75	<0.34	Bromodichloromethane	<1.1	<0.17
Butane	400	170	Trichloroethene	40	7.4
Bromomethane	<40	<10	cis-1,3-Dichloropropene	<7.7	<1.7
Chloroethane	<45	<17	4-Methyl-2-pentanone	<70	<17
Vinyl bromide	<7.4	<1.7	trans-1,3-Dichloropropene	<7.7	<1.7
Ethanol	570	300	Toluene	<320	<85
Acrolein	<35	<15	1,1,2-Trichloroethane	<1.9	<0.34
Pentane	190	64	2-Hexanone	<70	<17
Trichlorofluoromethane	<38	<6.8	Tetrachloroethene	<120	<17
Acetone	640	270	Dibromochloromethane	<1.4	<0.17
2-Propanol	<150	<59	1,2-Dibromoethane (EDB)	<1.3	<0.17
1,1-Dichloroethene	<6.7	<1.7	Chlorobenzene	<7.8	<1.7
trans-1,2-Dichloroethene	<6.7	<1.7	Ethylbenzene	<7.4	<1.7
Methylene chloride	<590 ca	<170 ca	1,1,2,2-Tetrachloroethane	<2.3	<0.34
t-Butyl alcohol (TBA)	<210	<68	Nonane	<89	<17
3-Chloropropene	<27	<8.5	Isopropylbenzene	<42	<8.5
CFC-113	<13	<1.7	2-Chlorotoluene	<88	<17
Carbon disulfide	<110	<34	Propylbenzene	<42	<8.5
Methyl t-butyl ether (MTBE)	<31	<8.5	4-Ethyltoluene	<42	<8.5
Vinyl acetate	<120	<34	m,p-Xylene	20	4.6
1,1-Dichloroethane	<6.9	<1.7	o-Xylene	<7.4	<1.7
cis-1,2-Dichloroethene	35	8.8	Styrene	<14	<3.4
Hexane	79	22	Bromoform	<35	<3.4
Chloroform	1.7	0.36	Benzyl chloride	<0.88	<0.17
Ethyl acetate	<120	<34	1,3,5-Trimethylbenzene	<42	<8.5
Tetrahydrofuran	28	9.3	1,2,4-Trimethylbenzene	<42	<8.5
2-Butanone (MEK)	<50	<17	1,3-Dichlorobenzene	<10	<1.7
1,2-Dichloroethane (EDC)	<0.69	<0.17	1,4-Dichlorobenzene	<3.9	<0.65
1,1,1-Trichloroethane	<9.3	<1.7	1,2-Dichlorobenzene	<10	<1.7
Carbon tetrachloride	<5.3	<0.85	1,2,4-Trichlorobenzene	<13	<1.7
Benzene	29	9.2	Naphthalene	<4.5	<0.85
Cyclohexane	<120	<34	Hexachlorobutadiene	<3.6	<0.34

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	Not Applicable	Project:	Evergreen Treatment Services, Seattle, WA
Date Collected:	Not Applicable	Lab ID:	00-2043 MB
Date Analyzed:	09/14/20	Data File:	091421.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	107	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<1.2	<0.7	1,2-Dichloropropane	<0.23	<0.05
Dichlorodifluoromethane	<0.49	<0.1	1,4-Dioxane	<0.36	<0.1
Chloromethane	<3.7	<1.8	2,2,4-Trimethylpentane	<4.7	<1
F-114	<0.7	<0.1	Methyl methacrylate	<4.1	<1
Vinyl chloride	<0.26	<0.1	Heptane	<4.1	<1
1,3-Butadiene	<0.044	<0.02	Bromodichloromethane	<0.067	<0.01
Butane	<2.4	<1	Trichloroethene	<0.11	<0.02
Bromomethane	<2.3	<0.6	cis-1,3-Dichloropropene	<0.45	<0.1
Chloroethane	<2.6	<1	4-Methyl-2-pentanone	<4.1	<1
Vinyl bromide	<0.44	<0.1	trans-1,3-Dichloropropene	<0.45	<0.1
Ethanol	<7.5	<4	Toluene	<19	<5
Acrolein	<2.1	<0.9	1,1,2-Trichloroethane	<0.11	<0.02
Pentane	<3	<1	2-Hexanone	<4.1	<1
Trichlorofluoromethane	<2.2	<0.4	Tetrachloroethene	<6.8	<1
Acetone	<4.8	<2	Dibromochloromethane	<0.085	<0.01
2-Propanol	<8.6	<3.5	1,2-Dibromoethane (EDB)	<0.077	<0.01
1,1-Dichloroethene	<0.4	<0.1	Chlorobenzene	<0.46	<0.1
trans-1,2-Dichloroethene	<0.4	<0.1	Ethylbenzene	<0.43	<0.1
Methylene chloride	<35 ca	<10 ca	1,1,2,2-Tetrachloroethane	<0.14	<0.02
t-Butyl alcohol (TBA)	<12	<4	Nonane	<5.2	<1
3-Chloropropene	<1.6	<0.5	Isopropylbenzene	<2.5	<0.5
CFC-113	<0.77	<0.1	2-Chlorotoluene	<5.2	<1
Carbon disulfide	<6.2	<2	Propylbenzene	<2.5	<0.5
Methyl t-butyl ether (MTBE)	<1.8	<0.5	4-Ethyltoluene	<2.5	<0.5
Vinyl acetate	<7	<2	m,p-Xylene	<0.87	<0.2
1,1-Dichloroethane	<0.4	<0.1	o-Xylene	<0.43	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1	Styrene	<0.85	<0.2
Hexane	<3.5	<1	Bromoform	<2.1	<0.2
Chloroform	<0.049	<0.01	Benzyl chloride	<0.052	<0.01
Ethyl acetate	<7.2	<2	1,3,5-Trimethylbenzene	<2.5	<0.5
Tetrahydrofuran	<0.29	<0.1	1,2,4-Trimethylbenzene	<2.5	<0.5
2-Butanone (MEK)	<2.9	<1	1,3-Dichlorobenzene	<0.6	<0.1
1,2-Dichloroethane (EDC)	<0.04	<0.01	1,4-Dichlorobenzene	<0.23	<0.038
1,1,1-Trichloroethane	<0.55	<0.1	1,2-Dichlorobenzene	<0.6	<0.1
Carbon tetrachloride	<0.31	<0.05	1,2,4-Trichlorobenzene	<0.74	<0.1
Benzene	<0.32	<0.1	Naphthalene	<0.26	<0.05
Cyclohexane	<6.9	<2	Hexachlorobutadiene	<0.21	<0.02

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/20

Date Received: 09/10/20

Project: Evergreen Treatment Services 1700 Airport Way South, Seattle, F&BI 009183

Date Extracted: 09/16/20

Date Analyzed: 09/16/20

**RESULTS FROM THE ANALYSIS OF AIR SAMPLES  
FOR HELIUM USING METHOD ASTM D1946**

Results Reported as % Helium

Sample ID

Helium

Laboratory ID

SV-3-091020

<0.6

009183-01

Method Blank

<0.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/20

Date Received: 09/10/20

Project: Evergreen Treatment Services 1700 Airport Way South, Seattle, F&BI 009183

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD MA-APH**

Laboratory Code: 009222-03 1/8.3 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
APH EC5-8 aliphatics	ug/m3	370	260	35 vo
APH EC9-12 aliphatics	ug/m3	1,600	1,500	6
APH EC9-10 aromatics	ug/m3	<210	<210	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
APH EC5-8 aliphatics	ug/m3	67	80	70-130
APH EC9-12 aliphatics	ug/m3	67	102	70-130
APH EC9-10 aromatics	ug/m3	67	88	70-130

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/20

Date Received: 09/10/20

Project: Evergreen Treatment Services 1700 Airport Way South, Seattle, F&BI 009183

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: 009222-03 1/8.3 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Propene	ug/m3	<10	<10	nm
Dichlorodifluoromethane	ug/m3	<4.1	<4.1	nm
Chloromethane	ug/m3	<31	<31	nm
F-114	ug/m3	<5.8	<5.8	nm
Vinyl chloride	ug/m3	3.7	3.7	0
1,3-Butadiene	ug/m3	<0.37	<0.37	nm
Butane	ug/m3	<20	<20	nm
Bromomethane	ug/m3	<19	<19	nm
Chloroethane	ug/m3	<22	<22	nm
Vinyl bromide	ug/m3	<3.6	<3.6	nm
Ethanol	ug/m3	<63	<63	nm
Acrolein	ug/m3	<17	<17	nm
Pentane	ug/m3	<24	<24	nm
Trichlorofluoromethane	ug/m3	<19	<19	nm
Acetone	ug/m3	110	91	19
2-Propanol	ug/m3	<71	<71	nm
1,1-Dichloroethene	ug/m3	<3.3	<3.3	nm
trans-1,2-Dichloroethene	ug/m3	<3.3	<3.3	nm
Methylene chloride	ug/m3	<290	<290	nm
t-Butyl alcohol (TBA)	ug/m3	<100	<100	nm
3-Chloropropene	ug/m3	<13	<13	nm
CFC-113	ug/m3	<6.4	<6.4	nm
Carbon disulfide	ug/m3	<52	<52	nm
Methyl t-butyl ether (MTBE)	ug/m3	<15	<15	nm
Vinyl acetate	ug/m3	<58	<58	nm
1,1-Dichloroethane	ug/m3	<3.4	<3.4	nm
cis-1,2-Dichloroethene	ug/m3	<3.3	<3.3	nm
Hexane	ug/m3	<29	<29	nm
Chloroform	ug/m3	<0.41	<0.41	nm
Ethyl acetate	ug/m3	<60	<60	nm
Tetrahydrofuran	ug/m3	<2.4	<2.4	nm
2-Butanone (MEK)	ug/m3	45	42	7
1,2-Dichloroethane (EDC)	ug/m3	<0.34	<0.34	nm
1,1,1-Trichloroethane	ug/m3	<4.5	<4.5	nm
Carbon tetrachloride	ug/m3	<2.6	<2.6	nm
Benzene	ug/m3	<2.7	<2.7	nm
Cyclohexane	ug/m3	<57	<57	nm
1,2-Dichloropropane	ug/m3	<1.9	<1.9	nm
1,4-Dioxane	ug/m3	<3	<3	nm
2,2,4-Trimethylpentane	ug/m3	<39	<39	nm

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/20

Date Received: 09/10/20

Project: Evergreen Treatment Services 1700 Airport Way South, Seattle, F&BI 009183

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: 009222-03 1/8.3 (Duplicate, continued)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Methyl methacrylate	ug/m3	<34	<34	nm
Heptane	ug/m3	<34	<34	nm
Bromodichloromethane	ug/m3	<0.56	<0.56	nm
Trichloroethene	ug/m3	<0.89	<0.89	nm
cis-1,3-Dichloropropene	ug/m3	<3.8	<3.8	nm
4-Methyl-2-pentanone	ug/m3	<34	<34	nm
trans-1,3-Dichloropropene	ug/m3	<3.8	<3.8	nm
Toluene	ug/m3	<160	<160	nm
1,1,2-Trichloroethane	ug/m3	<0.91	<0.91	nm
2-Hexanone	ug/m3	<34	<34	nm
Tetrachloroethene	ug/m3	<56	<56	nm
Dibromochloromethane	ug/m3	<0.71	<0.71	nm
1,2-Dibromoethane (EDB)	ug/m3	<0.64	<0.64	nm
Chlorobenzene	ug/m3	<3.8	<3.8	nm
Ethylbenzene	ug/m3	<3.6	<3.6	nm
1,1,2,2-Tetrachloroethane	ug/m3	1.6	1.5	6
Nonane	ug/m3	<44	<44	nm
Isopropylbenzene	ug/m3	<20	<20	nm
2-Chlorotoluene	ug/m3	<43	<43	nm
Propylbenzene	ug/m3	<20	<20	nm
4-Ethyltoluene	ug/m3	<20	<20	nm
m,p-Xylene	ug/m3	<7.2	<7.2	nm
o-Xylene	ug/m3	<3.6	<3.6	nm
Styrene	ug/m3	<7.1	<7.1	nm
Bromoform	ug/m3	<17	<17	nm
Benzyl chloride	ug/m3	<0.43	<0.43	nm
1,3,5-Trimethylbenzene	ug/m3	<20	<20	nm
1,2,4-Trimethylbenzene	ug/m3	<20	<20	nm
1,3-Dichlorobenzene	ug/m3	<5	<5	nm
1,4-Dichlorobenzene	ug/m3	<1.9	<1.9	nm
1,2-Dichlorobenzene	ug/m3	<5	<5	nm
1,2,4-Trichlorobenzene	ug/m3	<6.2	<6.2	nm
Naphthalene	ug/m3	<2.2	<2.2	nm
Hexachlorobutadiene	ug/m3	<1.8	<1.8	nm



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/20

Date Received: 09/10/20

Project: Evergreen Treatment Services 1700 Airport Way South, Seattle, F&BI 009183

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Propene	ug/m3	23	102	70-130
Dichlorodifluoromethane	ug/m3	67	104	70-130
Chloromethane	ug/m3	28	103	70-130
F-114	ug/m3	94	105	70-130
Vinyl chloride	ug/m3	35	103	70-130
1,3-Butadiene	ug/m3	30	101	70-130
Butane	ug/m3	32	103	70-130
Bromomethane	ug/m3	52	110	70-130
Chloroethane	ug/m3	36	103	70-130
Vinyl bromide	ug/m3	59	108	70-130
Ethanol	ug/m3	25	95	70-130
Acrolein	ug/m3	31	99	70-130
Pentane	ug/m3	40	105	70-130
Trichlorofluoromethane	ug/m3	76	107	70-130
Acetone	ug/m3	32	106	70-130
2-Propanol	ug/m3	33	102	70-130
1,1-Dichloroethene	ug/m3	54	103	70-130
trans-1,2-Dichloroethene	ug/m3	54	102	70-130
Methylene chloride	ug/m3	94	92	70-130
t-Butyl alcohol (TBA)	ug/m3	41	101	70-130
3-Chloropropene	ug/m3	42	96	70-130
CFC-113	ug/m3	100	104	70-130
Carbon disulfide	ug/m3	42	95	70-130
Methyl t-butyl ether (MTBE)	ug/m3	49	103	70-130
Vinyl acetate	ug/m3	48	94	70-130
1,1-Dichloroethane	ug/m3	55	105	70-130
cis-1,2-Dichloroethene	ug/m3	54	104	70-130
Hexane	ug/m3	48	105	70-130
Chloroform	ug/m3	66	105	70-130
Ethyl acetate	ug/m3	49	108	70-130
Tetrahydrofuran	ug/m3	40	100	70-130
2-Butanone (MEK)	ug/m3	40	112	70-130
1,2-Dichloroethane (EDC)	ug/m3	55	104	70-130
1,1,1-Trichloroethane	ug/m3	74	103	70-130
Carbon tetrachloride	ug/m3	85	104	70-130
Benzene	ug/m3	43	101	70-130
Cyclohexane	ug/m3	46	102	70-130
1,2-Dichloropropane	ug/m3	62	96	70-130
1,4-Dioxane	ug/m3	49	92	70-130
2,2,4-Trimethylpentane	ug/m3	63	98	70-130

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/20

Date Received: 09/10/20

Project: Evergreen Treatment Services 1700 Airport Way South, Seattle, F&BI 009183

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: Laboratory Control Sample (Continued)

Analyte	Reporting Units	Spike Level	Percent	Acceptance Criteria
			Recovery LCS	
Methyl methacrylate	ug/m3	55	98	70-130
Heptane	ug/m3	55	99	70-130
Bromodichloromethane	ug/m3	90	101	70-130
Trichloroethene	ug/m3	73	100	70-130
cis-1,3-Dichloropropene	ug/m3	61	105	70-130
4-Methyl-2-pentanone	ug/m3	55	106	70-130
trans-1,3-Dichloropropene	ug/m3	61	100	70-130
Toluene	ug/m3	51	98	70-130
1,1,2-Trichloroethane	ug/m3	74	102	70-130
2-Hexanone	ug/m3	55	100	70-130
Tetrachloroethene	ug/m3	92	92	70-130
Dibromochloromethane	ug/m3	120	102	70-130
1,2-Dibromoethane (EDB)	ug/m3	100	102	70-130
Chlorobenzene	ug/m3	62	100	70-130
Ethylbenzene	ug/m3	59	101	70-130
1,1,2,2-Tetrachloroethane	ug/m3	93	105	70-130
Nonane	ug/m3	71	105	70-130
Isopropylbenzene	ug/m3	66	105	70-130
2-Chlorotoluene	ug/m3	70	107	70-130
Propylbenzene	ug/m3	66	110	70-130
4-Ethyltoluene	ug/m3	66	116	70-130
m,p-Xylene	ug/m3	120	103	70-130
o-Xylene	ug/m3	59	102	70-130
Styrene	ug/m3	58	101	70-130
Bromoform	ug/m3	140	104	70-130
Benzyl chloride	ug/m3	70	105	70-130
1,3,5-Trimethylbenzene	ug/m3	66	106	70-130
1,2,4-Trimethylbenzene	ug/m3	66	108	70-130
1,3-Dichlorobenzene	ug/m3	81	104	70-130
1,4-Dichlorobenzene	ug/m3	81	98	70-130
1,2-Dichlorobenzene	ug/m3	81	98	70-130
1,2,4-Trichlorobenzene	ug/m3	100	91	70-130
Naphthalene	ug/m3	71	92	70-130
Hexachlorobutadiene	ug/m3	140	106	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/20

Date Received: 09/10/20

Project: Evergreen Treatment Services 1700 Airport Way South, Seattle, F&BI 009183

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR HELIUM  
USING METHOD ASTM D1946**

Laboratory Code: 009138-01 (Duplicate)

Analyte	Sample Result (%)	Duplicate Result (%)	Relative Percent Difference	Acceptance Criteria
Helium	<0.6	<0.6	nm	0-20

Laboratory Code: 009233-01 (Duplicate)

Analyte	Sample Result (%)	Duplicate Result (%)	Relative Percent Difference	Acceptance Criteria
Helium	<0.6	<0.6	nm	0-20

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

09-10-20

24

Person C

#01

80043

INVOICE TO

2

**SAMPLE DISPOSAL**

☐ Default: Clean after 3 days

☐ Archive (Fee may apply)

## ANALYSIS REQUESTED

[illegible]

DATE	TIME
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2017

10

Samples received at	22 °C
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FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Yelena Aravkina, M.S.  
Michael Erdahl, B.S.  
Arina Podnozova, B.S.  
Eric Young, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
(206) 285-8282  
fbi@isomedia.com  
www.friedmanandbruya.com

September 18, 2020

Andrew Yonkofski, Project Manager  
Aspect Consulting, LLC  
710 2<sup>nd</sup> Ave S, Suite 550  
Seattle, WA 98104

Dear Mr Yonkofski:

Included are the results from the testing of material submitted on September 17, 2020 from the 180043, F&BI 009308 project. There are 13 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
c: Aspect Data  
ASP0918R.DOC

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 17, 2020 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC 180043, F&BI 009308 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Aspect Consulting, LLC</u>
009308 -01	SV-5-091720

The TO-15 calibration standard failed the acceptance criteria for methylene chloride. The data were flagged accordingly.

The APH EC5-8 aliphatics and propene concentration in sample SV-5-091720 exceeded the calibration range of the instrument. The data were flagged accordingly.

All other quality control requirements were acceptable.

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SV-5-091720	Client:	Aspect Consulting, LLC
Date Received:	09/17/20	Project:	180043, F&BI 009308
Date Collected:	09/17/20	Lab ID:	009308-01 1/42
Date Analyzed:	09/18/20	Data File:	091723.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	95	70	130

Compounds:	Concentration
	ug/m3

APH EC5-8 aliphatics	29,000 ve
APH EC9-12 aliphatics	22,000
APH EC9-10 aromatics	<1,000



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	Not Applicable	Project:	180043, F&BI 009308
Date Collected:	Not Applicable	Lab ID:	00-2080 MB
Date Analyzed:	09/17/20	Data File:	091718.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	106	70	130

Compounds:	Concentration ug/m3
APH EC5-8 aliphatics	<40
APH EC9-12 aliphatics	<50
APH EC9-10 aromatics	<25

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID: SV-5-091720	Client: Aspect Consulting, LLC
Date Received: 09/17/20	Project: 180043, F&BI 009308
Date Collected: 09/17/20	Lab ID: 009308-01 1/42
Date Analyzed: 09/18/20	Data File: 091723.D
Matrix: Air	Instrument: GCMS7
Units: ug/m3	Operator: bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	93	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	2,100 ve	1,200 ve	1,2-Dichloropropane	<9.7	<2.1
Dichlorodifluoromethane	<21	<4.2	1,4-Dioxane	<15	<4.2
Chloromethane	<160	<76	2,2,4-Trimethylpentane	460	99
F-114	<29	<4.2	Methyl methacrylate	<170	<42
Vinyl chloride	280	110	Heptane	<170	<42
1,3-Butadiene	<1.9	<0.84	Bromodichloromethane	<2.8	<0.42
Butane	2,000	850	Trichloroethene	61	11
Bromomethane	<98	<25	cis-1,3-Dichloropropene	<19	<4.2
Chloroethane	<110	<42	4-Methyl-2-pentanone	<170	<42
Vinyl bromide	<18	<4.2	trans-1,3-Dichloropropene	<19	<4.2
Ethanol	<320	<170	Toluene	<790	<210
Acrolein	<87	<38	1,1,2-Trichloroethane	<2.3	<0.42
Pentane	870	290	2-Hexanone	<170	<42
Trichlorofluoromethane	<94	<17	Tetrachloroethene	<280	<42
Acetone	<600	<250	Dibromochloromethane	<3.6	<0.42
2-Propanol	<360	<150	1,2-Dibromoethane (EDB)	<3.2	<0.42
1,1-Dichloroethene	<17	<4.2	Chlorobenzene	<19	<4.2
trans-1,2-Dichloroethene	110	28	Ethylbenzene	<18	<4.2
Methylene chloride	<1,500 ca	<420 ca	1,1,2,2-Tetrachloroethane	<5.8	<0.84
t-Butyl alcohol (TBA)	<510	<170	Nonane	<220	<42
3-Chloropropene	<66	<21	Isopropylbenzene	<100	<21
CFC-113	<32	<4.2	2-Chlorotoluene	<220	<42
Carbon disulfide	<260	<84	Propylbenzene	<100	<21
Methyl t-butyl ether (MTBE)	<76	<21	4-Ethyltoluene	<100	<21
Vinyl acetate	<300	<84	m,p-Xylene	<36	<8.4
1,1-Dichloroethane	<17	<4.2	o-Xylene	37	8.5
cis-1,2-Dichloroethene	70	18	Styrene	<36	<8.4
Hexane	360	100	Bromoform	<87	<8.4
Chloroform	<2.1	<0.42	Benzyl chloride	<2.2	<0.42
Ethyl acetate	<300	<84	1,3,5-Trimethylbenzene	<100	<21
Tetrahydrofuran	18	6.2	1,2,4-Trimethylbenzene	<100	<21
2-Butanone (MEK)	<120	<42	1,3-Dichlorobenzene	<25	<4.2
1,2-Dichloroethane (EDC)	<1.7	<0.42	1,4-Dichlorobenzene	<9.7	<1.6
1,1,1-Trichloroethane	<23	<4.2	1,2-Dichlorobenzene	<25	<4.2
Carbon tetrachloride	<13	<2.1	1,2,4-Trichlorobenzene	<31	<4.2
Benzene	170	54	Naphthalene	<11	<2.1
Cyclohexane	<290	<84	Hexachlorobutadiene	<9	<0.84

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	Not Applicable	Project:	180043, F&BI 009308
Date Collected:	Not Applicable	Lab ID:	00-2080 MB
Date Analyzed:	09/17/20	Data File:	091718.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	104	70	130

Compounds:	Concentration ug/m3	ppbv	Compounds:	Concentration ug/m3	ppbv
Propene	<1.2	<0.7	1,2-Dichloropropane	<0.23	<0.05
Dichlorodifluoromethane	<0.49	<0.1	1,4-Dioxane	<0.36	<0.1
Chloromethane	<3.7	<1.8	2,2,4-Trimethylpentane	<4.7	<1
F-114	<0.7	<0.1	Methyl methacrylate	<4.1	<1
Vinyl chloride	<0.26	<0.1	Heptane	<4.1	<1
1,3-Butadiene	<0.044	<0.02	Bromodichloromethane	<0.067	<0.01
Butane	<2.4	<1	Trichloroethene	<0.11	<0.02
Bromomethane	<2.3	<0.6	cis-1,3-Dichloropropene	<0.45	<0.1
Chloroethane	<2.6	<1	4-Methyl-2-pentanone	<4.1	<1
Vinyl bromide	<0.44	<0.1	trans-1,3-Dichloropropene	<0.45	<0.1
Ethanol	<7.5	<4	Toluene	<19	<5
Acrolein	<2.1	<0.9	1,1,2-Trichloroethane	<0.055	<0.01
Pentane	<3	<1	2-Hexanone	<4.1	<1
Trichlorofluoromethane	<2.2	<0.4	Tetrachloroethene	<6.8	<1
Acetone	<4.8	<2	Dibromochloromethane	<0.085	<0.01
2-Propanol	<8.6	<3.5	1,2-Dibromoethane (EDB)	<0.077	<0.01
1,1-Dichloroethene	<0.4	<0.1	Chlorobenzene	<0.46	<0.1
trans-1,2-Dichloroethene	<0.4	<0.1	Ethylbenzene	<0.43	<0.1
Methylene chloride	<35 ca	<10 ca	1,1,2,2-Tetrachloroethane	<0.14	<0.02
t-Butyl alcohol (TBA)	<12	<4	Nonane	<5.2	<1
3-Chloropropene	<1.6	<0.5	Isopropylbenzene	<2.5	<0.5
CFC-113	<0.77	<0.1	2-Chlorotoluene	<5.2	<1
Carbon disulfide	<6.2	<2	Propylbenzene	<2.5	<0.5
Methyl t-butyl ether (MTBE)	<1.8	<0.5	4-Ethyltoluene	<2.5	<0.5
Vinyl acetate	<7	<2	m,p-Xylene	<0.87	<0.2
1,1-Dichloroethane	<0.4	<0.1	o-Xylene	<0.43	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1	Styrene	<0.85	<0.2
Hexane	<3.5	<1	Bromoform	<2.1	<0.2
Chloroform	<0.049	<0.01	Benzyl chloride	<0.052	<0.01
Ethyl acetate	<7.2	<2	1,3,5-Trimethylbenzene	<2.5	<0.5
Tetrahydrofuran	<0.29	<0.1	1,2,4-Trimethylbenzene	<2.5	<0.5
2-Butanone (MEK)	<2.9	<1	1,3-Dichlorobenzene	<0.6	<0.1
1,2-Dichloroethane (EDC)	<0.04	<0.01	1,4-Dichlorobenzene	<0.23	<0.038
1,1,1-Trichloroethane	<0.55	<0.1	1,2-Dichlorobenzene	<0.6	<0.1
Carbon tetrachloride	<0.31	<0.05	1,2,4-Trichlorobenzene	<0.74	<0.1
Benzene	<0.32	<0.1	Naphthalene	<0.26	<0.05
Cyclohexane	<6.9	<2	Hexachlorobutadiene	<0.21	<0.02

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/20

Date Received: 09/17/20

Project: 180043, F&BI 009308

Date Extracted: 09/18/20

Date Analyzed: 09/18/20

**RESULTS FROM THE ANALYSIS OF AIR SAMPLES  
FOR HELIUM USING METHOD ASTM D1946**

Results Reported as % Helium

Sample ID

Helium

Laboratory ID

SV-5-091720

<0.6

009308-01

Method Blank

<0.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/20

Date Received: 09/17/20

Project: 180043, F&BI 009308

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD MA-APH**

Laboratory Code: 009252-01 1/3.8 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
APH EC5-8 aliphatics	ug/m3	350	350	0
APH EC9-12 aliphatics	ug/m3	790	630	23
APH EC9-10 aromatics	ug/m3	<95	<95	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
APH EC5-8 aliphatics	ug/m3	67	87	70-130
APH EC9-12 aliphatics	ug/m3	67	116	70-130
APH EC9-10 aromatics	ug/m3	67	96	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/20

Date Received: 09/17/20

Project: 180043, F&BI 009308

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: 009252-01 1/3.8 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Propene	ug/m3	<4.6	<4.6	nm
Dichlorodifluoromethane	ug/m3	2.7	2.9	7
Chloromethane	ug/m3	<14	<14	nm
F-114	ug/m3	<2.7	<2.7	nm
Vinyl chloride	ug/m3	<0.97	<0.97	nm
1,3-Butadiene	ug/m3	<0.17	<0.17	nm
Butane	ug/m3	<9	<9	nm
Bromomethane	ug/m3	<8.9	<8.9	nm
Chloroethane	ug/m3	<10	<10	nm
Vinyl bromide	ug/m3	<1.7	<1.7	nm
Ethanol	ug/m3	280	290	4
Acrolein	ug/m3	<7.8	<7.8	nm
Pentane	ug/m3	<11	<11	nm
Trichlorofluoromethane	ug/m3	<8.5	<8.5	nm
Acetone	ug/m3	230	240	4
2-Propanol	ug/m3	51	51	0
1,1-Dichloroethene	ug/m3	<1.5	<1.5	nm
trans-1,2-Dichloroethene	ug/m3	<1.5	<1.5	nm
Methylene chloride	ug/m3	140	140	0
t-Butyl alcohol (TBA)	ug/m3	94	94	0
3-Chloropropene	ug/m3	<5.9	<5.9	nm
CFC-113	ug/m3	<2.9	<2.9	nm
Carbon disulfide	ug/m3	<24	<24	nm
Methyl t-butyl ether (MTBE)	ug/m3	<6.9	<6.9	nm
Vinyl acetate	ug/m3	<27	<27	nm
1,1-Dichloroethane	ug/m3	<1.5	<1.5	nm
cis-1,2-Dichloroethene	ug/m3	<1.5	<1.5	nm
Hexane	ug/m3	<13	<13	nm
Chloroform	ug/m3	0.37	0.35	6
Ethyl acetate	ug/m3	<27	<27	nm
Tetrahydrofuran	ug/m3	<1.1	<1.1	nm
2-Butanone (MEK)	ug/m3	15	14	7
1,2-Dichloroethane (EDC)	ug/m3	<0.15	<0.15	nm
1,1,1-Trichloroethane	ug/m3	2.7	2.7	0
Carbon tetrachloride	ug/m3	<1.2	<1.2	nm
Benzene	ug/m3	3.4	3.4	0
Cyclohexane	ug/m3	<26	<26	nm
1,2-Dichloropropane	ug/m3	<0.88	<0.88	nm
1,4-Dioxane	ug/m3	<1.4	<1.4	nm
2,2,4-Trimethylpentane	ug/m3	<18	<18	nm

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/20

Date Received: 09/17/20

Project: 180043, F&BI 009308

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: 009252-01 1/3.8 (Duplicate, continued)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Methyl methacrylate	ug/m3	<16	<16	nm
Heptane	ug/m3	<16	<16	nm
Bromodichloromethane	ug/m3	<0.25	<0.25	nm
Trichloroethene	ug/m3	<0.41	<0.41	nm
cis-1,3-Dichloropropene	ug/m3	<1.7	<1.7	nm
4-Methyl-2-pentanone	ug/m3	<16	<16	nm
trans-1,3-Dichloropropene	ug/m3	<1.7	<1.7	nm
Toluene	ug/m3	<72	<72	nm
1,1,2-Trichloroethane	ug/m3	<0.21	<0.21	nm
2-Hexanone	ug/m3	<16	<16	nm
Tetrachloroethene	ug/m3	<26	<26	nm
Dibromochloromethane	ug/m3	<0.32	<0.32	nm
1,2-Dibromoethane (EDB)	ug/m3	<0.29	<0.29	nm
Chlorobenzene	ug/m3	<1.7	<1.7	nm
Ethylbenzene	ug/m3	2.9	2.6	11
1,1,2,2-Tetrachloroethane	ug/m3	<0.52	<0.52	nm
Nonane	ug/m3	<20	<20	nm
Isopropylbenzene	ug/m3	<9.3	<9.3	nm
2-Chlorotoluene	ug/m3	<20	<20	nm
Propylbenzene	ug/m3	<9.3	<9.3	nm
4-Ethyltoluene	ug/m3	<9.3	<9.3	nm
m,p-Xylene	ug/m3	14	13	7
o-Xylene	ug/m3	5.0	4.5	11
Styrene	ug/m3	<3.2	<3.2	nm
Bromoform	ug/m3	<7.9	<7.9	nm
Benzyl chloride	ug/m3	<0.2	<0.2	nm
1,3,5-Trimethylbenzene	ug/m3	<9.3	<9.3	nm
1,2,4-Trimethylbenzene	ug/m3	<9.3	<9.3	nm
1,3-Dichlorobenzene	ug/m3	<2.3	<2.3	nm
1,4-Dichlorobenzene	ug/m3	<0.87	<0.87	nm
1,2-Dichlorobenzene	ug/m3	<2.3	<2.3	nm
1,2,4-Trichlorobenzene	ug/m3	<2.8	<2.8	nm
Naphthalene	ug/m3	<1	<1	nm
Hexachlorobutadiene	ug/m3	<0.81	<0.81	nm

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/20

Date Received: 09/17/20

Project: 180043, F&BI 009308

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Propene	ug/m3	23	113	70-130
Dichlorodifluoromethane	ug/m3	67	106	70-130
Chloromethane	ug/m3	28	111	70-130
F-114	ug/m3	94	108	70-130
Vinyl chloride	ug/m3	35	109	70-130
1,3-Butadiene	ug/m3	30	106	70-130
Butane	ug/m3	32	112	70-130
Bromomethane	ug/m3	52	109	70-130
Chloroethane	ug/m3	36	108	70-130
Vinyl bromide	ug/m3	59	108	70-130
Ethanol	ug/m3	25	102	70-130
Acrolein	ug/m3	31	101	70-130
Pentane	ug/m3	40	109	70-130
Trichlorofluoromethane	ug/m3	76	108	70-130
Acetone	ug/m3	32	107	70-130
2-Propanol	ug/m3	33	105	70-130
1,1-Dichloroethene	ug/m3	54	103	70-130
trans-1,2-Dichloroethene	ug/m3	54	104	70-130
Methylene chloride	ug/m3	94	95	70-130
t-Butyl alcohol (TBA)	ug/m3	41	103	70-130
3-Chloropropene	ug/m3	42	110	70-130
CFC-113	ug/m3	100	106	70-130
Carbon disulfide	ug/m3	42	97	70-130
Methyl t-butyl ether (MTBE)	ug/m3	49	105	70-130
Vinyl acetate	ug/m3	48	102	70-130
1,1-Dichloroethane	ug/m3	55	110	70-130
cis-1,2-Dichloroethene	ug/m3	54	105	70-130
Hexane	ug/m3	48	108	70-130
Chloroform	ug/m3	66	108	70-130
Ethyl acetate	ug/m3	49	115	70-130
Tetrahydrofuran	ug/m3	40	108	70-130
2-Butanone (MEK)	ug/m3	40	113	70-130
1,2-Dichloroethane (EDC)	ug/m3	55	108	70-130
1,1,1-Trichloroethane	ug/m3	74	105	70-130
Carbon tetrachloride	ug/m3	85	106	70-130
Benzene	ug/m3	43	102	70-130
Cyclohexane	ug/m3	46	102	70-130
1,2-Dichloropropane	ug/m3	62	103	70-130
1,4-Dioxane	ug/m3	49	93	70-130
2,2,4-Trimethylpentane	ug/m3	63	105	70-130



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/20

Date Received: 09/17/20

Project: 180043, F&BI 009308

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: Laboratory Control Sample (Continued)

Analyte	Reporting Units	Spike Level	Percent	Acceptance Criteria
			Recovery LCS	
Methyl methacrylate	ug/m3	55	109	70-130
Heptane	ug/m3	55	111	70-130
Bromodichloromethane	ug/m3	90	107	70-130
Trichloroethene	ug/m3	73	103	70-130
cis-1,3-Dichloropropene	ug/m3	61	110	70-130
4-Methyl-2-pentanone	ug/m3	55	104	70-130
trans-1,3-Dichloropropene	ug/m3	61	100	70-130
Toluene	ug/m3	51	105	70-130
1,1,2-Trichloroethane	ug/m3	74	108	70-130
2-Hexanone	ug/m3	55	110	70-130
Tetrachloroethene	ug/m3	92	94	70-130
Dibromochloromethane	ug/m3	120	107	70-130
1,2-Dibromoethane (EDB)	ug/m3	100	106	70-130
Chlorobenzene	ug/m3	62	102	70-130
Ethylbenzene	ug/m3	59	104	70-130
1,1,2,2-Tetrachloroethane	ug/m3	93	104	70-130
Nonane	ug/m3	71	109	70-130
Isopropylbenzene	ug/m3	66	101	70-130
2-Chlorotoluene	ug/m3	70	103	70-130
Propylbenzene	ug/m3	66	106	70-130
4-Ethyltoluene	ug/m3	66	113	70-130
m,p-Xylene	ug/m3	120	99	70-130
o-Xylene	ug/m3	59	98	70-130
Styrene	ug/m3	58	97	70-130
Bromoform	ug/m3	140	101	70-130
Benzyl chloride	ug/m3	70	105	70-130
1,3,5-Trimethylbenzene	ug/m3	66	100	70-130
1,2,4-Trimethylbenzene	ug/m3	66	103	70-130
1,3-Dichlorobenzene	ug/m3	81	102	70-130
1,4-Dichlorobenzene	ug/m3	81	95	70-130
1,2-Dichlorobenzene	ug/m3	81	94	70-130
1,2,4-Trichlorobenzene	ug/m3	100	89	70-130
Naphthalene	ug/m3	71	91	70-130
Hexachlorobutadiene	ug/m3	140	102	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/18/20

Date Received: 09/17/20

Project: 180043, F&BI 009308

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR HELIUM  
USING METHOD ASTM D1946**

Laboratory Code: 009308-01 (Duplicate)

Analyte	Sample Result (%)	Duplicate Result (%)	Relative Percent Difference	Acceptance Criteria
Helium	<0.6	<0.6	nm	0-20

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

# SAMPLE CHAIN OF CUSTODY

ME 09-17-20

009308

SAMPLES (signature)

Rachel C

Page # 1 of 1

Report To Andrew Yonkovski

Company Aspect Consulting

Address 710 2nd Ave, SE 556

City, State, ZIP Seattle, WA 98104

Phone (206) 413-5411 Email ayonkovski@aspectconsulting.com

PROJECT NAME & ADDRESS

Evergreen Treatment Services  
1700 Airport Way South, Seattle, WA

PO #

180043

NOTES:

INVOICE TO

AP

TURNAROUND TIME

☐ Standard

☒ RUSH 24-hr

Rush charges authorized by:

SAMPLE DISPOSAL

☒ Default: Clean after 3 days

☐ Archive (Fee may apply)

## SAMPLE INFORMATION

## ANALYSIS REQUESTED

Sample Name	Lab ID	Canister ID	Flow Cont. ID	Reporting Level: IA=Indoor Air SG=Soil Gas (Circle One)	Date Sampled	Initial Vac. (°Hg)	Field Initial Time	Final Vac. (°Hg)	Field Final Time	TO15 Full Scan	TO15 BTEXN	TO15 cVOCs	APH	Helium	Notes
SU-5-091120	01	18579	18	IA / <u>SG</u>	9/17/20	30	1031	5	1103	/	/	/	/	/	
				IA / SG											
				IA / SG											
				IA / SG											
				IA / SG											
				IA / SG											
				IA / SG											
				IA / SG											
				IA / SG											

Friedman & Brugg, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

FORMS\COG\COCTO-15.DOC

SIGNATURE

Relinquished by:

Rachel C

Received by:

James Brugg

PRINT NAME

Rachel Cornwell

James Brugg

COMPANY

Aspect Consulting

ECB

DATE

9/17/20

1154

TIME

1154

1154

Samples received at 21 °C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Yelena Aravkina, M.S.  
Michael Erdahl, B.S.  
Vineta Mills, M.S.  
Eric Young, B.S.

5500 4th Ave South  
Seattle, WA 98108-2419  
(206) 285-8282  
office@friedmanandbruya.com  
www.friedmanandbruya.com

November 12, 2024

Nathan Dickey, Project Manager  
Aspect Consulting  
710 2<sup>nd</sup> Ave S, Suite 550  
Seattle, WA 98104

Dear Mr Dickey:

Included are the results from the testing of material submitted on November 5, 2024 from the Evergreen Treatment Services AS180043, F&BI 411071 project. There are 29 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
c: Aspect Data  
ASP1112R.DOC

## FRIEDMAN & BRUYA, INC.

### ENVIRONMENTAL CHEMISTS

#### CASE NARRATIVE

This case narrative encompasses samples received on November 5, 2024 by Friedman & Bruya, Inc. from the Aspect Consulting Evergreen Treatment Services AS180043, F&BI 411071 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Aspect Consulting</u>
411071 -01	AMW-1-20241105
411071 -02	AMW-2-20241105
411071 -03	AMW-3-20241105
411071 -04	AMW-4-20241105
411071 -05	AMW-5-20241105

The dissolved metals samples were filtered at Friedman and Bruya. The data were flagged accordingly.

The 8260D methylene chloride calibration standard did not meet the acceptance criteria. The data were flagged accordingly.

The 8260D laboratory control sample and laboratory control sample duplicate failed the relative percent difference for several compounds. The analytes were not detected therefore the data were acceptable.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/12/24

Date Received: 11/05/24

Project: Evergreen Treatment Services AS180043, F&BI 411071

Date Extracted: 11/07/24

Date Analyzed: 11/07/24

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE  
USING METHOD NWTPH-G<sub>x</sub>**  
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate <u>(% Recovery)</u> (Limit 50-150)
AMW-1-20241105 411071-01	<100	106
AMW-2-20241105 411071-02	<100	104
AMW-3-20241105 411071-03	<100	108
AMW-4-20241105 411071-04	<100	108
AMW-5-20241105 411071-05	<100	108
Method Blank 04-2699 MB	<100	100

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/12/24

Date Received: 11/05/24

Project: Evergreen Treatment Services AS180043, F&BI 411071

Date Extracted: 11/06/24

Date Analyzed: 11/06/24

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL AND MOTOR OIL  
USING METHOD NWTPH-D<sub>x</sub>**

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C <sub>10</sub> -C <sub>25</sub> )	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	<u>Surrogate</u> (% Recovery) (Limit 50-150)
AMW-1-20241105 411071-01	<50	<250	90
AMW-2-20241105 411071-02	57 x	<250	104
AMW-3-20241105 411071-03	<50	<250	94
AMW-4-20241105 411071-04	<50	<250	88
AMW-5-20241105 411071-05	95 x	<250	107
Method Blank 04-2755 MB	<50	<250	77



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	AMW-1-20241105	Client:	Aspect Consulting
Date Received:	11/05/24	Project:	Evergreen Treatment Services
Date Extracted:	11/11/24	Lab ID:	411071-01
Date Analyzed:	11/11/24	Data File:	111128.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	71	132
Toluene-d8	98	68	139
4-Bromofluorobenzene	99	62	136

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	2.4	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<0.01
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5 ca	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	AMW-2-20241105	Client:	Aspect Consulting
Date Received:	11/05/24	Project:	Evergreen Treatment Services
Date Extracted:	11/11/24	Lab ID:	411071-02
Date Analyzed:	11/11/24	Data File:	111129.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	71	132
Toluene-d8	98	68	139
4-Bromofluorobenzene	101	62	136

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<0.01
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5 ca	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	AMW-3-20241105	Client:	Aspect Consulting
Date Received:	11/05/24	Project:	Evergreen Treatment Services
Date Extracted:	11/11/24	Lab ID:	411071-03
Date Analyzed:	11/11/24	Data File:	111130.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	93	71	132
Toluene-d8	96	68	139
4-Bromofluorobenzene	102	62	136

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<0.01
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5 ca	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	AMW-4-20241105	Client:	Aspect Consulting
Date Received:	11/05/24	Project:	Evergreen Treatment Services
Date Extracted:	11/11/24	Lab ID:	411071-04
Date Analyzed:	11/11/24	Data File:	111131.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	71	132
Toluene-d8	94	68	139
4-Bromofluorobenzene	100	62	136

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<0.01
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5 ca	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	AMW-5-20241105	Client:	Aspect Consulting
Date Received:	11/05/24	Project:	Evergreen Treatment Services
Date Extracted:	11/11/24	Lab ID:	411071-05
Date Analyzed:	11/11/24	Data File:	111132.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	71	132
Toluene-d8	99	68	139
4-Bromofluorobenzene	99	62	136

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	23	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<0.01
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5 ca	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	22	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	Method Blank	Client:	Aspect Consulting
Date Received:	Not Applicable	Project:	Evergreen Treatment Services
Date Extracted:	11/11/24	Lab ID:	04-2762 mb
Date Analyzed:	11/11/24	Data File:	111109.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	78	126
Toluene-d8	94	84	115
4-Bromofluorobenzene	96	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<0.01
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50 ca	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5 ca	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1 ca
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-1-20241105	Client:	Aspect Consulting
Date Received:	11/05/24	Project:	Evergreen Treatment Services
Date Extracted:	11/06/24	Lab ID:	411071-01
Date Analyzed:	11/06/24	Data File:	411071-01.178
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	12
Cadmium	<1
Chromium	<1
Lead	1.9
Mercury	<1

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-2-20241105	Client:	Aspect Consulting
Date Received:	11/05/24	Project:	Evergreen Treatment Services
Date Extracted:	11/06/24	Lab ID:	411071-02
Date Analyzed:	11/06/24	Data File:	411071-02.179
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	9.5
Cadmium	<1
Chromium	<1
Lead	7.4
Mercury	<1



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-3-20241105	Client:	Aspect Consulting
Date Received:	11/05/24	Project:	Evergreen Treatment Services
Date Extracted:	11/06/24	Lab ID:	411071-03
Date Analyzed:	11/06/24	Data File:	411071-03.180
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	18
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-4-20241105	Client:	Aspect Consulting
Date Received:	11/05/24	Project:	Evergreen Treatment Services
Date Extracted:	11/06/24	Lab ID:	411071-04
Date Analyzed:	11/06/24	Data File:	411071-04.181
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	1.1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-5-20241105	Client:	Aspect Consulting
Date Received:	11/05/24	Project:	Evergreen Treatment Services
Date Extracted:	11/06/24	Lab ID:	411071-05
Date Analyzed:	11/06/24	Data File:	411071-05.182
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	4.8
Cadmium	<1
Chromium	1.6
Mercury	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-5-20241105	Client:	Aspect Consulting
Date Received:	11/05/24	Project:	Evergreen Treatment Services
Date Extracted:	11/06/24	Lab ID:	411071-05 x10
Date Analyzed:	11/07/24	Data File:	411071-05 x10.123
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Lead	26
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# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Aspect Consulting
Date Received:	NA	Project:	Evergreen Treatment Services
Date Extracted:	11/06/24	Lab ID:	I4-951 mb
Date Analyzed:	11/06/24	Data File:	I4-951 mb.163
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	AMW-1-20241105 f	Client:	Aspect Consulting
Date Received:	11/05/24	Project:	Evergreen Treatment Services
Date Extracted:	11/06/24	Lab ID:	411071-01
Date Analyzed:	11/06/24	Data File:	411071-01.126
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	12
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	AMW-2-20241105 f	Client:	Aspect Consulting
Date Received:	11/05/24	Project:	Evergreen Treatment Services
Date Extracted:	11/06/24	Lab ID:	411071-02
Date Analyzed:	11/06/24	Data File:	411071-02.129
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	2.4
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	AMW-3-20241105 f	Client:	Aspect Consulting
Date Received:	11/05/24	Project:	Evergreen Treatment Services
Date Extracted:	11/06/24	Lab ID:	411071-03
Date Analyzed:	11/06/24	Data File:	411071-03.130
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	14
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	AMW-4-20241105 f	Client:	Aspect Consulting
Date Received:	11/05/24	Project:	Evergreen Treatment Services
Date Extracted:	11/06/24	Lab ID:	411071-04
Date Analyzed:	11/06/24	Data File:	411071-04.131
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	AMW-5-20241105 f	Client:	Aspect Consulting
Date Received:	11/05/24	Project:	Evergreen Treatment Services
Date Extracted:	11/06/24	Lab ID:	411071-05
Date Analyzed:	11/06/24	Data File:	411071-05.132
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	4.3
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	Method Blank f	Client:	Aspect Consulting
Date Received:	NA	Project:	Evergreen Treatment Services
Date Extracted:	11/06/24	Lab ID:	I4-950 mb
Date Analyzed:	11/06/24	Data File:	I4-950 mb.114
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/12/24

Date Received: 11/05/24

Project: Evergreen Treatment Services AS180043, F&BI 411071

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER  
SAMPLES FOR TPH AS GASOLINE  
USING METHOD NWTPH-G<sub>x</sub>**

Laboratory Code: 411062-02 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Gasoline	ug/L (ppb)	1,300	1,300	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	ug/L (ppb)	1,000	95	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/12/24

Date Received: 11/05/24

Project: Evergreen Treatment Services AS180043, F&BI 411071

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER  
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL EXTENDED USING METHOD NWTPH-D<sub>x</sub>**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	96	96	65-151	0

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 11/12/24

Date Received: 11/05/24

Project: Evergreen Treatment Services AS180043, F&BI 411071

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: 411145-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent	Acceptance Criteria
				Recovery MS	
Dichlorodifluoromethane	ug/L (ppb)	10	<1	91	30-221
Chloromethane	ug/L (ppb)	10	<10	89	50-150
Vinyl chloride	ug/L (ppb)	10	<0.02	100	50-150
Bromomethane	ug/L (ppb)	10	<5	101	50-150
Chloroethane	ug/L (ppb)	10	<1	97	50-150
Trichlorofluoromethane	ug/L (ppb)	10	<1	104	50-150
Acetone	ug/L (ppb)	50	<50	35	18-161
1,1-Dichloroethene	ug/L (ppb)	10	<1	90	50-150
Hexane	ug/L (ppb)	10	<5	106	50-150
Methylene chloride	ug/L (ppb)	10	<5	61	50-150
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	<1	91	50-150
trans-1,2-Dichloroethene	ug/L (ppb)	10	<1	93	50-150
1,1-Dichloroethane	ug/L (ppb)	10	<1	92	50-150
2,2-Dichloropropane	ug/L (ppb)	10	<1	94	43-171
cis-1,2-Dichloroethene	ug/L (ppb)	10	<1	91	10-211
Chloroform	ug/L (ppb)	10	<1	97	50-150
2-Butanone (MEK)	ug/L (ppb)	50	<20	60	10-192
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	1.6	95	50-150
1,1,1-Trichloroethane	ug/L (ppb)	10	<1	92	50-150
1,1-Dichloropropene	ug/L (ppb)	10	<1	95	50-150
Carbon tetrachloride	ug/L (ppb)	10	<0.5	93	50-150
Benzene	ug/L (ppb)	10	3.8	99 b	50-150
Trichloroethene	ug/L (ppb)	10	<0.5	95	35-149
1,2-Dichloropropane	ug/L (ppb)	10	<1	90	50-150
Bromodichloromethane	ug/L (ppb)	10	<0.5	96	50-150
Dibromomethane	ug/L (ppb)	10	<1	92	50-150
4-Methyl-2-pentanone	ug/L (ppb)	50	<10	95	50-150
cis-1,3-Dichloropropene	ug/L (ppb)	10	<0.4	99	50-150
Toluene	ug/L (ppb)	10	<1	98	50-150
trans-1,3-Dichloropropene	ug/L (ppb)	10	<0.4	88	50-150
1,1,2-Trichloroethane	ug/L (ppb)	10	<0.5	94	50-150
2-Hexanone	ug/L (ppb)	50	<10	66	50-150
1,3-Dichloropropane	ug/L (ppb)	10	<1	95	50-150
Tetrachloroethene	ug/L (ppb)	10	<1	101	50-150
Dibromochloromethane	ug/L (ppb)	10	<0.5	92	50-150
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	<0.01	98	50-150
Chlorobenzene	ug/L (ppb)	10	<1	98	50-150
Ethylbenzene	ug/L (ppb)	10	<1	98	50-150
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	<1	92	50-150
m,p-Xylene	ug/L (ppb)	20	<2	96	50-150
o-Xylene	ug/L (ppb)	10	<1	94	50-150
Styrene	ug/L (ppb)	10	<1	93	50-150
Isopropylbenzene	ug/L (ppb)	10	<1	93	50-150
Bromoform	ug/L (ppb)	10	<5	90	50-150
n-Propylbenzene	ug/L (ppb)	10	<1	86	50-150
Bromobenzene	ug/L (ppb)	10	<1	85	50-150
1,3,5-Trimethylbenzene	ug/L (ppb)	10	<1	85	50-150
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	<0.2	89	50-150
1,2,3-Trichloropropane	ug/L (ppb)	10	<1	84	50-150
2-Chlorotoluene	ug/L (ppb)	10	<1	84	50-150
4-Chlorotoluene	ug/L (ppb)	10	<1	85	50-150
tert-Butylbenzene	ug/L (ppb)	10	<1	85	50-150
1,2,4-Trimethylbenzene	ug/L (ppb)	10	<1	86	50-150
sec-Butylbenzene	ug/L (ppb)	10	<1	83	50-150
p-Isopropyltoluene	ug/L (ppb)	10	<1	84	50-150
1,3-Dichlorobenzene	ug/L (ppb)	10	<1	86	50-150
1,4-Dichlorobenzene	ug/L (ppb)	10	<1	85	50-150
1,2-Dichlorobenzene	ug/L (ppb)	10	<1	83	50-150
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	<10	79	50-150
1,2,4-Trichlorobenzene	ug/L (ppb)	10	<1	83	50-150
Hexachlorobutadiene	ug/L (ppb)	10	<0.5	79	50-150
Naphthalene	ug/L (ppb)	10	<1	81	50-150
1,2,3-Trichlorobenzene	ug/L (ppb)	10	<1	82	50-150

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 11/12/24

Date Received: 11/05/24

Project: Evergreen Treatment Services AS180043, F&BI 411071

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	10	98	96	46-206	2
Chloromethane	ug/L (ppb)	10	94	94	59-132	0
Vinyl chloride	ug/L (ppb)	10	104	106	64-142	2
Bromomethane	ug/L (ppb)	10	101	102	50-197	1
Chloroethane	ug/L (ppb)	10	99	101	70-130	2
Trichlorofluoromethane	ug/L (ppb)	10	98	104	51-159	6
Acetone	ug/L (ppb)	50	22	31	10-140	34 vo
1,1-Dichloroethene	ug/L (ppb)	10	93	95	64-140	2
Hexane	ug/L (ppb)	10	105	91	54-136	14
Methylene chloride	ug/L (ppb)	10	91	73	43-134	22 vo
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	94	95	70-130	1
trans-1,2-Dichloroethene	ug/L (ppb)	10	96	97	70-130	1
1,1-Dichloroethane	ug/L (ppb)	10	97	97	70-130	0
2,2-Dichloropropane	ug/L (ppb)	10	105	108	64-148	3
cis-1,2-Dichloroethene	ug/L (ppb)	10	96	98	70-130	2
Chloroform	ug/L (ppb)	10	98	101	70-130	3
2-Butanone (MEK)	ug/L (ppb)	50	58	60	47-112	3
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	99	99	70-130	0
1,1,1-Trichloroethane	ug/L (ppb)	10	98	99	70-130	1
1,1-Dichloropropene	ug/L (ppb)	10	96	95	70-130	1
Carbon tetrachloride	ug/L (ppb)	10	98	99	70-130	1
Benzene	ug/L (ppb)	10	103	104	70-130	1
Trichloroethene	ug/L (ppb)	10	98	98	70-130	0
1,2-Dichloropropane	ug/L (ppb)	10	95	95	70-130	0
Bromodichloromethane	ug/L (ppb)	10	98	95	70-130	3
Dibromomethane	ug/L (ppb)	10	91	95	70-130	4
4-Methyl-2-pentanone	ug/L (ppb)	50	95	89	68-130	7
cis-1,3-Dichloropropene	ug/L (ppb)	10	96	98	69-131	2
Toluene	ug/L (ppb)	10	99	99	70-130	0
trans-1,3-Dichloropropene	ug/L (ppb)	10	96	92	70-130	4
1,1,2-Trichloroethane	ug/L (ppb)	10	95	94	70-130	1
2-Hexanone	ug/L (ppb)	50	68	68	45-138	0
1,3-Dichloropropene	ug/L (ppb)	10	92	92	70-130	0
Tetrachloroethene	ug/L (ppb)	10	102	101	70-130	1
Dibromochloromethane	ug/L (ppb)	10	93	94	60-148	1
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	100	99	70-130	1
Chlorobenzene	ug/L (ppb)	10	95	96	70-130	1
Ethylbenzene	ug/L (ppb)	10	99	99	70-130	0
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	99	100	70-130	1
m,p-Xylene	ug/L (ppb)	20	97	97	70-130	0
o-Xylene	ug/L (ppb)	10	96	96	70-130	0
Styrene	ug/L (ppb)	10	97	96	70-130	1
Isopropylbenzene	ug/L (ppb)	10	97	96	70-130	1
Bromoform	ug/L (ppb)	10	97	94	69-138	3
n-Propylbenzene	ug/L (ppb)	10	93	87	70-130	7
Bromobenzene	ug/L (ppb)	10	92	87	70-130	6
1,3,5-Trimethylbenzene	ug/L (ppb)	10	93	90	70-130	3
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	94	94	70-130	0
1,2,3-Trichloropropane	ug/L (ppb)	10	90	87	70-130	3
2-Chlorotoluene	ug/L (ppb)	10	88	88	70-130	0
4-Chlorotoluene	ug/L (ppb)	10	91	87	70-130	4
tert-Butylbenzene	ug/L (ppb)	10	94	91	70-130	3
1,2,4-Trimethylbenzene	ug/L (ppb)	10	91	91	70-130	0
sec-Butylbenzene	ug/L (ppb)	10	93	91	70-130	2
p-Isopropyltoluene	ug/L (ppb)	10	94	93	70-130	1
1,3-Dichlorobenzene	ug/L (ppb)	10	93	88	70-130	6
1,4-Dichlorobenzene	ug/L (ppb)	10	93	91	70-130	2
1,2-Dichlorobenzene	ug/L (ppb)	10	93	89	70-130	4
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	88	87	70-130	1
1,2,4-Trichlorobenzene	ug/L (ppb)	10	90	91	70-130	1
Hexachlorobutadiene	ug/L (ppb)	10	94	93	70-130	1
Naphthalene	ug/L (ppb)	10	83	87	70-130	5
1,2,3-Trichlorobenzene	ug/L (ppb)	10	93	95	70-130	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/12/24

Date Received: 11/05/24

Project: Evergreen Treatment Services AS180043, F&BI 411071

**QUALITY ASSURANCE RESULTS  
FOR THE ANALYSIS OF WATER SAMPLES  
FOR TOTAL METALS USING EPA METHOD 6020B**

Laboratory Code: 411062-01 x10 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	<10	98	96	75-125	2
Cadmium	ug/L (ppb)	10	<10	97	96	75-125	1
Chromium	ug/L (ppb)	10	<10	95	94	75-125	1
Lead	ug/L (ppb)	10	<10	101	100	75-125	1
Mercury	ug/L (ppb)	5	<10	95	97	75-125	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	102	80-120
Cadmium	ug/L (ppb)	10	99	80-120
Chromium	ug/L (ppb)	10	104	80-120
Lead	ug/L (ppb)	10	103	80-120
Mercury	ug/L (ppb)	5	98	80-120



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/12/24

Date Received: 11/05/24

Project: Evergreen Treatment Services AS180043, F&BI 411071

**QUALITY ASSURANCE RESULTS  
FOR THE ANALYSIS OF WATER SAMPLES  
FOR DISSOLVED METALS USING EPA METHOD 6020B**

Laboratory Code: 411071-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	12.1	104 b	102 b	75-125	2 b
Cadmium	ug/L (ppb)	10	<1	92	90	75-125	2
Chromium	ug/L (ppb)	10	<1	93	94	75-125	1
Lead	ug/L (ppb)	10	<1	102	102	75-125	0
Mercury	ug/L (ppb)	5	<1	104	103	75-125	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	99	80-120
Cadmium	ug/L (ppb)	10	94	80-120
Chromium	ug/L (ppb)	10	98	80-120
Lead	ug/L (ppb)	10	98	80-120
Mercury	ug/L (ppb)	5	99	80-120

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the standard reporting limit. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

k - The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

11/05/24 F2/K3/VW<sup>4</sup>

of

Asthan Dickey

Aspect

SATLE

ZIP

Email \_\_\_\_\_

100

Everson Treatment  
Services

AS180043

INVOICE TO

Project specific RLS? - Yes / No

☒ Standard turnaround  
☐ RUSH  
 Rush charges authorized by \_\_\_\_\_

---

SAMPLE DISPOSAL

☐ Archive samples  
☐ Other \_\_\_\_\_

---

Default: Dispose after 30

☐ Archive samples

☐ Other \_\_\_\_\_

Default: Dispose

**Default: Dispose after 30 days**

ANALYSES REQUESTED

[illegible]

PRINT NAME \_\_\_\_\_

COMPANY

DATE	TIME
------	------

*Friedman & Bruya, Inc.*

5500 4th Ave S.

Seattle WA 98108

(206) 285-8282

office@friedmanandbruya.com

Relinquished by:

Dealing with

RECEIVED BY

Relinquished by:

Received by

Nathan Pickers

See four

Aspirin

Samples received at 4 °C

# SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 411071 CLIENT Aspet INITIALS/ DATE: AP 11/5/24

If custody seals are present on cooler, are they intact? ☒ NA ☐ YES ☐ NO

Cooler/Sample temperature 4 °C  
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? ☒ YES ☐ NO

How did samples arrive?  
☒ Over the Counter ☐ Picked up by F&BI ☐ FedEx/UPS/GSO

Is there a Chain-of-Custody\* (COC)? ☒ YES ☐ NO Initials/ AP  
\*or other representative documents, letters, and/or shipping memos Date: 11/06/24

Number of days samples have been sitting prior to receipt at laboratory 1 days

Are the samples clearly identified? (explain "no" answer below) ☒ YES ☐ NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) ☒ YES ☐ NO

Were appropriate sample containers used? ☒ YES ☐ NO ☐ Unknown

If custody seals are present on samples, are they intact? ☒ NA ☐ YES ☐ NO

Are samples requiring no headspace, headspace free? ☐ NA ☒ YES ☐ NO

Is the following information provided on the COC, and does it match the sample label?  
(explain "no" answer below)

Sample ID's	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Not on COC/label
Date Sampled	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Not on COC/label
Time Sampled	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Not on COC/label
# of Containers	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>Received 7 containers for AMU-4-20241105(04)</u>
Relinquished	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Requested analysis	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> On Hold	

Other comments (use a separate page if needed)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Air Samples: Were any additional canisters/tubes received? ☒ NA ☐ YES ☐ NO

Number of unused TO15 canisters \_\_\_\_\_ Number of unused TO17 tubes \_\_\_\_\_

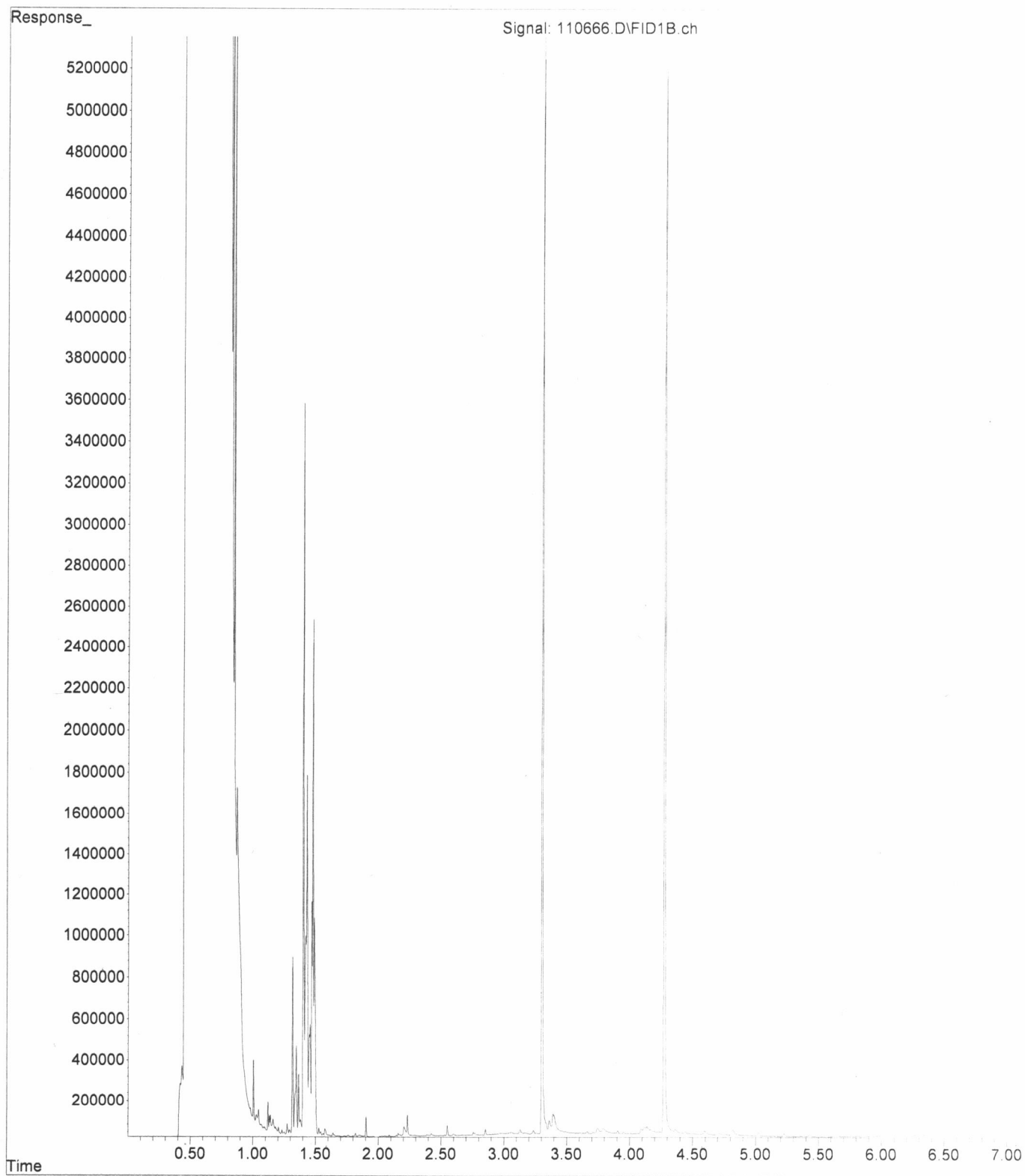
File :D:\GC14\GC14\_Data\11-06-24\110665.D  
Operator : TL  
Acquired : 06 Nov 2024 10:26 pm using AcqMethod DX.M  
Instrument : GC14  
Sample Name: 411071-01  
Misc Info :  
Vial Number: 49

ERR



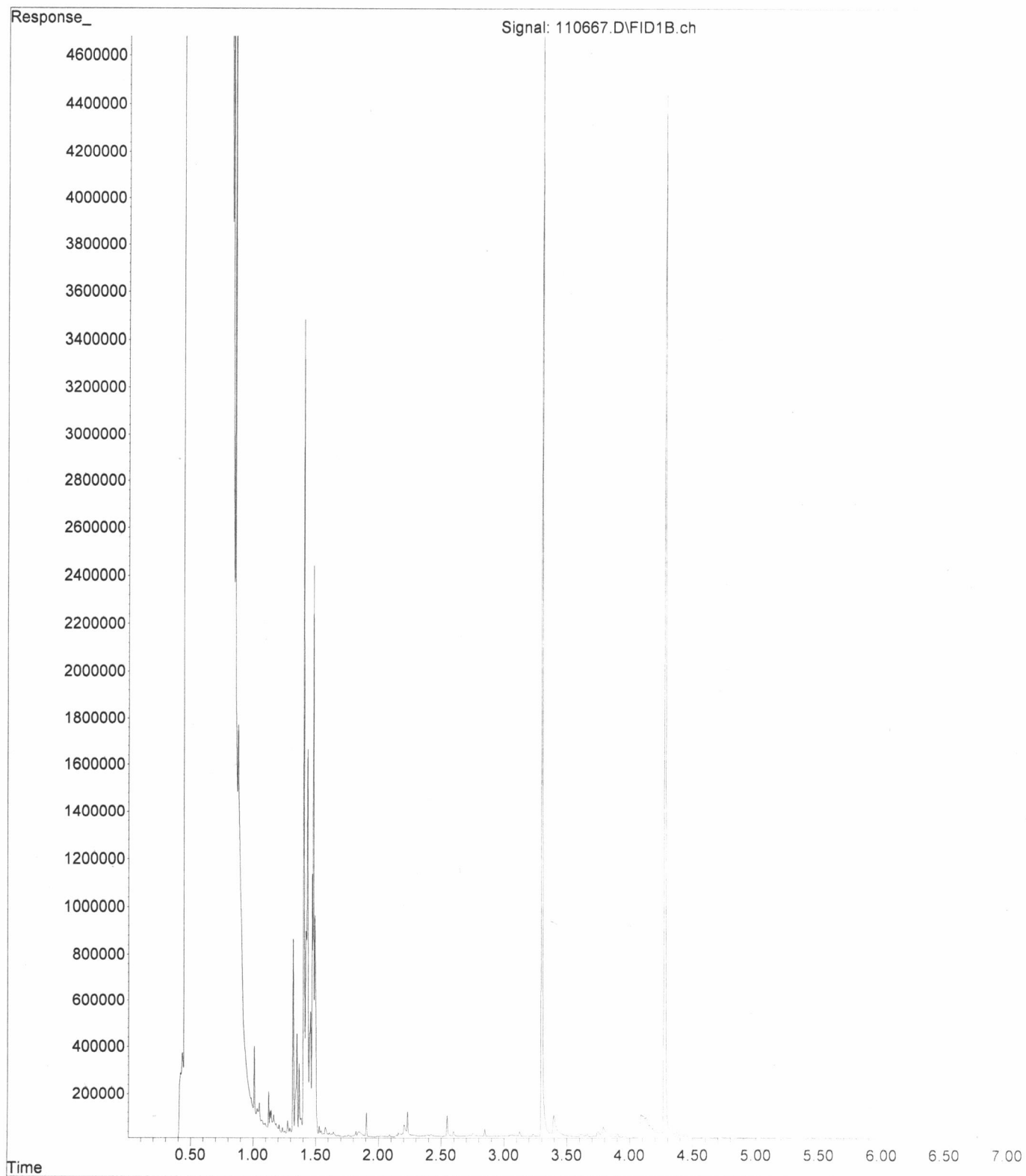
File :D:\GC14\GC14\_Data\11-06-24\110666.D  
Operator : TL  
Acquired : 06 Nov 2024 10:38 pm using AcqMethod DX.M  
Instrument : GC14  
Sample Name: 411071-02  
Misc Info :  
Vial Number: 50

ERR



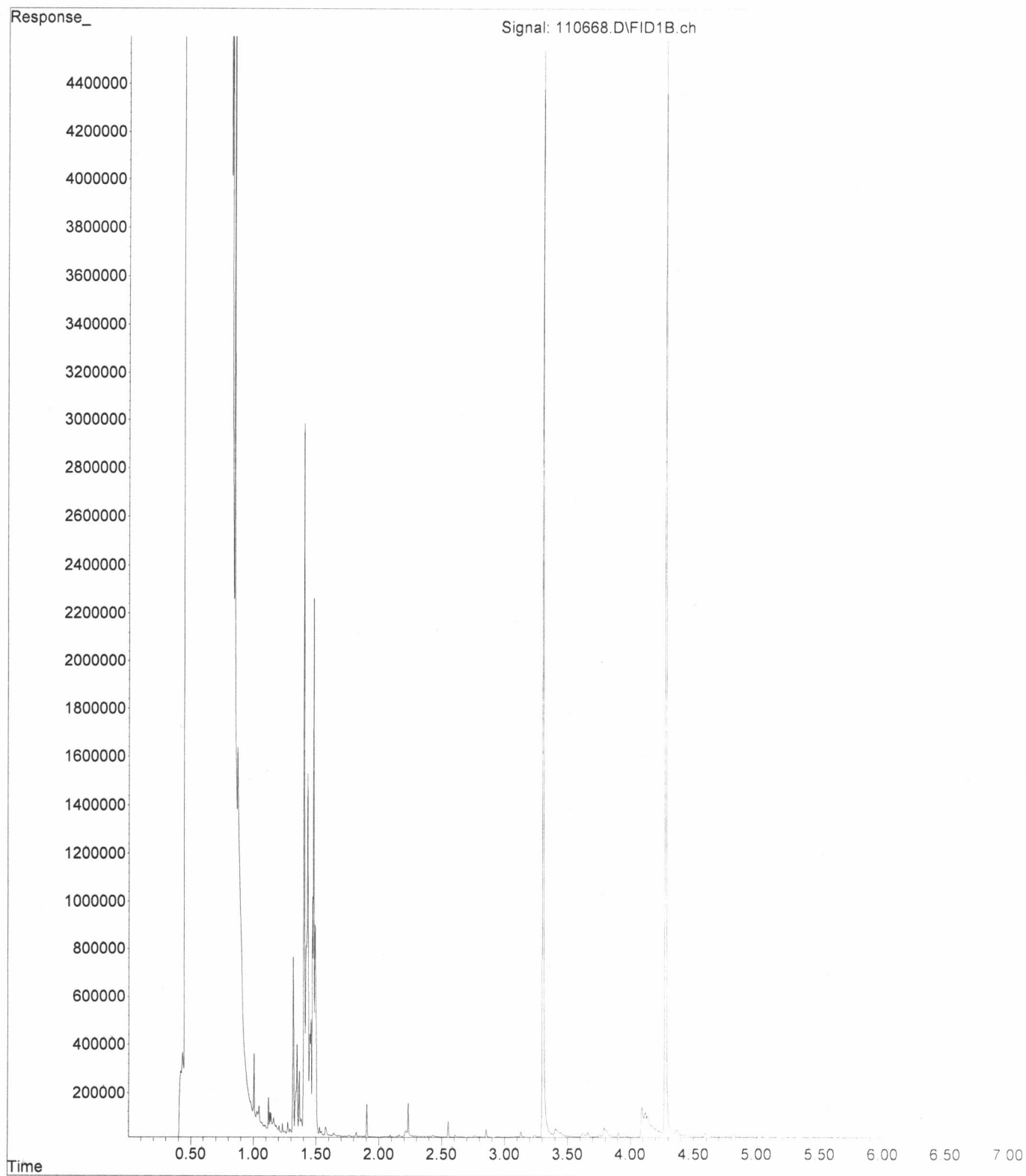
File :D:\GC14\GC14\_Data\11-06-24\110667.D  
Operator : TL  
Acquired : 06 Nov 2024 10:50 pm using AcqMethod DX.M  
Instrument : GC14  
Sample Name: 411071-03  
Misc Info :  
Vial Number: 51

ERR



File :D:\GC14\GC14\_Data\11-06-24\110668.D  
Operator : TL  
Acquired : 06 Nov 2024 11:02 pm using AcqMethod DX.M  
Instrument : GC14  
Sample Name: 411071-04  
Misc Info :  
Vial Number: 52

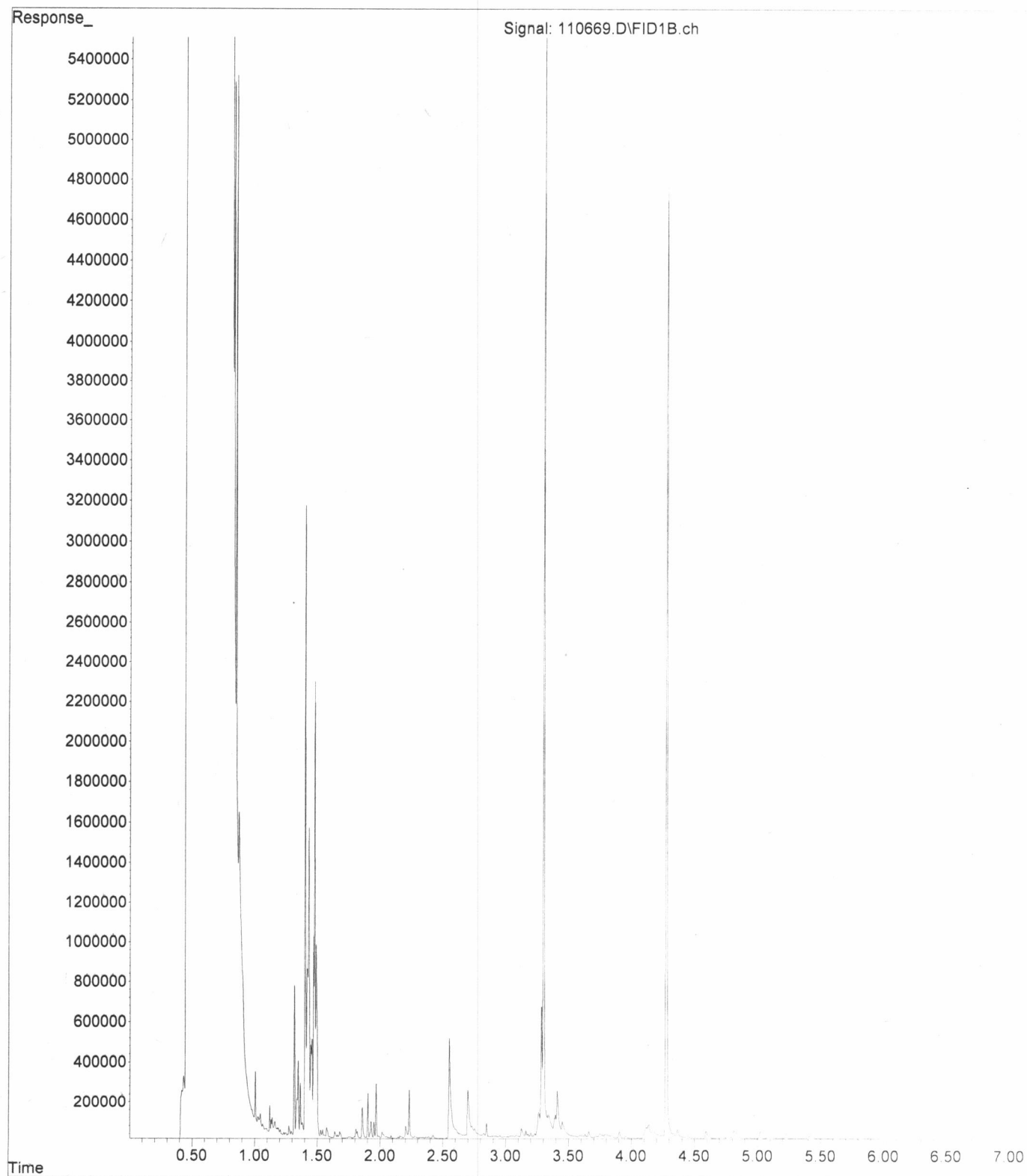
ERR





File :D:\GC14\GC14\_Data\11-06-24\110669.D  
Operator : TL  
Acquired : 06 Nov 2024 11:14 pm using AcqMethod DX.M  
Instrument : GC14  
Sample Name: 411071-05  
Misc Info :  
Vial Number: 53

ERR



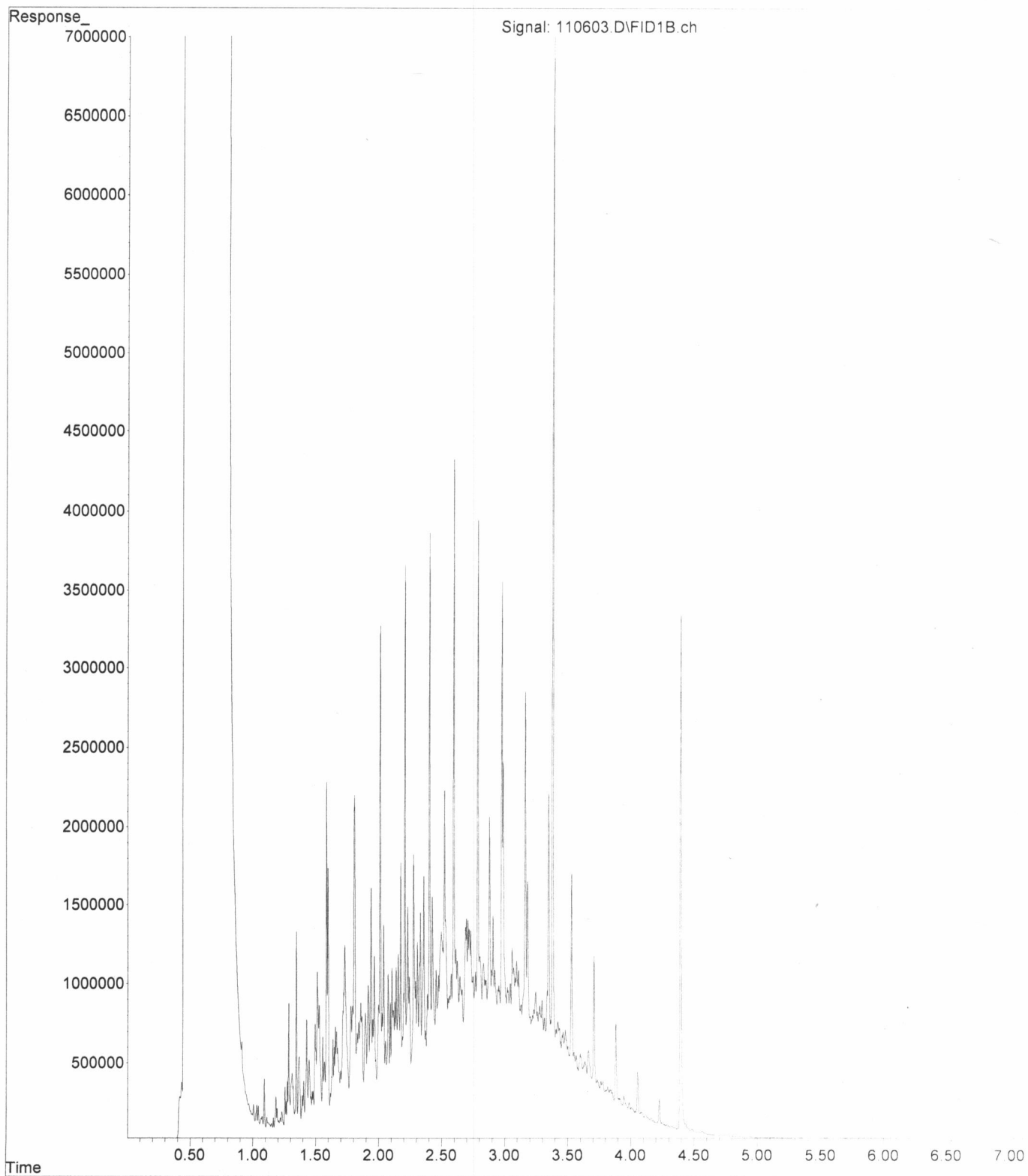
File :D:\GC14\GC14\_Data\11-06-24\110625.D  
Operator : TL  
Acquired : 06 Nov 2024 02:25 pm using AcqMethod DX.M  
Instrument : GC14  
Sample Name: 04-2755 mb  
Misc Info :  
Vial Number: 17

ERR



File :D:\GC14\GC14\_Data\11-06-24\110603.D  
Operator : TL  
Acquired : 06 Nov 2024 08:54 am using AcqMethod DX.M  
Instrument : GC14  
Sample Name: 500 Dx 73-88G  
Misc Info :  
Vial Number: 3

ERR



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Yelena Aravkina, M.S.  
Michael Erdahl, B.S.  
Vineta Mills, M.S.  
Eric Young, B.S.

5500 4th Ave South  
Seattle, WA 98108-2419  
(206) 285-8282  
office@friedmanandbruya.com  
www.friedmanandbruya.com

November 15, 2024

Nathan Dickey, Project Manager  
Aspect Consulting  
710 2<sup>nd</sup> Ave S, Suite 550  
Seattle, WA 98104

Dear Mr Dickey:

Included are the results from the testing of material submitted on November 4, 2024 from the ETS Subsurface Investigation PO 180043-02, F&BI 411043 project. There are 80 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
c: Aspect Data  
ASP1115R.DOC

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on November 4, 2024 by Friedman & Bruya, Inc. from the Aspect Consulting ETS Subsurface Investigation PO 180043-02, F&BI 411043 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Aspect Consulting</u>
411043 -01	AB-01-01.5
411043 -02	AB-01-02.5
411043 -03	AB-01-06.5
411043 -04	AB-01-09
411043 -05	AB-02-01
411043 -06	AB-02-03
411043 -07	AB-02-05
411043 -08	AB-02-06.5
411043 -09	AB-02-09.5
411043 -10	AB-02-10.5
411043 -11	AB-03-01
411043 -12	AB-03-02.5
411043 -13	AB-03-05.5
411043 -14	AB-03-07
411043 -15	AB-04-02.5
411043 -16	AB-04-05.5
411043 -17	AB-04-10
411043 -18	AB-04-12.5
411043 -19	AB-05-02
411043 -20	AB-05-02.5
411043 -21	AB-05-05
411043 -22	AB-05-07
411043 -23	AB-05-09.7
411043 -24	AB-05-11
411043 -25	AB-05-13
411043 -26	AMW-5-01
411043 -27	AMW-5-02
411043 -28	AMW-5-02.5
411043 -29	AMW-5-06.5
411043 -30	AMW-5-08.5

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Aspect Consulting</u>
411043 -31	AMW-5-12
411043 -32	AB-06-01
411043 -33	AB-06-04.5
411043 -34	AB-06-06.5
411043 -35	AB-06-08.5

The 8260D calibration standard did not meet the acceptance criteria for methylene chloride. The data were flagged accordingly.

An 8270E internal standard did not meet the acceptance criteria for samples AB-03-01, AB-05-02.5, AB-05-13, and AB-06-08.5. The samples were diluted and reanalyzed with acceptable results. Both data sets were reported.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/15/24

Date Received: 11/04/24

Project: ETS Subsurface Investigation PO 180043-02, F&BI 411043

Date Extracted: 11/08/24

Date Analyzed: 11/11/24

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE  
USING METHOD NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate (% Recovery) (Limit 50-150)
AB-01-01.5 411043-01	<5	88
AB-01-09 411043-04	<5	97
AB-02-03 411043-06	<5	91
AB-02-09.5 411043-09	<5	85
AB-03-01 411043-11	<5	96
AB-03-07 411043-14	<5	97
AB-04-02.5 411043-15	<5	93
AB-04-10 411043-17	<5	87
AB-05-02.5 411043-20	<5	89
AB-05-13 411043-25	<5	95
AMW-5-01 411043-26	<5	89

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/15/24

Date Received: 11/04/24

Project: ETS Subsurface Investigation PO 180043-02, F&BI 411043

Date Extracted: 11/08/24

Date Analyzed: 11/11/24

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE  
USING METHOD NWTPH-G<sub>x</sub>**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate (% Recovery) (Limit 50-150)
AMW-5-12 411043-31	<5	92
AB-06-01 411043-32	8.3	100
AB-06-08.5 411043-35	<5	91
Method Blank 04-2703 MB	<5	92



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/15/24

Date Received: 11/04/24

Project: ETS Subsurface Investigation PO 180043-02, F&BI 411043

Date Extracted: 11/08/24

Date Analyzed: 11/08/24

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL AND MOTOR OIL  
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C <sub>10</sub> -C <sub>25</sub> )	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
AB-01-01.5 411043-01	170 x	<250	104
AB-01-09 411043-04	83 x	<250	102
AB-02-03 411043-06	<50	<250	101
AB-02-09.5 411043-09	100 x	<250	101
AB-03-01 411043-11	<50	<250	101
AB-03-07 411043-14	<50	<250	101
AB-04-02.5 411043-15	<50	<250	99
AB-04-10 411043-17	210 x	360	104
AB-05-02.5 411043-20	75 x	<250	105
AB-05-13 411043-25	<50	<250	101
AMW-5-01 411043-26	110 x	<250	104

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/15/24

Date Received: 11/04/24

Project: ETS Subsurface Investigation PO 180043-02, F&BI 411043

Date Extracted: 11/08/24

Date Analyzed: 11/08/24

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL AND MOTOR OIL  
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C <sub>10</sub> -C <sub>25</sub> )	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
AMW-5-12 411043-31	<50	<250	103
AB-06-01 411043-32	71 x	<250	101
AB-06-08.5 411043-35	310 x	530	102
Method Blank 04-2797 MB	<50	<250	101

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-01-01.5	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/11/24	Lab ID:	411043-01 1/0.5
Date Analyzed:	11/11/24	Data File:	111108.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	84	120
Toluene-d8	98	73	128
4-Bromofluorobenzene	96	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	0.0034
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	0.0064
Hexane	<0.25	o-Xylene	0.0029
Methylene chloride	<0.4 ca	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	0.0051	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	0.013	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.0054	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	0.78
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-01-09	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/11/24	Lab ID:	411043-04 1/0.5
Date Analyzed:	11/11/24	Data File:	111109.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	84	120
Toluene-d8	98	73	128
4-Bromofluorobenzene	97	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	0.0060
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4 ca	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	0.0023	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	0.016	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	0.064	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.0043	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	0.024
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-02-03	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/11/24	Lab ID:	411043-06 1/0.5
Date Analyzed:	11/11/24	Data File:	111110.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	84	120
Toluene-d8	99	73	128
4-Bromofluorobenzene	98	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4 ca	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	0.0051	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	0.0025	sec-Butylbenzene	<0.05
Trichloroethene	0.012	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.0055	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-02-09.5	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/11/24	Lab ID:	411043-09 1/0.5
Date Analyzed:	11/11/24	Data File:	111111.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	94	84	120
Toluene-d8	92	73	128
4-Bromofluorobenzene	99	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	0.51	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	0.0057
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	0.0090
Hexane	<0.25	o-Xylene	0.0065
Methylene chloride	<0.4 ca	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	0.31	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	0.018	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.018	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID: AB-03-01	Client: Aspect Consulting
Date Received: 11/04/24	Project: ETS Subsurface Investigation
Date Extracted: 11/11/24	Lab ID: 411043-11 1/0.5
Date Analyzed: 11/11/24	Data File: 111112.D
Matrix: Soil	Instrument: GCMS13
Units: mg/kg (ppm) Dry Weight	Operator: MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	90	84	120
Toluene-d8	92	73	128
4-Bromofluorobenzene	98	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4 ca	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	0.035	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	0.058	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.041	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID: AB-03-07	Client: Aspect Consulting
Date Received: 11/04/24	Project: ETS Subsurface Investigation
Date Extracted: 11/11/24	Lab ID: 411043-14 1/0.5
Date Analyzed: 11/11/24	Data File: 111113.D
Matrix: Soil	Instrument: GCMS13
Units: mg/kg (ppm) Dry Weight	Operator: MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	84	120
Toluene-d8	98	73	128
4-Bromofluorobenzene	98	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	0.017	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	0.015
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	0.016
Hexane	<0.25	o-Xylene	0.0038
Methylene chloride	<0.4 ca	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	0.13	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	0.14	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	0.0079	sec-Butylbenzene	<0.05
Trichloroethene	0.16	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.061	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-04-02.5	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/11/24	Lab ID:	411043-15 1/0.5
Date Analyzed:	11/11/24	Data File:	111114.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	84	120
Toluene-d8	100	73	128
4-Bromofluorobenzene	101	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4 ca	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID: AB-04-10	Client: Aspect Consulting
Date Received: 11/04/24	Project: ETS Subsurface Investigation
Date Extracted: 11/11/24	Lab ID: 411043-17 1/0.5
Date Analyzed: 11/11/24	Data File: 111115.D
Matrix: Soil	Instrument: GCMS13
Units: mg/kg (ppm) Dry Weight	Operator: MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	84	120
Toluene-d8	98	73	128
4-Bromofluorobenzene	100	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	0.0036
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	0.0026
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	0.0070
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4 ca	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	0.0028	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	0.010	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	0.019	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.012	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-05-02.5	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/11/24	Lab ID:	411043-20 1/0.5
Date Analyzed:	11/11/24	Data File:	111116.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	84	120
Toluene-d8	99	73	128
4-Bromofluorobenzene	99	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4 ca	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	0.0036	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	0.011	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	0.0032	sec-Butylbenzene	<0.05
Trichloroethene	0.0037	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.0029	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID: AB-05-13	Client: Aspect Consulting
Date Received: 11/04/24	Project: ETS Subsurface Investigation
Date Extracted: 11/11/24	Lab ID: 411043-25 1/0.5
Date Analyzed: 11/11/24	Data File: 111117.D
Matrix: Soil	Instrument: GCMS13
Units: mg/kg (ppm) Dry Weight	Operator: MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	84	120
Toluene-d8	101	73	128
4-Bromofluorobenzene	100	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	0.0029
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4 ca	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	0.0036	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.0075	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID: AMW-5-01	Client: Aspect Consulting
Date Received: 11/04/24	Project: ETS Subsurface Investigation
Date Extracted: 11/11/24	Lab ID: 411043-26 1/0.5
Date Analyzed: 11/11/24	Data File: 111118.D
Matrix: Soil	Instrument: GCMS13
Units: mg/kg (ppm) Dry Weight	Operator: MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	84	120
Toluene-d8	97	73	128
4-Bromofluorobenzene	99	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	0.0066
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	0.0097
Hexane	<0.25	o-Xylene	0.0050
Methylene chloride	<0.4 ca	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	0.0024	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	0.0047	sec-Butylbenzene	<0.05
Trichloroethene	0.030	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.0080	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	0.034
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AMW-5-12	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/11/24	Lab ID:	411043-31 1/0.5
Date Analyzed:	11/11/24	Data File:	111119.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	84	120
Toluene-d8	99	73	128
4-Bromofluorobenzene	98	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	1.7	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	0.0072
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	0.0064
Hexane	<0.25	o-Xylene	0.0052
Methylene chloride	<0.4 ca	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	0.0020	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	0.95	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	0.030	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.026	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-06-01	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/11/24	Lab ID:	411043-32 1/0.5
Date Analyzed:	11/11/24	Data File:	111120.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	84	120
Toluene-d8	98	73	128
4-Bromofluorobenzene	97	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	0.0036
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	0.0090
Hexane	<0.25	o-Xylene	0.0028
Methylene chloride	<0.4 ca	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	0.0068	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	0.018	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	0.0024	sec-Butylbenzene	<0.05
Trichloroethene	0.11	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.0085	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	0.42
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	AB-06-08.5	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/11/24	Lab ID:	411043-35 1/0.5
Date Analyzed:	11/11/24	Data File:	111121.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	84	120
Toluene-d8	97	73	128
4-Bromofluorobenzene	98	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	0.0026	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	0.012
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	0.0024
Methylene chloride	<0.4 ca	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	0.038	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	0.0030	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	0.0090	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	0.10
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	Method Blank	Client:	Aspect Consulting
Date Received:	Not Applicable	Project:	ETS Subsurface Investigation
Date Extracted:	11/11/24	Lab ID:	04-2761 mb 1/0.5
Date Analyzed:	11/11/24	Data File:	111107.D
Matrix:	Soil	Instrument:	GCMS13
Units:	mg/kg (ppm) Dry Weight	Operator:	MD

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	84	120
Toluene-d8	98	73	128
4-Bromofluorobenzene	97	57	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.002
Vinyl chloride	<0.002	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.005
Chloroethane	<0.1	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.002
Acetone	<5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.002	m,p-Xylene	<0.004
Hexane	<0.25	o-Xylene	<0.002
Methylene chloride	<0.4 ca	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.002	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.002	Bromoform	<0.05
1,1-Dichloroethane	<0.002	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.002	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<1	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.003	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.002	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.002	sec-Butylbenzene	<0.05
Trichloroethene	<0.002	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.002	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.01
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<1		

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AB-01-01.5	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	10/08/24	Lab ID:	411043-01
Date Analyzed:	11/08/24	Data File:	110824.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	84	50	150
Benz(a)anthracene-d12	106	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.44
2-Methylnaphthalene	0.18
1-Methylnaphthalene	0.11
Acenaphthylene	0.0085
Acenaphthene	0.30
Fluorene	0.34
Phenanthrene	1.9
Anthracene	0.33
Fluoranthene	4.3
Pyrene	2.2
Benz(a)anthracene	0.88
Chrysene	1.0

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AB-01-01.5	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	10/08/24	Lab ID:	411043-01 1/10
Date Analyzed:	11/10/24	Data File:	111014.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	127 d	50	150
Benz(a)anthracene-d12	92 d	50	150

Compounds:	Concentration mg/kg (ppm)
Benzo(b)fluoranthene	0.91
Benzo(k)fluoranthene	0.25
Benzo(a)pyrene	0.46
Indeno(1,2,3-cd)pyrene	0.34
Dibenz(a,h)anthracene	0.091
Benzo(g,h,i)perylene	0.35

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AB-01-09	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	10/08/24	Lab ID:	411043-04
Date Analyzed:	11/08/24	Data File:	110825.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	87	50	150
Benz(a)anthracene-d12	103	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.025
2-Methylnaphthalene	0.0088
1-Methylnaphthalene	0.019
Acenaphthylene	<0.005
Acenaphthene	0.18
Fluorene	0.012
Phenanthrene	0.061
Anthracene	<0.005
Fluoranthene	0.090
Pyrene	0.070
Benz(a)anthracene	0.036
Chrysene	0.059
Benzo(b)fluoranthene	0.030
Benzo(k)fluoranthene	0.010
Benzo(a)pyrene	0.026
Indeno(1,2,3-cd)pyrene	0.017
Dibenz(a,h)anthracene	<0.005
Benzo(g,h,i)perylene	0.022

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AB-02-03	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	10/08/24	Lab ID:	411043-06
Date Analyzed:	11/08/24	Data File:	110826.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	99	50	150
Benz(a)anthracene-d12	104	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.0082
2-Methylnaphthalene	0.0054
1-Methylnaphthalene	<0.005
Acenaphthylene	0.0056
Acenaphthene	<0.005
Fluorene	<0.005
Phenanthrene	0.022
Anthracene	<0.005
Fluoranthene	0.058
Pyrene	0.053
Benz(a)anthracene	0.050
Chrysene	0.055
Benzo(b)fluoranthene	0.090
Benzo(k)fluoranthene	0.028
Benzo(a)pyrene	0.078
Indeno(1,2,3-cd)pyrene	0.064
Dibenz(a,h)anthracene	0.019
Benzo(g,h,i)perylene	0.079

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AB-02-09.5	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	10/08/24	Lab ID:	411043-09 1/10
Date Analyzed:	11/10/24	Data File:	111006.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	93 d	50	150
Benz(a)anthracene-d12	68 d	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.15
2-Methylnaphthalene	0.13
1-Methylnaphthalene	0.085
Acenaphthylene	0.050
Acenaphthene	0.063
Fluorene	0.11
Phenanthrene	0.60
Anthracene	0.086
Fluoranthene	0.80
Pyrene	0.79
Benz(a)anthracene	0.29
Chrysene	0.36
Benzo(b)fluoranthene	0.44
Benzo(k)fluoranthene	0.12
Benzo(a)pyrene	0.30
Indeno(1,2,3-cd)pyrene	0.21
Dibenz(a,h)anthracene	0.062
Benzo(g,h,i)perylene	0.28

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AB-03-01	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	10/08/24	Lab ID:	411043-11
Date Analyzed:	11/08/24	Data File:	110828.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	101	50	150
Benz(a)anthracene-d12	103	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.0065
2-Methylnaphthalene	0.0058
1-Methylnaphthalene	<0.005
Acenaphthylene	<0.005
Acenaphthene	0.011
Fluorene	0.010
Phenanthrene	0.079
Anthracene	0.012
Fluoranthene	0.11
Pyrene	0.078
Benz(a)anthracene	0.053
Chrysene	0.058
Benzo(k)fluoranthene	0.021 J
Dibenz(a,h)anthracene	0.012 J

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AB-03-01	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	10/08/24	Lab ID:	411043-11 1/10
Date Analyzed:	11/10/24	Data File:	111007.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	121 d	50	150
Benz(a)anthracene-d12	86 d	50	150

Compounds:	Concentration mg/kg (ppm)
Benzo(b)fluoranthene	0.090
Benzo(k)fluoranthene	<0.05
Benzo(a)pyrene	0.060
Indeno(1,2,3-cd)pyrene	0.051
Dibenz(a,h)anthracene	<0.05
Benzo(g,h,i)perylene	0.057



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AB-03-07	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	10/08/24	Lab ID:	411043-14
Date Analyzed:	11/08/24	Data File:	110829.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	98	50	150
Benz(a)anthracene-d12	99	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.0058
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Acenaphthylene	<0.005
Acenaphthene	<0.005
Fluorene	<0.005
Phenanthrene	0.018
Anthracene	<0.005
Fluoranthene	0.033
Pyrene	0.034
Benz(a)anthracene	0.017
Chrysene	0.021
Benzo(b)fluoranthene	0.022
Benzo(k)fluoranthene	0.0065
Benzo(a)pyrene	0.012
Indeno(1,2,3-cd)pyrene	0.010
Dibenz(a,h)anthracene	<0.005
Benzo(g,h,i)perylene	0.012

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AB-04-02.5	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	10/08/24	Lab ID:	411043-15
Date Analyzed:	11/08/24	Data File:	110830.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	96	50	150
Benz(a)anthracene-d12	99	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.014
2-Methylnaphthalene	0.0098
1-Methylnaphthalene	0.012
Acenaphthylene	0.016
Acenaphthene	0.016
Fluorene	0.012
Phenanthrene	0.32
Anthracene	0.030
Fluoranthene	0.63
Pyrene	0.54
Benz(a)anthracene	0.22
Chrysene	0.30
Benzo(b)fluoranthene	0.33
Benzo(k)fluoranthene	0.11
Benzo(a)pyrene	0.29
Indeno(1,2,3-cd)pyrene	0.27
Dibenz(a,h)anthracene	0.049
Benzo(g,h,i)perylene	0.28

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AB-04-10	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	10/08/24	Lab ID:	411043-17
Date Analyzed:	11/08/24	Data File:	110831.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	50	150
Benz(a)anthracene-d12	107	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.024
2-Methylnaphthalene	0.020
1-Methylnaphthalene	0.011
Acenaphthylene	<0.005
Acenaphthene	<0.005
Fluorene	<0.005
Phenanthrene	0.022
Anthracene	<0.005
Fluoranthene	0.031
Pyrene	0.046
Benz(a)anthracene	0.036
Chrysene	0.036
Benzo(b)fluoranthene	0.031
Benzo(k)fluoranthene	0.0089
Benzo(a)pyrene	0.022
Indeno(1,2,3-cd)pyrene	0.027
Dibenz(a,h)anthracene	0.0060
Benzo(g,h,i)perylene	0.026

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AB-05-02.5	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	10/08/24	Lab ID:	411043-20
Date Analyzed:	11/08/24	Data File:	110832.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	84	50	150
Benz(a)anthracene-d12	103	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.0051
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Acenaphthylene	0.0051
Acenaphthene	0.025
Fluorene	0.017
Phenanthrene	0.060
Anthracene	0.017
Fluoranthene	0.33
Pyrene	0.24
Benz(a)anthracene	0.13
Chrysene	0.14
Dibenz(a,h)anthracene	0.023 J

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AB-05-02.5	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	10/08/24	Lab ID:	411043-20 1/10
Date Analyzed:	11/10/24	Data File:	111008.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	128 d	50	150
Benz(a)anthracene-d12	94 d	50	150

Compounds:	Concentration mg/kg (ppm)
Benzo(b)fluoranthene	0.24
Benzo(k)fluoranthene	0.061
Benzo(a)pyrene	0.16
Indeno(1,2,3-cd)pyrene	0.14
Dibenz(a,h)anthracene	<0.05
Benzo(g,h,i)perylene	0.17

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AB-05-13	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	10/08/24	Lab ID:	411043-25
Date Analyzed:	11/08/24	Data File:	110833.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	83	50	150
Benz(a)anthracene-d12	102	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.0058
2-Methylnaphthalene	0.0083
1-Methylnaphthalene	<0.005
Acenaphthylene	<0.005
Acenaphthene	<0.005
Fluorene	<0.005
Phenanthrene	0.014
Anthracene	<0.005
Fluoranthene	0.019
Pyrene	0.015
Benz(a)anthracene	0.0084
Chrysene	0.012
Benzo(b)fluoranthene	0.010 J
Benzo(k)fluoranthene	<0.005 J
Benzo(a)pyrene	0.0074 J
Indeno(1,2,3-cd)pyrene	<0.005 J
Dibenz(a,h)anthracene	<0.005 J
Benzo(g,h,i)perylene	0.0054 J

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AB-05-13	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	10/08/24	Lab ID:	411043-25 1/10
Date Analyzed:	11/10/24	Data File:	111009.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	111 d	50	150
Benz(a)anthracene-d12	87 d	50	150

Compounds:	Concentration mg/kg (ppm)
Benzo(b)fluoranthene	<0.05
Benzo(k)fluoranthene	<0.05
Benzo(a)pyrene	<0.05
Indeno(1,2,3-cd)pyrene	<0.05
Dibenz(a,h)anthracene	<0.05
Benzo(g,h,i)perylene	<0.05

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AMW-5-01	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	10/08/24	Lab ID:	411043-26
Date Analyzed:	11/08/24	Data File:	110834.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	70	50	150
Benz(a)anthracene-d12	89	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.033
2-Methylnaphthalene	0.022
1-Methylnaphthalene	0.013
Acenaphthylene	0.020
Acenaphthene	0.085
Fluorene	0.11
Phenanthrene	0.56
Anthracene	0.11
Fluoranthene	1.0
Pyrene	0.79
Benz(a)anthracene	0.36
Chrysene	0.47



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AMW-5-01	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	10/08/24	Lab ID:	411043-26 1/10
Date Analyzed:	11/10/24	Data File:	111010.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	117 d	50	150
Benz(a)anthracene-d12	101 d	50	150

Compounds:	Concentration mg/kg (ppm)
Benzo(b)fluoranthene	0.78
Benzo(k)fluoranthene	0.28
Benzo(a)pyrene	0.59
Indeno(1,2,3-cd)pyrene	0.49
Dibenz(a,h)anthracene	0.10
Benzo(g,h,i)perylene	0.58

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AMW-5-12	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	10/08/24	Lab ID:	411043-31
Date Analyzed:	11/08/24	Data File:	110835.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	94	50	150
Benz(a)anthracene-d12	94	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.017
2-Methylnaphthalene	0.0077
1-Methylnaphthalene	0.0072
Acenaphthylene	<0.005
Acenaphthene	<0.005
Fluorene	<0.005
Phenanthrene	0.020
Anthracene	<0.005
Fluoranthene	0.022
Pyrene	0.019
Benz(a)anthracene	0.011
Chrysene	0.011
Benzo(b)fluoranthene	0.012
Benzo(k)fluoranthene	<0.005
Benzo(a)pyrene	0.010
Indeno(1,2,3-cd)pyrene	0.0051
Dibenz(a,h)anthracene	<0.005
Benzo(g,h,i)perylene	0.0074

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AB-06-01	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	10/08/24	Lab ID:	411043-32
Date Analyzed:	11/08/24	Data File:	110836.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	50	150
Benz(a)anthracene-d12	108	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.25
2-Methylnaphthalene	0.078
1-Methylnaphthalene	0.036
Acenaphthylene	0.0079
Acenaphthene	0.15
Fluorene	0.17
Phenanthrene	0.53
Anthracene	0.14
Fluoranthene	0.97
Pyrene	0.61
Benz(a)anthracene	0.33
Chrysene	0.51

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AB-06-01	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	10/08/24	Lab ID:	411043-32 1/10
Date Analyzed:	11/10/24	Data File:	111011.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	113 d	50	150
Benz(a)anthracene-d12	93 d	50	150

Compounds:	Concentration mg/kg (ppm)
Benzo(b)fluoranthene	0.49
Benzo(k)fluoranthene	0.12
Benzo(a)pyrene	0.33
Indeno(1,2,3-cd)pyrene	0.24
Dibenz(a,h)anthracene	0.062
Benzo(g,h,i)perylene	0.26

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AB-06-08.5	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	10/08/24	Lab ID:	411043-35
Date Analyzed:	11/09/24	Data File:	110837.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	50	150
Benz(a)anthracene-d12	102	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.33
2-Methylnaphthalene	0.21
1-Methylnaphthalene	0.17
Acenaphthylene	0.0053
Acenaphthene	0.014
Fluorene	0.037
Phenanthrene	0.18
Anthracene	<0.005
Fluoranthene	0.10
Pyrene	0.067
Benz(a)anthracene	0.029
Chrysene	0.057
Benzo(b)fluoranthene	0.033 J
Benzo(k)fluoranthene	0.011 J
Benzo(a)pyrene	0.024 J
Indeno(1,2,3-cd)pyrene	0.010 J
Dibenz(a,h)anthracene	<0.005 J
Benzo(g,h,i)perylene	0.015 J

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	AB-06-08.5	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	10/08/24	Lab ID:	411043-35 1/10
Date Analyzed:	11/10/24	Data File:	111012.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	108 d	50	150
Benz(a)anthracene-d12	95 d	50	150

Compounds:	Concentration mg/kg (ppm)
Benzo(b)fluoranthene	<0.05
Benzo(k)fluoranthene	<0.05
Benzo(a)pyrene	<0.05
Indeno(1,2,3-cd)pyrene	<0.05
Dibenz(a,h)anthracene	<0.05
Benzo(g,h,i)perylene	<0.05

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	Method Blank	Client:	Aspect Consulting
Date Received:	Not Applicable	Project:	ETS Subsurface Investigation
Date Extracted:	10/08/24	Lab ID:	04-2793 mb
Date Analyzed:	11/08/24	Data File:	110823.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	50	150
Benz(a)anthracene-d12	93	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Acenaphthylene	<0.005
Acenaphthene	<0.005
Fluorene	<0.005
Phenanthrene	<0.005
Anthracene	<0.005
Fluoranthene	<0.005
Pyrene	<0.005
Benz(a)anthracene	<0.005
Chrysene	<0.005
Benzo(b)fluoranthene	<0.005
Benzo(k)fluoranthene	<0.005
Benzo(a)pyrene	<0.005
Indeno(1,2,3-cd)pyrene	<0.005
Dibenz(a,h)anthracene	<0.005
Benzo(g,h,i)perylene	<0.005

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-01-01.5	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-01
Date Analyzed:	11/12/24	Data File:	411043-01.116
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	4.5
Cadmium	1.9
Mercury	<1



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-01-01.5	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-01 x5
Date Analyzed:	11/13/24	Data File:	411043-01 x5.061
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Chromium	32
Lead	45

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-01-09	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-04
Date Analyzed:	11/12/24	Data File:	411043-04.117
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	4.6
Cadmium	<1
Chromium	23
Mercury	<1

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-01-09	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-04
Date Analyzed:	11/13/24	Data File:	411043-04.067
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Lead	46
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-02-03	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-06
Date Analyzed:	11/12/24	Data File:	411043-06.118
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	3.0
Cadmium	40
Chromium	16
Mercury	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-02-03	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-06
Date Analyzed:	11/13/24	Data File:	411043-06.068
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Lead	15
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# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-02-09.5	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-09
Date Analyzed:	11/12/24	Data File:	411043-09.119
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	18
Cadmium	2.2
Mercury	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-02-09.5	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-09 x25
Date Analyzed:	11/13/24	Data File:	411043-09 x25.069
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Chromium	37
Lead	2,900

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-03-01	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-11
Date Analyzed:	11/12/24	Data File:	411043-11.120
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	9.2
Cadmium	220
Chromium	13
Mercury	<1



# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-03-01	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-11
Date Analyzed:	11/13/24	Data File:	411043-11.080
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Lead	19
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# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-03-07	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-14
Date Analyzed:	11/12/24	Data File:	411043-14.121
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	3.6
Cadmium	70
Chromium	32
Mercury	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-03-07	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-14
Date Analyzed:	11/13/24	Data File:	411043-14.081
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Lead	75
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# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-04-02.5	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-15
Date Analyzed:	11/12/24	Data File:	411043-15.124
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	4.8
Cadmium	<1
Chromium	19
Mercury	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-04-02.5	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-15
Date Analyzed:	11/13/24	Data File:	411043-15.098
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Lead	29
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# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-04-10	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-17
Date Analyzed:	11/12/24	Data File:	411043-17.125
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	3.4
Cadmium	<1
Chromium	16
Mercury	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-04-10	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-17
Date Analyzed:	11/13/24	Data File:	411043-17.099
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Lead	60
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# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-05-02.5	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-20
Date Analyzed:	11/12/24	Data File:	411043-20.126
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	7.6
Cadmium	1.2
Chromium	39
Mercury	<1



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-05-02.5	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-20
Date Analyzed:	11/13/24	Data File:	411043-20.100
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Lead	73
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# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-05-13	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-25
Date Analyzed:	11/12/24	Data File:	411043-25.127
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	3.3
Cadmium	<1
Chromium	19
Mercury	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-05-13	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-25
Date Analyzed:	11/13/24	Data File:	411043-25.101
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Lead	46
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# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-5-01	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-26
Date Analyzed:	11/12/24	Data File:	411043-26.128
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	5.9
Cadmium	53
Chromium	39
Mercury	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-5-01	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-26 x20
Date Analyzed:	11/13/24	Data File:	411043-26 x20.102
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Lead	160
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# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-5-12	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-31
Date Analyzed:	11/12/24	Data File:	411043-31.129
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
----------	------------------------------

Arsenic	16
Cadmium	1.2
Chromium	12
Mercury	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	AMW-5-12	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-31 x20
Date Analyzed:	11/13/24	Data File:	411043-31 x20.141
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Lead	1,700
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# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-06-01	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-32
Date Analyzed:	11/12/24	Data File:	411043-32.130
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	6.5
Cadmium	18
Chromium	24
Mercury	<1



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-06-01	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-32
Date Analyzed:	11/13/24	Data File:	411043-32.142
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Lead	68
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# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-06-08.5	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-35
Date Analyzed:	11/12/24	Data File:	411043-35.131
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	4.0
Cadmium	<1
Chromium	31
Mercury	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	AB-06-08.5	Client:	Aspect Consulting
Date Received:	11/04/24	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	411043-35
Date Analyzed:	11/13/24	Data File:	411043-35.143
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Lead	32
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# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Aspect Consulting
Date Received:	NA	Project:	ETS Subsurface Investigation
Date Extracted:	11/12/24	Lab ID:	I4-970 mb
Date Analyzed:	11/12/24	Data File:	I4-970 mb.074
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Arsenic	<1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/15/24

Date Received: 11/04/24

Project: ETS Subsurface Investigation PO 180043-02, F&BI 411043

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES  
FOR TPH AS GASOLINE  
USING METHOD NWTPH-G<sub>x</sub>**

Laboratory Code: 410568-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	mg/kg (ppm)	40	82	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/15/24

Date Received: 11/04/24

Project: ETS Subsurface Investigation PO 180043-02, F&BI 411043

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL EXTENDED USING METHOD NWTPH-D<sub>x</sub>**

Laboratory Code: 411043-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	230	105	103	64-136	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	106	78-121

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 11/15/24

Date Received: 11/04/24

Project: ETS Subsurface Investigation PO 180043-02, F&BI 411043

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: 411043-26 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	2	<0.5	50	49	10-142	2
Chloromethane	mg/kg (ppm)	2	<0.5	72	74	10-126	3
Vinyl chloride	mg/kg (ppm)	2	<0.05	79	78	10-138	1
Bromomethane	mg/kg (ppm)	2	<0.5	67	67	10-163	0
Chloroethane	mg/kg (ppm)	2	<0.5	79	78	10-176	1
Trichlorofluoromethane	mg/kg (ppm)	2	<0.5	84	81	10-176	4
Acetone	mg/kg (ppm)	10	<5	66	58	10-163	13
1,1-Dichloroethene	mg/kg (ppm)	2	<0.05	86	83	10-160	4
Hexane	mg/kg (ppm)	2	<0.25	85	84	10-137	1
Methylene chloride	mg/kg (ppm)	2	<0.5	65	63	10-156	3
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	<0.05	85	85	21-145	0
trans-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	81	83	14-137	2
1,1-Dichloroethane	mg/kg (ppm)	2	<0.05	84	82	19-140	2
2,2-Dichloropropane	mg/kg (ppm)	2	<0.05	85	81	10-158	5
cis-1,2-Dichloroethene	mg/kg (ppm)	2	<0.05	85	87	25-135	2
Chloroform	mg/kg (ppm)	2	<0.05	85	83	21-145	2
2-Butanone (MEK)	mg/kg (ppm)	10	<1	76	72	19-147	5
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	<0.05	91	90	12-160	1
1,1,1-Trichloroethane	mg/kg (ppm)	2	<0.05	87	87	10-156	0
1,1-Dichloropropene	mg/kg (ppm)	2	<0.05	86	87	17-140	1
Carbon tetrachloride	mg/kg (ppm)	2	<0.05	95	96	9-164	1
Benzene	mg/kg (ppm)	2	<0.03	86	86	29-129	0
Trichloroethene	mg/kg (ppm)	2	<0.02	84	83	21-139	1
1,2-Dichloropropane	mg/kg (ppm)	2	<0.05	91	89	30-135	2
Bromodichloromethane	mg/kg (ppm)	2	<0.05	88	88	23-155	0
Dibromomethane	mg/kg (ppm)	2	<0.05	84	84	23-145	0
4-Methyl-2-pentanone	mg/kg (ppm)	10	<1	89	95	24-155	7
cis-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	89	89	28-144	0
Toluene	mg/kg (ppm)	2	<0.05	81	80	35-130	1
trans-1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	85	85	26-149	0
1,1,2-Trichloroethane	mg/kg (ppm)	2	<0.05	85	81	10-205	5
2-Hexanone	mg/kg (ppm)	10	<1	81	77	15-166	5
1,3-Dichloropropene	mg/kg (ppm)	2	<0.05	86	85	31-137	1
Tetrachloroethene	mg/kg (ppm)	2	<0.025	83	82	20-133	1
Dibromochloromethane	mg/kg (ppm)	2	<0.05	83	79	28-150	5
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	<0.05	83	80	28-142	4
Chlorobenzene	mg/kg (ppm)	2	<0.05	83	81	32-129	2
Ethylbenzene	mg/kg (ppm)	2	<0.05	85	82	32-137	4
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	83	81	31-143	2
m,p-Xylene	mg/kg (ppm)	4	<0.1	83	83	34-136	0
o-Xylene	mg/kg (ppm)	2	<0.05	80	80	33-134	0
Styrene	mg/kg (ppm)	2	<0.05	82	80	35-137	2
Isopropylbenzene	mg/kg (ppm)	2	<0.05	84	82	31-142	2
Bromoform	mg/kg (ppm)	2	<0.05	85	83	21-156	2
n-Propylbenzene	mg/kg (ppm)	2	<0.05	85	87	23-146	2
Bromobenzene	mg/kg (ppm)	2	<0.05	82	83	34-130	1
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	<0.05	85	86	18-149	1
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	<0.05	89	89	28-140	0
1,2,3-Trichloropropane	mg/kg (ppm)	2	<0.05	87	86	25-144	1
2-Chlorotoluene	mg/kg (ppm)	2	<0.05	81	84	31-134	4
4-Chlorotoluene	mg/kg (ppm)	2	<0.05	85	86	31-136	1
tert-Butylbenzene	mg/kg (ppm)	2	<0.05	84	88	30-137	5
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	<0.05	83	85	10-182	2
sec-Butylbenzene	mg/kg (ppm)	2	<0.05	86	86	23-145	0
p-Isopropyltoluene	mg/kg (ppm)	2	<0.05	84	87	21-149	4
1,3-Dichlorobenzene	mg/kg (ppm)	2	<0.05	84	84	30-131	0
1,4-Dichlorobenzene	mg/kg (ppm)	2	<0.05	81	83	29-129	2
1,2-Dichlorobenzene	mg/kg (ppm)	2	<0.05	79	82	31-132	4
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	<0.5	81	88	11-161	8
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	<0.25	79	81	22-142	2
Hexachlorobutadiene	mg/kg (ppm)	2	<0.25	81	80	10-142	1
Naphthalene	mg/kg (ppm)	2	<0.05	84	84	14-157	0
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	<0.25	83	85	20-144	2

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 11/15/24

Date Received: 11/04/24

Project: ETS Subsurface Investigation PO 180043-02, F&BI 411043

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2	61	10-146
Chloromethane	mg/kg (ppm)	2	79	27-133
Vinyl chloride	mg/kg (ppm)	2	87	22-139
Bromomethane	mg/kg (ppm)	2	69	10-201
Chloroethane	mg/kg (ppm)	2	72	10-163
Trichlorofluoromethane	mg/kg (ppm)	2	99	10-196
Acetone	mg/kg (ppm)	10	90	52-141
1,1-Dichloroethene	mg/kg (ppm)	2	91	47-128
Hexane	mg/kg (ppm)	2	96	43-142
Methylene chloride	mg/kg (ppm)	2	73	10-184
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	91	60-123
trans-1,2-Dichloroethene	mg/kg (ppm)	2	93	64-132
1,1-Dichloroethane	mg/kg (ppm)	2	92	64-135
2,2-Dichloropropane	mg/kg (ppm)	2	90	52-170
cis-1,2-Dichloroethene	mg/kg (ppm)	2	94	64-135
Chloroform	mg/kg (ppm)	2	91	61-139
2-Butanone (MEK)	mg/kg (ppm)	10	99	30-197
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	100	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2	94	62-131
1,1-Dichloropropene	mg/kg (ppm)	2	93	64-136
Carbon tetrachloride	mg/kg (ppm)	2	105	60-139
Benzene	mg/kg (ppm)	2	94	65-136
Trichloroethene	mg/kg (ppm)	2	92	63-139
1,2-Dichloropropane	mg/kg (ppm)	2	99	61-145
Bromodichloromethane	mg/kg (ppm)	2	100	57-126
Dibromomethane	mg/kg (ppm)	2	95	62-123
4-Methyl-2-pentanone	mg/kg (ppm)	10	96	45-145
cis-1,3-Dichloropropene	mg/kg (ppm)	2	96	65-143
Toluene	mg/kg (ppm)	2	88	66-126
trans-1,3-Dichloropropene	mg/kg (ppm)	2	96	65-131
1,1,2-Trichloroethane	mg/kg (ppm)	2	91	62-131
2-Hexanone	mg/kg (ppm)	10	92	33-152
1,3-Dichloropropene	mg/kg (ppm)	2	95	67-128
Tetrachloroethene	mg/kg (ppm)	2	88	68-128
Dibromochloromethane	mg/kg (ppm)	2	92	55-121
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	91	66-129
Chlorobenzene	mg/kg (ppm)	2	89	67-128
Ethylbenzene	mg/kg (ppm)	2	90	64-123
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2	93	64-121
m,p-Xylene	mg/kg (ppm)	4	89	68-128
o-Xylene	mg/kg (ppm)	2	88	67-129
Styrene	mg/kg (ppm)	2	88	67-129
Isopropylbenzene	mg/kg (ppm)	2	89	68-128
Bromoform	mg/kg (ppm)	2	96	56-132
n-Propylbenzene	mg/kg (ppm)	2	96	68-129
Bromobenzene	mg/kg (ppm)	2	91	69-128
1,3,5-Trimethylbenzene	mg/kg (ppm)	2	95	69-129
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2	96	56-143
1,2,3-Trichloropropane	mg/kg (ppm)	2	97	61-137
2-Chlorotoluene	mg/kg (ppm)	2	95	69-128
4-Chlorotoluene	mg/kg (ppm)	2	95	67-127
tert-Butylbenzene	mg/kg (ppm)	2	96	69-129
1,2,4-Trimethylbenzene	mg/kg (ppm)	2	93	69-128
sec-Butylbenzene	mg/kg (ppm)	2	96	69-130
p-Isopropyltoluene	mg/kg (ppm)	2	94	69-130
1,3-Dichlorobenzene	mg/kg (ppm)	2	92	69-127
1,4-Dichlorobenzene	mg/kg (ppm)	2	91	68-126
1,2-Dichlorobenzene	mg/kg (ppm)	2	93	69-127
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2	94	58-138
1,2,4-Trichlorobenzene	mg/kg (ppm)	2	90	64-135
Hexachlorobutadiene	mg/kg (ppm)	2	91	50-153
Naphthalene	mg/kg (ppm)	2	95	62-128
1,2,3-Trichlorobenzene	mg/kg (ppm)	2	96	61-126



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/15/24

Date Received: 11/04/24

Project: ETS Subsurface Investigation PO 180043-02, F&BI 411043

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL  
SAMPLES FOR PAHS BY EPA METHOD 8270E SIM**

Laboratory Code: 411043-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.5	0.38	113 b	111 b	50-150	2 b
2-Methylnaphthalene	mg/kg (ppm)	0.5	0.16	104 b	115 b	50-150	10 b
1-Methylnaphthalene	mg/kg (ppm)	0.5	0.098	97	106	50-150	9
Acenaphthylene	mg/kg (ppm)	0.5	0.0075	95	98	50-150	3
Acenaphthene	mg/kg (ppm)	0.5	0.26	100 b	114 b	50-150	13 b
Fluorene	mg/kg (ppm)	0.5	0.30	101 b	125 b	50-150	21 b
Phenanthrene	mg/kg (ppm)	0.5	1.6	164 b	241 b	50-150	38 b
Anthracene	mg/kg (ppm)	0.5	0.29	98 b	118 b	50-150	19 b
Fluoranthene	mg/kg (ppm)	0.5	3.8	109 b	292 b	50-150	91 b
Pyrene	mg/kg (ppm)	0.5	2.0	77 b	110 b	50-150	35 b
Benz(a)anthracene	mg/kg (ppm)	0.5	0.77	92 b	101 b	50-150	9 b
Chrysene	mg/kg (ppm)	0.5	0.91	82 b	83 b	50-150	1 b
Benzo(b)fluoranthene	mg/kg (ppm)	0.5	0.65	90 b	85 b J	50-150	6 b
Benzo(k)fluoranthene	mg/kg (ppm)	0.5	0.22	98 b	95 b J	50-150	3 b
Benzo(a)pyrene	mg/kg (ppm)	0.5	0.33	100 b	97 b J	50-150	3 b
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.5	0.28	92 b	89 b J	50-150	3 b
Dibenz(a,h)anthracene	mg/kg (ppm)	0.5	0.067	102	100 J	50-150	2
Benzo(g,h,i)perylene	mg/kg (ppm)	0.5	0.28	99 b	96 b J	50-150	3 b

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/15/24

Date Received: 11/04/24

Project: ETS Subsurface Investigation PO 180043-02, F&BI 411043

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL  
SAMPLES FOR PAHS BY EPA METHOD 8270E SIM**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.5	79	70-130
2-Methylnaphthalene	mg/kg (ppm)	0.5	82	70-130
1-Methylnaphthalene	mg/kg (ppm)	0.5	81	70-130
Acenaphthylene	mg/kg (ppm)	0.5	94	70-130
Acenaphthene	mg/kg (ppm)	0.5	90	70-130
Fluorene	mg/kg (ppm)	0.5	94	70-130
Phenanthrene	mg/kg (ppm)	0.5	93	70-130
Anthracene	mg/kg (ppm)	0.5	86	70-130
Fluoranthene	mg/kg (ppm)	0.5	102	70-130
Pyrene	mg/kg (ppm)	0.5	89	70-130
Benz(a)anthracene	mg/kg (ppm)	0.5	84	70-130
Chrysene	mg/kg (ppm)	0.5	92	70-130
Benzo(b)fluoranthene	mg/kg (ppm)	0.5	85	70-130
Benzo(k)fluoranthene	mg/kg (ppm)	0.5	94	70-130
Benzo(a)pyrene	mg/kg (ppm)	0.5	87	70-130
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.5	87	70-130
Dibenz(a,h)anthracene	mg/kg (ppm)	0.5	85	70-130
Benzo(g,h,i)perylene	mg/kg (ppm)	0.5	91	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/15/24

Date Received: 11/04/24

Project: ETS Subsurface Investigation PO 180043-02, F&BI 411043

**QUALITY ASSURANCE RESULTS  
FOR THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL METALS USING EPA METHOD 6020B**

Laboratory Code: 411171-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	2.31	100 b	93 b	75-125	7 b
Cadmium	mg/kg (ppm)	10	<1	90	98	75-125	9
Chromium	mg/kg (ppm)	10	17.3	113 b	79 b	75-125	35 b
Lead	mg/kg (ppm)	10	6.17	152 b	105 b	75-125	37 b
Mercury	mg/kg (ppm)	10	<1	90	95	75-125	5

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	89	80-120
Cadmium	mg/kg (ppm)	10	94	80-120
Chromium	mg/kg (ppm)	10	103	80-120
Lead	mg/kg (ppm)	10	98	80-120
Mercury	mg/kg (ppm)	10	91	80-120

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the standard reporting limit. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

k - The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

411043

## SAMPLE CHAIN OF CUSTODY

11-04-24

N3/D22

Page # 1 of 1

Report To Nathan Dickey

Company Aspect

Address Seattle

City, State, ZIP

Phone Email Nathan.dickey@seattle.gov

SAMPLERS (signature)

PROJECT NAME

ETS Subsurface Investigation

PO #

180043-02

REMARKS

cc: Aspect EDD

INVOICE TO

Project specific RLS? - Yes / No

TURNAROUND TIME

☒ Standard turnaround

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Archive samples

☐ Other

Default: Dispose after 30 days

## ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	MTCA 5	Notes
AB-01-01.5	01A-E	10/31	1001	S	S	X	X			X	X	X		X PEND 11/7/24 ME
AB-01-02.5	02		1006		1									
AB-01-06.5	03A-E		1020		S									
AB-01-09	04		1025		S	X	X			X	X	X		
AB-02-01	05		1115		S									
AB-02-03	06		1120		S	X	X			X	X	X		
AB-02-05	07		1123		B									
AB-02-06.5	08		1125		S									
AB-02-09.5	09		1140		S	X	X			X	X	X		
AB-02-10.5	10		1145		S									

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

Aspect

NWD

Aspect

11/4

800

Received by:

NWD

NWD

EBI

11-4-24

1310

Relinquished by:

Received by:

Samples received at 2:00



Friedman &amp; Bruya, Inc.

5500 4th Ave S.

Seattle WA 98108

(206) 285-8282

office@friedmanandbruya.com

411043

## SAMPLE CHAIN OF CUSTODY

11-04-24

N3/D2

Page # 2 of 4

Report To

Company

Address

City, State, ZIP

Phone Email

SAMPLERS (signature)

PROJECT NAME

PO #

REMARKS

INVOICE TO

Project specific RLS? - Yes / No

TURNAROUND TIME  
☐ Standard turnaround  
☐ RUSH  
Rush charges authorized by:

SAMPLE DISPOSAL  
☐ Archive samples  
☐ Other  
Default: Dispose after 30 days

						ANALYSES REQUESTED								
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	MTCA 5	Notes
AB-03-01	11 AE	10/31	1220	S	5	X	X			X	X		X	
AB-03-02.5	12		1230		5									
AB-03-05.5	13		1236		5									
AB-03-04	14		1240		5	X	X			X	X		X	
AB-04-02.5	15		1340		5	X	X			X	X		X	
AB-04-05.5	16		1350		5									
AB-04-10	17		131400		5	X	X			X	X		X	Label AB-04-10.5 11/04
AB-04-12.5	18		1401		5									
AB-05-02	19	11/1	1112		5									
AB-05-02.5	20	11/1	1120		5	X	X			X	X		X	

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman &amp; Bruya, Inc.

5500 4th Ave S.

Seattle WA 98108

(206) 285-8282

office@friedmanandbruya.com

Relinquished by:

PRINT NAME

COMPANY

DATE

TIME

Received by:

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

PRINT NAME

COMPANY

DATE

TIME

Received by:

PRINT NAME

COMPANY

DATE

TIME

411043

## SAMPLE CHAIN OF CUSTODY

11-04-24

N3/223 4

Page # of

Report To \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City, State, ZIP \_\_\_\_\_

Phone \_\_\_\_\_ Email \_\_\_\_\_

## SAMPLERS (signature)

PROJECT NAME

PO #

REMARKS

INVOICE TO

Project specific RLS? - Yes / No

## TURNAROUND TIME

☐ Standard turnaround☐ RUSH

Rush charges authorized by: \_\_\_\_\_

## SAMPLE DISPOSAL

☐ Archive samples☐ Other \_\_\_\_\_

Default: Dispose after 30 days

## ANALYSES REQUESTED

NWTPH-Dx

NWTPH-Gx

BTEX EPA 8021

NWTPH-HCID

VOCs EPA 8260

PAHs EPA 8270

PCBs EPA 8082

MTCA 5

Notes

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	MTCA 5	Notes
AB-05-05	21 A.E	11/1	1115	S	5									
AB-05-07	22		1124		5									
AB-05-09.7	23		1130		5									
AB-05-11	24		1135		5									
AB-05-13	25	11/1	1140		5	X	X		X	X		X		
AMW-S-01	26	10/31	1435		5	X	X		X	X		X		
AMW-S-02	27	14/1	0910		1									
AMW-S-02.5	28 A.E		0920		5									
AMW-S-06.5	29 V		0930		5									
AMW-S-08.5	30		0940		1									

## SIGNATURE

## PRINT NAME

## COMPANY

DATE

TIME

Relinquished by: \_\_\_\_\_

PRINT NAME

COMPANY

DATE

TIME

Received by: \_\_\_\_\_

PRINT NAME

COMPANY

DATE

TIME

Relinquished by: \_\_\_\_\_

PRINT NAME

COMPANY

DATE

TIME

Received by: \_\_\_\_\_

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.  
Ph. (206) 285-8282

Samples received at 2 °C

## SAMPLE CHAIN OF CUSTODY

Page # 4 of 4

SAMPLERS (signature)

PROJECT NAME

TURNAROUND TIME  
standard turnaround

REMARKS

# INVOICE TO

☒ Standard turnaround  
☐ RUSH \_\_\_\_\_  
 Rush charges authorized by: \_\_\_\_\_



## SAMPLE DISPOSAL

Project specific RIs? - Yes / No

☐ Other \_\_\_\_\_

Default: Dispose after 30 days

[illegible]

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	ALWD	Aspart	11/14	0800
Received by: 	VINTA	FBI	11-14-2004	1310
Relinquished by:		Samples received at	2	00
Received by:				



# SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 411043 CLIENT Aspect INITIALS/ AP  
DATE: 11/04/24

If custody seals are present on cooler, are they intact? ☒ NA ☐ YES ☐ NO

Cooler/Sample temperature 2 °C  
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? ☒ YES ☐ NO

How did samples arrive?  
☐ Over the Counter ☒ Picked up by F&BI ☐ FedEx/UPS/GSO

Is there a Chain-of-Custody\* (COC)? ☒ YES ☐ NO Initials/ NP  
\*or other representative documents, letters, and/or shipping memos Date: 11/04/24

Number of days samples have been sitting prior to receipt at laboratory 3 > 4 days

Are the samples clearly identified? (explain "no" answer below) ☐ YES ☒ NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) ☒ YES ☐ NO

Were appropriate sample containers used? ☒ YES ☐ NO ☐ Unknown

If custody seals are present on samples, are they intact? ☒ NA ☐ YES ☐ NO

Are samples requiring no headspace, headspace free? ☒ NA ☐ YES ☐ NO

Is the following information provided on the COC, and does it match the sample label?  
(explain "no" answer below)

Sample ID's	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Not on COC/label
Date Sampled	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Not on COC/label
Time Sampled	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Not on COC/label
# of Containers	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Relinquished	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Requested analysis	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> On Hold	

Other comments (use a separate page if needed)

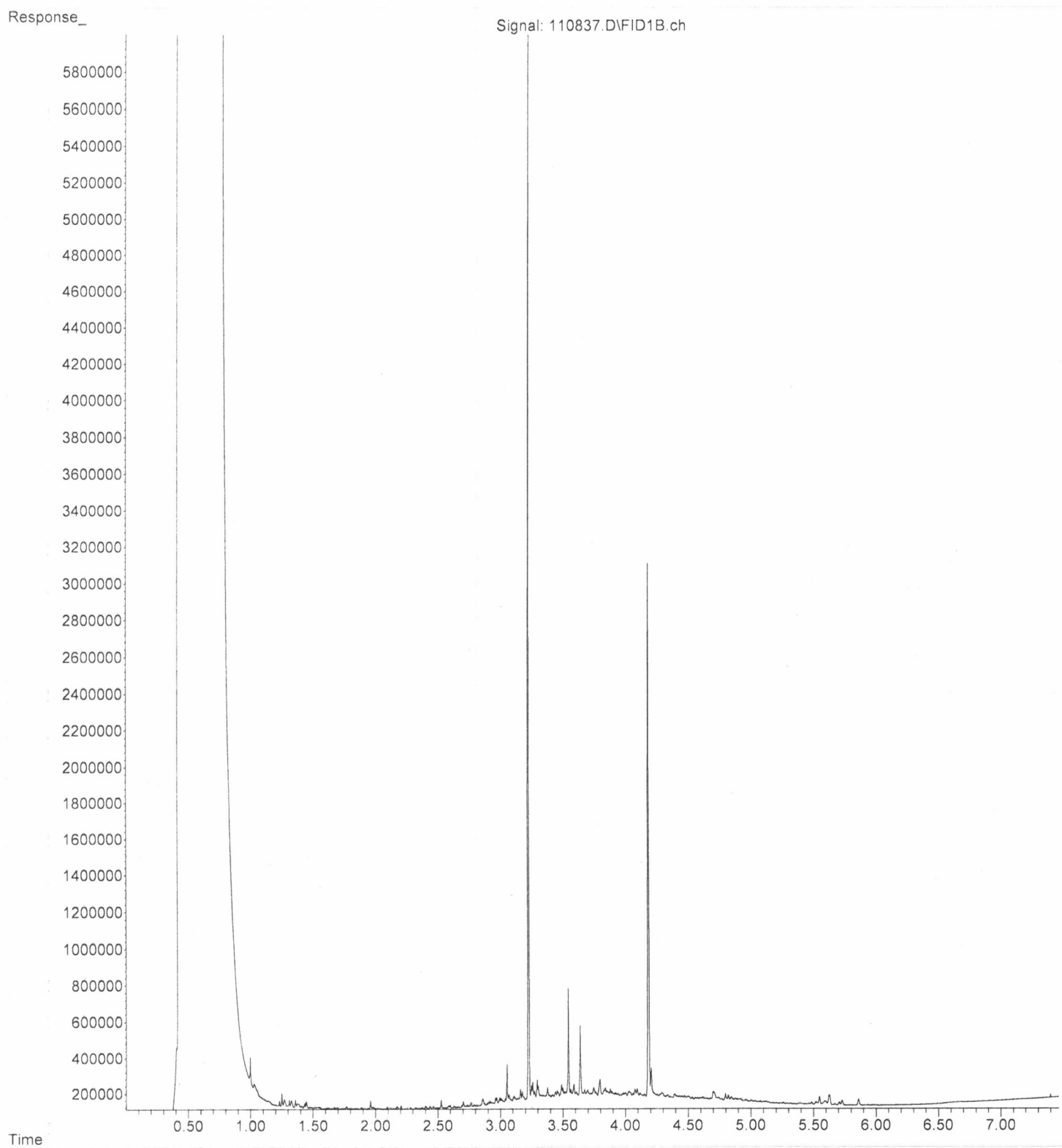
5035 Soil sample kit label on the Ziploc.

Air Samples: Were any additional canisters/tubes received? ☐ NA ☐ YES ☐ NO

Number of unused TO15 canisters \_\_\_\_\_ Number of unused TO17 tubes \_\_\_\_\_

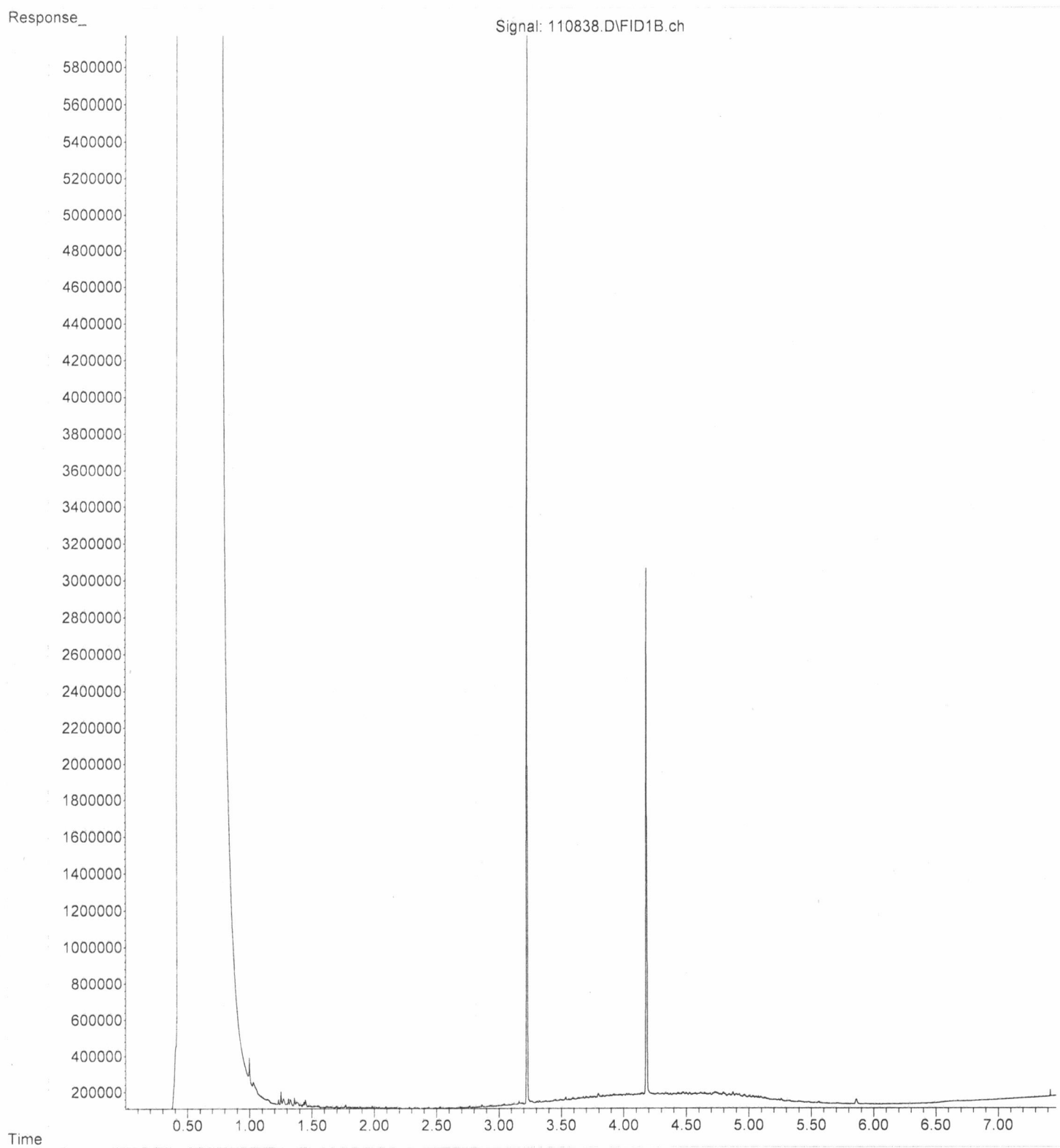
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Operator : TL  
Acquired : 08 Nov 2024 02:44 pm using AcqMethod Dx.M  
Instrument : GC13  
Sample Name: 411043-01  
Misc Info :  
Vial Number: 32

ERR



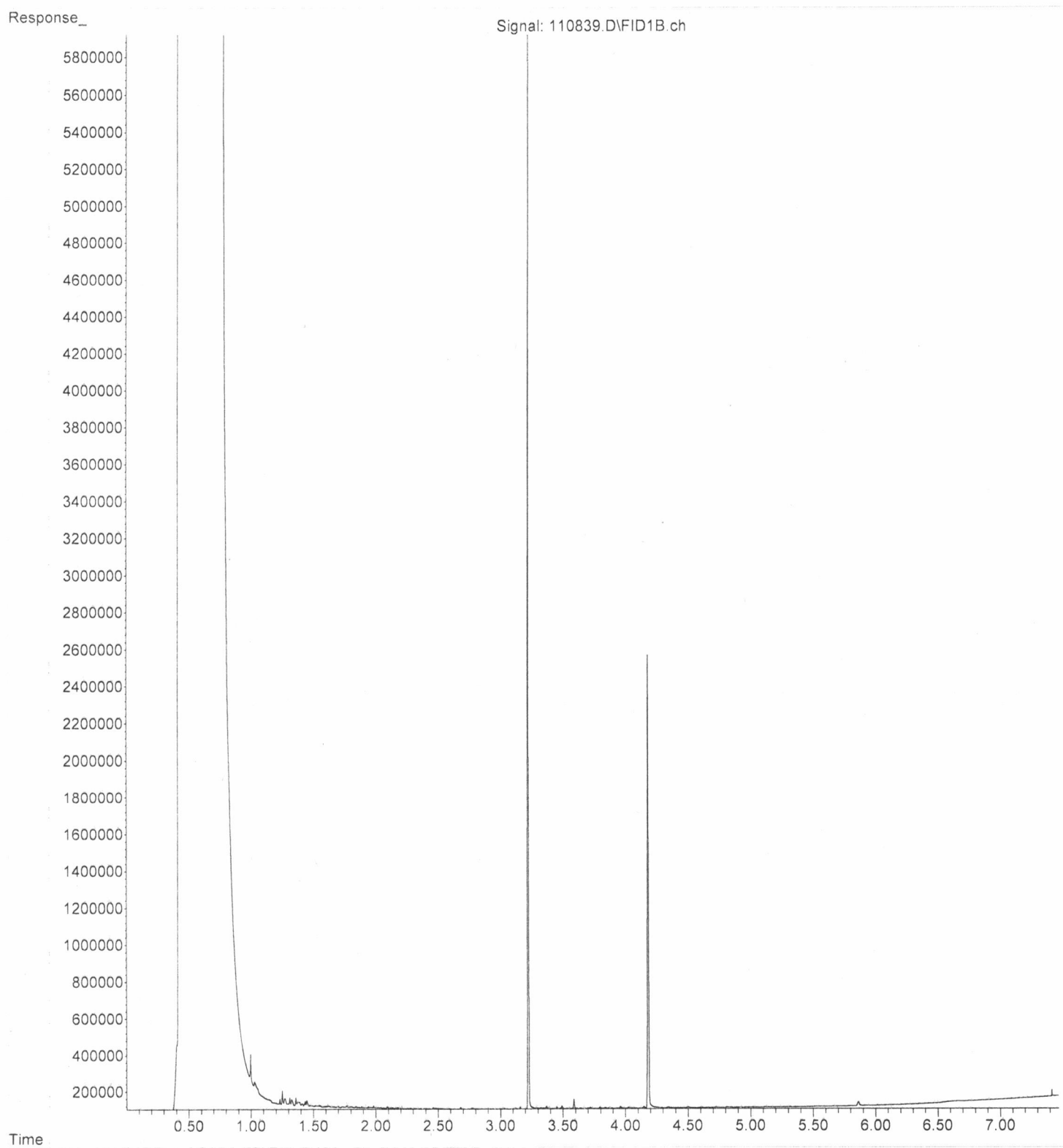
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Operator : TL  
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Instrument : GC13  
Sample Name: 411043-04  
Misc Info :  
Vial Number: 33

ERR



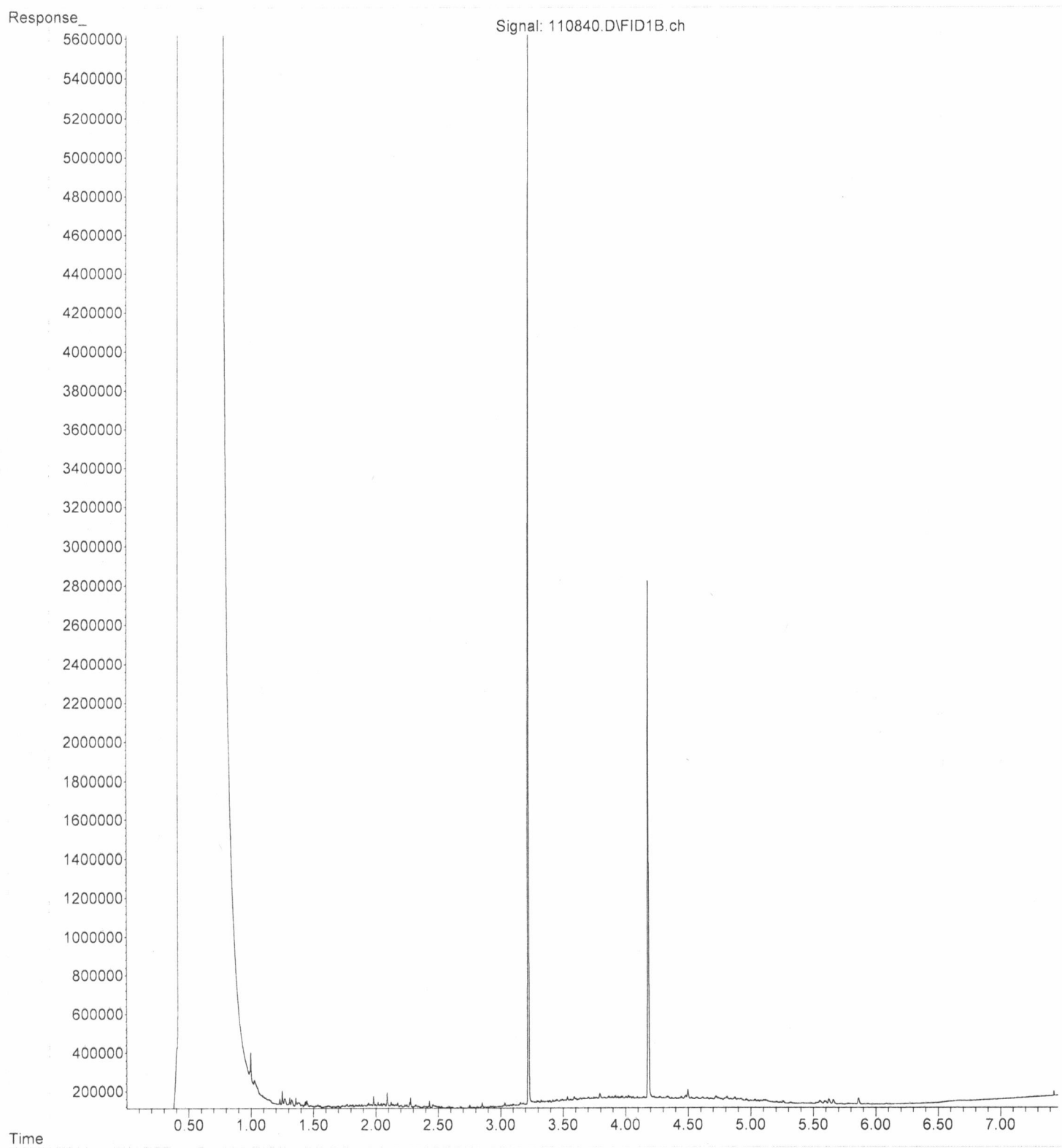
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Operator : TL  
Acquired : 08 Nov 2024 03:07 pm using AcqMethod Dx.M  
Instrument : GC13  
Sample Name: 411043-06  
Misc Info :  
Vial Number: 34

ERR



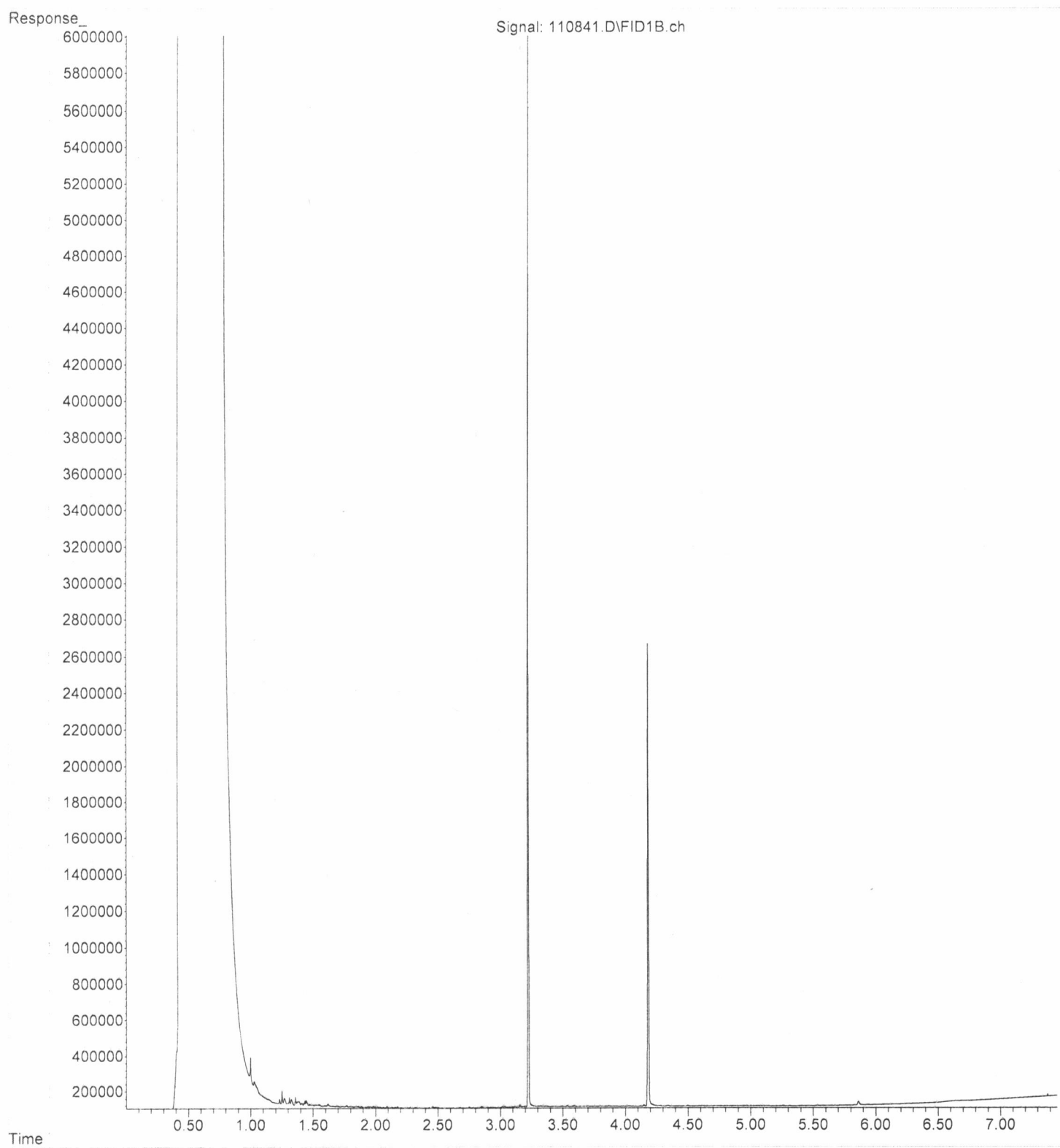
File : P:\Proc\_GC13\11-08-24\110840.D  
Operator : TL  
Acquired : 08 Nov 2024 03:18 pm using AcqMethod Dx.M  
Instrument : GC13  
Sample Name: 411043-09  
Misc Info :  
Vial Number: 35

ERR



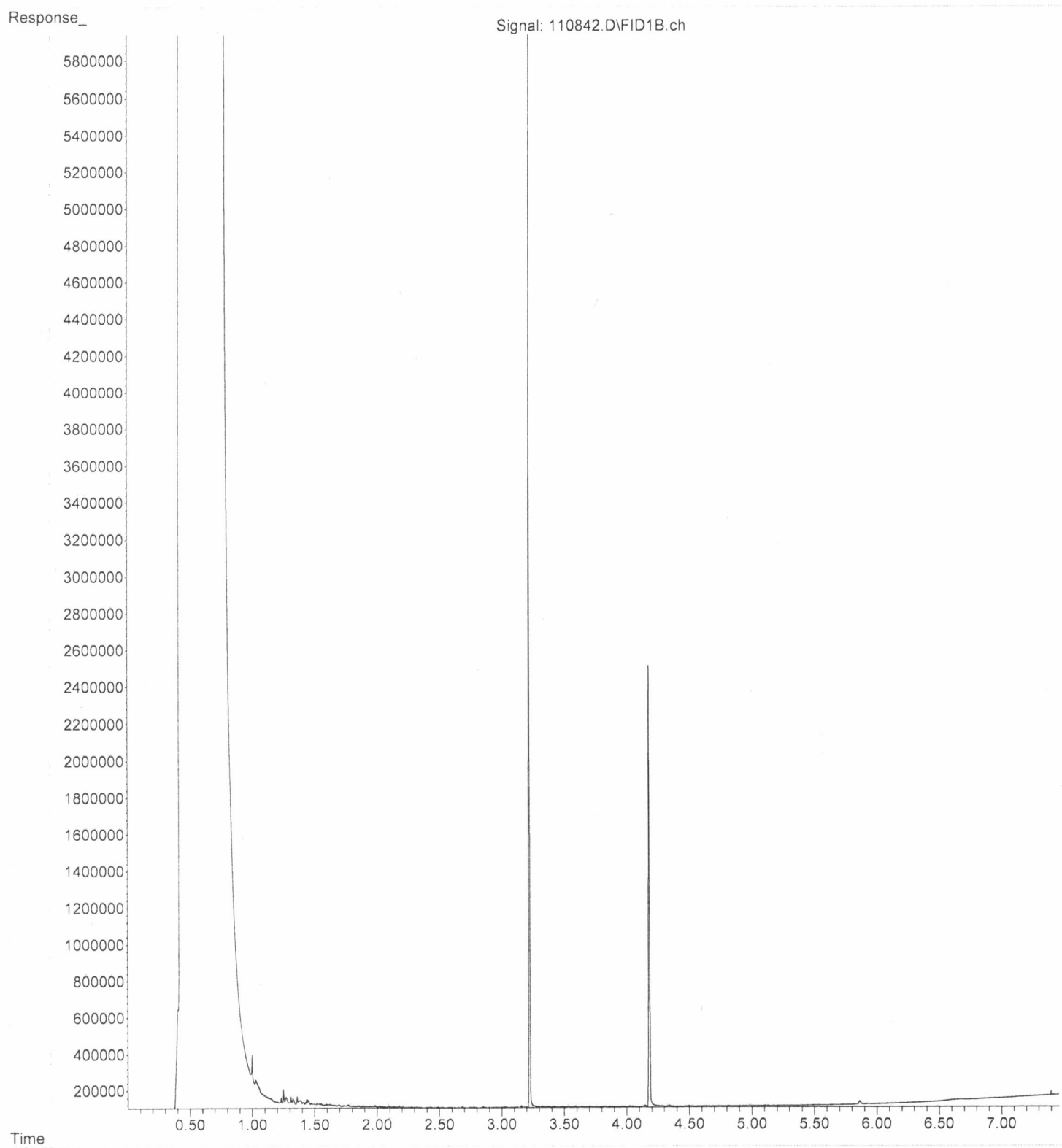
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Instrument : GC13  
Sample Name: 411043-11  
Misc Info :  
Vial Number: 36

ERR



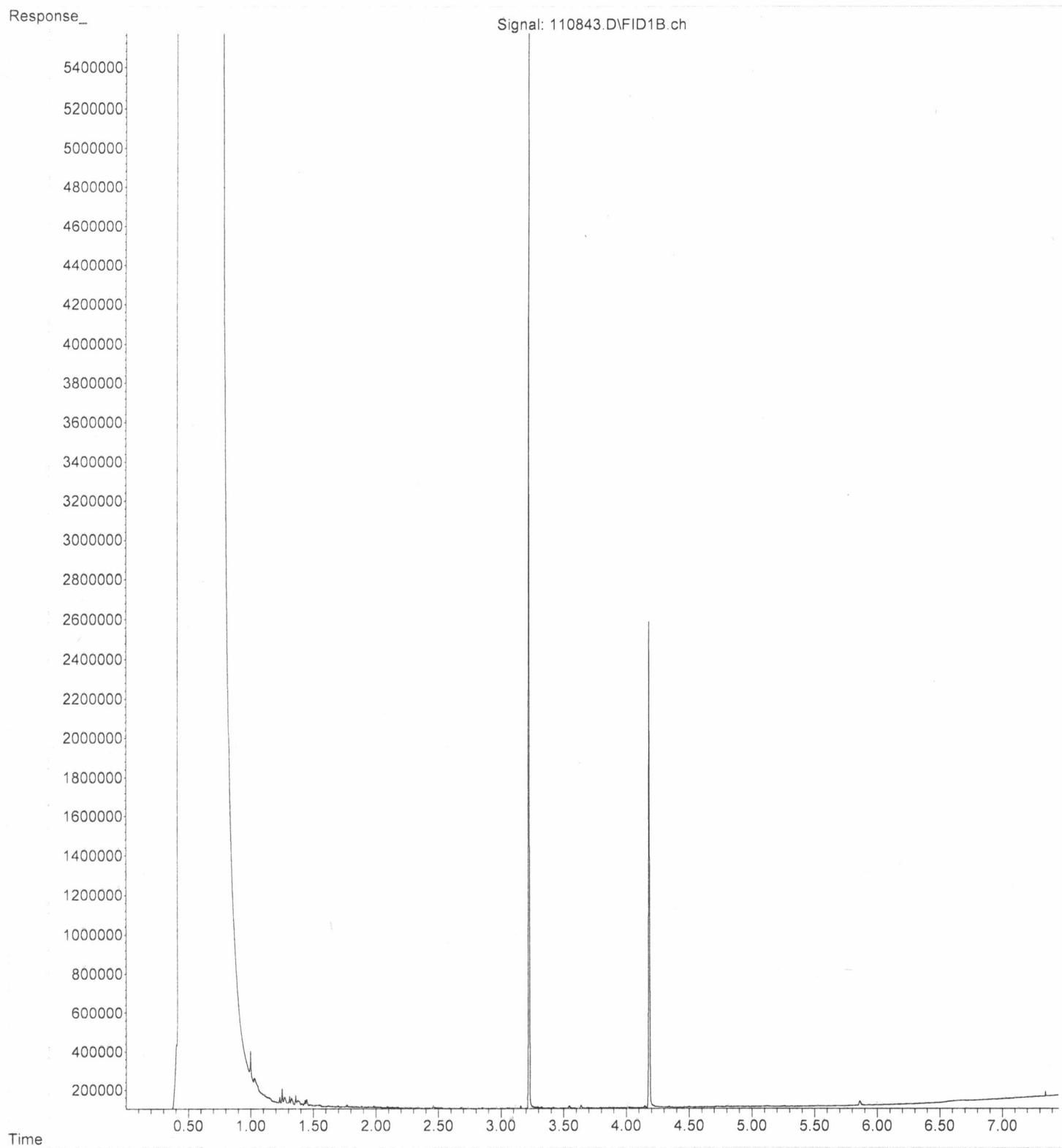
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Instrument : GC13  
Sample Name: 411043-14  
Misc Info :  
Vial Number: 37

ERR



File : P:\Proc\_GC13\11-08-24\110843.D  
Operator : TL  
Acquired : 08 Nov 2024 03:53 pm using AcqMethod Dx.M  
Instrument : GC13  
Sample Name: 411043-15  
Misc Info :  
Vial Number: 38

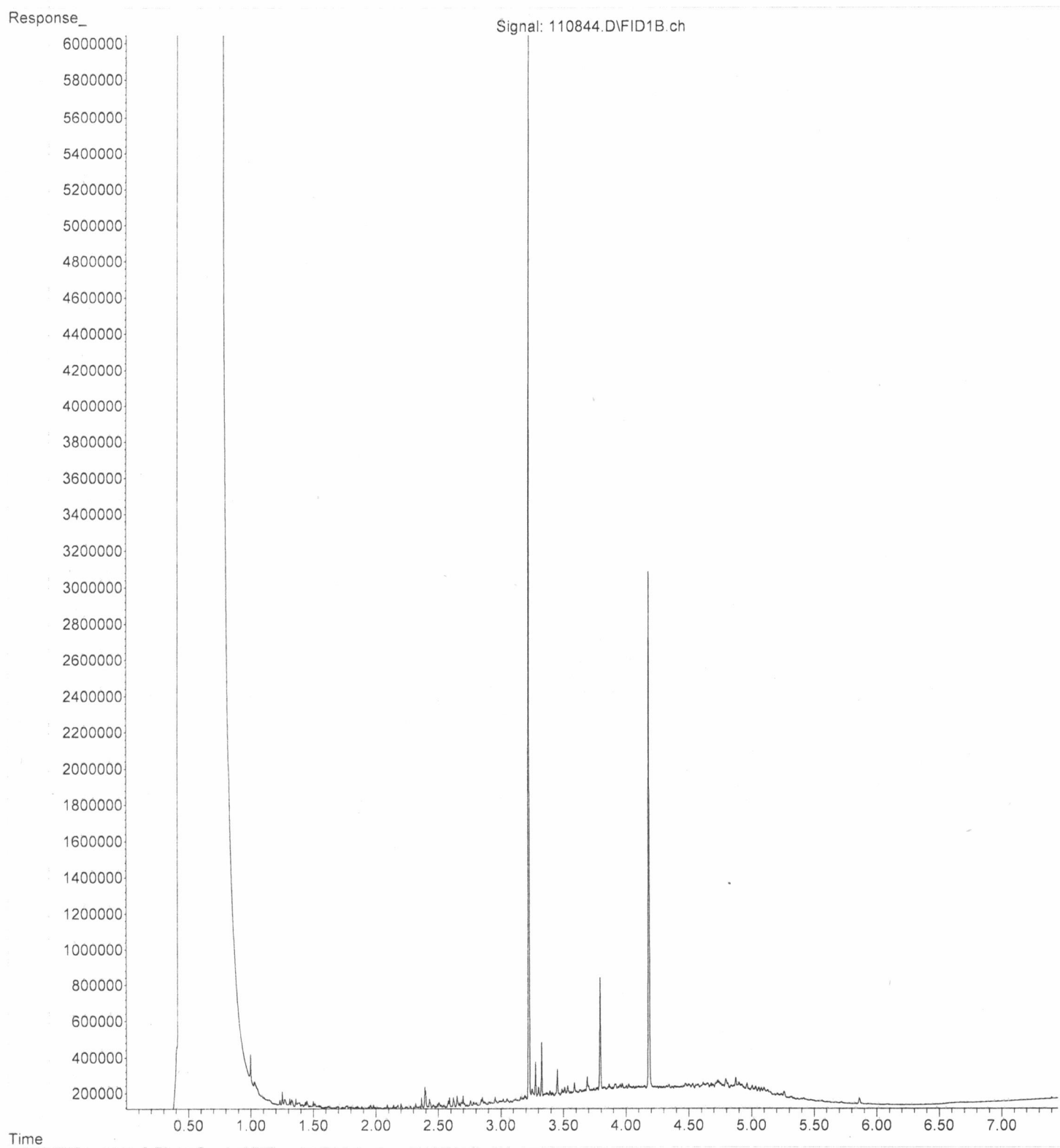
ERR





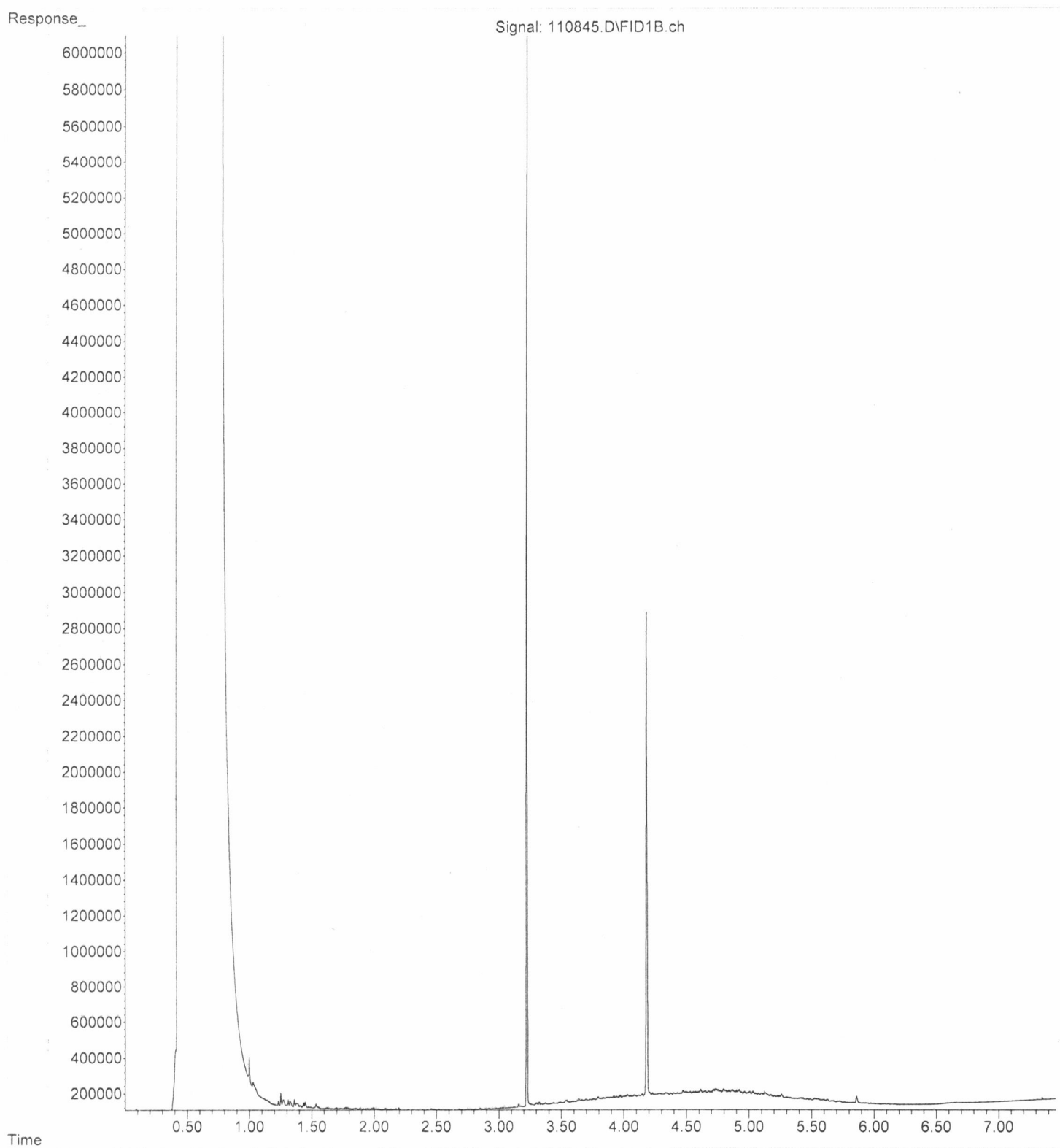
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Instrument : GC13  
Sample Name: 411043-17  
Misc Info :  
Vial Number: 39

ERR



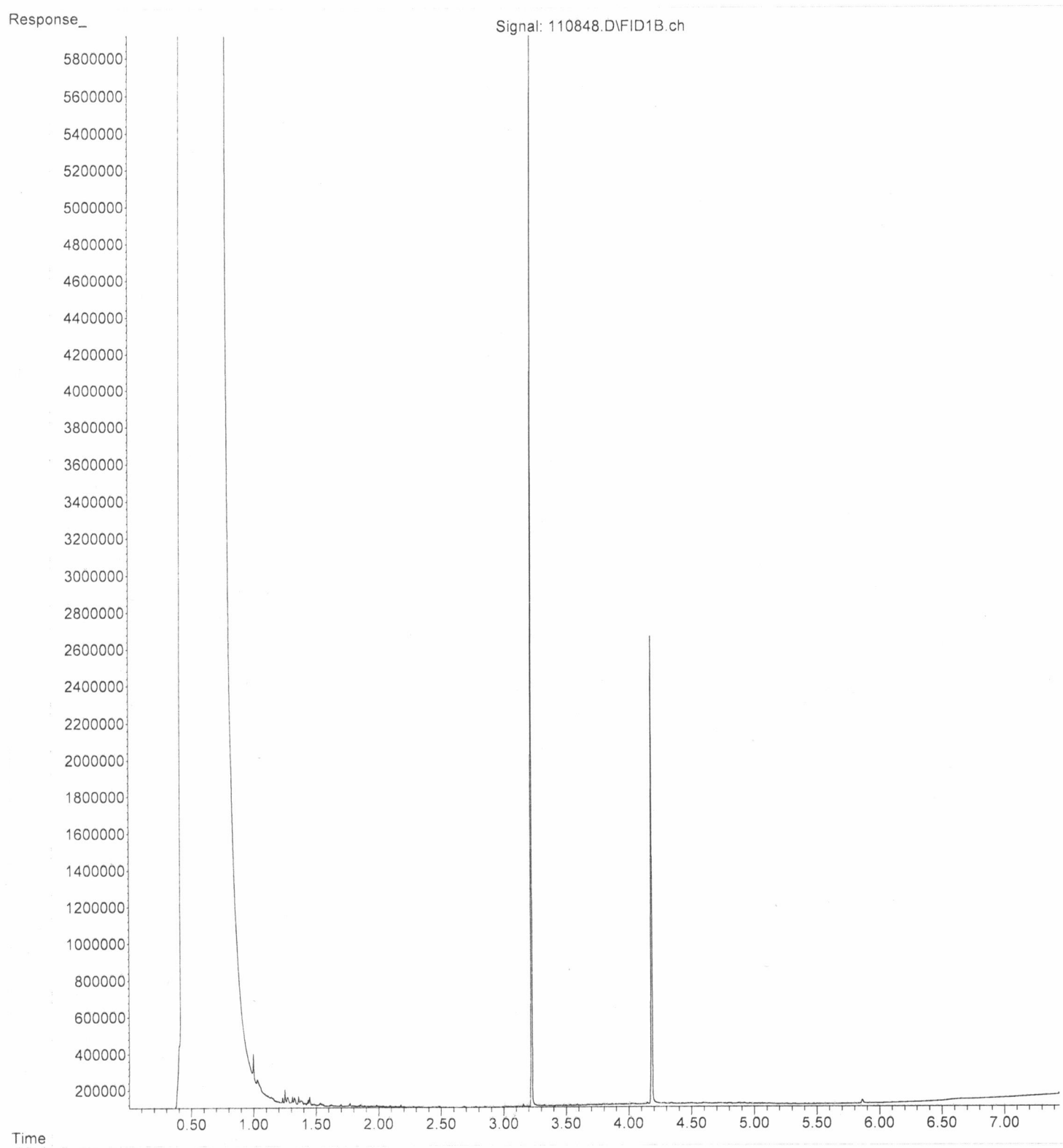
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Instrument : GC13  
Sample Name: 411043-20  
Misc Info :  
Vial Number: 40

ERR



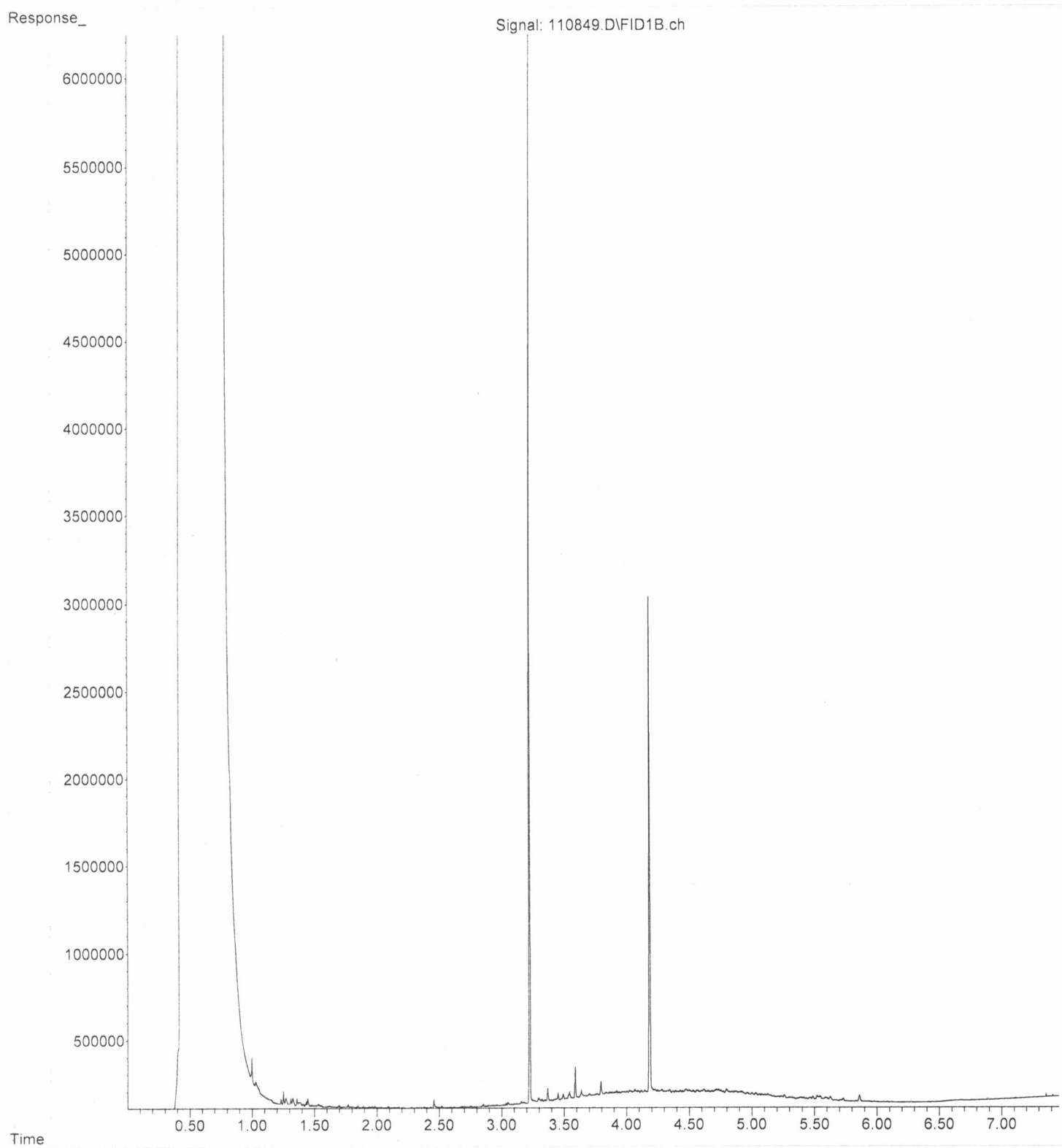
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Operator : TL  
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Instrument : GC13  
Sample Name: 411043-25  
Misc Info :  
Vial Number: 41

ERR



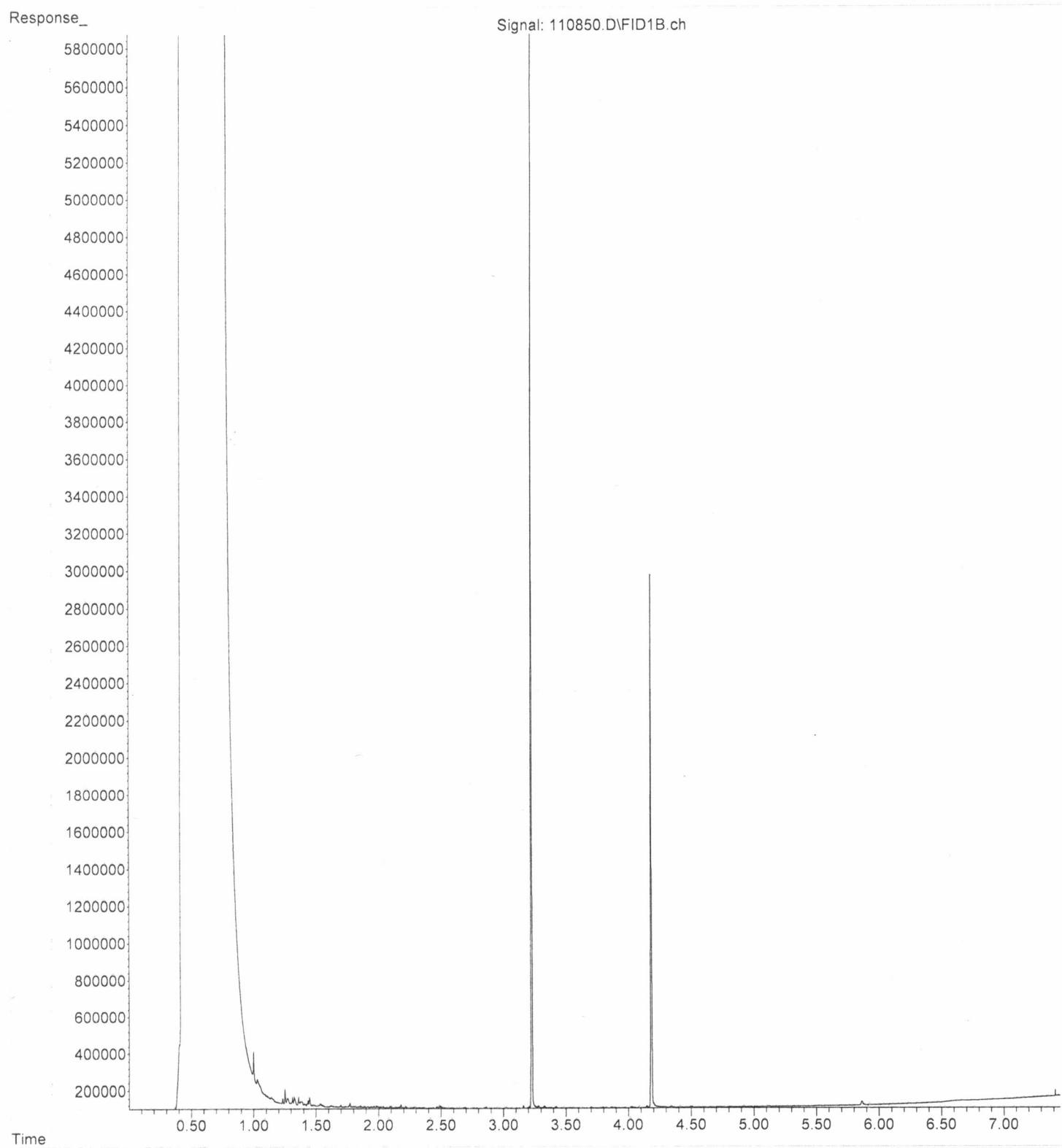
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Operator : TL  
Acquired : 08 Nov 2024 05:01 pm using AcqMethod Dx.M  
Instrument : GC13  
Sample Name: 411043-26  
Misc Info :  
Vial Number: 42

ERR



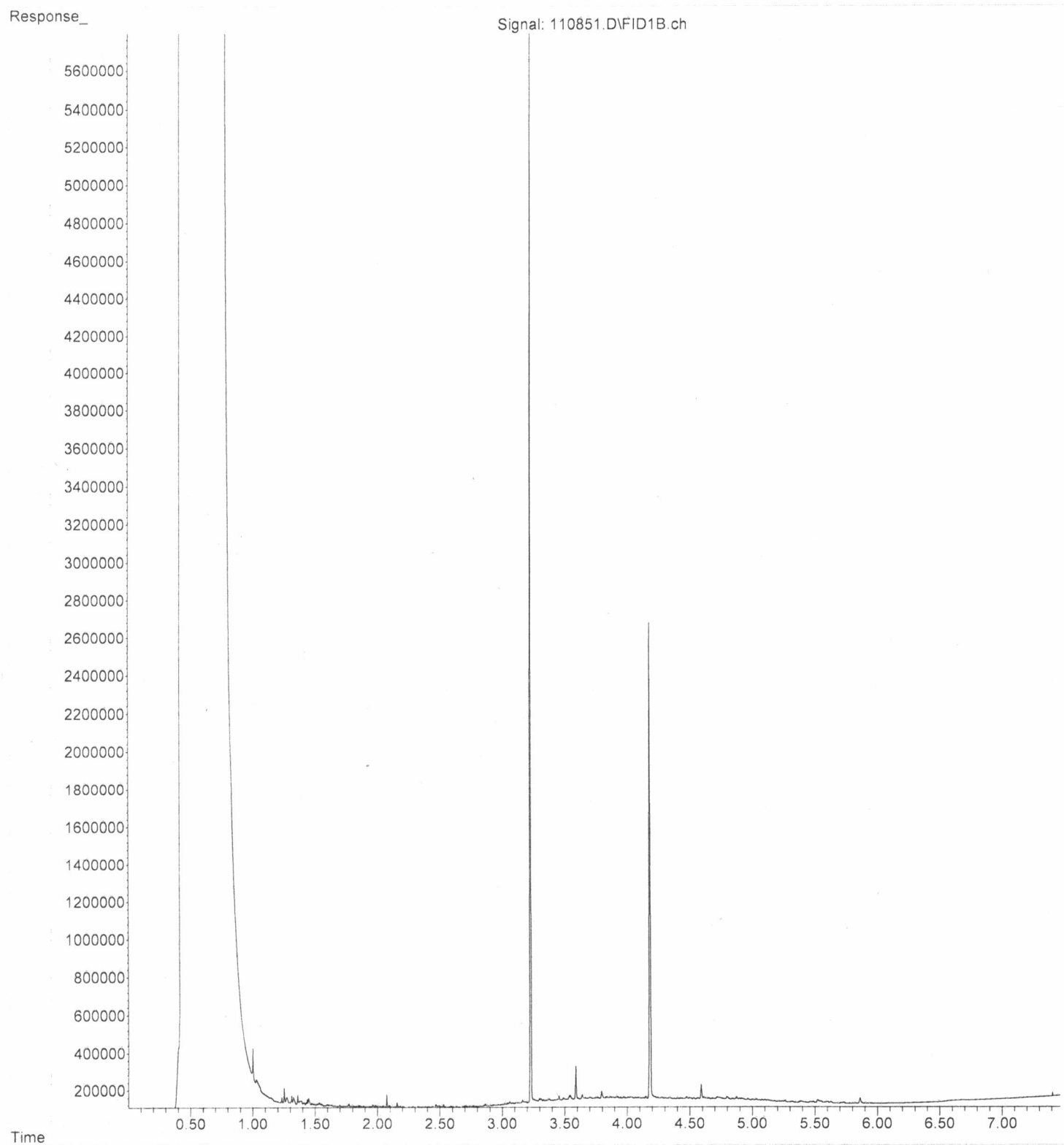
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Operator : TL  
Acquired : 08 Nov 2024 05:12 pm using AcqMethod Dx.M  
Instrument : GC13  
Sample Name: 411043-31  
Misc Info :  
Vial Number: 43

ERR



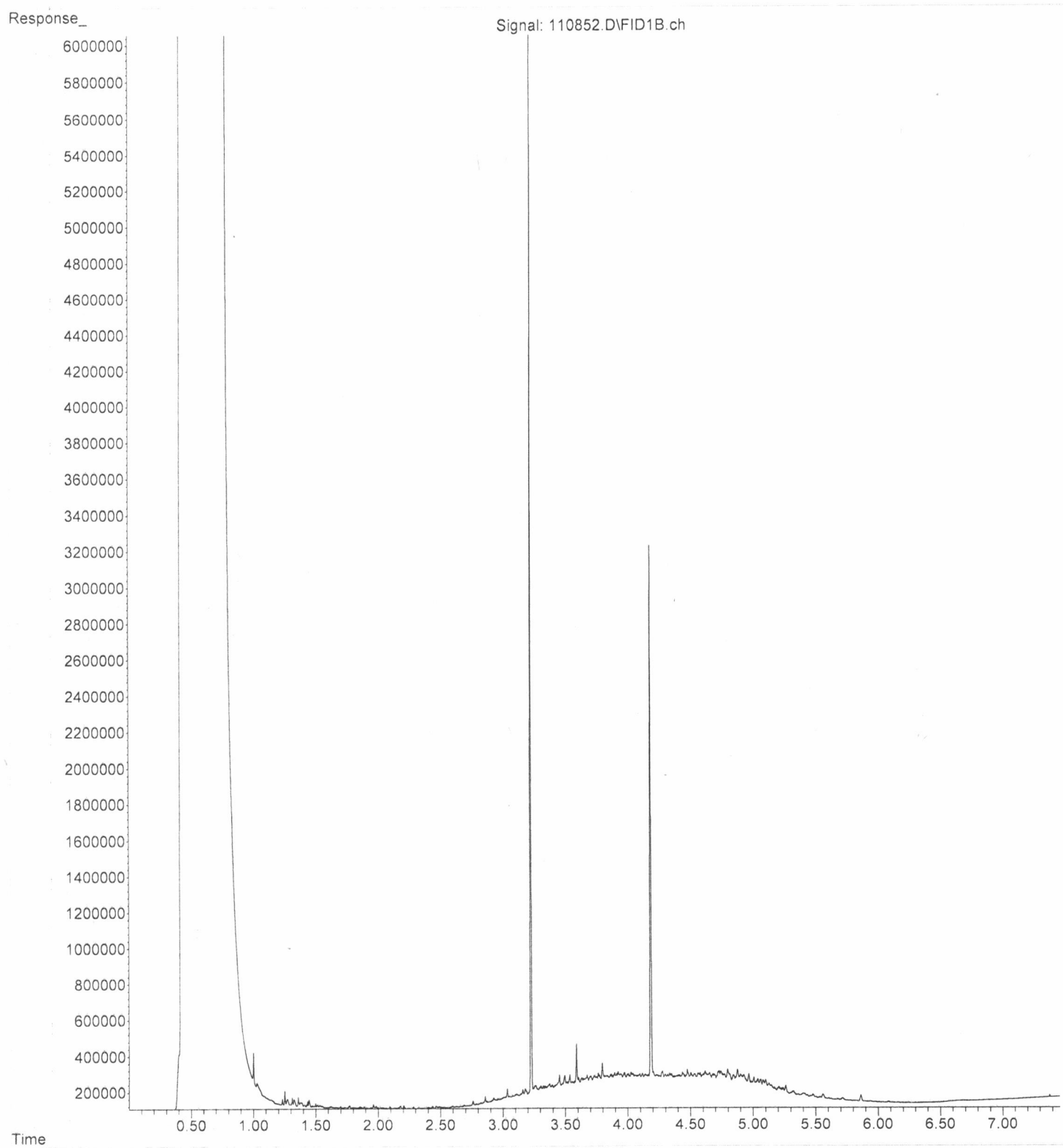
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Operator : TL  
Acquired : 08 Nov 2024 05:24 pm using AcqMethod Dx.M  
Instrument : GC13  
Sample Name: 411043-32  
Misc Info :  
Vial Number: 44

ERR



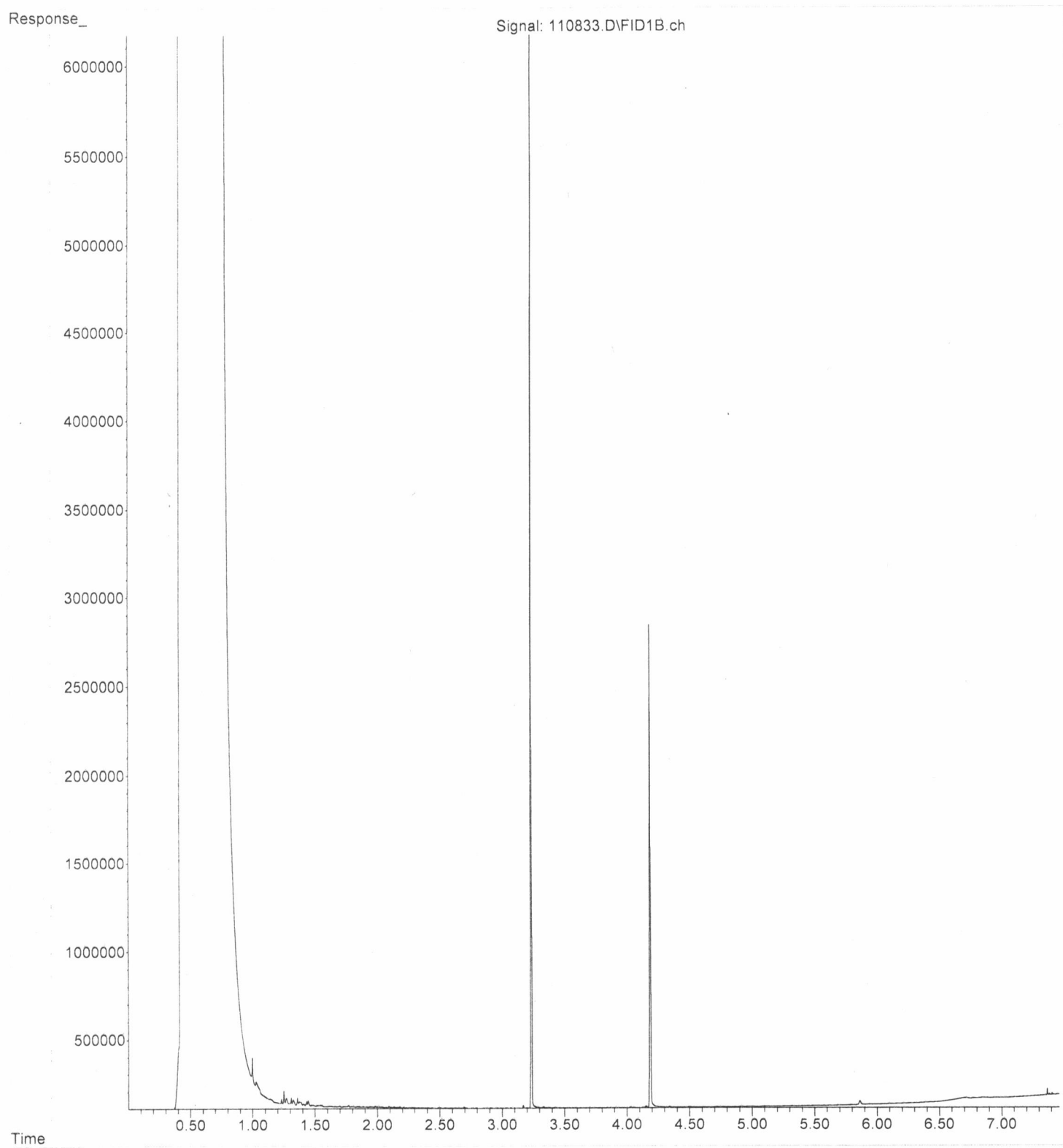
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Operator : TL  
Acquired : 08 Nov 2024 05:35 pm using AcqMethod Dx.M  
Instrument : GC13  
Sample Name: 411043-35  
Misc Info :  
Vial Number: 45

ERR



File :P:\Proc\_GC13\11-08-24\110833.D  
Operator : TL  
Acquired : 08 Nov 2024 01:58 pm using AcqMethod Dx.M  
Instrument : GC13  
Sample Name: 04-2797 mb  
Misc Info :  
Vial Number: 28

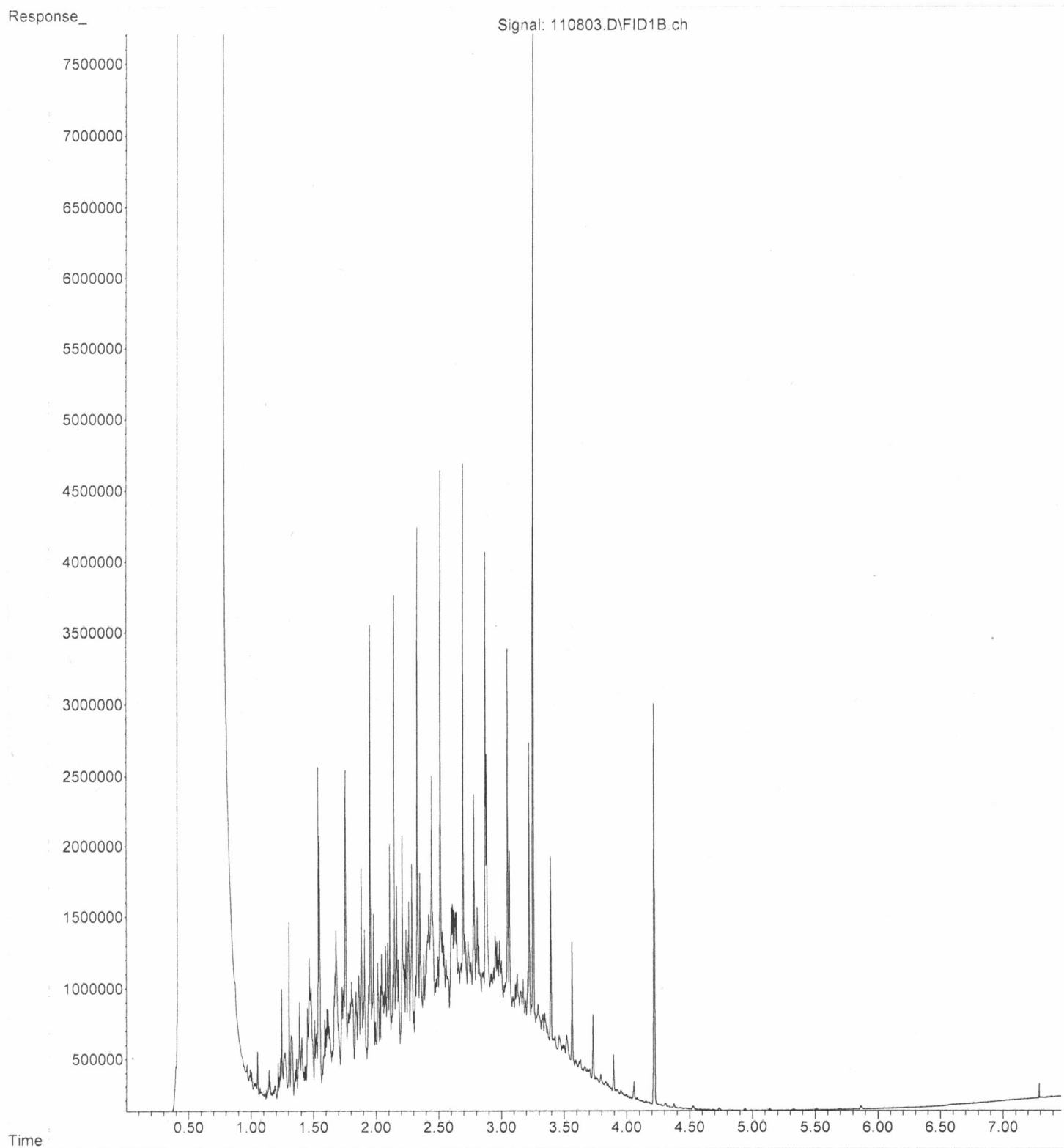
ERR





File : P:\Proc\_GC13\11-08-24\110803.D  
Operator : TL  
Acquired : 08 Nov 2024 08:14 am using AcqMethod Dx.M  
Instrument : GC13  
Sample Name: 500 Dx 73-88C  
Misc Info :  
Vial Number: 3

ERR



NELAC NY 11769  
NRPP 101193 AL  
NRSB ARL0017

EPA Method #402-R-92-004  
Liquid Scintillation  
NRPP Device Code 8088  
NRSB Device Code 12193

Laboratory Report for:

Property Tested:

Evergreen Treatment Services  
1700 Airport Way South  
Seattle WA 98134


Evergreen Treatment Services  
1700 Airport Way South  
Seattle WA 98134


Log Number	Device Number	Test Exposure Duration				Area Tested	Result pCi/L
8646445	5071311	11/19/2024	8:00 am	11/21/2024	10:00 am	Basement South Warehouse	< 0.4
8646446	5110880	11/19/2024	8:00 am	11/21/2024	10:00 am	First Floor Ambient	< 0.4
8646447	5110881	11/19/2024	8:00 am	11/21/2024	10:00 am	Basement North Warehouse	< 0.4

**Comment:** Aspect Consulting was emailed a copy of this report.

Distributed by: Aspect Consulting

Date Received: 11/22/2024    Date Logged: 11/22/2024    Date Analyzed: 11/23/2024    Date Reported: 11/25/2024

Report Reviewed By: 

Report Approved By: 

**Disclaimer:**

Shawn Price, Director of Laboratory Operations, AccuStar Labs

The counting uncertainty of this radon measurement is +/- 10 %. Factors contributing to uncertainty include statistical variations, daily and seasonal variations in radon concentrations, sample collection techniques and operation of the dwelling. Interference with test conditions may influence the test results.

This report may only be transferred to a third party in its entirety. Laboratory personnel were not involved in the placement or retrieval of the samples. Analytical results relate to the samples as received by the laboratory. Results shown on this report represent levels of radon gas measured between the dates shown in the room or area of the site identified above as "Property Tested". Incorrect information will affect results. The results may not be construed as either predictive or supportive of measurements conducted in any area of this structure at any other time. AccuStar Labs, its employees and agents are not responsible for the consequences of any action taken or not taken based upon the results reported or any verbal or written interpretation of the results.

## **APPENDIX C**

### **Soil Boring and Monitor Well Construction Logs**


Coarse-Grained Soils - More than 50% <sup>1</sup> Retained on No. 200 Sieve	G Gravels - More than 50% <sup>1</sup> of Coarse Fraction Retained on No. 4 Sieve	≤5% Fines	GW	Well-graded GRAVEL Well-graded GRAVEL WITH SAND
				GP Poorly-graded GRAVEL Poorly-graded GRAVEL WITH SAND
	S Sands - 50% <sup>1</sup> or More of Coarse Fraction Passes No. 4 Sieve	≥15% Fines	GM	SILTY GRAVEL SILTY GRAVEL WITH SAND
				GC CLAYEY GRAVEL CLAYEY GRAVEL WITH SAND
	S Sands - 50% <sup>1</sup> or More of Coarse Fraction Passes No. 4 Sieve	≤5% Fines	SW	Well-graded SAND Well-graded SAND WITH GRAVEL
				SP Poorly-graded SAND Poorly-graded SAND WITH GRAVEL
	S Sands - 50% <sup>1</sup> or More of Coarse Fraction Passes No. 4 Sieve	≥15% Fines	SM	SILTY SAND SILTY SAND WITH GRAVEL
				SC CLAYEY SAND CLAYEY SAND WITH GRAVEL
Fine-Grained Soils - 50% <sup>1</sup> or More Passes No. 200 Sieve	S Silts and Clays Liquid Limit Less than 50%		ML	SILT SANDY or GRAVELLY SILT SILT WITH SAND SILT WITH GRAVEL
				CL LEAN CLAY SANDY or GRAVELLY LEAN CLAY LEAN CLAY WITH SAND LEAN CLAY WITH GRAVEL
	S Silts and Clays Liquid Limit 50% or More		OL	ORGANIC SILT SANDY or GRAVELLY ORGANIC SILT ORGANIC SILT WITH SAND ORGANIC SILT WITH GRAVEL
				MH ELASTIC SILT SANDY or GRAVELLY ELASTIC SILT ELASTIC SILT WITH SAND ELASTIC SILT WITH GRAVEL
	S Silts and Clays Liquid Limit 50% or More		CH	FAT CLAY SANDY or GRAVELLY FAT CLAY FAT CLAY WITH SAND FAT CLAY WITH GRAVEL
				OH ORGANIC CLAY SANDY or GRAVELLY ORGANIC CLAY ORGANIC CLAY WITH SAND ORGANIC CLAY WITH GRAVEL
Highly Organic Soils			PT	PEAT and other mostly organic soils

"WITH SILT" or "WITH CLAY" means 5 to 15% silt and clay, denoted by a "-" in the group name; e.g., SP-SM • "SILTY" or "CLAYEY" means >15% silt and clay • "WITH SAND" or "WITH GRAVEL" means 15 to 30% sand and gravel. • "SANDY" or "GRAVELLY" means >30% sand and gravel. • "Well-graded" means approximately equal amounts of fine to coarse grain sizes • "Poorly graded" means unequal amounts of grain sizes • Group names separated by "/" means soil contains layers of the two soil types; e.g., SM/ML.

Soils were described and identified in the field in general accordance with the methods described in ASTM D2488. Where indicated in the log, soils were classified using ASTM D2487 or other laboratory tests as appropriate. Refer to the report accompanying these exploration logs for details.

1. Estimated or measured percentage by dry weight
2. (SPT) Standard Penetration Test (ASTM D1586)
3. Determined by SPT, DCPT (ASTM STP399) or other field methods. See report text for details.

MC	=	Natural Moisture Content	<b>GEOTECHNICAL LAB TESTS</b>	
GS	=	Grain Size Distribution		
FC	=	Fines Content (% < 0.075 mm)		
GH	=	Hydrometer Test		
AL	=	Atterberg Limits		
C	=	Consolidation Test		
Str	=	Strength Test		
OC	=	Organic Content (% Loss by Ignition)		
Comp	=	Proctor Test		
K	=	Hydraulic Conductivity Test		
SG	=	Specific Gravity Test		
<b><u>Organic Chemicals</u></b>			<b>CHEMICAL LAB TESTS</b>	
BTEX	=	Benzene, Toluene, Ethylbenzene, Xylenes		
TPH-Dx	=	Diesel and Oil-Range Petroleum Hydrocarbons		
TPH-G	=	Gasoline-Range Petroleum Hydrocarbons		
VOCs	=	Volatile Organic Compounds		
SVOCs	=	Semi-Volatile Organic Compounds		
PAHs	=	Polycyclic Aromatic Hydrocarbon Compounds		
PCBs	=	Polychlorinated Biphenyls		
<b><u>Metals</u></b>				
RCRA8	=	As, Ba, Cd, Cr, Pb, Hg, Se, Ag, (d = dissolved, t = total)		
MTCAS	=	As, Cd, Cr, Hg, Pb (d = dissolved, t = total)		
PP-13	=	Ag, As, Be, Cd, Cr, Cu, Hg, Ni, Pb, Sb, Se, Tl, Zn (d=dissolved, t=total)		
<b>PID = Photoionization Detector</b>			<b>FIELD TESTS</b>	
<b>Sheen = Oil Sheen Test</b>				
<b>SPT<sup>2</sup> = Standard Penetration Test</b>				
<b>NSPT = Non-Standard Penetration Test</b>				
<b>DCPT = Dynamic Cone Penetration Test</b>				
<b><u>Descriptive Term</u></b>			<b>COMPONENT DEFINITIONS</b>	
<b><u>Size Range and Sieve Number</u></b>				
Boulders	=	Larger than 12 inches		
Cobbles	=	3 inches to 12 inches		
Coarse Gravel	=	3 inches to 3/4 inches		
Fine Gravel	=	3/4 inches to No. 4 (4.75 mm)		
Coarse Sand	=	No. 4 (4.75 mm) to No. 10 (2.00 mm)		
Medium Sand	=	No. 10 (2.00 mm) to No. 40 (0.425 mm)		
Fine Sand	=	No. 40 (0.425 mm) to No. 200 (0.075 mm)		
Silt and Clay	=	Smaller than No. 200 (0.075 mm)		
<b>% by Weight</b>			<b>ESTIMATED<sup>1</sup> PERCENTAGE</b>	
<b><u>Modifier</u></b>				
<b>% by Weight</b>				
<b><u>Modifier</u></b>				
<1	=	Subtrace	15 to 25	= Little
1 to <5	=	Trace	30 to 45	= Some
5 to 10	=	Few	>50	= Mostly
<b>Dry = Absence of moisture, dusty, dry to the touch</b>			<b>MOISTURE CONTENT</b>	
<b>Slightly Moist = Perceptible moisture</b>				
<b>Moist = Damp but no visible water</b>				
<b>Very Moist = Water visible but not free draining</b>				
<b>Wet = Visible free water, usually from below water table</b>				
<b><u>Non-Cohesive or Coarse-Grained Soils</u></b>			<b>RELATIVE DENSITY</b>	
<b><u>Density<sup>3</sup></u></b>			<b><u>SPT<sup>2</sup> Blows/Foot</u></b>	
<b><u>Penetration with 1/2" Diameter Rod</u></b>				
Very Loose	=	0 to 4	≥ 2'	
Loose	=	5 to 10	1' to 2'	
Medium Dense	=	11 to 30	3" to 1'	
Dense	=	31 to 50	1" to 3"	
Very Dense	=	> 50	< 1"	
<b><u>Cohesive or Fine-Grained Soils</u></b>			<b>CONSISTENCY</b>	
<b><u>Consistency<sup>3</sup></u></b>			<b><u>Manual Test</u></b>	
Very Soft	=	0 to 1	Penetrated >1" easily by thumb. Extrudes between thumb & fingers.	
Soft	=	2 to 4	Penetrated 1/4" to 1" easily by thumb. Easily molded.	
Medium Stiff	=	5 to 8	Penetrated >1/4" with effort by thumb. Molded with strong pressure.	
Stiff	=	9 to 15	Indented ~1/4" with effort by thumb.	
Very Stiff	=	16 to 30	Indented easily by thumbnail.	
Hard	=	> 30	Indented with difficulty by thumbnail.	
<b>Observed and Distinct</b>			<b>Observed and Gradual</b>	
<b>Observed and Gradual</b>			<b>Inferred</b>	
<b>Aspect CONSULTING</b>				
<b>Exploration Log Key</b>				

	<b>Subsurface Investigation - AS180043</b> <i>Project Address &amp; Site Specific Location</i> 1700 Airport Way S, Seattle, WA, Basement		<b>Environmental Exploration Log</b> <i>Coordinates</i> NA		<i>Exploration Number</i> <b>AB-01</b>
	<i>Contractor</i> Holocene Drilling	<i>Equipment</i> Geoprobe 6011 DT	<i>Sampling Method</i> Percussion hammer	<i>Ground Surface Elev. (NAVD88)</i> 20'	
<i>Operator</i> Trevor	<i>Exploration Method(s)</i> Direct push	<i>Work Start/Completion Dates</i> 10/31/2024		<i>Top of Casing Elev. (NAVD88)</i> NA	<i>Depth to Water (Below GS)</i> No Water Encountered

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
			○				CONCRETE; 8 inches.	
			■		PID=0.9		<b>FILL</b>	
			■	AB-01-1.5 TPH-G, TPH-Dx, VOCs, SVOCs, MTCA 5	PID=1.2		SAND WITH GRAVEL (SP); moist, grey; trace silt; medium sand; fine and coarse gravel; trace shards of glass, brick, and slag; no odor	
5	15		○					5
			■		PID=0.8			
			○					
			■		PID=0.5		<b>ESTUARINE DEPOSITS</b>	
			■	TPH-G, TPH-Dx, VOCs, SVOCs, MTCA 5			SAND (SW); wet, grey; fine to coarse sand; trace silt, trace seashell fragments; no odor.	
10	10		○				Bottom of exploration at 10 ft. bgs.	10
15	5							15
20	0							20

Sample Type	<b>Legend</b>		Water Level	No Water Encountered	See Exploration Log Key for explanation of symbols  Logged by: NWD Approved by: ND, 4/17/2025	<b>Exploration Log AB-01</b>  Sheet 1 of 1
	<input type="checkbox"/> No Soil Sample Recovery	<input checked="" type="checkbox"/> Continuous core 4" ID				

NEW STANDARD EXPLORATION LOG TEMPLATE C:\PROJECTS\EVERGREEN CLINIC 180043.GPJ April 18, 2025





Subsurface Investigation - AS180043

Project Address & Site Specific Location

1700 Airport Way S, Seattle, WA, Basement

Environmental Exploration Log

Coordinates

NA

Exploration Number

AB-04

Contractor

Holocene Drilling

Equipment

Geoprobe 6011 DT

Sampling Method

Percussion hammer

Ground Surface Elev. (NAVD88)

25.5'

Operator

Trevor

Exploration Method(s)

Direct push

Work Start/Completion Dates

10/31/2024

Top of Casing Elev. (NAVD88)

NA

Depth to Water (Below GS)

No Water Encountered

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
25				AB-04-02.5 TPH-G, TPH-Dx, VOCs, SVOCs, MTCA 5	PID=0.1		CONCRETE; 6 inches	
					GRAVEL (GW); Concrete base gravel			
						PID=0.2		FILL
			PID=0.2	SAND (SW); loose, moist, brown; non-plastic silt, fine to coarse sand, fine to coarse subangular gravel; no odor.				
							SAND WITH SILT (SP-SM); loose, moist, dark gray; non-plastic silt, fine to coarse sand, fine to coarse subrounded gravel with some cobbles less than 2" in diameter; no odor.	
5	20				PID=0.2		SILT (ML); soft, wet, gray-brown; low plasticity silt, no sand, no gravel; no odor.	5
							PID=0.4	
							PID=0.4	
10	15			AB-04-10 TPH-G, TPH-Dx, VOCs, SVOCs, MTCA 5	PID=4.6		SAND (SP); loose, wet, very dark gray; trace fines, fine sand, trace fine gravel; strong petroleum-like odor.	10
							PID=1.1	
15	10							
20	5							20

Legend

No Soil Sample Recovery

Continuous core 4" ID

Grab sample

Water Level

No Water Encountered

See Exploration Log Key for explanation of symbols

Logged by: NWD

Approved by: ND, 4/17/2025

Exploration Log


















AB-04

Sheet 1 of 1





NEW STANDARD EXPLORATION LOG TEMPLATE C:\PROJECTS\EVERGREEN CLINIC 180043.GPJ April 18, 2025



NEW STANDARD EXPLORATION LOG TEMPLATE C:\PROJECTS\EVERGREEN CLINIC 180043.GPJ April 18, 2025

		<b>Subsurface Investigation - AS180043</b>			<b>Environmental Exploration Log</b>			
		Project Address & Site Specific Location 1700 Airport Way S, Seattle, WA, Basement			Coordinates NA		Exploration Number <b>AB-05</b>	
Contractor Holocene Drilling		Equipment Geoprobe 6011 DT	Sampling Method Percussion hammer		Ground Surface Elev. (NAVD88) 20'		Depth to Water (Below GS) No Water Encountered	
Operator Trevor		Exploration Method(s) Direct push	Work Start/Completion Dates 11/1/2024		Top of Casing Elev. (NAVD88) NA			
Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
					PID=0.2		CONCRETE; 6 inches	
				AB-05-02.5 TPH-G, TPH-Dx, VOCs, SVOCs, MTCA 5			<b>FILL</b> GRAVEL WITH SAND (GP); loose, dry, light gray; concrete base gravel; no odor	
					PID=0.9		SAND WITH SILT AND GRAVEL (SP-SM); loose, wet, black; nonplastic silt, fine to coarse sand, fine to coarse subangular gravel; no odor	
							SAND WITH GRAVEL (SW); loose, wet, dark gray; fine to coarse sand, fine to coarse subrounded gravel; moderate petroleum-like odor	
5	15				PID=0.2		<b>ESTUARINE DEPOSITS</b> SAND (SW); loose, wet, gray; fine to coarse sand, no fines, no gravel; no odor	5
					PID=0.2		SILTY SAND (SM); loose, wet, dark gray; medium plasticity silt, fine to medium sand; no odor	
					PID=0.3		SILT (ML); soft, wet, gray; nonplastic silt, trace fine sand; no odor	
10	10				PID=0.2		SILTY SAND (SM); loose, wet, gray; nonplastic silt, fine to coarse sand, no gravel; no odor	10
							GRAVEL (GP); loose, wet, gray; no fines, trace sand, fine to coarse subrounded to rounded gravel; no odor.	
				AB-05-13 TPH-G, TPH-Dx, VOCs, SVOCs, MTCA 5	PID=0.3		@ 12': woody debris as broken sticks	
							SAND (SW); loose, wet, gray; no fines, fine to medium sand, no gravel; no odor.	
							GRAVEL (GP); loose, wet, gray; no fines, trace sand, fine to coarse subrounded to rounded gravel; no odor.	
							SAND (SW); loose, wet, gray; no fines, fine to coarse sand, trace fine gravel; no odor.	
15	5						Bottom of exploration at 14 ft. bgs.	15
20	0							20
<b>Legend</b>  No Soil Sample Recovery  Continuous core 4" ID  Grab sample		<b>Water Level</b> No Water Encountered		See Exploration Log Key for explanation of symbols  Logged by: NWD Approved by: ND, 4/17/2025			<b>Exploration Log</b> <b>AB-05</b> Sheet 1 of 1	

NEW STANDARD EXPLORATION LOG TEMPLATE C:\PROJECTS\EVERGREEN CLINIC 180043.GPJ April 18, 2025

		<b>Subsurface Investigation - AS180043</b>			<b>Environmental Exploration Log</b>			
		Project Address & Site Specific Location 1700 Airport Way S, Seattle, WA, Basement			Coordinates NA		Exploration Number <b>AB-06</b>	
Contractor Holocene Drilling		Equipment Geoprobe 6011 DT	Sampling Method Percussion hammer		Ground Surface Elev. (NAVD88) 20'		Depth to Water (Below GS) No Water Encountered	
Operator Trevor		Exploration Method(s) Direct push	Work Start/Completion Dates 11/1/2024		Top of Casing Elev. (NAVD88) NA			
Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
				AB-06-01 TPH-G, TPH-Dx, VOCs, SVOCs, MTCA 5	PID=0.9		CONCRETE; 6 inches	
							<b>FILL</b>	
							SAND WITH GRAVEL (SW); loose, wet, gray; fine to coarse sand, fine to coarse subangular gravel; no odor.	
							WOODY DEBRIS; 24 inches vertical grain wood	
5	15				PID=1.0		SAND WITH SILT AND GRAVEL (SW-SM); loose, wet, dark gray; nonplastic silt, fine to coarse sand, fine to coarse subrounded gravel; no odor.	5
					PID=1.1		SAND (SW); loose, wet, gray; some nonplastic silt, fine to coarse sand, trace organics; no odor.	
				AB-06-08.5 TPH-G, TPH-Dx, VOCs, SVOCs, MTCA 5	PID=0.3		<b>ESTUARINE DEPOSITS</b>	
							SILT (ML); soft, wet, gray; low plasticity, no sand; no odor.	
							SILTY SAND (SM); loose, wet, gray; low plasticity silt, fine to medium sand, no gravel, trace organics; no odor.	
							SILT (ML); soft, wet, dark gray; medium plasticity silt, fine sand, no gravel, trace organics; no odor.	
10	10						Bottom of exploration at 8.5 ft. bgs.	10
							Note: Refusal met at 8.5'	
15	5							15
20	0							20
<b>Legend</b>								
Sample Type		No Soil Sample Recovery		Water Level	No Water Encountered		See Exploration Log Key for explanation of symbols	
		Continuous core 4" ID						
		Grab sample						
						Logged by: NWD Approved by: ND, 4/17/2025		
						<b>Exploration Log AB-06</b>		Sheet 1 of 1



## Subsurface Investigation - AS180043

Project Address & Site Specific Location

1700 Airport Way S, Seattle, WA, Parking strip

## Monitoring Well Log

Coordinates (SPN NAD83 ft)

E: 1273268.43 N: 217961.62

Exploration Number

### AMW-1

Ecology Well Tag No.  
BKF905

Depth to Water (Below GS)

5.5' (ATD)

Contractor

Cascade Drilling

Equipment

Geoprobe 7822 DT

Sampling Method

Percussion hammer

Operator

Tim

Exploration Method(s)

Direct push

Work Start/Completion Dates

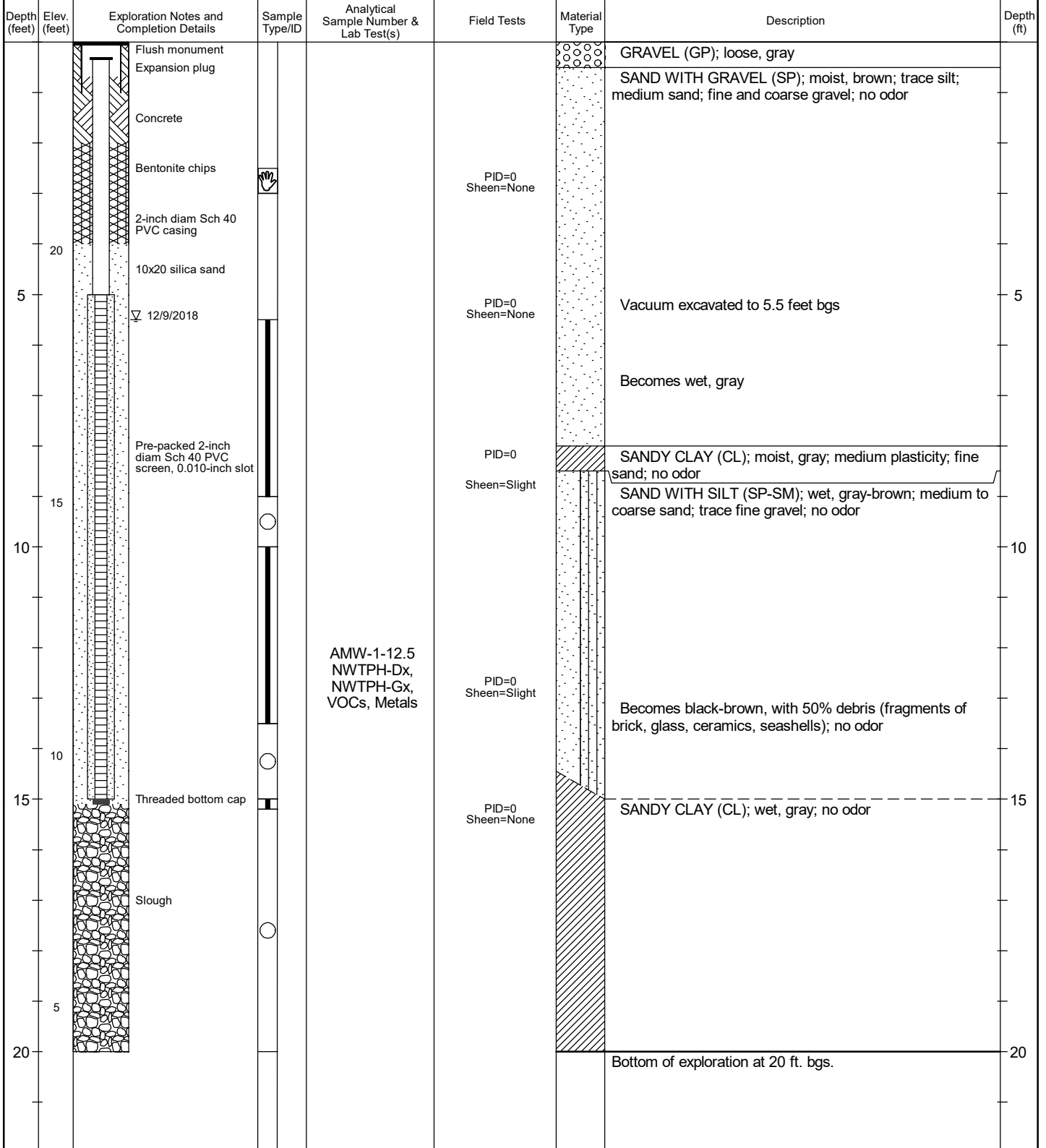
12/9/2018

Ground Surface Elev. (NAVD88)

24.137'

Top of Casing Elev. (NAVD88)

NA



### Legend

- No Soil Sample Recovery
- Grab sample
- Continuous core 1.85" ID

Water Level

Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: KB  
Approved by: DC, 1/15/2019

**Exploration Log**  
**AMW-1**

Sheet 1 of 1



## Subsurface Investigation - AS180043

## Monitoring Well Log

Project Address & Site Specific Location

Coordinates (SPN NAD83 ft)

Exploration Number

1700 Airport Way S, Seattle, WA, Between buildings

E:1273287.49 N:217877.76

**AMW-2**

Contractor

Equipment

Sampling Method

Ground Surface Elev. (NAVD88)

Ecology Well Tag No.  
BKF906

Cascade Drilling

Geoprobe 7822 DT

Percussion hammer

23.813'

Operator

Exploration Method(s)

Work Start/Completion Dates

Top of Casing Elev. (NAVD88)

Depth to Water (Below GS)

Tim

Direct push

12/9/2018

NA

5.5' (ATD)

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
		Flush monument Expansion plug					CONCRETE; 6 inches	
		Concrete					SILTY SAND (SM); moist, gray-brown,; fine to medium sand; trace gravel; no petroleum like odor	
		Bentonite chips			PID=0 Sheen=SS			
20		2-inch diam Sch 40 PVC casing		AMW-2-2.5 NWTPH-Dx, NWTPH-Gx, Metals			Wood and charcoal debris at 4 ft bgs	
5		10x20 silica sand					Vacuum excavated to 5 ft	5
		12/9/2018		AMW-2-5.5 NWTPH-Dx, NWTPH-Gx	PID=0 Sheen=None		Gray. No odor	
		Pre-packed 2-inch diam Sch 40 PVC screen, 0.010-inch slot			PID=0 Sheen=Slight		Becomes wet, black-brown; no odor Brick, glass, and ceramic debris; no odor	
15								
10					PID=0 Sheen=None		Trace seashell fragments at 11 ft bgs	10
10		Threaded bottom cap			PID=0 Sheen=None		Becomes black; with coal fragments	
15							Becomes gray; with seashell fragments	15
					PID=0 Sheen=None		Becomes black; with seashell and ceramic fragments	
5		Slough						
20					PID=0 Sheen=None		SANDY CLAY (CL); moist, gray,; medium plasticity; fine to medium sand; <4" thick saturated sandy interbed; no odor	20
							Bottom of exploration at 20 ft. bgs.	

### Legend

- No Soil Sample Recovery
- Grab sample
- Continuous core 1.85" ID

Water Level

Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: KB  
Approved by: DC, 1/15/2019

**Exploration Log**  
**AMW-2**

Sheet 1 of 1



## Subsurface Investigation - AS180043

Project Address & Site Specific Location

1700 Airport Way S, Seattle, WA, Parking lane

## Monitoring Well Log

Coordinates (SPN NAD83 ft)

E:1273253.78 N:217757.70

Exploration Number

### AMW-3

Ecology Well Tag No.  
BKF907

Depth to Water (Below GS)

8.5' (ATD)

Contractor

Cascade Drilling

Equipment

Geoprobe 7822 DT

Sampling Method

Percussion hammer

Operator

Tim

Exploration Method(s)

Direct push

Work Start/Completion Dates

12/9/2018

Ground Surface Elev. (NAVD88)

23.226'

Top of Casing Elev. (NAVD88)

NA

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
		Flush monument					CONCRETE; 8 inches	
		Expansion plug						
		Concrete					SAND WITH SILT AND GRAVEL (SP-SM); moist, gray; medium sand; fine to coarse gravel; no odor	
		Bentonite chips			PID=0 Sheen=None			
20		2-inch diam Sch 40 PVC casing					Vacuum-excavated to 5 ft	
		10x20 silica sand					SILTY SAND (SM); moist, gray; no odor	
5				AMW-3-5.0 NWTPH-Dx, NWTPH-Gx, Metals, cPAHs	PID=0 Sheen=None			5
					PID=0 Sheen=None		SANDY CLAY (CL); moist, gray; medium to high plasticity; fine sand; interbedded with 1' beds SAND WITH GRAVEL (SW); wet, gray; no odor	
15		12/9/2018			PID=0 Sheen=None			
		Pre-packed 2-inch diam Sch 40 PVC screen, 0.010-inch slot					SILTY SAND (SM); wet, gray; medium to coarse sand; trace fine gravel; no odor	
10					PID=0 Sheen=None			10
							Becomes fine sand	
10								
15		Threaded bottom cap			PID=0 Sheen=None			15
		Slough			PID=0 Sheen=None		CLAY (CL); wet, gray; medium to high plasticity; no odor	
5								
20							Bottom of exploration at 20 ft. bgs.	20

### Legend

- No Soil Sample Recovery
- Grab sample
- Continuous core 1.85" ID

Water Level

Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: KB  
Approved by: DC, 1/15/2019

**Exploration Log**  
**AMW-3**

Sheet 1 of 1



## Subsurface Investigation - AS180043

## Monitoring Well Log

Project Address & Site Specific Location

Coordinates (SPN NAD83 ft)

Exploration Number

1700 Airport Way S, Seattle, WA, Back parking lot

E: 1273354.03 N: 217868.29

**AMW-4**

Contractor

Equipment

Sampling Method

Ground Surface Elev. (NAVD88)

Ecology Well Tag No.  
BKF908

Operator

Exploration Method(s)

Work Start/Completion Dates

Top of Casing Elev. (NAVD88)

Depth to Water (Below GS)

Tim

Direct push

12/9/2018 to 12/10/2018

NA

6' (ATD)

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)
25		Flush monument Expansion plug					CONCRETE; 6 inches	
		Concrete					SAND WITH SILT AND GRAVEL (SP-SM); moist, brown; medium to coarse sand; fine to coarse gravel; no odor	
		Bentonite chips		AMW-4-2.5 NWTPH-Dx, NWTPH-Gx, Metals, cPAHs	PID=0 Sheen=None		SILTY SAND (SM); moist, brown; medium to coarse sand; no odor	
		2-inch diam Sch 40 PVC casing						
5		10x20 silica sand			PID=0 Sheen=None		Vacuum excavated to 5 ft.	5
20		12/9/2018					SAND WITH SILT (SP-SM); wet, brown; fine to medium sand, trace coarse sand; no odor	
		Pre-packed 2-inch diam Sch 40 PVC screen, 0.010-inch slot		AMW-4-8.0 NWTPH-Dx, NWTPH-Gx, Metals	PID=0 Sheen=Slight			
10								
15					PID=0 Sheen=Slight		SILTY SAND (SM); wet, black; coarse sand; 50% coal fragments, brick fragments, seashell fragments; no odor	
		Threaded bottom cap			PID=0 Sheen=Slight			
15					PID=0 Sheen=Slight		Becomes gray, fine to coarse sand; trace fine gravel; no odor	15
10								
		Slough			PID=0.0 Sheen=None			
20							Bottom of exploration at 20 ft. bgs.	20
5								

### Legend

- No Soil Sample Recovery
- Grab sample
- Continuous core 1.85" ID

Water Level

Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: KB  
Approved by: DC, 1/15/2019

**Exploration Log**  
**AMW-4**

Sheet 1 of 1

NEW STANDARD EXPLORATION LOG TEMPLATE C:\PROJECTS\EVERGREEN CLINIC 180043.GPJ April 18, 2025

		<b>Subsurface Investigation - AS180043</b>			<b>Monitoring Well Log</b>		
		Project Address & Site Specific Location 1700 Airport Way S, Seattle, WA, Basement, outside sump room			Coordinates (SPN NAD83 ft) E:1273313.41 N:217932.75		Exploration Number <b>AMW-5</b>
Contractor Holocene Drilling		Equipment Geoprobe 6011 DT	Sampling Method Percussion hammer		Ground Surface Elev. (NAVD88) 19.89'		Ecology Well Tag No. BPK160
Operator Trevor		Exploration Method(s) Direct push	Work Start/Completion Dates 10/31/2024 to 11/1/2024		Top of Casing Elev. (NAVD88) NA		Depth to Water (Below GS) 0.8' (Static)

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Analytical Sample Number & Lab Test(s)	Field Tests	Material Type	Description	Depth (ft)	
		Flush monument		AMW-5-01 TPH-G, TPH-Dx, VOCs, SVOCs, MTCA 5			CONCRETE; 6 inches		
		11/1/2024 1-inch diam Sch 40 PVC casing						SAND WITH SILT AND GRAVEL (SP-SM); loose, moist, gray; fine to coarse sand, fine to coarse subrounded cobbles, nonplastic silt; no odor.	
		Concrete				PID=0.1		CONCRETE; 3 inches	
					PID=0.2		<b>FILL</b> SAND WITH SILT AND GRAVEL (SP-SM); loose, wet, gray; fine to coarse sand, fine to coarse subrounded cobbles, nonplastic silt; no odor.		
5	15	10x20 silica sand			PID=0.2			5	
		Pre-packed 1-inch diam Sch 40 PVC screen, 0.010-inch slot			PID=0.1				
10	10				PID=0.2		WOODY DEBRIS; 2 inches; cedar odor	10	
		Threaded bottom cap		AMW-5-12 TPH-G, TPH-Dx, VOCs, SVOCs, MTCA 5			GRAVEL (GW); loose, wet, gray; fine to coarse sand, fine to coarse subrounded to subangular gravel; no odor.		
								SAND WITH GRAVEL (SP); loose, wet, black; fine to medium sand, fine subrounded gravel; no odor.	
								<b>ESTUARINE DEPOSITS</b> SILT (ML); soft, wet, gray; low plasticity silt; no odor. Bottom of exploration at 12 ft. bgs.	
15	5							15	
20	0							20	

**Legend**  

☐ No Soil Sample Recovery

☒ Grab sample

☒ Continuous core 4" ID

Water Level

▼ Static Water Level

See Exploration Log Key for explanation of symbols

Logged by: NWD  
Approved by: ND, 4/17/2025

**Exploration Log**  
**AMW-5**  
Sheet 1 of 1

## **APPENDIX D**

### **Report Limitations and Use Guidelines**



# REPORT LIMITATIONS AND USE GUIDELINES

## Reliance Conditions for Third Parties

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This report was prepared for the exclusive use of the Client. No other party may rely on this report or the product of our services without the express written consent of Aspect Consulting (Aspect). This limitation is to provide our firm with reasonable protection against liability claims by third parties with whom there would otherwise be no contractual conditions or limitations and guidelines governing their use of the report. Within the limitations of scope, schedule and budget, our services have been executed in accordance with our Agreement with the Client and recognized standards of professionals in the same locality and involving similar conditions.

## Services for Specific Purposes, Persons and Projects

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Aspect has performed the services in general accordance with the scope and limitations of our Agreement. This report has been prepared for the exclusive use of the Client and their authorized third parties, approved in writing by Aspect. This report is not intended for use by others, and the information contained herein is not applicable to other properties.

This report is not, and should not, be construed as a warranty or guarantee regarding the presence or absence of hazardous substances or petroleum products that may affect the Site. The report is not intended to make any representation concerning title or ownership to the Site. If real property records were reviewed, they were reviewed for the sole purpose of determining the Site's historical uses. All findings, conclusions, and recommendations stated in this report are based on the data and information provided to Aspect, current use of the Site, and observations and conditions that existed on the date and time of the report.

Aspect structures its services to meet the specific needs of our clients. Because each environmental study is unique, each environmental report is unique, prepared solely for the specific client and Site. This report should not be applied for any purpose or project except the purpose described in the Agreement.

## This Report Is Project-Specific

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Aspect considered a number of unique, project-specific factors when establishing the Scope of Work for this project and report. You should not rely on this report if it was:

- Not prepared for you
- Not prepared for the specific purpose identified in the Agreement
- Not prepared for the specific real property assessed
- Completed before important changes occurred concerning the Site, project or governmental regulatory actions

If changes are made to the project or Site after the date of this report, Aspect should be retained to assess the impact of the changes with respect to the conclusions contained in the report.

## **Geoscience Interpretations**

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The geoscience practices (geotechnical engineering, geology, and environmental science) require interpretation of spatial information that can make them less exact than other engineering and natural science disciplines. It is important to recognize this limitation in evaluating the content of the report. If you are unclear how these "Report Limitations and Use Guidelines" apply to your project or site, you should contact Aspect.

## **Discipline-Specific Reports Are Not Interchangeable**

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The equipment, techniques and personnel used to perform an environmental study differ significantly from those used to perform a geotechnical or geologic study and vice versa. For that reason, a geotechnical engineering or geologic report does not usually address any environmental findings, conclusions or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. Similarly, environmental reports are not used to address geotechnical or geologic concerns regarding the Site.

## **Environmental Regulations Are Not Static**

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Some hazardous substances or petroleum products may be present near the Site in quantities or under conditions that may have led, or may lead, to contamination of the Site, but are not included in current local, state or federal regulatory definitions of hazardous substances or petroleum products or do not otherwise present potential liability. Changes may occur in the standards for appropriate inquiry or regulatory definitions of hazardous substance and petroleum products; therefore, this report has a limited useful life.

## **Property Conditions Change Over Time**

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This report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time (for example, Phase I ESA reports are applicable for 180 days), by events such as a change in property use or occupancy, or by natural events, such as floods, earthquakes, slope failure or groundwater fluctuations. If more than six months have passed since issuance of our report, or if any of the described events may have occurred following the issuance of the report, you should contact Aspect so that we may evaluate whether changed conditions affect the continued reliability or applicability of our conclusions and recommendations.

## **Phase I ESAs – Uncertainty Remains After Completion**

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Aspect has performed the services in general accordance with the scope and limitations of our Agreement and the current version of the “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process,” ASTM E1527, and U.S. Environmental Protection Agency (EPA)'s Federal Standard 40 CFR Part 312 "Innocent Landowners, Standards for Conducting All Appropriate Inquiries".

No ESA can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with Site. Performance of an ESA study is intended to reduce, but not eliminate, uncertainty regarding the potential for environmental conditions affecting the Site. There is always a potential that areas with contamination that were not identified during this ESA exist at the Site or in the study area. Further evaluation of such potential would require additional research, subsurface exploration, sampling and/or testing.

## **Historical Information Provided by Others**

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Aspect has relied upon information provided by others in our description of historical conditions and in our review of regulatory databases and files. The available data does not provide definitive information with regard to all past uses, operations or incidents affecting the Site or adjacent properties. Aspect makes no warranties or guarantees regarding the accuracy or completeness of information provided or compiled by others.

## **Exclusion of Mold, Fungus, Radon, Lead, and HBM**

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Aspect's services do not include the investigation, detection, prevention or assessment of the presence of molds, fungi, spores, bacteria, and viruses, and/or any of their byproducts. Accordingly, this report does not include any interpretations, recommendations, findings, or conclusions regarding the detection, assessment, prevention or abatement of molds, fungi, spores, bacteria, and viruses, and/or any of their byproducts. Aspect's services also do not include the investigation or assessment of hazardous building materials (HBM) such as asbestos, polychlorinated biphenyls (PCBs) in light ballasts, lead based paint, asbestos-containing building materials, urea-formaldehyde insulation in on-site structures or debris or any other HBMs. Aspect's services do not include an evaluation of radon or lead in drinking water, unless specifically requested.