

June 2018

FEDERAL WAY LINK EXTENSION

AE 0044-12 3.7.N

Phase II Environmental Site Assessment

FL-210, FL-211, FL-212, and
FL-213

Tax Parcels 2500600481,
2500600486, 2500600485, and
2500600490



CENTRAL PUGET SOUND
REGIONAL TRANSIT AUTHORITY

**Phase II Environmental Site Assessment Report
Sound Transit – Federal Way Link Extension
Parcel FL-210, FL-211, FL-212, FL-213
Allison Marine Boat Storage and Repair,
Mixed-use Property
Kent, Washington**

File No. 4082-039-01

June 14, 2018

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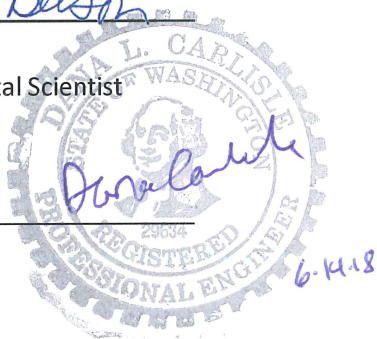
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RECORD OF REVISIONS TO FEDERAL WAY LINK EXTENSION, PHASE 3 QUALITY MANAGEMENT PLAN

[illegible]

Acronyms and Abbreviations

AST	aboveground storage tank
ASTM	ASTM International
Bgs	below ground surface
CLARC	Cleanup Levels and Risk Calculation
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
ESA	Environmental Site Assessment
HREC	Historical Recognized Environmental Condition
mg/kg	milligrams per kilogram
MTCA	Model Toxics Control Act
NAVD 88	North American Vertical Datum of 1988
PAH	polycyclic aromatic hydrocarbon
PCBs	polychlorinated biphenyls
PCE	tetrachloroethene
PID	photoionization detector
ppm	parts per million
QC	quality control
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
TCLP	Toxicity Characteristic Leaching Procedure
TSP	Tacoma Smelter Plume
UST	underground storage tank
VOC	volatile organic compound
WAC	Washington Administrative Code

EXECUTIVE SUMMARY

This report summarizes the results of the Phase II Environmental Site Assessment (ESA) of four contiguous King County Tax Parcels 2500600481, 2500600486, 2500600485, and 2500600490 in Kent, Washington (referred to individually and collectively in this report as “subject property”). Existing structures on the subject property use the following addresses: 23427 30th Avenue South, 23431 30th Avenue South, 23434 Pacific Highway South, and 23451 30th Avenue South, respectively. The parcels are identified by Sound Transit as Federal Way parcels FL-210, FL-211, FL-212, and FL-213, respectively. The subject property is owned by the Puetz family.

Current businesses and uses on each parcel are as follows:

- FL-210 – Allison Marine boat engine repair garage (constructed in 1985) and Midway Auto & Detail office (constructed in 1977)
- FL-211 – Allison Marine boat and equipment storage
- FL-212 – Mixed-use commercial building and apartments (constructed in the 1930s)
- FL-213 – Allison Marine boat and automobile/truck storage

Boat engine service operations on the subject property have occurred since the early 1990s and may have included automotive service in the past. The auto detailing business on FL-210 is a relatively new tenant on the property (as of 2018).

This Phase II ESA was conducted to evaluate potential soil contamination associated with the Recognized Environmental Conditions (RECs) for the property as identified in the Phase I ESA prepared by GeoEngineers, Inc. (GeoEngineers) dated March 2017.

Phase I ESA Summary

RECs identified for the subject property based on the Phase I ESA included on-site, areawide and off-site potential sources of contamination. The on-site potential sources of contamination included the following:

- Former and current boat engine service, and possible historic auto service activities, on the subject property may have used, stored, and generated hazardous substances or petroleum products resulting in a REC for the property. No releases of hazardous materials were documented to have occurred.
- Other tenants that historically occupied buildings on the subject property may have used or stored hazardous materials. Past building tenants included Petrolane Incorporated, a roofing company, and Enterprise Rent-A-Car (Enterprise). Enterprise reportedly operated a car wash on the property (see Figure 2) in the 2000s. Possible hazardous materials use and storage therefore represent a REC for the subject property.

The Tacoma Smelter Plume (TSP) is considered an areawide potential source of contamination for the subject property. The subject property is within Ecology's mapped footprint of the TSP where arsenic concentrations in surface/near surface soil are predicted to exceed the MTCA Method A cleanup level for unrestricted land use.

Off-site potential sources of contamination identified in the Phase I ESA include the adjacent property to the southwest (currently Discount Car Stereo) that was a gasoline service station in the 1930s until at least the 1940s, and the north-adjacent property (formerly Southgate Oil) that was an oil company for approximately 75 years. Phase II ESA explorations and sampling for Sound Transit were completed on both of these adjacent properties. Based on the results of the Phase II ESA soil sampling, we conclude that these adjacent properties do not appear to present a significant risk for releases that could have migrated to and impacted the subject property.

Phase II ESA Conclusions

The purpose of the Phase II ESA was to evaluate the potential for RECs or other potential sources of contamination to affect the subject property, and/or to impact soil that may be encountered during Sound Transit construction activities at the property.

Potential On-site Sources

Site Reconnaissance Observations

A March 2018 site reconnaissance and interview with the current property manager and owner Matt Puetz identified the following:

- **FL-210:** A variety of boat engine repair and maintenance service items and tools are stored in the Allison Marine garage (see photographs in Appendix A). The garage has two bays. Much of the concrete floor in this building was not visible because it was obscured by items stored on the floor; however, minor localized areas of oil staining (*de minimis*) were observed on the concrete floor. At least one 55-gallon drum containing used oil (with no secondary containment) was observed inside the garage. Floor drains were not observed. A storm drain is located outside of the south bay of the garage. In general, housekeeping practices for use and storage of automotive fluids appeared to be relatively good.
- **FL-210:** Midway Auto & Detail is a relatively new tenant in the office building. This building was previously used by Allison Marine. It did not appear as if Midway Auto & Detail had opened as of March 2018. The business owner was not present during our site reconnaissance and access to the building and northern adjacent storage awning were not provided by Mr. Puetz. Historical records included in the Phase I ESA show that the eastern half of this building is an office and the western half has a small "shop." This building has no service-type garage bay doors.
- **FL-210:** A water tank apparently used for testing boat engines and a 55-gallon drum labeled "used oil filters only" were observed just east and outside of the boat engine repair garage.

Minor staining of the asphalt pavement (*de minimis*) was observed adjacent to these items. Numerous gasoline containers, 5-gallon buckets and several 55-gallon drums with oil, or that formerly stored oil, were observed inside of a metal shed adjacent to the garage.

- **FL-211:** Much of the property is used for boat, auto and truck storage and a moderate quantity of accumulated solid waste, both non-boat related and auto-related, was observed. Unpaved areas of the property that were visible did not show evidence of oil leaks or spills on the ground surface. Asphalt-paved parking areas and driveways had minor staining (*de minimis*) from apparent boat or auto oil leaks. Ponded water from boat washing activities were observed in low areas of the ground surface.
- **FL-211:** Enterprise conducted car washing activities in the 2000s, according to Mr. Puetz. Car washing activities occurred under an open carport located in the southwest portion of FL-211 (Figure 2). Mr. Puetz indicated the washing area discharged to an oil/water separator at one time, but the oil/water separator has since been removed. The carport remains on site and is currently used for storage. Based on review of available aerial photographs from the years corresponding to Enterprise car wash activities, the size of the carport area, and the lack of water service and distribution infrastructure visible in this area today, our interpretation is that the car washing activities were likely small-scale rather than commercial-scale, and likely did not generate or discharge significant quantities of wastewater.
- **FL-212:** A possible UST vent pipe was observed on the north side of the apartment building, near the northeast corner of the building (see Photograph 9, Figure A-16). Mr. Puetz indicated there were no USTs on the subject property to his knowledge.
- **FL-213:** A moderate quantity of accumulated solid waste, both non-boat related and auto-related, was observed. In general, housekeeping practices appeared to be relatively good.

Subject property buildings are connected to the sanitary sewer according to King County records. Existing underground sewer lines appear to be connected to the municipal sanitary sewer in 30th Avenue South. There are several stormwater catch basins on the subject property that appear to be connected to the municipal storm drain system in 30th Avenue South.

The site reconnaissance did not identify visual evidence of past or ongoing petroleum or hazardous substances releases (other than *de minimis* minor staining) to the ground surface or inside the boat engine repair garage. Except for the possible UST vent pipe mentioned above, no other surface features indicative of possible USTs were identified during the March 2018 site reconnaissance.

Field Explorations, Sampling and Chemical Analytical Testing

Ten Phase II ESA exploration locations were selected to evaluate potential Tacoma Smelter Plume impacts, potential on-site sources of contamination related to current and past operations, and possible impacts from the northern and southern adjacent properties. A total

of 38 soil samples were submitted for chemical analysis and the results are presented in Table 1. Groundwater is estimated to be deeper than 70 feet in the site vicinity (see Section 3.1.2).

Chemical analytical results for soil samples obtained from the Phase II ESA borings identified the following:

- Lube oil-range petroleum hydrocarbons were detected in two of 38 samples analyzed from ten borings; detected concentrations were 160 mg/kg (FL212-B2-2-3) and 690 mg/kg (FL210-B6-2-2.5). Both detected concentrations of lube oil are less than the MTCA Method A cleanup level of 2,000 mg/kg for unrestricted land use. Diesel- and gasoline-range petroleum hydrocarbons were not detected in the soil samples analyzed.
- Low-level concentrations of VOCs ethylbenzene, xylenes and/or 1,2,4-trimethylbenzene were detected in three soil samples submitted for VOC analysis: FL212-B2-2-3, FL211-B5-5.5-6 and FL211-B5-11.5-12. The detected concentrations were significantly below corresponding MTCA screening levels. Low concentrations of acetone and 1,2-butanone (MEK) detected in one of the samples (FL211-B7-2.5-3.5) are assumed to be laboratory-related.
- Carcinogenic and noncarcinogenic PAH compounds were detected in the following five soil samples, four of which are shallow samples above 3 feet bgs, and one was a sample at 11.5 feet bgs: FL212-B1-2.5-3.5 and FL212-B2-2-3 (lube oil and VOCs also detected in these two samples), FL211-B5-11.5-12 (low-level VOCs also detected), FL210-B6-2-2.5 (lube oil also detected) and FL213-B10-2-3. The detected concentration of cPAHs in only one sample, the deeper sample FL211-B5-11.5-12, was greater than the corresponding MTCA Method A cleanup level. Detected concentrations of cPAHs and noncarcinogenic PAHs in the remaining samples were significantly less than MTCA screening levels. cPAHs can be associated with heavy-end petroleum products but petroleum hydrocarbons were not detected in this sample. The detection of cPAHs in sample FL211-B5-11.5-12 (0.25 mg/kg) was isolated from the standpoint of vertical delineation: cPAHs were not detected in the soil samples collected above and below sample FL211-B5-11.5-12. The source of cPAHs in the 11.5-12 foot sample is not apparent, but available data do not indicate the detection resulted from a subsurface release of a petroleum-type product.
- Metals, including arsenic and lead, either were not detected or the detected concentrations were less than or equal to the corresponding MTCA cleanup levels in the soil samples analyzed.

In our opinion, the chemical analytical results for soil sample FL211-B5-11.5-12, where the concentration of cPAHs detected was greater than the MTCA Method A cleanup level, does not represent a reportable release under MTCA because the results do not conclusively identify a threat or potential threat to human health or the environment. This opinion is based on the

following: available data do not indicate the detection resulted from a subsurface release of a petroleum-type product (which would be the most likely source given the site history), the majority of the site is capped with pavement, and the sample with cPAHs detected at a concentration exceeding the cleanup level (FL211-B5-11.5-12) was isolated from a delineation standpoint.

Tacoma Smelter Plume (TSP)

Tacoma Smelter Plume impacts were evaluated through analysis of arsenic and lead in surface soil samples collected from 0-0.5 feet and 0.5-1-foot bgs. Arsenic was detected in eight of 10 surface soil samples (collected from 0-0.5 feet and 0.5-1-foot bgs) from borings FL212-B1, FL211-B3, FL211-B5, FL213-B8 and FL213-B9 at concentrations less than or equal to the MTCA screening level of 20 mg/kg. The arsenic concentrations in six of 10 surface soil samples were above the naturally occurring background concentrations for arsenic in Puget Sound (7 mg/kg).

Lead was detected in nine of 10 surface soil samples from borings FL212-B1, FL211-B3, FL211-B5, FL213-B8 and FL213-B9 at concentrations less than the MTCA screening level of 250 mg/kg. The lead concentrations in seven of 10 surface soil samples were above the naturally occurring background concentrations for arsenic in Puget Sound (24 mg/kg).

Based on these results, no MTCA cleanup action would be required on this parcel with regard to TSP impacts.

Potential Off-site Sources

Soil explorations FL212-B1, FL212-B2 and FL211-B4 were also used to evaluate potential impacts from off-site sources. Based on results of soil samples tested from these borings, we conclude that significant impacts from the northern-adjacent former Southgate Oil property and southwest adjacent historic service station were not apparent.

Sound Transit Acquisition and Future Construction Recommendations

Based on current design information for the FWLE alignment (HDR, provided in March 2018), Sound Transit plans to acquire all of FL-210, FL-211, FL-212, FL-213 in fee (“full take”), and building impacts are anticipated. Sound Transit’s proposed construction and development on the property includes a stormwater vault, a traction power substation, columns with elevated tracks, and new roadways, parking, sidewalks and utilities (Figure 3). Proposed construction and development activities by Sound Transit could change as project design is refined.

For the purposes of Sound Transit’s acquisition, a remediation cost estimate is not necessary.

Best management practices related to on-site storage of small quantities of oil and petroleum products at the subject property should be implemented to minimize the potential for a future release that could affect the ground, or the municipal storm drain system.

A construction cost estimate will be necessary for FL-210, FL-211, FL-212 and FL-213 because

the findings of the Phase II ESA identified impacted soil at five of the 10 Phase II ESA exploration locations and the soil sample with cPAHs detected at a concentration greater than the MTCA Method A cleanup level was at FL211-B5, which is located near the proposed Sound Transit stormwater vault (Figure 3).

Sound Transit or their contractors should verify the presence/absence of a suspect UST at the apartment building. If a UST is confirmed, it should be removed before or during Sound Transit construction activities in accordance with the project specifications and applicable regulations. We recommend contaminated and impacted soil screening and handling plans be prepared prior to construction activities that outlines soil segregation, handling, stockpiling and end use/disposal with potential follow-up chemical analytical testing for waste disposal characterization as needed. Ecology's "Guidance for Remediation of Petroleum-Contaminated Soil" should be used as a guidance document for end use options for petroleum-related soil impacts.

The table below summarizes the Phase II ESA findings relative to Sound Transit's proposed acquisition and future construction.

Potential Sources of Contamination Identified Nearby	Potential Source Within Acquisition Area	Potential Source Within Construction Area	Impacted Soil Present	Contaminated Soil Present	Remedial Cost Estimate Necessary for Acquisition	Remedial Cost Estimate Necessary for Construction
On-Site: Former site uses, current boat and auto repair and storage	Yes	Yes	Yes	Yes, however, based on the distribution and concentration of contaminants identified during this study ¹ , it is our opinion that the results from FL211-B5-11.5-12 do not represent a reportable release under MTCA.	No	Yes
Off-Site: Adjacent property uses	No	No	No	No	No	No
Areawide: Tacoma Smelter Plume	Yes	Yes	Yes	No	No	No

Note:

¹ Only one soil sample from one Phase II ESA boring had a contaminant detection greater than MTCA Method A cleanup levels: cPAHs in the soil sample from FL211-B5 at 11.5-12 feet bgs.

This Executive Summary should be used only in the context of the full report for which it is intended.

1.0 Introduction

This report summarizes the results of the Phase II Environmental Site Assessment (ESA) of four contiguous King County Tax Parcels 2500600481, 2500600486, 2500600485, and 2500600490 in Kent, Washington (referred to individually and collectively in this report as “subject property”). Existing structures on the subject property use the following addresses: 23427 30th Avenue South, 23431 30th Avenue South, 23434 Pacific Highway South, and 23451 30th Avenue South, respectively. The parcels are identified by Sound Transit as Federal Way parcels FL-210, FL-211, FL-212, and FL-213, respectively. The subject property is owned by the Puetz family.

Current businesses and uses on each parcel are as follows:

- FL-210 – Allison Marine boat engine repair garage (constructed in 1985) and Midway Auto & Detail office (constructed in 1977)
- FL-211 – Allison Marine boat and equipment storage
- FL-212 – Mixed-use commercial building and apartments (constructed in the 1930s)
- FL-213 – Allison Marine boat and automobile/truck storage

Boat engine service operations on the subject property have occurred since the early 1990s, and may have included automotive service in the past. The auto detailing business on FL-210 is a relatively new tenant on the property (as of 2018). The subject property is shown relative to surrounding physical features in the Vicinity Map, Figure 1. The layout of the subject property and surrounding properties is shown in the Site Plan and Boring Location Map – FL-210, FL-211, FL-212, FL-213, Figure 2.

Based on current design information for the FWLE alignment (HDR, provided in March 2018), Sound Transit plans to acquire all of FL-210, FL-211, FL-212, FL-213 in fee (“full take”), and building impacts are anticipated. Sound Transit’s proposed construction and development on the property includes a stormwater vault, a traction power substation, columns with elevated tracks, and new roadways, parking, sidewalks and utilities (Figure 3). Proposed construction and development activities by Sound Transit could change as project design is refined.

The results of this Phase II ESA will be used by Sound Transit as part of their evaluation of potential environmental liabilities associated with ownership of the property and future design and construction of the FWLE. This report has been prepared for the exclusive use of Sound Transit, their agents and project design team. Because this environmental report is not intended for use by others, no one else should rely on this report without first conferring with GeoEngineers, Inc. (GeoEngineers).

Throughout the report, references to “the FWLE,” the “project,” the “proposed project,” “the alignment,” or the “light rail corridor” refer to the alignment selected by the Sound Transit Board in January 2017 after publication of the Final Environmental Impact Statement (FEIS).

1.1 FWLE Project Description

Sound Transit intends to extend light rail between the cities of SeaTac and Federal Way, through the FWLE Preferred Alternative route. The Sound Transit 2 (ST2) Plan, approved by voters in 2008, included environmental study and design of this extension. This 7.8-mile extension would extend light rail south from the Angle Lake Station terminus of the Central Link system at South 200th Street in SeaTac to the Federal Way Transit Center (FWTC) at South 317th Street. The FWLE would travel within the cities of SeaTac, Des Moines, Kent and Federal Way in King County.

Link Light Rail is currently operating between University of Washington, Seattle and Sea-Tac International Airport. In 2008, the ST2 program was approved by voters. This package added nearly 36 new miles of service to the north, south and east, to Sound Transit's initial light rail line, resulting in 55 miles of light rail open for revenue service by 2023. The ST2 program of projects includes construction of light rail from the Angle Lake Station, just south of SeaTac Airport, to Kent/Des Moines Station. ST2 funds were also programmed to provide environmental clearance and preliminary engineering design to downtown Federal Way.

In June 2016, the Sound Transit Board unanimously approved to move forward with a November 2016 ballot asking taxpayers to fund Sound Transit 3 (ST3), which was subsequently passed by the taxpayers. ST3 funds the remaining segments from Kent/Des Moines station to the FWTC. Revenue service to the FWTC Station is targeted to open by 2024.

1.2 Authorization

This report was prepared under the terms of the subcontract between HDR and GeoEngineers dated August 24, 2012, along with Amendments 1 through 12. The subcontract authorizes GeoEngineers to provide environmental services for the Sound Transit FWLE in accordance with Agreement No. RTA/AE 044-12 between HDR and Sound Transit.

1.3 Site History and Summary of RECs

In March 2017, GeoEngineers completed a Phase I ESA for the subject property. RECs identified for the subject property included on-site, areawide and off-site potential sources of contamination. The on-site potential sources of contamination included the following:

- Former and current boat engine service, and possible historic auto service activities, on the subject property may have used, stored, and generated hazardous substances or petroleum products resulting in a REC for the property. No releases of hazardous materials were documented to have occurred.
- Other tenants that historically occupied buildings on the subject property may have used or stored hazardous materials. Past building tenants included Petrolane Incorporated, a roofing company, and Enterprise Rent-A-Car (Enterprise). Enterprise reportedly operated a car wash on the property (see Figure 2) in the 2000s. Possible hazardous materials use and storage therefore represent a REC for the subject property.

The Tacoma Smelter Plume (TSP) is a considered an areawide potential source of contamination for the subject property. The subject property is within Ecology's mapped footprint of the TSP where arsenic concentrations in surface/near surface soil are predicted to exceed the MTCA Method A cleanup level for unrestricted land use.

Off-site potential sources of contamination identified in the Phase I ESA include the adjacent property to the southwest (currently Discount Car Stereo) that was a gasoline service station in the 1930s until at least the 1940s, and the north-adjacent property (formerly Southgate Oil) that was an oil company for approximately 75 years. Phase II ESA explorations and sampling for Sound Transit were completed on both of these adjacent properties. Based on the results of the Phase II ESA soil sampling, we conclude that these adjacent properties do not appear to present a significant risk for releases that could have migrated to and impacted the subject property.

1.4 Purpose and Scope of Services

The purpose of the Phase II ESA is to evaluate the potential for RECs or other potential sources of contamination to affect the subject property and/or to impact soil that may be encountered during Sound Transit construction activities at the site. GeoEngineers' scope of services consisted of the following:

1. Performed a site reconnaissance of the property and met with the subject property owner's representative.
2. Developed a health and safety plan for use by our field representatives in accordance with WAC 296-24.
3. Coordinated the marking of subsurface utilities at the exploration locations by notifying the one-call locate service for underground utilities in public rights-of-way and a private utility locate service for underground utilities on private property.
4. Retained a drilling subcontractor to advance 10 direct-push soil borings.
5. Obtained continuous core soil samples from each of the explorations. Field screened the soil samples for evidence of petroleum and volatiles using visual, water sheen and headspace vapor screening methods. Visually classified the samples in general accordance with ASTM D 2488 and maintained a detailed log of each boring.
6. Submitted select soil samples for chemical analysis of one or more of the following: gasoline-range petroleum hydrocarbons by NWTPH-Gx, diesel- and lube oil-range petroleum hydrocarbons by NWTPH-Dx, Resource Conservation and Recovery Act (RCRA) metals, hexavalent chromium and/or arsenic and lead by U.S. Environmental Protection Agency (EPA) Method 6000/7000 series, PAHs by EPA Method 8270D/SIM, and volatile organic compounds (VOCs) by EPA Method 8260.
7. Evaluated the soil sampling field and chemical analytical data relative to Washington State Department of Ecology (Ecology) Toxics Cleanup Program Model Toxics Control Act (MTCA) cleanup levels and naturally occurring background metals concentrations in Puget Sound region soil.

2.0 Site Description

2.1 Location and Property Description

General location and property description information for the subject property are summarized in Table 2-1 below. The location is shown relative to surrounding physical features in Figure 1. The current layout of the subject property and surrounding properties are shown in Figure 2.

Table 2-1. Subject Property Location and Description

Quarter/Quarter, Section, Township and Range	NE/SE quarter of Section 16, Township 22, Range 4, Willamette Meridian
Address	FL-210 - 23427 30 th Avenue South FL-211 - 23431 30 th Avenue South FL-212 - 23434 Pacific Highway South FL-213 - 23451 30 th Avenue South All parcels are in Kent, King County, Washington.
Tax Parcel Number	FL-210 - 2500600481 FL-211 - 2500600486 FL-212 - 2500600485 FL-213 - 2500600490
Approximate Area	FL-210 is 0.14 acres FL-211 is 0.49 acres FL-212 is 0.27 acres FL-213 is 0.35 acres
Existing Use(s)	FL-210 – boat engine repair and office for Midway Auto & Detail FL-211 – boat and equipment storage FL-212 – mixed-use commercial building and apartments FL-213 – boat and automobile/truck storage

2.2 Site Vicinity and General Characteristics

The subject property is located in an area of commercial and light industrial land uses. Figure 2 shows the configuration of the subject property and surrounding properties.

2.3 Site Reconnaissance and Interview

On March 29, 2018 GeoEngineers personnel conducted a visual site reconnaissance of the parcel and interview with the property manager and one of the property owners, Matt Puetz, to evaluate current conditions on the property for potential RECs not identified previously. Mr. Puetz resides on the property but is not involved in the business operations of the tenants Allison Marine and Midway Auto & Detail. The interior of the Midway Auto & Detail building on FL-210, the Allison Marine office trailer on FL-211, and the apartments and commercial building on FL-212 were not observed during the site

reconnaissance. Photographs of the subject property are included in Appendix A as Figures A-12 through A-19. Observations made during the visual reconnaissance are summarized below:

- **FL-210:** A variety of boat engine repair and maintenance service items and tools are stored in the Allison Marine garage (see photographs in Appendix A). The garage has two bays. Much of the concrete floor in this building was not visible because it was obscured by items stored on the floor; however, minor localized areas of oil staining (*de minimis*) were observed on the concrete floor. At least one 55-gallon drum containing used oil (with no secondary containment) was observed inside the garage. Floor drains were not observed. A storm drain is located outside of the south bay of the garage. In general, housekeeping practices for use and storage of automotive fluids appeared to be relatively good.
- **FL-210:** Midway Auto & Detail is a relatively new tenant in the office building. This building was previously used by Allison Marine. It did not appear as if Midway Auto & Detail had opened as of March 2018. The business owner was not present during our site reconnaissance and access to the building and northern adjacent storage awning were not provided by Mr. Puetz. Historical records included in the Phase I ESA show that the eastern half of this building is an office and the western half has a small “shop.” This building has no service-type garage bay doors.
- **FL-210:** A water tank apparently used for testing boat engines and a 55-gallon drum labeled “used oil filters only” were observed just east and outside of the boat engine repair garage. Minor staining of the asphalt pavement was observed adjacent to these items. Numerous gasoline containers, 5-gallon buckets and several 55-gallon drums with oil, or that formerly stored oil, were observed inside of a metal shed adjacent to the garage.
- **FL-211:** Much of the property is used for boat, auto and truck storage and a moderate quantity of accumulated solid waste, both non-boat related and auto-related, was observed. Unpaved areas of the property that were visible did not show evidence of oil leaks or spills on the ground surface. Asphalt-paved parking areas and driveways had minor staining (*de minimis*) from apparent boat or auto oil leaks. Pooled water from boat washing activities were observed in low areas of the ground surface.
- **FL-211:** Enterprise conducted car washing activities in the 2000s, according to Mr. Puetz. Car washing activities occurred under an open carport located in the southwest portion of FL-211 (Figure 2). Mr. Puetz indicated the washing area discharged to an oil/water separator at one time, but the oil/water separator has since been removed. The carport remains on site and is currently used for storage. Based on review of available aerial photographs from the years corresponding to Enterprise car wash activities, the size of the carport area, and the lack of water service and distribution infrastructure visible in this area today, our interpretation is that the car washing activities were likely small-scale rather than commercial-scale, and likely did not generate or discharge significant quantities of wastewater.
- **FL-212:** A possible UST vent pipe was observed on the north side of the apartment building, near the northeast corner of the building (see Photograph 9, Figure A-16). Mr. Puetz indicated there were no USTs on the subject property to his knowledge.

- **FL-213:** A moderate quantity of accumulated solid waste, both non-boat related and auto-related, was observed. In general, housekeeping practices appeared to be relatively good.

Subject property buildings are connected to the sanitary sewer according to King County records. Existing underground sewer lines appear to be connected to the municipal sanitary sewer in 30th Avenue South. There are several storm water catch basins on the subject property that appear to be connected to the municipal storm drain system in 30th Avenue South.

The site reconnaissance did not identify visual evidence of past or ongoing petroleum or hazardous substances releases (other than *de minimis* minor staining) to the ground surface or inside the boat engine repair garage. Except for the possible UST vent pipe mentioned above, no other surface features indicative of possible USTs were identified during the March 2018 site reconnaissance.

3.0 Physical Setting

3.1 Topography and Hydrogeologic Setting

Our knowledge of the general physiographic setting, geology and groundwater occurrence in the vicinity of the subject property is based on our general experience in the area and our recent soil explorations. Subsurface conditions observed during our recent soil explorations are described in the following sections of this report.

3.1.1 Geologic Setting

Glaciation events in the Puget Lowland left thick deposits of glacially-derived and reworked sediments across the region. The upland plateau in the Project area was formed during the latest glacial epoch called the Vashon stade of the continental Fraser glaciation. The advance and retreat of the Vashon-age Puget glacial lobe, approximately 14,000 to 10,000 years ago, deposited most of the near-surface materials and sculpted most of the present landforms within the Puget Lowland.

After the latest glaciation, Holocene-period sediments were deposited over the glacial soils. These deposits typically consist of alluvial soils commonly found in river valleys as well as colluvial deposits (landslide materials) on slopes. Peat and other organic soils occur in numerous depressional areas at the surface. Some of these Holocene-period sediments have been modified by human activity, including placement of roadway embankment fill for construction of Interstate 5.

3.1.2 Groundwater Conditions

The Phase II ESA explorations did not extend to groundwater. Below is a general description of groundwater conditions throughout the Project area.

Groundwater encountered in the FWLE project area may be grouped into one of three main aquifer types: unconfined, semi-confined and confined artesian. Unconfined aquifers may include groundwater within recent alluvium along streams and creeks, within recessional outwash that is perched above low-permeability glacial till, within discontinuous lenses of permeable layers in glacial till or within advance outwash that is exposed at the ground surface. The semi-confined aquifer is present in the advance outwash where it is overlain by less permeable soil, but the groundwater level is below the confining layer, making the aquifer semi-confined. Confined aquifers encountered in the project area are either flowing artesian (elevated groundwater levels aboveground surface) or sub-artesian (elevated groundwater levels at or near ground surface).

Geotechnical boring FWLE-D02 was completed approximately 50 feet east of the subject property. Groundwater was observed approximately 78 feet below ground surface (bgs) during drilling of boring FLWE-D02 in December 2015. Groundwater in the site vicinity is noted as being in a semi-confined aquifer type (GeoEngineers, January 2017).

4.0 Contaminants of Concern and Cleanup Levels

In addition to contaminants associated with the TSP (i.e., lead and arsenic), potential contaminants identified for soil at the subject property are associated with boat and auto service and repair, and auto-related activities on adjacent properties. Potential contaminants for the Phase II ESA screening therefore included gasoline-, diesel- and oil-range petroleum hydrocarbons and related constituents such as VOCs, PAHs, and metals.

The chemical analytical data for samples obtained during this investigation were compared to their respective MTCA Method A cleanup levels. MTCA Method B cleanup levels protective of soil direct contact were used for analytes where MTCA Method A cleanup levels are not established. Where appropriate, detected concentrations of metals in soil also were compared to naturally occurring background metals concentrations in Puget Sound region soil (Ecology, 1994).

4.1 Contaminated and Impacted Soil Classifications

For purposes of Sound Transit's property acquisition and future construction activities at FL-210, FL-211, FL-212, FL-213, impacted soil and contaminated soil are defined as follows:

- **Contaminated Soil:** Soil containing concentrations of contaminants greater than cleanup levels such as MTCA Method A Cleanup Levels for Unrestricted Use, or other relevant cleanup levels established by state, local, or federal regulation, law or permit condition, if no Method A level has been developed.
- **Impacted Soil:** Soil containing detectable concentrations of contaminants that are less than cleanup levels, specifically MTCA Method A Cleanup Levels for Unrestricted Land Use, or other relevant cleanup levels established by state, local, or federal regulation, law or permit condition, if no Method A level has been developed. Also, soil containing detectable concentrations of total metals that are less than MTCA Cleanup Levels but greater than naturally occurring background metals concentrations in Puget Sound region soil (Ecology, 1994). Impacted soil is not considered contaminated, but may be subject to restrictions or conditions for end use at off-site facilities.

4.2 Evaluation of Tacoma Smelter Plume Impacts

The "Tacoma Smelter Plume Model Remedies Guidance" (Ecology 2012) was used to evaluate whether a soil cleanup action for Tacoma Smelter Plume (TSP) impacts would be necessary on the subject property in connection with future property redevelopment. Detected concentrations of lead and arsenic from TSP impacts were evaluated according to the following Ecology guidance: discrete soil samples analyzed from within the upper 1-foot with detectable concentrations of either lead or arsenic exceeding MTCA Method A cleanup levels (250 mg/kg and 20 mg/kg, respectively), do not require further action with regard to TSP impacts on a redevelopment property provided that: (a) no single sample has a concentration exceeding twice the corresponding MTCA Method A cleanup level, and (b)

the average¹ concentrations of lead and arsenic for each 6-inch sampling interval (i.e., 0-0.5 foot or 0.5-1 foot bgs) are less than the corresponding MTCA Method A cleanup level.

¹ Non-detects are assigned a value equal to half the laboratory detection limit for the purpose of calculating this averaged value.

5.0 Subsurface Explorations

5.1 General

The Phase II ESA explorations included 10 direct-push soil borings completed to depths of 7 to 20 feet bgs from which soil samples were obtained to characterize subsurface conditions. Boring locations are shown in Figure 2. The field explorations were completed on May 2, 2018. Environmental Services Northwest (ESN) performed drilling services. Ground surface elevations for the boring locations were determined by locational survey.

Explorations were monitored by a representative of GeoEngineers who visually classified and field screened soil samples collected from the explorations for evidence of petroleum and volatiles. Subsurface conditions and field screening results are shown in the exploration logs presented in Appendix A. Soil samples were submitted to OnSite Environmental, Inc. in Redmond, Washington for chemical analysis. The soil chemical analytical results are summarized in Table 1. Copies of the laboratory reports are presented in Appendix B.

5.2 Sampling and Analysis Plan

Site historical uses, site reconnaissance observations, and field screening results were evaluated to develop the sampling and analysis plan for the Phase II ESA. The exploration locations are shown in Figure 2. Analyses completed for each exploration are summarized in the table below.

Table 5.1 Sampling and Analysis Summary

Boring ID	Potential Contamination Source(s)	Completed Depth (feet bgs)	Analyses Completed					
			Diesel- and Lube Oil-Range PHCs	Gasoline-Range PHCs	VOCs	PAHs	RCRA 8 Metals	As, Pb (surface soil)
FL212-B1	Former Southgate Oil to north, TSP	20	X	X	X	X	X	X
FL212-B2	Former service station to south	15	X	X	X	X	X	--
FL211-B3	Former Enterprise rental car washing activities, TSP	15	X	X	X	X	X	X
FL211-B4	Former Southgate Oil to north	10	X	X	X	X	X	--
FL211-B5	Boat servicing, repair, washing, TSP	14	X	X	X	X	X	X
FL210-B6	Boat servicing, repair, washing	20	X	X	X	X	X	--
FL211-B7 ¹	Boat servicing, repair, washing	20	X	X	X	X	X	--
FL213-B8	Boat and auto storage, TSP	15	X	X	X	X	X	X
FL213-B9	Boat and auto storage, TSP	10	X	X	X	X	X	X

Boring ID	Potential Contamination Source(s)	Completed Depth (feet bgs)	Analyses Completed					
			Diesel- and Lube Oil-Range PHCs	Gasoline-Range PHCs	VOCs	PAHs	RCRA 8 Metals	As, Pb (surface soil)
FL213-B10	Former Enterprise rental car washing activities, boat and auto storage	7	X	X	X	X	X	--

Notes:

¹ One sample from this boring also analyzed for hexavalent chromium

"X" = Sample Analyzed; PHCs = Petroleum Hydrocarbons

"—" = not analyzed; RCRA = Resource Conservation and Recovery Act

6.0 Findings

6.1 Subsurface Observations and Field Screening

Ten borings were advanced to depths of approximately 7 to 20 feet bgs. Soil samples were collected from each exploration for field screening and possible chemical analysis. Field screening results are shown in the boring logs in Appendix A.

Soil conditions observed consisted of fine to coarse sand with silt and gravel to the total depths explored (20 feet bgs). Field screening evidence of petroleum hydrocarbons (slight sheens) were observed in soil samples from borings FL211-B3 (0.5-1-foot bgs), FL211-B4 (2-3 feet bgs), FL210-B6 (2-2.5 feet bgs), FL211-B7 (1-3 and 6.5-7 feet bgs), and FL213-B9 (0.5-1, 2-3 and 4-5 feet bgs). Groundwater was not encountered during drilling of the borings.

6.2 Analytical Testing Results

Thirty-eight soil samples from the Phase II ESA explorations were submitted for chemical analysis of one or more of the following: gasoline-, diesel- and lube oil-range petroleum hydrocarbons, VOCs, PAHs, and total metals. One sample was additionally analyzed for hexavalent chromium. Analytical results are summarized in Table 1.

6.2.1 Petroleum Hydrocarbons

Lube oil-range petroleum hydrocarbons were detected in two of 38 samples analyzed from ten borings at concentrations of 160 mg/kg (FL212-B2-2-3) and 690 mg/kg (FL210-B6-2-2.5). Both detected concentrations of lube oil are less than the MTCA Method A cleanup level of 2,000 mg/kg for unrestricted land use.

Diesel- and gasoline-range petroleum hydrocarbons were not detected in the soil samples analyzed.

6.2.2 VOCs

The VOC compounds ethylbenzene, xylenes and/or 1,2,4-trimethylbenzene were detected in three soil samples submitted for VOC analysis: FL212-B2-2-3, FL211-B5-5.5-6 and FL211-B5-11.5-12. The detected concentrations were below corresponding MTCA Method A cleanup levels.

Acetone and 1,2-butanone (MEK), common laboratory contaminants, were detected in one of the samples tested for VOCs (FL211-B7-2.5-3.5).

6.2.3 PAHs

Carcinogenic and noncarcinogenic PAHs typically associated with petroleum were detected in five soil samples submitted for chemical analysis: FL212-B1-2.5-3.5, FL212-B2-2-3, FL211-B5-11.5-12, FL210-B6-2-2.5 and FL213-B10-2-3. The detected concentration of cPAHs in sample FL211-B5-11.5-12 was greater than the corresponding MTCA cleanup level. This sample did not have a corresponding detection of petroleum hydrocarbons. cPAHs were not detected in the samples collected above and below FL211-B5-11.5-12. The source of cPAHs in this sample is unknown.

PAHs in the remaining samples either were non-detect or the detected concentrations were less than corresponding MTCA cleanup levels. Two soil samples (FL212-B2-2-3 and FL210-B6-2-2.5) where PAHs were detected at concentrations less than MTCA screening levels also had detectable lube oil-range hydrocarbons.

6.2.4 Metals

Metals, including arsenic and lead, either were not detected or the detected concentrations did not exceed the corresponding MTCA cleanup levels in the soil samples analyzed.

Arsenic was detected in eight of 10 surface soil samples (collected from 0-0.5 feet and 0.5-1-foot bgs) from borings FL212-B1, FL211-B3, FL211-B5, FL213-B8 and FL213-B9 at concentrations less than or equal to the MTCA screening level of 20 mg/kg. The arsenic concentrations in six of 10 surface soil samples were above the naturally occurring background concentrations for arsenic in Puget Sound (7 mg/kg).

Lead was detected in nine of 10 surface soil samples from borings FL212-B1, FL211-B3, FL211-B5, FL213-B8 and FL213-B9 at concentrations less than the MTCA screening level of 250 mg/kg. The lead concentrations in seven of 10 surface soil samples were above the naturally occurring background concentrations for arsenic in Puget Sound (24 mg/kg).

7.0 Conclusions and Recommendations

The purpose of the Phase II ESA was to evaluate the potential for RECs or other potential sources of contamination to affect the subject property, and/or to impact soil that may be encountered during Sound Transit construction activities at the property.

7.1 Potential On-site Sources

7.1.1 Site Reconnaissance Observations

A March 2018 site reconnaissance and interview with the current property manager and owner Matt Puetz identified the following:

- **FL-210:** A variety of boat engine repair and maintenance service items and tools are stored in the Allison Marine garage (see photographs in Appendix A). The garage has two bays. Much of the concrete floor in this building was not visible because it was obscured by items stored on the floor; however, minor localized areas of oil staining (*de minimis*) were observed on the concrete floor. At least one 55-gallon drum containing used oil (with no secondary containment) was observed inside the garage. Floor drains were not observed. A storm drain is located outside of the south bay of the garage. In general, housekeeping practices for use and storage of automotive fluids appeared to be relatively good.
- **FL-210:** Midway Auto & Detail is a relatively new tenant in the office building. This building was previously used by Allison Marine. It did not appear as if Midway Auto & Detail had opened as of March 2018. The business owner was not present during our site reconnaissance and access to the building and northern adjacent storage awning were not provided by Mr. Puetz. Historical records included in the Phase I ESA show that the eastern half of this building is an office and the western half has a small “shop.” This building has no service-type garage bay doors.
- **FL-210:** A water tank apparently used for testing boat engines and a 55-gallon drum labeled “used oil filters only” were observed just east and outside of the boat engine repair garage. Minor staining of the asphalt pavement was observed adjacent to these items. Numerous gasoline containers, 5-gallon buckets and several 55-gallon drums with oil, or that formerly stored oil, were observed inside of a metal shed adjacent to the garage.
- **FL-211:** Much of the property is used for boat, auto and truck storage and a moderate quantity of accumulated solid waste, both non-boat related and auto-related, was observed. Unpaved areas of the property that were visible did not show evidence of oil leaks or spills on the ground surface. Asphalt-paved parking areas and driveways had minor staining (*de minimis*) from apparent boat or auto oil leaks. Ponded water from boat washing activities were observed in low areas of the ground surface.
- **FL-211:** Enterprise conducted car washing activities in the 2000s, according to Mr. Puetz. Car washing activities occurred under an open carport located in the southwest portion of FL-211 (Figure 2). Mr. Puetz indicated the washing area discharged to an oil/water separator at one time,

but the oil/water separator has since been removed. The carport remains on site and is currently used for storage. Based on review of available aerial photographs from the years corresponding to Enterprise car wash activities, the size of the carport area, and the lack of water service and distribution infrastructure visible in this area today, our interpretation is that the car washing activities were likely small-scale rather than commercial-scale, and likely did not generate or discharge significant quantities of wastewater.

- **FL-212:** A possible UST vent pipe was observed on the north side of the apartment building, near the northeast corner of the building (see Photograph 9, Figure A-16). Mr. Puetz indicated there were no USTs on the subject property to his knowledge.
- **FL-213:** A moderate quantity of accumulated solid waste, both non-boat related and auto-related, was observed. In general, housekeeping practices appeared to be relatively good.

Subject property buildings are connected to the sanitary sewer according to King County records. Existing underground sewer lines appear to be connected to the municipal sanitary sewer in 30th Avenue South. There are several stormwater catch basins on the subject property that appear to be connected to the municipal storm drain system in 30th Avenue South.

The site reconnaissance did not identify visual evidence of past or ongoing petroleum or hazardous substances releases (other than *de minimis* minor staining) to the ground surface or inside the boat engine repair garage. Except for the possible UST vent pipe mentioned above, no other surface features indicative of possible USTs were identified during the March 2018 site reconnaissance.

7.1.2 Field Explorations, Sampling and Chemical Analytical Testing

Ten Phase II ESA exploration locations were selected to evaluate potential Tacoma Smelter Plume impacts, potential on-site sources of contamination related to current and past operations, and possible impacts from the northern and southern adjacent properties. A total of 38 soil samples were submitted for chemical analysis and the results are presented in Table 1. Groundwater is estimated to be deeper than 70 feet in the site vicinity (see Section 3.1.2).

Chemical analytical results for soil samples obtained from the Phase II ESA borings identified the following:

- Lube oil-range petroleum hydrocarbons were detected in two of 38 samples analyzed from ten borings; detected concentrations were 160 mg/kg (FL212-B2-2-3) and 690 mg/kg (FL210-B6-2-2.5). Both detected concentrations of lube oil are less than the MTCA Method A cleanup level of 2,000 mg/kg for unrestricted land use. Diesel- and gasoline-range petroleum hydrocarbons were not detected in the soil samples analyzed.
- Low-level concentrations of VOCs ethylbenzene, xylenes and/or 1,2,4-trimethylbenzene were detected in three soil samples submitted for VOC analysis: FL212-B2-2-3, FL211-B5-5.5-6 and FL211-B5-11.5-12. The detected concentrations were significantly below corresponding MTCA screening levels. Low concentrations of acetone and 1,2-butanone (MEK) detected in one of the samples (FL211-B7-2.5-3.5) are assumed to be laboratory-related.

- Carcinogenic and noncarcinogenic PAH compounds were detected in the following five soil samples, four of which are shallow samples above 3 feet bgs, and one was a sample at 11.5 feet bgs: FL212-B1-2.5-3.5 and FL212-B2-2-3 (lube oil and VOCs also detected in these two samples), FL211-B5-11.5-12 (low-level VOCs also detected), FL210-B6-2-2.5 (lube oil also detected) and FL213-B10-2-3. The detected concentration of cPAHs in only one sample, the deeper sample FL211-B5-11.5-12, was greater than the corresponding MTCA Method A cleanup level. Detected concentrations of cPAHs and noncarcinogenic PAHs in the remaining samples were significantly less than MTCA screening levels. cPAHs can be associated with heavy-end petroleum products but petroleum hydrocarbons were not detected in this sample. The detection of cPAHs in sample FL211-B5-11.5-12 (0.25 mg/kg) was isolated from the standpoint of vertical delineation: cPAHs were not detected in the soil samples collected above and below sample FL211-B5-11.5-12. The source of cPAHs in the 11.5-12 foot sample is not apparent, but available data do not indicate the detection resulted from a subsurface release of a petroleum-type product.
- Metals, including arsenic and lead, either were not detected or the detected concentrations were less than or equal to the corresponding MTCA cleanup levels in the soil samples analyzed.

In our opinion, the chemical analytical results for soil sample FL211-B5-11.5-12, where the concentration of cPAHs detected was greater than the MTCA Method A cleanup level, does not represent a reportable release under MTCA because the results do not conclusively identify a threat or potential threat to human health or the environment. This opinion is based on the following: available data do not indicate the detection resulted from a subsurface release of a petroleum-type product (which would be the most likely source given the site history), the majority of the site is capped with pavement, and the sample with cPAHs detected at a concentration exceeding the cleanup level (FL211-B5-11.5-12) was isolated from a delineation standpoint.

7.2 Tacoma Smelter Plume (TSP)

Tacoma Smelter Plume impacts were evaluated through analysis of arsenic and lead in surface soil samples collected from 0-0.5 feet and 0.5-1-foot bgs. Arsenic was detected in eight of 10 surface soil samples (collected from 0-0.5 feet and 0.5-1-foot bgs) from borings FL212-B1, FL211-B3, FL211-B5, FL213-B8 and FL213-B9 at concentrations less than or equal to the MTCA screening level of 20 mg/kg. The arsenic concentrations in six of 10 surface soil samples were above the naturally occurring background concentrations for arsenic in Puget Sound (7 mg/kg).

Lead was detected in nine of 10 surface soil samples from borings FL212-B1, FL211-B3, FL211-B5, FL213-B8 and FL213-B9 at concentrations less than the MTCA screening level of 250 mg/kg. The lead concentrations in seven of 10 surface soil samples were above the naturally occurring background concentrations for arsenic in Puget Sound (24 mg/kg).

Based on these results, no MTCA cleanup action would be required on this parcel with regard to TSP impacts.

7.3 Potential Off-site Sources

Soil explorations FL212-B1, FL212-B2 and FL211-B4 were also used to evaluate potential impacts from off-site sources. Based on results of soil samples tested from these borings, we conclude that significant impacts from the northern-adjacent former Southgate Oil property and southwest adjacent historic service station were not apparent.

7.4 Sound Transit Acquisition and Future Construction Recommendations

Based on current design information for the FWLE alignment (HDR, provided in March 2018), Sound Transit plans to acquire all of FL-210, FL-211, FL-212, FL-213 in fee (“full take”), and building impacts are anticipated. Sound Transit’s proposed construction and development on the property includes a stormwater vault, a traction power substation, columns with elevated tracks, and new roadways, parking, sidewalks and utilities (Figure 3). Proposed construction and development activities by Sound Transit could change as project design is refined.

For the purposes of Sound Transit’s acquisition, a remediation cost estimate is not necessary.

Best management practices related to on-site storage of small quantities of oil and petroleum products at the subject property should be implemented to minimize the potential for a future release that could affect the ground, or the municipal storm drain system.

A construction cost estimate will be necessary for FL-210, FL-211, FL-212 and FL-213 because the findings of the Phase II ESA identified impacted soil at five of the 10 Phase II ESA exploration locations and the soil sample with cPAHs detected at a concentration greater than the MTCA Method A cleanup level was at FL211-B5, which is located near the proposed Sound Transit stormwater vault (Figure 3).

Sound Transit or their contractors should verify the presence/absence of a suspect UST at the apartment building. If a UST is confirmed, it should be removed before or during Sound Transit construction activities in accordance with the project specifications and applicable regulations. We recommend contaminated and impacted soil screening and handling plans be prepared prior to construction activities that outlines soil segregation, handling, stockpiling and end use/disposal with potential follow-up chemical analytical testing for waste disposal characterization as needed. Ecology’s “Guidance for Remediation of Petroleum-Contaminated Soil” should be used as a guidance document for end use options for petroleum-related soil impacts.

The table below summarizes the Phase II ESA findings relative to Sound Transit’s proposed acquisition and future construction.

Potential Sources of Contamination Identified Nearby	Potential Source Within Acquisition Area	Potential Source Within Construction Area	Impacted Soil Present	Contaminated Soil Present	Remedial Cost Estimate Necessary for Acquisition	Remedial Cost Estimate Necessary for Construction
On-Site: Former site uses, current boat and auto repair and storage	Yes	Yes	Yes	Yes, however, based on the distribution and concentration of contaminants identified during this study ¹ , it is our opinion that the results from FL211-B5-11.5-12 do not represent a reportable release under MTCA.	No	Yes
Off-Site: Adjacent property uses	No	No	No	No	No	No
Areawide: Tacoma Smelter Plume	Yes	Yes	Yes	No	No	No

Note:

¹ Only one soil sample from one Phase II ESA boring had a contaminant detection greater than MTCA Method A cleanup levels: cPAHs in the soil sample from FL211-B5 at 11.5-12 feet bgs.

8.0 Limitations and Guidelines for Use

These Limitations provide information to help you manage your risks with respect to the use of this report. Some clients, design professionals and contractors may not recognize that the geoscience practices (geotechnical engineering, geology and environmental science) are far less exact than other engineering and natural science disciplines. This lack of understanding can create unrealistic expectations that could lead to disappointments, claims and disputes. GeoEngineers includes these explanatory “limitations” provisions in our reports to help reduce such risks. Please confer with GeoEngineers if you are unclear how these “Limitations and Guidelines for Use” apply to your project or site.

This Phase II ESA has been prepared, in general accordance with the scope and limitations of the subcontract between HDR and GeoEngineers dated August 24, 2012, along with Amendments 1 through 12 and Agreement No. RTA/AE 044-12 between HDR and Sound Transit.

This report has been prepared for the exclusive use of Sound Transit and their agents. This report is not intended for use by others, and the information contained herein is not applicable to other properties. No other party may rely on the product of our services unless we agree in advance to such reliance in writing. This is to provide our firm with reasonable protection against open-ended liability claims by third parties with whom there would otherwise be no contractual limits to their actions. Within the limitations of scope, schedule and budget, our services have been executed in accordance with our Agreement with the Client and generally accepted environmental practices in this area at the time this report was prepared.

Within the limitations of scope, schedule and budget, our services have been executed in accordance with generally accepted environmental science practices in this area at the time this report was prepared. The conclusions and opinions presented in this report are based on our professional knowledge, judgment and experience. No warranty, express or implied, applies to this report.

Any electronic form, facsimile or hard copy of the original document (email, text, table and/or figure), if provided, and any attachments should be considered a copy of the original document. The original document is stored by GeoEngineers, Inc. and will serve as the official document of record.

Please refer to the appendix titled “Report Limitations and Guidelines for Use” for additional information pertaining to use of this report.

9.0 References

- GeoEngineers, Inc. January 2017. Federal Way Link Extension, AE 0044-12 3.1.L, Geotechnical Recommendations Report.
- GeoEngineers, Inc. March 2017. Federal Way Link Extension, AE 0044-12 WP 3.S, Phase I Environmental Site Assessment FL-210, FL-211, FL-212, FL-213, Tax Parcels 2500600481, 2500600486, 2500600485, and 2500600490.
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- Washington State Department of Ecology. 2015. "Soil – Method B and Groundwater Protection (unrestricted land use)". Cleanup Levels and Risk Calculation (CLARC). Department of Ecology. Web. Accessed June 20, 2017. <https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx>

Table 1

Summary of Soil Chemical Analytical Results¹
 Sound Transit - Federal Way Link Extension FL-210, FL-211, FL-212 and FL-213
 Federal Way, Washington

Boring Identification	FL212-B1						FL212-B2			MTCA Screening Level ¹¹	Naturally Occurring Background Metals in Puget Sound Soils ¹⁵
Sample Identification ²	FL212-B1-0-5	FL212-B1-0.5-1	FL212-B1-2.5-3.5	FL212-B1-5-6	FL212-B1-9-10	FL212-B1-19-20	FL212-B2-2-3	FL212-B2-5.5-6.5	FL212-B2-9-10		
Sample Date	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018		
Sample Start Depth (feet bgs)	0.0	0.5	2.5	5.0	9.0	19	2.0	5.5	9.0		
Sample End Depth (feet bgs)	0.5	1.0	3.5	6.0	10	20	3.0	6.5	10		
NWTPH-HCID ³ (mg/kg)											
Gasoline-range hydrocarbons	--	--	24 U	22 U	21 U	22 U	24 U	24 U	22 U	30/100 ¹²	N/A
Diesel-range hydrocarbons	--	--	59 U	54 U	52 U	56 U	59 U	59 U	54 U	2,000	
Lube Oil-range Hydrocarbons	--	--	120 U	110 U	110 U	110 U	Detected	120 U	110 U	2,000	
NWTPH-Dx ⁴ (mg/kg)											
Diesel-range hydrocarbons	--	--	--	--	--	--	30 U	--	--	2,000	N/A
Lube Oil-range Hydrocarbons	--	--	--	--	--	--	160	--	--	2,000	
Metals ⁵ (mg/kg)											
Arsenic	6.0	10	5.9 U	5.4 U	5.2 U	--	5.9 U	5.9 U	--	20	7
Barium	--	--	60	44	43	--	160	64	--	16,000	NE
Cadmium	--	--	0.59 U	0.54 U	0.52 U	--	0.59 U	0.59 U	--	2	1
Chromium	--	--	41	30	14	--	37	52	--	2,000 ¹³	48
Chromium, Hexavalent	--	--	--	--	--	--	--	--	--	19	NE
Lead	73	59	5.9	5.4 U	5.2 U	--	5.9 U	5.9 U	--	250	24
Mercury	--	--	0.29 U	0.27 U	0.26 U	--	0.30 U	0.30 U	--	2	0.07
Selenium	--	--	12 U	11 U	10 U	--	12 U	12 U	--	400	NE
Silver	--	--	1.2 U	1.1 U	1.0 U	--	1.2 U	1.2 U	--	400	NE
VOCs ⁶ (mg/kg)											
1,1,1,2-Tetrachloroethane	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	38.5	N/A
1,1,1-Trichloroethane	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	2	
1,1,2,2-Tetrachloroethane	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	5	
1,1,2-Trichloroethane	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	17.5	
1,1-Dichloroethane	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	175	
1,1-Dichloroethene	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	4,000	
1,1-Dichloropropene	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	NE	
1,2,3-Trichlorobenzene	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	NE	
1,2,3-Trichloropropane	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	0.0333	
1,2,4-Trichlorobenzene	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	34.5	
1,2,4-Trimethylbenzene	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	NE	
1,2-Dibromo-3-Chloropropane	--	--	0.0050 U	0.0041 U	0.0045 U	0.0044 U	0.0049 U	0.0047 U	0.0045 U	1.25	
1,2-Dibromoethane	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	0.005	
1,2-Dichlorobenzene (o-Dichlorobenzene)	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	7,200	
1,2-Dichloroethane	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	11	
1,2-Dichloropropane	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	27.8	
1,3,5-Trimethylbenzene	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	800	

Boring Identification	FL212-B1						FL212-B2			MTCA Screening Level ¹¹	Naturally Occurring Background Metals in Puget Sound Soils ¹⁵
Sample Identification ²	FL212-B1-0-5	FL212-B1-0.5-1	FL212-B1-2.5-3.5	FL212-B1-5-6	FL212-B1-9-10	FL212-B1-19-20	FL212-B2-2-3	FL212-B2-5.5-6.5	FL212-B2-9-10		
Sample Date	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018		
Sample Start Depth (feet bgs)	0.0	0.5	2.5	5.0	9.0	19	2.0	5.5	9.0		
Sample End Depth (feet bgs)	0.5	1.0	3.5	6.0	10	20	3.0	6.5	10		
1,3-Dichlorobenzene (m-Dichlorobenzene)	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	NE	N/A
1,3-Dichloropropane	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	NE	
1,4-Dichlorobenzene (p-Dichlorobenzene)	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	185	
2,2-Dichloropropane	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	NE	
2-Butanone (MEK)	--	--	0.0050 U	0.0041 U	0.0045 U	0.0044 U	0.0049 U	0.0047 U	0.0045 U	48,000	
2-Chloroethyl vinyl ether	--	--	0.0069 U	0.0057 U	0.0062 U	0.0061 U	0.0067 U	0.0065 U	0.0062 U	NE	
2-Chlorotoluene	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	1,600	
2-Hexanone	--	--	0.0050 U	0.0041 U	0.0045 U	0.0044 U	0.0049 U	0.0047 U	0.0045 U	NE	
4-Chlorotoluene	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	NE	
4-Methyl-2-Pentanone (Methyl isobutyl ketone)	--	--	0.0050 U	0.0041 U	0.0045 U	0.0044 U	0.0049 U	0.0047 U	0.0045 U	6,400	
Acetone ⁷	--	--	0.0064 U	0.0053 U	0.0057 U	0.0056 U	0.0062 U	0.0060 U	0.0058 U	72,000	
Benzene	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	0.03	
Bromobenzene	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	NE	
Bromochloromethane	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	NE	
Bromodichloromethane	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	16.1	
Bromoform (Tribromomethane)	--	--	0.0050 U	0.0041 U	0.0045 U	0.0044 U	0.0049 U	0.0047 U	0.0045 U	127	
Bromomethane	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	112	
Carbon Disulfide	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	8,000	
Carbon Tetrachloride	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	14.3	
Chlorobenzene	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	1,600	
Chloroethane	--	--	0.0050 U	0.0041 U	0.0045 U	0.0044 U	0.0049 U	0.0047 U	0.0045 U	NE	
Chloroform	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	32.3	
Chloromethane	--	--	0.0050 U	0.0041 U	0.0045 U	0.0044 U	0.0049 U	0.0047 U	0.0045 U	NE	
cis-1,2-Dichloroethene	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	160	
cis-1,3-Dichloropropene	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	NE	
Dibromochloromethane	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	11.9	
Dibromomethane	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	800	
Dichlorodifluoromethane (CFC-12)	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	16,000	
Ethylbenzene	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.0011	0.00094 U	0.00091 U	6	
Hexachlorobutadiene	--	--	0.0050 U	0.0041 U	0.0045 U	0.0044 U	0.0049 U	0.0047 U	0.0045 U	12.8	
Isopropylbenzene (Cumene)	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	8,000	
Methyl Iodide (Iodomethane)	--	--	0.0050 U	0.0041 U	0.0045 U	0.0044 U	0.0049 U	0.0047 U	0.0045 U	NE	
Methyl t-butyl ether	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	0.1	
Methylene Chloride	--	--	0.0050 U	0.0041 U	0.0045 U	0.0044 U	0.0049 U	0.0047 U	0.0045 U	0.02	
Naphthalene	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	5	
n-Butylbenzene	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	4,000	
n-Propylbenzene	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	8,000	
p-Isopropyltoluene	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	NE	
Sec-Butylbenzene	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	8,000	
Styrene	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	16,000	
Tert-Butylbenzene	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	8,000	
Tetrachloroethene	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	0.05	

Boring Identification	FL212-B1						FL212-B2			MTCA Screening Level ¹¹	Naturally Occurring Background Metals in Puget Sound Soils ¹⁵
Sample Identification ²	FL212-B1-0-.5	FL212-B1-0.5-1	FL212-B1-2.5-3.5	FL212-B1-5-6	FL212-B1-9-10	FL212-B1-19-20	FL212-B2-2-3	FL212-B2-5.5-6.5	FL212-B2-9-10		
Sample Date	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018		
Sample Start Depth (feet bgs)	0.0	0.5	2.5	5.0	9.0	19	2.0	5.5	9.0		
Sample End Depth (feet bgs)	0.5	1.0	3.5	6.0	10	20	3.0	6.5	10		
Toluene	--	--	0.0050 U	0.0041 U	0.0045 U	0.0044 U	0.0049 U	0.0047 U	0.0045 U	7	N/A
Trans-1,2-Dichloroethene	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	1,600	
Trans-1,3-Dichloropropene	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	NE	
Trichloroethene	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	0.03	
Trichlorofluoromethane (CFC-11)	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	24,000	
Vinyl Acetate	--	--	0.0050 U	0.0041 U	0.0045 U	0.0044 U	0.0049 U	0.0047 U	0.0045 U	80,000	
Vinyl Chloride	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.00097 U	0.00094 U	0.00091 U	240	
Xylene, m-,p-	--	--	0.0050 U	0.0041 U	0.0045 U	0.0044 U	0.0056	0.0047 U	0.0045 U	9	
Xylene, o-	--	--	0.0010 U	0.00083 U	0.00089 U	0.00088 U	0.0027	0.00094 U	0.00091 U		
Total Xylenes ⁸	--	--	0.0050 U	0.0041 U	0.0045 U	0.0044 U	0.0083	0.0047 U	0.0045 U		
PAHs ⁹ (mg/kg)											
1-Methylnaphthalene	--	--	0.0078 U	0.0072 U	--	--	0.0079 U	0.0079 U	--	5	N/A
2-Methylnaphthalene	--	--	0.0078 U	0.0072 U	--	--	0.0079 U	0.0079 U	--		
Naphthalene	--	--	0.0078 U	0.0072 U	--	--	0.0079 U	0.0079 U	--		
Total Naphthalenes ¹⁰	--	--	0.0078 U	0.0072 U	--	--	0.0079 U	0.0079 U	--		
Acenaphthene	--	--	0.0078 U	0.0072 U	--	--	0.0079 U	0.0079 U	--	4,800	
Acenaphthylene	--	--	0.0078 U	0.0072 U	--	--	0.0079 U	0.0079 U	--	NE	
Anthracene	--	--	0.0078 U	0.0072 U	--	--	0.0079 U	0.0079 U	--	24,000	
Benzo(a)anthracene	--	--	0.0078 U	0.0072 U	--	--	0.0079 U	0.0079 U	--	See cPAHs	
Benzo(a)pyrene	--	--	0.0078 U	0.0072 U	--	--	0.0079 U	0.0079 U	--	See cPAHs	
Benzo(b)fluoranthene	--	--	0.0078 U	0.0072 U	--	--	0.0079 U	0.0079 U	--	See cPAHs	
Benzo(g,h,i)perylene	--	--	0.0096	0.0072 U	--	--	0.0079 U	0.0079 U	--	NE	
Benzo(j,k)fluoranthene	--	--	0.0078 U	0.0072 U	--	--	0.0079 U	0.0079 U	--	See cPAHs	
Chrysene	--	--	0.016	0.0072 U	--	--	0.0081	0.0079 U	--	See cPAHs	
Dibenzo(a,h)anthracene	--	--	0.0078 U	0.0072 U	--	--	0.0079 U	0.0079 U	--	See cPAHs	
Fluoranthene	--	--	0.0078 U	0.0072 U	--	--	0.0079 U	0.0079 U	--	3,200	
Fluorene	--	--	0.0078 U	0.0072 U	--	--	0.0079 U	0.0079 U	--	3,200	
Indeno(1,2,3-c,d)pyrene	--	--	0.0078 U	0.0072 U	--	--	0.0079 U	0.0079 U	--	See cPAHs	
Phenanthrene	--	--	0.0093	0.0072 U	--	--	0.0079 U	0.0079 U	--	NE	
Pyrene	--	--	0.0078 U	0.0072 U	--	--	0.0079 U	0.0079 U	--	2,400	
cPAHs (benzo(a)pyrene toxicity equivalent concentration) ¹⁴	--	--	0.006	0.0054 U	--	--	0.006	0.006 U	--	0.1	

Table 1
Summary of Soil Chemical Analytical Results¹
Sound Transit - Federal Way Link Extension FL-210, FL-211, FL-212 and FL-213
Federal Way, Washington

Boring Identification		FL211-B3				FL211-B4		FL211-B5					MTCA Screening Level ¹¹	Naturally Occurring Background Metals in Puget Sound Soils ¹⁵
Sample Identification ²	FL211-B3-0-0.5	FL211-B3-0.5-1	FL211-B3-3-4	FL211-B3-6-7	FL211-B4-2-3	FL211-B4-5-6	FL211-B5-0-0.5	FL211-B5-0.5-1	FL211-B5-3.5-4	FL211-B5-5.5-6	FL211-B5-11.5-12			
Sample Date	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018			
Sample Start Depth (feet bgs)	0.0	0.5	3.0	6.0	2.0	5.0	0.0	0.5	3.5	5.5	11.5			
Sample End Depth (feet bgs)	0.5	1.0	4.0	7.0	3.0	6.0	0.5	1.0	4.0	6.0	12			
NWTPH-HCID ³ (mg/kg)														
Gasoline-range hydrocarbons	–	–	23 U	23 U	24 U	25 U	–	–	25 U	23 U	23 U	30/100 ¹²	N/A	
Diesel-range hydrocarbons	–	–	58 U	56 U	60 U	62 U	–	–	63 U	56 U	56 U	2,000		
Lube Oil-range Hydrocarbons	–	–	120 U	110 U	120 U	120 U	–	–	130 U	110 U	110 U	2,000		
NWTPH-Dx ⁴ (mg/kg)														
Diesel-range hydrocarbons	–	–	–	–	–	–	–	–	–	–	–	2,000	N/A	
Lube Oil-range Hydrocarbons	–	–	–	–	–	–	–	–	–	–	–	2,000		
Metals ⁵ (mg/kg)														
Arsenic	16	15	5.7 U	5.6 U	6.0 U	13	5.3 U	9.8	12	5.6 U	5.6 U	20	7	
Barium	–	–	66	69	89	140	–	–	130	59	71	16,000	NE	
Cadmium	–	–	0.57 U	0.56 U	0.60 U	0.62 U	–	–	0.63 U	0.56 U	0.56 U	2	1	
Chromium	–	–	37	37	34	36	–	–	40	30	43	2,000 ¹³	48	
Chromium, Hexavalent	–	–	–	–	–	–	–	–	–	–	–	19	NE	
Lead	89	72	5.7 U	5.6 U	6.0 U	70	31	18	54	5.6 U	5.6 U	250	24	
Mercury	–	–	0.29 U	0.28 U	0.30 U	0.31 U	–	–	0.31 U	0.28 U	0.28 U	2	0.07	
Selenium	–	–	11 U	11 U	12 U	12 U	–	–	13 U	11 U	11 U	400	NE	
Silver	–	–	1.1 U	1.1 U	1.2 U	1.2 U	–	–	1.3 U	1.1 U	1.1 U	400	NE	
VOCs ⁶ (mg/kg)														
1,1,1,2-Tetrachloroethane	–	–	0.0010 U	0.00092 U	0.0015 U	0.00080 U	–	–	0.0012 U	0.00088 U	0.00096 U	38.5	N/A	
1,1,1-Trichloroethane	–	–	0.0010 U	0.00092 U	0.0015 U	0.00080 U	–	–	0.0012 U	0.00088 U	0.00096 U	2		
1,1,2,2-Tetrachloroethane	–	–	0.0010 U	0.00092 U	0.0015 U	0.00080 U	–	–	0.0012 U	0.00088 U	0.00096 U	5		
1,1,2-Trichloroethane	–	–	0.0010 U	0.00092 U	0.0015 U	0.00080 U	–	–	0.0012 U	0.00088 U	0.00096 U	17.5		
1,1-Dichloroethane	–	–	0.0010 U	0.00092 U	0.0015 U	0.00080 U	–	–	0.0012 U	0.00088 U	0.00096 U	175		
1,1-Dichloroethene	–	–	0.0010 U	0.00092 U	0.0015 U	0.00080 U	–	–	0.0012 U	0.00088 U	0.00096 U	4,000		
1,1-Dichloropropene	–	–	0.0010 U	0.00092 U	0.0015 U	0.00080 U	–	–	0.0012 U	0.00088 U	0.00096 U	NE		
1,2,3-Trichlorobenzene	–	–	0.0010 U	0.00092 U	0.0015 U	0.00080 U	–	–	0.0012 U	0.00088 U	0.00096 U	NE		
1,2,3-Trichloropropane	–	–	0.0010 U	0.00092 U	0.0015 U	0.00080 U	–	–	0.0012 U	0.00088 U	0.00096 U	0.0333		
1,2,4-Trichlorobenzene	–	–	0.0010 U	0.00092 U	0.0015 U	0.00080 U	–	–	0.0012 U	0.00088 U	0.00096 U	34.5		
1,2,4-Trimethylbenzene	–	–	0.0010 U	0.00092 U	0.0015 U	0.00080 U	–	–	0.0012 U	0.00088 U	0.0013	NE		
1,2-Dibromo-3-Chloropropane	–	–	0.0052 U	0.0046 U	0.0075 U	0.0040 U	–	–	0.0060 U	0.0044 U	0.0048 U	1.25		
1,2-Dibromoethane	–	–	0.0010 U	0.00092 U	0.0015 U	0.00080 U	–	–	0.0012 U	0.00088 U	0.00096 U	0.005		
1,2-Dichlorobenzene (o-Dichlorobenzene)	–	–	0.0010 U	0.00092 U	0.0015 U	0.00080 U	–	–	0.0012 U	0.00088 U	0.00096 U	7,200		
1,2-Dichloroethane	–	–	0.0010 U	0.00092 U	0.0015 U	0.00080 U	–	–	0.0012 U	0.00088 U	0.00096 U	11		
1,2-Dichloropropane	–	–	0.0010 U	0.00092 U	0.0015 U	0.00080 U	–	–	0.0012 U	0.00088 U	0.00096 U	27.8		
1,3,5-Trimethylbenzene	–	–	0.0010 U	0.00092 U	0.0015 U	0.00080 U	–	–	0.0012 U	0.00088 U	0.00096 U	800		

Boring Identification	FL211-B3				FL211-B4		FL211-B5					MTCA Screening Level ¹¹	Naturally Occurring Background Metals in Puget Sound Soils ¹⁵
Sample Identification ²	FL211-B3-0-0.5	FL211-B3-0.5-1	FL211-B3-3-4	FL211-B3-6-7	FL211-B4-2-3	FL211-B4-5-6	FL211-B5-0-0.5	FL211-B5-0.5-1	FL211-B5-3.5-4	FL211-B5-5.5-6	FL211-B5-11.5-12		
Sample Date	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018		
Sample Start Depth (feet bgs)	0.0	0.5	3.0	6.0	2.0	5.0	0.0	0.5	3.5	5.5	11.5		
Sample End Depth (feet bgs)	0.5	1.0	4.0	7.0	3.0	6.0	0.5	1.0	4.0	6.0	12		
1,3-Dichlorobenzene (m-Dichlorobenzene)	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	NE	N/A
1,3-Dichloropropane	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	NE	
1,4-Dichlorobenzene (p-Dichlorobenzene)	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	185	
2,2-Dichloropropane	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	NE	
2-Butanone (MEK)	--	--	0.0052 U	0.0046 U	0.0075 U	0.0040 U	--	--	0.0060 U	0.0044 U	0.0048 U	48,000	
2-Chloroethyl vinyl ether	--	--	0.0072 U	0.0064 U	0.010 U	0.0055 U	--	--	0.0060 U	0.0044 U	0.0048 U	NE	
2-Chlorotoluene	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	1,600	
2-Hexanone	--	--	0.0052 U	0.0046 U	0.0075 U	0.0040 U	--	--	0.0060 U	0.0044 U	0.0048 U	NE	
4-Chlorotoluene	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	NE	
4-Methyl-2-Pentanone (Methyl isobutyl ketone)	--	--	0.0052 U	0.0046 U	0.0075 U	0.0040 U	--	--	0.0060 U	0.0044 U	0.0048 U	6,400	
Acetone ⁷	--	--	0.0067 U	0.0059 U	0.0096 U	0.0051 U	--	--	0.0060 U	0.0044 U	0.0048 U	72,000	
Benzene	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	0.03	
Bromobenzene	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	NE	
Bromochloromethane	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	NE	
Bromodichloromethane	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	16.1	
Bromoform (Tribromomethane)	--	--	0.0052 U	0.0046 U	0.0075 U	0.0040 U	--	--	0.0060 U	0.0044 U	0.0048 U	127	
Bromomethane	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	112	
Carbon Disulfide	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0017 U	0.0012 U	0.0013 U	8,000	
Carbon Tetrachloride	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	14.3	
Chlorobenzene	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	1,600	
Chloroethane	--	--	0.0052 U	0.0046 U	0.0075 U	0.0040 U	--	--	0.0060 U	0.0044 U	0.0048 U	NE	
Chloroform	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	32.3	
Chloromethane	--	--	0.0052 U	0.0046 U	0.0075 U	0.0040 U	--	--	0.0060 U	0.0044 U	0.0048 U	NE	
cis-1,2-Dichloroethene	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	160	
cis-1,3-Dichloropropene	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	NE	
Dibromochloromethane	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	11.9	
Dibromomethane	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	800	
Dichlorodifluoromethane (CFC-12)	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	16,000	
Ethylbenzene	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.0017	0.048	6	
Hexachlorobutadiene	--	--	0.0052 U	0.0046 U	0.0075 U	0.0040 U	--	--	0.0060 U	0.0044 U	0.0048 U	12.8	
Isopropylbenzene (Cumene)	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	8,000	
Methyl Iodide (Iodomethane)	--	--	0.0052 U	0.0046 U	0.0075 U	0.0040 U	--	--	0.0086 U	0.0064 U	0.0069 U	NE	
Methyl t-butyl ether	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	0.1	
Methylene Chloride	--	--	0.0052 U	0.0046 U	0.0075 U	0.0040 U	--	--	0.0060 U	0.0044 U	0.0048 U	0.02	
Naphthalene	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	5	
n-Butylbenzene	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	4,000	
n-Propylbenzene	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	8,000	
p-Isopropyltoluene	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	NE	
Sec-Butylbenzene	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	8,000	
Styrene	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	16,000	
Tert-Butylbenzene	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	8,000	
Tetrachloroethene	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	0.05	

Boring Identification	FL211-B3				FL211-B4		FL211-B5					MTCA Screening Level ¹¹	Naturally Occurring Background Metals in Puget Sound Soils ¹⁵
Sample Identification ²	FL211-B3-0-0.5	FL211-B3-0.5-1	FL211-B3-3-4	FL211-B3-6-7	FL211-B4-2-3	FL211-B4-5-6	FL211-B5-0-0.5	FL211-B5-0.5-1	FL211-B5-3.5-4	FL211-B5-5.5-6	FL211-B5-11.5-12		
Sample Date	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018		
Sample Start Depth (feet bgs)	0.0	0.5	3.0	6.0	2.0	5.0	0.0	0.5	3.5	5.5	11.5		
Sample End Depth (feet bgs)	0.5	1.0	4.0	7.0	3.0	6.0	0.5	1.0	4.0	6.0	12		
Toluene	--	--	0.0052 U	0.0046 U	0.0075 U	0.0040 U	--	--	0.0060 U	0.0044 U	0.0048 U	7	N/A
Trans-1,2-Dichloroethene	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	1,600	
Trans-1,3-Dichloropropene	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	NE	
Trichloroethene	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	0.03	
Trichlorofluoromethane (CFC-11)	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	24,000	
Vinyl Acetate	--	--	0.0052 U	0.0046 U	0.0075 U	0.0040 U	--	--	0.0060 U	0.0044 U	0.0048 U	80,000	
Vinyl Chloride	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.00088 U	0.00096 U	240	
Xylene, m-,p-	--	--	0.0052 U	0.0046 U	0.0075 U	0.0040 U	--	--	0.0060 U	0.0068	0.24	9	
Xylene, o-	--	--	0.0010 U	0.00092 U	0.0015 U	0.00080 U	--	--	0.0012 U	0.0022	0.076		
Total Xylenes ⁸	--	--	0.0052 U	0.0046 U	0.0075 U	0.0040 U	--	--	0.0060 U	0.0090	0.316		
PAHs ⁹ (mg/kg)													
1-Methylnaphthalene	--	--	0.0077 U	0.0075 U	0.0080 U	0.0082 U	--	--	0.0084 U	0.0075 U	0.0075 U	5	N/A
2-Methylnaphthalene	--	--	0.0077 U	0.0075 U	0.0080 U	0.0082 U	--	--	0.0084 U	0.0075 U	0.0075 U		
Naphthalene	--	--	0.0077 U	0.0075 U	0.0080 U	0.0082 U	--	--	0.0084 U	0.0075 U	0.0075 U		
Total Naphthalenes ¹⁰	--	--	0.0077 U	0.0075 U	0.0080 U	0.0082 U	--	--	0.0084 U	0.0075 U	0.0075 U		
Acenaphthene	--	--	0.0077 U	0.0075 U	0.0080 U	0.0082 U	--	--	0.0084 U	0.0075 U	0.0075 U	4,800	
Acenaphthylene	--	--	0.0077 U	0.0075 U	0.0080 U	0.0082 U	--	--	0.0084 U	0.0075 U	0.0075 U	NE	
Anthracene	--	--	0.0077 U	0.0075 U	0.0080 U	0.0082 U	--	--	0.0084 U	0.0075 U	0.011	24,000	
Benzo(a)anthracene	--	--	0.0077 U	0.0075 U	0.0080 U	0.0082 U	--	--	0.0084 U	0.0075 U	0.12	See cPAHs	
Benzo(a)pyrene	--	--	0.0077 U	0.0075 U	0.0080 U	0.0082 U	--	--	0.0084 U	0.0075 U	0.18	See cPAHs	
Benzo(b)fluoranthene	--	--	0.0077 U	0.0075 U	0.0080 U	0.0082 U	--	--	0.0084 U	0.0075 U	0.25	See cPAHs	
Benzo(g,h,i)perylene	--	--	0.0077 U	0.0075 U	0.0080 U	0.0082 U	--	--	0.0084 U	0.0075 U	0.20	NE	
Benzo(j,k)fluoranthene	--	--	0.0077 U	0.0075 U	0.0080 U	0.0082 U	--	--	0.0084 U	0.0075 U	0.068	See cPAHs	
Chrysene	--	--	0.0077 U	0.0075 U	0.0080 U	0.0082 U	--	--	0.0084 U	0.0075 U	0.13	See cPAHs	
Dibenzo(a,h)anthracene	--	--	0.0077 U	0.0075 U	0.0080 U	0.0082 U	--	--	0.0084 U	0.0075 U	0.029	See cPAHs	
Fluoranthene	--	--	0.0077 U	0.0075 U	0.0080 U	0.0082 U	--	--	0.0084 U	0.0075 U	0.16	3,200	
Fluorene	--	--	0.0077 U	0.0075 U	0.0080 U	0.0082 U	--	--	0.0084 U	0.0075 U	0.0075 U	3,200	
Indeno(1,2,3-c,d)pyrene	--	--	0.0077 U	0.0075 U	0.0080 U	0.0082 U	--	--	0.0084 U	0.0075 U	0.22	See cPAHs	
Phenanthrene	--	--	0.0077 U	0.0075 U	0.0080 U	0.0082 U	--	--	0.0084 U	0.0075 U	0.033	NE	
Pyrene	--	--	0.0077 U	0.0075 U	0.0080 U	0.0082 U	--	--	0.0084 U	0.0075 U	0.16	2,400	
cPAHs (benzo(a)pyrene toxicity equivalent concentration) ¹⁴	--	--	0.0058 U	0.0057 U	0.006 U	0.0062 U	--	--	0.0063 U	0.0057 U	0.25	0.1	

Table 1

Summary of Soil Chemical Analytical Results¹
Sound Transit - Federal Way Link Extension FL-210, FL-211, FL-212 and FL-213
Federal Way, Washington

Boring Identification	FL211-B5	FL210-B6			FL211-B7				FL213-B8		MTCA Screening Level ¹¹	Naturally Occurring Background Metals in Puget Sound Soils ¹⁵
Sample Identification ²	FL211-B5-13-14	FL210-B6-2-2.5	FL210-B6-6-7	FL210-B6-9-10	FL211-B7-2.5-3.5	FL211-B7-5-6	FL211-B7-6.5-7	FL211-B7-10-11	FL213-B8-0-0.5	FL213-B8-0.5-1		
Sample Date	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018		
Sample Start Depth (feet bgs)	13	2.0	6.0	9.0	2.5	5.0	6.5	10	0.0	0.5		
Sample End Depth (feet bgs)	14	2.5	7.0	10	3.5	6.0	7.0	11	0.5	1.0		
NWTPH-HCID ³ (mg/kg)												
Gasoline-range hydrocarbons	–	24 U	22 U	21 U	24 U	25 U	23 U	22 U	–	–	30/100 ¹²	N/A
Diesel-range hydrocarbons	–	61 U	55 U	54 U	60 U	61 U	57 U	55 U	–	–	2,000	
Lube Oil-range Hydrocarbons	–	Detected	110 U	110 U	120 U	120 U	110 U	110 U	–	–	2,000	
NWTPH-Dx ⁴ (mg/kg)												
Diesel-range hydrocarbons	–	54 U	–	–	–	–	–	–	–	–	2,000	N/A
Lube Oil-range Hydrocarbons	–	690	–	–	–	–	–	–	–	–	2,000	
Metals ⁵ (mg/kg)												
Arsenic	–	6.2	5.5 U	5.4 U	20	6.1 U	5.7 U	–	6.2	5.8 U	20	7
Barium	–	110	56	46	160	130	84	–	–	–	16,000	NE
Cadmium	–	0.61 U	0.55 U	0.54 U	0.60 U	0.61 U	0.57 U	–	–	–	2	1
Chromium	–	42	44	40	48	55	34	–	–	–	2,000 ¹³	48
Chromium, Hexavalent	–	–	–	–	–	1.2 U	–	–	–	–	19	NE
Lead	–	7.6	5.5 U	5.4 U	15	6.1 U	21	–	23	5.8 U	250	24
Mercury	–	0.30 U	0.27 U	0.27 U	0.30 U	0.31 U	0.28 U	–	–	–	2	0.07
Selenium	–	12 U	11 U	11 U	12 U	12 U	11 U	–	–	–	400	NE
Silver	–	1.2 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	–	–	–	400	NE
VOCs ⁶ (mg/kg)												
1,1,1,2-Tetrachloroethane	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	38.5	N/A
1,1,1-Trichloroethane	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	2	
1,1,2,2-Tetrachloroethane	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	5	
1,1,2-Trichloroethane	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	17.5	
1,1-Dichloroethane	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	175	
1,1-Dichloroethene	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	4,000	
1,1-Dichloropropene	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	NE	
1,2,3-Trichlorobenzene	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	NE	
1,2,3-Trichloropropane	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	0.0333	
1,2,4-Trichlorobenzene	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	34.5	
1,2,4-Trimethylbenzene	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	NE	
1,2-Dibromo-3-Chloropropane	–	0.0055 U	0.0048 U	0.0047 U	0.0054 U	0.0055 U	0.0056 U	0.0047 U	–	–	1.25	
1,2-Dibromoethane	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	0.005	
1,2-Dichlorobenzene (o-Dichlorobenzene)	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	7,200	
1,2-Dichloroethane	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	11	
1,2-Dichloropropane	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	27.8	
1,3,5-Trimethylbenzene	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	800	

Boring Identification	FL211-B5	FL210-B6			FL211-B7				FL213-B8		MTCA Screening Level ¹¹	Naturally Occurring Background Metals in Puget Sound Soils ¹⁵
Sample Identification ²	FL211-B5-13-14	FL210-B6-2-2.5	FL210-B6-6-7	FL210-B6-9-10	FL211-B7-2.5-3.5	FL211-B7-5-6	FL211-B7-6.5-7	FL211-B7-10-11	FL213-B8-0-0.5	FL213-B8-0.5-1		
Sample Date	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018		
Sample Start Depth (feet bgs)	13	2.0	6.0	9.0	2.5	5.0	6.5	10	0.0	0.5		
Sample End Depth (feet bgs)	14	2.5	7.0	10	3.5	6.0	7.0	11	0.5	1.0		
1,3-Dichlorobenzene (m-Dichlorobenzene)	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	NE	N/A
1,3-Dichloropropane	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	NE	
1,4-Dichlorobenzene (p-Dichlorobenzene)	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	185	
2,2-Dichloropropane	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	NE	
2-Butanone (MEK)	–	0.0055 U	0.0048 U	0.0047 U	0.0093	0.0055 U	0.0056 U	0.0047 U	–	–	48,000	
2-Chloroethyl vinyl ether	–	0.0055 U	0.0048 U	0.0047 U	0.0054 U	0.0055 U	0.0056 U	0.0047 U	–	–	NE	
2-Chlorotoluene	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	1,600	
2-Hexanone	–	0.0055 U	0.0048 U	0.0047 U	0.0054 U	0.0055 U	0.0056 U	0.0047 U	–	–	NE	
4-Chlorotoluene	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	NE	
4-Methyl-2-Pentanone (Methyl isobutyl ketone)	–	0.0055 U	0.0048 U	0.0047 U	0.0054 U	0.0055 U	0.0056 U	0.0047 U	–	–	6,400	
Acetone ⁷	–	0.0055 U	0.0048 U	0.0047 U	0.13	0.0055 U	0.0056 U	0.0047 U	–	–	72,000	
Benzene	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	0.03	
Bromobenzene	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	NE	
Bromochloromethane	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	NE	
Bromodichloromethane	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	16.1	
Bromoform (Tribromomethane)	–	0.0055 U	0.0048 U	0.0047 U	0.0054 U	0.0055 U	0.0056 U	0.0047 U	–	–	127	
Bromomethane	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	112	
Carbon Disulfide	–	0.0015 U	0.0013 U	0.0013 U	0.0015 U	0.0015 U	0.0016 U	0.0013 U	–	–	8,000	
Carbon Tetrachloride	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	14.3	
Chlorobenzene	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	1,600	
Chloroethane	–	0.0055 U	0.0048 U	0.0047 U	0.0054 U	0.0055 U	0.0056 U	0.0047 U	–	–	NE	
Chloroform	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	32.3	
Chloromethane	–	0.0055 U	0.0048 U	0.0047 U	0.0054 U	0.0055 U	0.0056 U	0.0047 U	–	–	NE	
cis-1,2-Dichloroethene	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	160	
cis-1,3-Dichloropropene	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	NE	
Dibromochloromethane	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	11.9	
Dibromomethane	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	800	
Dichlorodifluoromethane (CFC-12)	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	16,000	
Ethylbenzene	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	6	
Hexachlorobutadiene	–	0.0055 U	0.0048 U	0.0047 U	0.0054 U	0.0055 U	0.0056 U	0.0047 U	–	–	12.8	
Isopropylbenzene (Cumene)	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	8,000	
Methyl Iodide (Iodomethane)	–	0.0079 U	0.0069 U	0.0068 U	0.0078 U	0.0080 U	0.0081 U	0.0068 U	–	–	NE	
Methyl t-butyl ether	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	0.1	
Methylene Chloride	–	0.0055 U	0.0048 U	0.0047 U	0.0054 U	0.0055 U	0.0056 U	0.0047 U	–	–	0.02	
Naphthalene	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	5	
n-Butylbenzene	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	4,000	
n-Propylbenzene	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	8,000	
p-Isopropyltoluene	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	NE	
Sec-Butylbenzene	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	8,000	
Styrene	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	16,000	
Tert-Butylbenzene	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	8,000	
Tetrachloroethene	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	0.05	

Boring Identification	FL211-B5	FL210-B6			FL211-B7				FL213-B8		MTCA Screening Level ¹¹	Naturally Occurring Background Metals in Puget Sound Soils ¹⁵
Sample Identification ²	FL211-B5-13-14	FL210-B6-2-2.5	FL210-B6-6-7	FL210-B6-9-10	FL211-B7-2.5-3.5	FL211-B7-5-6	FL211-B7-6.5-7	FL211-B7-10-11	FL213-B8-0-0.5	FL213-B8-0.5-1		
Sample Date	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018		
Sample Start Depth (feet bgs)	13	2.0	6.0	9.0	2.5	5.0	6.5	10	0.0	0.5		
Sample End Depth (feet bgs)	14	2.5	7.0	10	3.5	6.0	7.0	11	0.5	1.0		
Toluene	–	0.0055 U	0.0048 U	0.0047 U	0.0054 U	0.0055 U	0.0056 U	0.0047 U	–	–	7	N/A
Trans-1,2-Dichloroethene	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	1,600	
Trans-1,3-Dichloropropene	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	NE	
Trichloroethene	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	0.03	
Trichlorofluoromethane (CFC-11)	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	24,000	
Vinyl Acetate	–	0.0055 U	0.0048 U	0.0047 U	0.0054 U	0.0055 U	0.0056 U	0.0047 U	–	–	80,000	
Vinyl Chloride	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–	240	
Xylene, m-,p-	–	0.0055 U	0.0048 U	0.0047 U	0.0054 U	0.0055 U	0.0056 U	0.0047 U	–	–	9	
Xylene, o-	–	0.0011 U	0.00096 U	0.00095 U	0.0011 U	0.0011 U	0.0011 U	0.00094 U	–	–		
Total Xylenes ⁸	–	0.0055 U	0.0048 U	0.0047 U	0.0054 U	0.0055 U	0.0056 U	0.0047 U	–	–		
PAHs ⁹ (mg/kg)												
1-Methylnaphthalene	0.0072 U	0.020	0.0073 U	0.0071 U	0.0080 U	0.0082 U	0.0076 U	–	–	–	5	N/A
2-Methylnaphthalene	0.0072 U	0.025	0.0073 U	0.0071 U	0.0080 U	0.0082 U	0.0076 U	–	–	–		
Naphthalene	0.0072 U	0.013	0.0073 U	0.0071 U	0.0080 U	0.0082 U	0.0076 U	–	–	–		
Total Naphthalenes ¹⁰	0.0072 U	0.058	0.0073 U	0.0071 U	0.0080 U	0.0082 U	0.0076 U	–	–	–		
Acenaphthene	0.0072 U	0.0081 U	0.0073 U	0.0071 U	0.0080 U	0.0082 U	0.0076 U	–	–	–	4,800	
Acenaphthylene	0.0072 U	0.0081 U	0.0073 U	0.0071 U	0.0080 U	0.0082 U	0.0076 U	–	–	–	NE	
Anthracene	0.0072 U	0.0081 U	0.0073 U	0.0071 U	0.0080 U	0.0082 U	0.0076 U	–	–	–	24,000	
Benzo(a)anthracene	0.0072 U	0.014	0.0073 U	0.0071 U	0.0080 U	0.0082 U	0.0076 U	–	–	–	See cPAHs	
Benzo(a)pyrene	0.0072 U	0.015	0.0073 U	0.0071 U	0.0080 U	0.0082 U	0.0076 U	–	–	–	See cPAHs	
Benzo(b)fluoranthene	0.0072 U	0.018	0.0073 U	0.0071 U	0.0080 U	0.0082 U	0.0076 U	–	–	–	See cPAHs	
Benzo(g,h,i)perylene	0.0072 U	0.012	0.0073 U	0.0071 U	0.0080 U	0.0082 U	0.0076 U	–	–	–	NE	
Benzo(j,k)fluoranthene	0.0072 U	0.0081 U	0.0073 U	0.0071 U	0.0080 U	0.0082 U	0.0076 U	–	–	–	See cPAHs	
Chrysene	0.0072 U	0.039	0.0073 U	0.0071 U	0.0080 U	0.0082 U	0.0076 U	–	–	–	See cPAHs	
Dibenzo(a,h)anthracene	0.0072 U	0.0081 U	0.0073 U	0.0071 U	0.0080 U	0.0082 U	0.0076 U	–	–	–	See cPAHs	
Fluoranthene	0.0072 U	0.018	0.0073 U	0.0071 U	0.0080 U	0.0082 U	0.0076 U	–	–	–	3,200	
Fluorene	0.0072 U	0.0081 U	0.0073 U	0.0071 U	0.0080 U	0.0082 U	0.0076 U	–	–	–	3,200	
Indeno(1,2,3-c,d)pyrene	0.0072 U	0.010	0.0073 U	0.0071 U	0.0080 U	0.0082 U	0.0076 U	–	–	–	See cPAHs	
Phenanthrene	0.0072 U	0.019	0.0073 U	0.0071 U	0.0080 U	0.0082 U	0.0076 U	–	–	–	NE	
Pyrene	0.0072 U	0.032	0.0073 U	0.0071 U	0.0080 U	0.0082 U	0.0076 U	–	–	–	2,400	
cPAHs (benzo(a)pyrene toxicity equivalent concentration) ¹⁴	0.0054 U	0.0204	0.0055 U	0.0054 U	0.006 U	0.0062 U	0.0057 U	–	–	–	0.1	

Table 1

Summary of Soil Chemical Analytical Results¹
Sound Transit - Federal Way Link Extension FL-210, FL-211, FL-212 and FL-213
Federal Way, Washington

Boring Identification	FL213-B8		FL213-B9				FL213-B10		MTCA Screening Level ¹¹	Naturally Occurring Background Metals in Puget Sound Soils ¹⁵
Sample Identification ²	FL213-B8-3.5-4.5	FL213-B8-7.5-8.5	FL213-B9-0-0.5	FL213-B9-0.5-1	FL213-B9-4-5	FL213-B9-6-7	FL213-B10-2-3	FL213-B10-4-5		
Sample Date	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018		
Sample Start Depth (feet bgs)	3.5	7.5	0.0	0.5	4.0	6.0	2.0	4.0		
Sample End Depth (feet bgs)	4.5	8.5	0.5	1.0	5.0	7.0	3.0	5.0		
NWTPH-HCID ³ (mg/kg)										
Gasoline-range hydrocarbons	23 U	22 U	--	--	23 U	22 U	24 U	22 U	30/100 ¹²	N/A
Diesel-range hydrocarbons	57 U	55 U	--	--	58 U	56 U	60 U	56 U	2,000	
Lube Oil-range Hydrocarbons	110 U	110 U	--	--	120 U	110 U	120 U	110 U	2,000	
NWTPH-Dx ⁴ (mg/kg)										
Diesel-range hydrocarbons	--	--	--	--	--	--	--	--	2,000	N/A
Lube Oil-range Hydrocarbons	--	--	--	--	--	--	--	--	2,000	
Metals ⁵ (mg/kg)										
Arsenic	5.7 U	5.5 U	8.4	15	5.8 U	5.6 U	6.0 U	5.5 U	20	7
Barium	67	61	--	--	72	58	120	59	16,000	NE
Cadmium	0.57 U	0.55 U	--	--	0.58 U	0.56 U	0.60 U	0.55 U	2	1
Chromium	41	45	--	--	27	35	54	29	2,000 ¹³	48
Chromium, Hexavalent	--	--	--	--	--	--	--	--	19	NE
Lead	5.7 U	5.5 U	60	61	5.8 U	5.6 U	8.7	5.5 U	250	24
Mercury	0.29 U	0.28 U	--	--	0.29 U	0.28 U	0.30 U	0.28 U	2	0.07
Selenium	11 U	11 U	--	--	12 U	11 U	12 U	11 U	400	NE
Silver	1.1 U	1.1 U	--	--	1.2 U	1.1 U	1.2 U	1.1 U	400	NE
VOCs ⁶ (mg/kg)										
1,1,1,2-Tetrachloroethane	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	38.5	N/A
1,1,1-Trichloroethane	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	2	
1,1,2,2-Tetrachloroethane	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	5	
1,1,2-Trichloroethane	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	17.5	
1,1-Dichloroethane	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	175	
1,1-Dichloroethene	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	4,000	
1,1-Dichloropropene	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	NE	
1,2,3-Trichlorobenzene	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	NE	
1,2,3-Trichloropropane	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	0.0333	
1,2,4-Trichlorobenzene	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	34.5	
1,2,4-Trimethylbenzene	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	NE	
1,2-Dibromo-3-Chloropropane	0.0047 U	0.0044 U	--	--	0.0046 U	0.0042 U	0.0046 U	0.0046 U	1.25	
1,2-Dibromoethane	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	0.005	
1,2-Dichlorobenzene (o-Dichlorobenzene)	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	7,200	
1,2-Dichloroethane	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	11	
1,2-Dichloropropane	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	27.8	
1,3,5-Trimethylbenzene	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	800	

Boring Identification	FL213-B8		FL213-B9				FL213-B10		MTCA Screening Level ¹¹	Naturally Occurring Background Metals in Puget Sound Soils ¹⁵
Sample Identification ²	FL213-B8-3.5-4.5	FL213-B8-7.5-8.5	FL213-B9-0-0.5	FL213-B9-0.5-1	FL213-B9-4-5	FL213-B9-6-7	FL213-B10-2-3	FL213-B10-4-5		
Sample Date	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018		
Sample Start Depth (feet bgs)	3.5	7.5	0.0	0.5	4.0	6.0	2.0	4.0		
Sample End Depth (feet bgs)	4.5	8.5	0.5	1.0	5.0	7.0	3.0	5.0		
1,3-Dichlorobenzene (m-Dichlorobenzene)	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	NE	N/A
1,3-Dichloropropane	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	NE	
1,4-Dichlorobenzene (p-Dichlorobenzene)	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	185	
2,2-Dichloropropane	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	NE	
2-Butanone (MEK)	0.0047 U	0.0044 U	--	--	0.0046 U	0.0042 U	0.0046 U	0.0046 U	48,000	
2-Chloroethyl vinyl ether	0.0047 U	0.0044 U	--	--	0.0046 U	0.0042 U	0.0046 U	0.0046 U	NE	
2-Chlorotoluene	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	1,600	
2-Hexanone	0.0047 U	0.0044 U	--	--	0.0046 U	0.0042 U	0.0046 U	0.0046 U	NE	
4-Chlorotoluene	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	NE	
4-Methyl-2-Pentanone (Methyl isobutyl ketone)	0.0047 U	0.0044 U	--	--	0.0046 U	0.0042 U	0.0046 U	0.0046 U	6,400	
Acetone ⁷	0.0047 U	0.0044 U	--	--	0.0046 U	0.0042 U	0.0046 U	0.0046 U	72,000	
Benzene	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	0.03	
Bromobenzene	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	NE	
Bromochloromethane	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	NE	
Bromodichloromethane	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	16.1	
Bromoform (Tribromomethane)	0.0047 U	0.0044 U	--	--	0.0046 U	0.0042 U	0.0046 U	0.0046 U	127	
Bromomethane	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	112	
Carbon Disulfide	0.0013 U	0.0012 U	--	--	0.0013 U	0.0012 U	0.0013 U	0.0013 U	8,000	
Carbon Tetrachloride	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	14.3	
Chlorobenzene	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	1,600	
Chloroethane	0.0047 U	0.0044 U	--	--	0.0046 U	0.0042 U	0.0046 U	0.0046 U	NE	
Chloroform	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	32.3	
Chloromethane	0.0047 U	0.0044 U	--	--	0.0046 U	0.0042 U	0.0046 U	0.0046 U	NE	
cis-1,2-Dichloroethene	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	160	
cis-1,3-Dichloropropene	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	NE	
Dibromochloromethane	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	11.9	
Dibromomethane	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	800	
Dichlorodifluoromethane (CFC-12)	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	16,000	
Ethylbenzene	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	6	
Hexachlorobutadiene	0.0047 U	0.0044 U	--	--	0.0046 U	0.0042 U	0.0046 U	0.0046 U	12.8	
Isopropylbenzene (Cumene)	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	8,000	
Methyl Iodide (Iodomethane)	0.0068 U	0.0063 U	--	--	0.0066 U	0.0060 U	0.0066 U	0.0067 U	NE	
Methyl t-butyl ether	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	0.1	
Methylene Chloride	0.0047 U	0.0044 U	--	--	0.0046 U	0.0042 U	0.0046 U	0.0046 U	0.02	
Naphthalene	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	5	
n-Butylbenzene	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	4,000	
n-Propylbenzene	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	8,000	
p-Isopropyltoluene	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	NE	
Sec-Butylbenzene	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	8,000	
Styrene	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	16,000	
Tert-Butylbenzene	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	8,000	
Tetrachloroethene	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	0.05	

Boring Identification	FL213-B8		FL213-B9				FL213-B10		MTCA Screening Level ¹¹	Naturally Occurring Background Metals in Puget Sound Soils ¹⁵
Sample Identification ²	FL213-B8-3.5-4.5	FL213-B8-7.5-8.5	FL213-B9-0-0.5	FL213-B9-0.5-1	FL213-B9-4-5	FL213-B9-6-7	FL213-B10-2-3	FL213-B10-4-5		
Sample Date	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018		
Sample Start Depth (feet bgs)	3.5	7.5	0.0	0.5	4.0	6.0	2.0	4.0		
Sample End Depth (feet bgs)	4.5	8.5	0.5	1.0	5.0	7.0	3.0	5.0		
Toluene	0.0047 U	0.0044 U	--	--	0.0046 U	0.0042 U	0.0046 U	0.0046 U	7	N/A
Trans-1,2-Dichloroethene	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	1,600	
Trans-1,3-Dichloropropene	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	NE	
Trichloroethene	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	0.03	
Trichlorofluoromethane (CFC-11)	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	24,000	
Vinyl Acetate	0.0047 U	0.0044 U	--	--	0.0046 U	0.0042 U	0.0046 U	0.0046 U	80,000	
Vinyl Chloride	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U	240	
Xylene, m-,p-	0.0047 U	0.0044 U	--	--	0.0046 U	0.0042 U	0.0046 U	0.0046 U	9	
Xylene, o-	0.00094 U	0.00087 U	--	--	0.00092 U	0.00084 U	0.00092 U	0.00092 U		
Total Xylenes ⁸	0.0047 U	0.0044 U	--	--	0.0046 U	0.0042 U	0.0046 U	0.0046 U		
PAHs ⁹ (mg/kg)										
1-Methylnaphthalene	0.0076 U	0.0073 U	--	--	0.0077 U	0.0074 U	0.0080 U	0.0074 U	5	N/A
2-Methylnaphthalene	0.0076 U	0.0073 U	--	--	0.0077 U	0.0074 U	0.0080 U	0.0074 U		
Naphthalene	0.0076 U	0.0073 U	--	--	0.0077 U	0.0074 U	0.0080 U	0.0074 U		
Total Naphthalenes ¹⁰	0.0076 U	0.0073 U	--	--	0.0077 U	0.0074 U	0.0080 U	0.0074 U		
Acenaphthene	0.0076 U	0.0073 U	--	--	0.0077 U	0.0074 U	0.0080 U	0.0074 U	4,800	
Acenaphthylene	0.0076 U	0.0073 U	--	--	0.0077 U	0.0074 U	0.0080 U	0.0074 U	NE	
Anthracene	0.0076 U	0.0073 U	--	--	0.0077 U	0.0074 U	0.0080 U	0.0074 U	24,000	
Benzo(a)anthracene	0.0076 U	0.0073 U	--	--	0.0077 U	0.0074 U	0.0080 U	0.0074 U	See cPAHs	
Benzo(a)pyrene	0.0076 U	0.0073 U	--	--	0.0077 U	0.0074 U	0.0080 U	0.0074 U	See cPAHs	
Benzo(b)fluoranthene	0.0076 U	0.0073 U	--	--	0.0077 U	0.0074 U	0.0080 U	0.0074 U	See cPAHs	
Benzo(g,h,i)perylene	0.0076 U	0.0073 U	--	--	0.0077 U	0.0074 U	0.0080 U	0.0074 U	NE	
Benzo(j,k)fluoranthene	0.0076 U	0.0073 U	--	--	0.0077 U	0.0074 U	0.0080 U	0.0074 U	See cPAHs	
Chrysene	0.0076 U	0.0073 U	--	--	0.0077 U	0.0074 U	0.0080 U	0.0074 U	See cPAHs	
Dibenzo(a,h)anthracene	0.0076 U	0.0073 U	--	--	0.0077 U	0.0074 U	0.0080 U	0.0074 U	See cPAHs	
Fluoranthene	0.0076 U	0.0073 U	--	--	0.0077 U	0.0074 U	0.0080 U	0.0074 U	3,200	
Fluorene	0.0076 U	0.0073 U	--	--	0.0077 U	0.0074 U	0.0080 U	0.0074 U	3,200	
Indeno(1,2,3-c,d)pyrene	0.0076 U	0.0073 U	--	--	0.0077 U	0.0074 U	0.0080 U	0.0074 U	See cPAHs	
Phenanthrene	0.0076 U	0.0073 U	--	--	0.0077 U	0.0074 U	0.0080 U	0.0074 U	NE	
Pyrene	0.0076 U	0.0073 U	--	--	0.0077 U	0.0074 U	0.0084	0.0074 U	2,400	
cPAHs (benzo(a)pyrene toxicity equivalent concentration) ¹⁴	0.0057 U	0.0055 U	--	--	0.0058 U	0.0056 U	0.006 U	0.0056 U	0.1	

Boring Identification	FL213-B8		FL213-B9				FL213-B10		MTCA Screening Level ¹¹	Naturally Occurring Background Metals in Puget Sound Soils ¹⁵
Sample Identification ²	FL213-B8-3.5-4.5	FL213-B8-7.5-8.5	FL213-B9-0-0.5	FL213-B9-0.5-1	FL213-B9-4-5	FL213-B9-6-7	FL213-B10-2-3	FL213-B10-4-5		
Sample Date	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018	5/2/2018		
Sample Start Depth (feet bgs)	3.5	7.5	0.0	0.5	4.0	6.0	2.0	4.0		
Sample End Depth (feet bgs)	4.5	8.5	0.5	1.0	5.0	7.0	3.0	5.0		

Notes:

- ¹ Chemical analysis performed by OnSite Environmental, Inc., of Redmond, Washington.

² Sample ID = Parcel ID - boring number - depth of sample [feet bgs]. FL210-B6-2-2.5 = Boring 6 from Parcel FL210, collected from a depth of 2 to 2.5 feet bgs.

³ Petroleum Hydrocarbon Identification by Northwest Method NWTPH-HCID.

⁴ Diesel- and lube oil-range petroleum hydrocarbons by Northwest Method NWTPH-Dx.

⁵ Resource Conservation Recovery Act (RCRA) metals analyzed by EPA 6000/7000 series method.

⁶ Volatile organic compounds (VOCs) analyzed by United States Environmental Protection Agency (EPA) Method 8260C.

⁷ Acetone is a common laboratory contaminant.

⁸ Total xylenes consists of m,p- and o- xylenes. The higher detection limit is used for non-detects.

⁹ Polycyclic aromatic hydrocarbons (PAHs) and carcinogenic PAHs (cPAHs) analyzed by EPA Method 8270D/SIM.

¹⁰ Total naphthalenes consists of 1-methylnaphthalene, 2-methylnaphthalene and naphthalene.

¹¹ MTCA Method A cleanup levels shown if established. Method B cleanup level shown if no Method A cleanup level is established. The MTCA Method B cleanup level shown is the lowest for either carcinogen or non-carcinogen, based on direct contact.

¹² Model Toxics Control Act (MTCA) Method A cleanup level for gasoline is 30 mg/kg if benzene is detected or if the sum of toluene, ethylbenzene and xylenes are greater than or equal to 1% of the total gasoline detection.

¹³ MTCA Method A cleanup level for Trivalent Chromium.

¹⁴ Results for cPAHs are shown as the sum of

¹⁵ 90th Percentile for natural background soil metals concentrations in Puget Sound region, Department of Ecology, publication #94-115, dated October 1994.

U = Analyte was not detected at or greater than the listed reporting limit.

TEF = Toxicity Equivalency Factor as defined in WAC 173-340-900 Table 708-2.

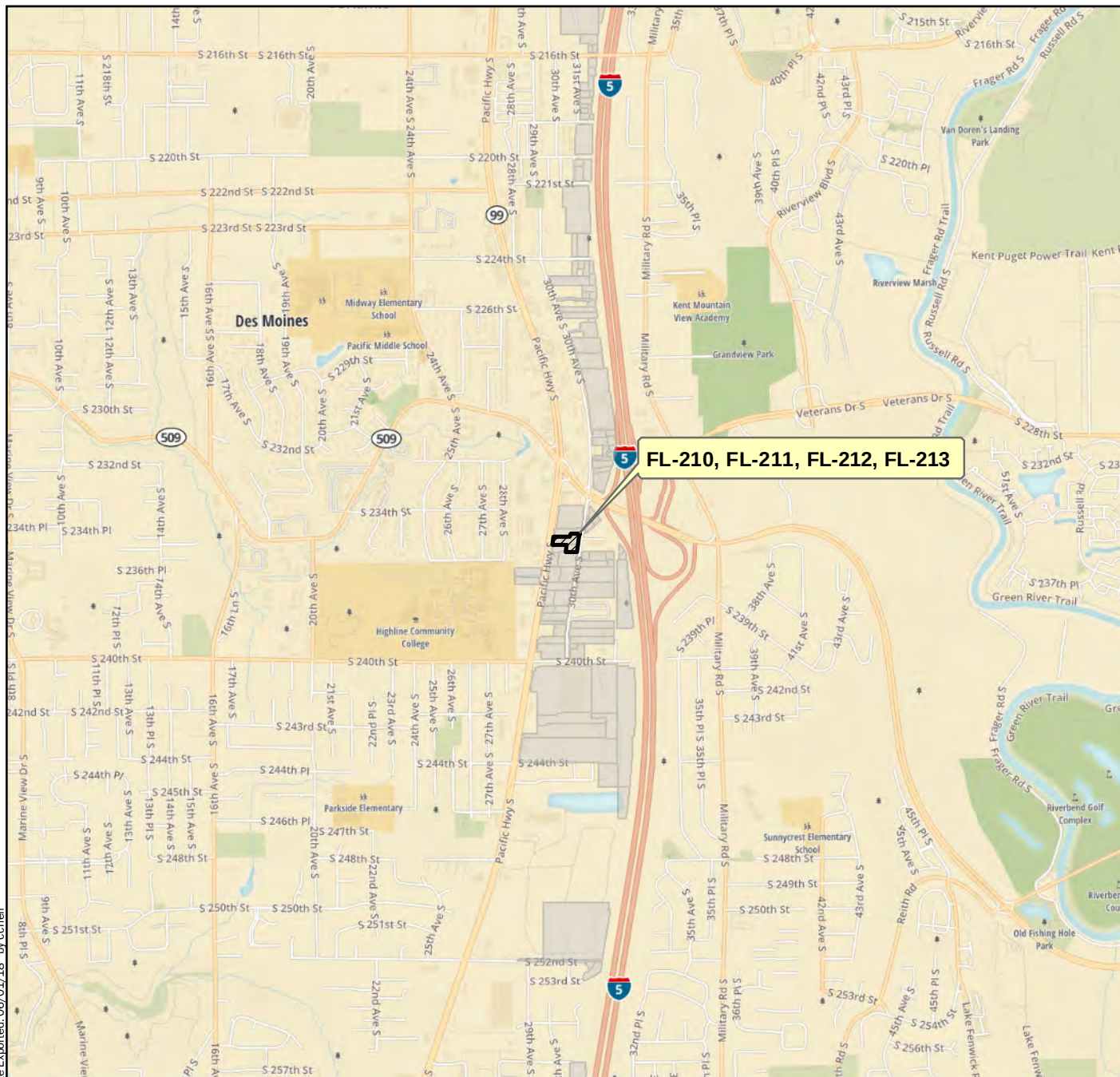
Bold font type indicates that the analyte was detected at a concentration greater than the respective laboratory reporting limit.

Grey shading indicates that the detected result exceeds the specified MTCA Cleanup Level.
- "--" = not tested

mg/kg = milligrams per kilogram

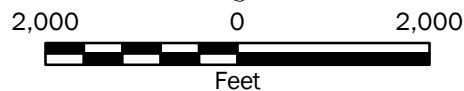
MTCA = Model Toxics Control Act

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Legend

-  Subject Property
-  Project Parcel



Notes:

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: Mapbox Open Street Map, 2017

Projection: NAD 1983 UTM Zone 10N

Vicinity Map FL-210, FL-211, FL-212, FL-213

Phase II ESA
Federal Way Link Extension
Kent, Washington



Figure 1



FL211-B5			
Depth (feet)	Analyte	Concentration (mg/kg)	Note
5.5-6	cPAHs	Not Detected	
11.5-12	cPAHs	0.25	> MTCA
13-14	cPAHs	Not Detected	

Direct-push Boring

One or More Samples Analyzed were > MTCA Screening Levels

Geotechnical Boring

Subject Property

Parcel

Fee Take

All Samples Analyzed Either were ND or < MTCA Screening Levels

Site Feature

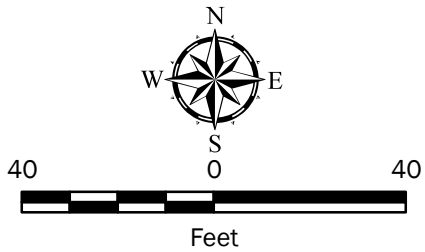
Individual Parcel Boundary

Crane Swing Easement

Temporary Construction Easement

Notes:
1. The locations of all features shown are approximate. 2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication. Data Source: Aerial and road names from King County 2015. Projection: NAD 1983 StatePlane Washington North FIPS 4601 Feet

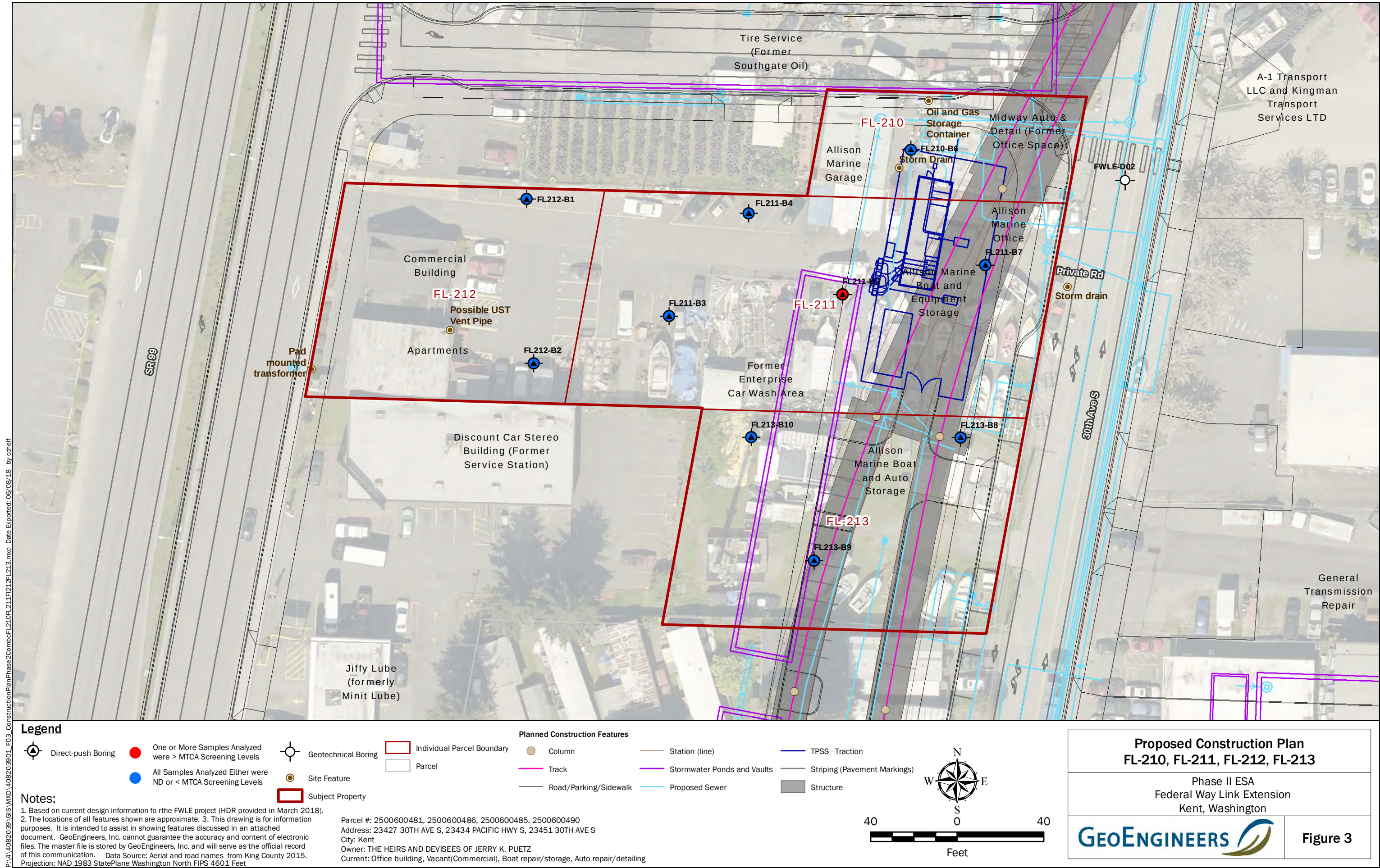
Parcel #: 2500600481, 2500600486, 2500600485, 2500600490
Address: 23427 30TH AVE S, 23434 PACIFIC HWY S, 23451 30TH AVE S
City: Kent
Owner: THE HEIRS AND DEVISEES OF JERRY K. PUETZ
Current: Office building, Vacant(Commercial), Boat repair/storage, Auto repair/detailing



Site Plan and Boring Locations
FL-210, FL-211, FL-212, FL-213

Phase II ESA
Federal Way Link Extension
Kent, Washington

Figure 2



APPENDIX A
FIELD EXPLORATION PROGRAM

APPENDIX A

FIELD PROCEDURES AND BORING LOGS

Underground Utility Locate

Prior to drilling activities, an underground utility locate was conducted in the areas of the proposed boring locations to identify subsurface utilities and/or potential underground physical hazards. The underground utility check consisted of contacting a local utility alert service (one-call) and hiring a private utility locating service.

Soil Sampling

The direct-push explorations were completed using direct-push drilling equipment. Soil samples were obtained using a 5-foot-long core sampler. The sampler was driven into the soil using a pneumatic hammer. Upon retrieval, the sampler was opened and a GeoEngineers representative examined the soil and performed field screening tests. The boring logs are presented in Figures A-2 through A-11. Selected photographs taken during the Phase II ESA drilling are presented as Figures A-12 through A-19.

Selected soil samples were obtained in glass jars (supplied by the analytical laboratory), labeled and stored in a cooler with ice pending delivery to the laboratory. VOC samples were collected first, directly from the sample sleeve using the 5035A sampling method (except as noted in Appendix B). Following the VOC sample collection, the remaining soil was placed in sample containers provided by the analytical laboratory. All sampling equipment was decontaminated between samples using a Liqui-Nox® wash solution and distilled water rinse.

Soil samples obtained from the explorations were collected from the samplers with a stainless-steel knife, a stainless-steel trowel and/or new gloves. A portion of each sample was placed in laboratory-prepared sample jars for possible chemical analysis. The remaining portion of each sample was used for field screening.

The samples collected from the borings were identified using the following identification system: FL210, FL211, FL212, or FL213-B1-6-7, where FL210, FL211, FL212, or FL213 is the identified FWLE parcel on which the boring was located, B1 is the boring number and the approximate depth at which the sample was obtained (e.g. FL213-B1-6-7 was collected from the FL-213 parcel at boring B1 at depths of approximately 6 to 7 feet bgs).

Selected samples from the explorations were submitted for chemical analysis based on field screening results. The soil samples were placed in a cooler with ice for transport to the laboratory. Standard chain-of-custody procedures were followed in transporting the soil samples to the laboratory. Drill cuttings were placed in drums pending disposal.

Field Screening of Soil Samples

Soil samples obtained from the borings were screened in the field for evidence of contamination using: 1) visual examination; 2) sheen screening and 3) vapor headspace screening with a photo-ionization detector (PID). The results of headspace and sheen screening are included in the boring logs.

Visual screening consists of inspecting the soil for stains indicative of petroleum-related contamination. Visual screening is generally more effective when contamination is related to heavy petroleum hydrocarbons, such as motor oil or hydraulic oil, or when hydrocarbon concentrations are high. Sheen screening and headspace vapor screening are more sensitive methods that have been effective in detecting contamination at concentrations less than regulatory cleanup guidelines. Sheen screening involves placing soil in a pan of water and observing the water surface for signs of sheen. Sheen classifications are as follows:

No Sheen (NS)	No visible sheen on water surface.
Slight Sheen (SS)	Light, colorless, dull sheen; spread is irregular, not rapid; sheen dissipates rapidly.
Moderate Sheen (MS)	Light to heavy sheen, may have some color/iridescence; spread is irregular to flowing; few remaining areas of no sheen on water surface.
Heavy Sheen (HS)	Heavy sheen with color/iridescence; spread is rapid; entire water surface may be covered with sheen.

Headspace vapor screening involves placing a soil sample in a plastic sample bag. Air is captured in the bag and the bag is shaken to expose the soil to the air trapped in the bag. The probe of a PID is inserted in the bag and the instrument measures the concentration of combustible vapor in the air removed from the sample headspace. The PID measures concentrations in ppm (parts per million) and is calibrated to isobutylene. The PID is designed to quantify combustible gas and organic vapor concentrations up to 2,500 ppm. A lower threshold of significance of 1 ppm was used in this application. Field screening results are site-specific and vary with soil type, soil moisture content, temperature and type of contaminant.

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS	
			GRAPH	LETTER		
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES	
		(LITTLE OR NO FINES)		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES	
		GRAVELS WITH FINES		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES	
		(APPRECIABLE AMOUNT OF FINES)		GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES	
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	SAND AND SANDY SOILS	CLEAN SANDS		SW	WELL-GRADED SANDS, GRAVELLY SANDS
			(LITTLE OR NO FINES)		SP	POORLY-GRADED SANDS, GRAVELLY SAND
FINE GRAINED SOILS	SILTS AND CLAYS	SANDS WITH FINES		SM	SILTY SANDS, SAND - SILT MIXTURES	
			(APPRECIABLE AMOUNT OF FINES)		SC	CLAYEY SANDS, SAND - CLAY MIXTURES
			MORE THAN 50% PASSING NO. 200 SIEVE	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50	
		CL				INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
		OL				ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS SILTY SOILS	
			CH	INORGANIC CLAYS OF HIGH PLASTICITY		
			OH	ORGANIC CLAYS AND SILTS OF MEDIUM TO HIGH PLASTICITY		
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS	

NOTE: Multiple symbols are used to indicate borderline or dual soil classifications

Sampler Symbol Descriptions

	2.4-inch I.D. split barrel
	Standard Penetration Test (SPT)
	Shelby tube
	Piston
	Direct-Push
	Bulk or grab
	Continuous Coring

Blowcount is recorded for driven samplers as the number of blows required to advance sampler 12 inches (or distance noted). See exploration log for hammer weight and drop.

"P" indicates sampler pushed using the weight of the drill rig.

"WOH" indicates sampler pushed using the weight of the hammer.

NOTE: The reader must refer to the discussion in the report text and the logs of explorations for a proper understanding of subsurface conditions. Descriptions on the logs apply only at the specific exploration locations and at the time the explorations were made; they are not warranted to be representative of subsurface conditions at other locations or times.

ADDITIONAL MATERIAL SYMBOLS

SYMBOLS		TYPICAL DESCRIPTIONS
GRAPH	LETTER	
	AC	Asphalt Concrete
	CC	Cement Concrete
	CR	Crushed Rock/Quarry Spalls
	SOD	Sod/Forest Duff
	TS	Topsoil

Groundwater Contact



Measured groundwater level in exploration, well, or piezometer



Measured free product in well or piezometer

Graphic Log Contact



Distinct contact between soil strata



Approximate contact between soil strata

Material Description Contact



Contact between geologic units



Contact between soil of the same geologic unit

Laboratory / Field Tests

%F	Percent fines
%G	Percent gravel
AL	Atterberg limits
CA	Chemical analysis
CP	Laboratory compaction test
CS	Consolidation test
DD	Dry density
DS	Direct shear
HA	Hydrometer analysis
MC	Moisture content
MD	Moisture density
Mohs	Mohs hardness scale
OC	Organic content
PM	Permeability or hydraulic conductivity
PI	Plasticity index
PP	Pocket penetrometer
SA	Sieve analysis
TX	Triaxial compression
UC	Unconfined compression
VS	Vane shear

Sheen Classification

NS	No Visible Sheen
SS	Slight Sheen
MS	Moderate Sheen
HS	Heavy Sheen

Key to Exploration Logs



Figure A-1

Drilled	Start 5/2/2018	End 5/2/2018	Total Depth (ft)	20	Logged By Checked By	PDR AMW	Driller	ESN Northwest	Drilling Method	Direct-Push
Surface Elevation (ft) Vertical Datum	399.39 NAVD88				Hammer Data	N/A			Drilling Equipment	Geoprobe 7800 (truck-mounted)
Easting (X) Northing (Y)	1278420.728 146047.985				System Datum	WA State Plane North NAD83			Groundwater not observed at time of exploration	
Notes:										

Elevation (feet)	FIELD DATA					MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing				
0	24			FL212-B1-0-0.5 CA	AC	Asphalt concrete pavement	NS	<1	
	24			FL212-B1-0.5-1 CA	SP	Dark brown fine to coarse sand, trace silt and brick fragments (moist) (fill)	NS	<1	
				FL212-B1-2.5-3.5 CA	SP-SM	Red-brown fine to medium sand with silt (moist)	NS	<1	
395					SM	Red-brown silty fine to coarse sand with gravel (moist)	NS	<1	
5	60			FL212-B1-5-6 CA	NR	No recovery	NS	<1	
					SM	Red-brown silty fine to coarse sand, occasional fine gravel (moist)	NS	<1	
					SP	Gray fine to coarse sand with gravel and trace silt (wet)	NS	<1	
390				FL212-B1-9-10 CA	SP-SM	Gray fine to coarse sand with silt and gravel (moist) (native)	NS	<1	
	60						NS	<1	
385							NS	<1	
15	60						NS	<1	
380				FL212-B1-19-20 CA			NS	<1	
20									

Note: See Figure A-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on GPS (Rec). Vertical approximated based on topographic map provided by HDR.

Log of Direct-Push Boring FL212-B1



Project: Sound Transit - Federal Way Link Extension FL-210 to FL-213
Project Location: 23434 Pacific Highway South, Kent, Washington
Project Number: 4082-039-01

Figure A-2
Sheet 1 of 1

Drilled	Start 5/2/2018	End 5/2/2018	Total Depth (ft)	15	Logged By Checked By	PDR AMW	Driller	ESN Northwest	Drilling Method	Direct-Push
Surface Elevation (ft) Vertical Datum	400.44 NAVD88				Hammer Data	N/A			Drilling Equipment	Geoprobe 7800 (truck-mounted)
Easting (X) Northing (Y)	1278423.938 145972.07				System Datum	WA State Plane North NAD83			Groundwater not observed at time of exploration	
Notes:										

Elevation (feet)	FIELD DATA					MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing				
400	0	24				AC	NS	<1	
		36			FL212-B2- 2-3 CA	SP-SM	NS	<1	
395	5	60			FL212-B2- 5.5-6.5 CA	SP	NS	<1	
390	10	60			FL212-B2- 9-10 CA	SM	NS	<1	
15							NS	<1	Hard drilling

Note: See Figure A-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on GPS (Rec). Vertical approximated based on topographic map provided by HDR.

Log of Direct-Push Boring FL212-B2



Project: Sound Transit - Federal Way Link Extension FL-210 to FL-213
Project Location: 23434 Pacific Highway South, Kent, Washington
Project Number: 4082-039-01

Figure A-3
Sheet 1 of 1

Drilled	Start 5/2/2018	End 5/2/2018	Total Depth (ft)	10	Logged By Checked By	PDR AMW	Driller	ESN Northwest	Drilling Method	Direct-Push
Surface Elevation (ft) Vertical Datum			397.69 NAVD88		Hammer Data			N/A		Drilling Equipment
Easting (X) Northing (Y)		1278523.271 146041.4			System Datum		WA State Plane North NAD83		Groundwater not observed at time of exploration	
Notes:										

Elevation (feet)	FIELD DATA					MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval Depth (feet)	Recovered (in)	Blows/foot	Collected Sample Sample Name Testing	Graphic Log Group Classification				
0	24				AC	Asphalt concrete pavement			
					SM	Dark brown silty fine to coarse sand (moist)	NS	<1	
396	36			FL211-B4 2-3 CA	SP-SM	Red-brown fine to coarse sand with silt (moist)	SS	<1	
					SM	Brown silty fine to medium sand, occasional gravel (moist)	NS	<1	
5	36			FL211-B4 5-6 CA	NR	No recovery	NS	<1	
					SP-SM	Brown fine to coarse sand with silt (wet)			
					SM	Gray silty fine to coarse sand with gravel (moist) (till)	NS	<1	
10					NR	No recovery			

Note: See Figure A-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on GPS (Rec). Vertical approximated based on topographic map provided by HDR.

Log of Direct-Push Boring FL211-B4



Project: Sound Transit - Federal Way Link Extension FL-210 to FL-213
Project Location: 23431 30th Ave S., Kent, Washington
Project Number: 4082-039-01

Figure A-5
Sheet 1 of 1

Drilled	Start 5/2/2018	End 5/2/2018	Total Depth (ft)	14	Logged By Checked By	PDR AMW	Driller	ESN Northwest	Drilling Method	Direct-Push	
Surface Elevation (ft) Vertical Datum			397.4 NAVD88		Hammer Data		N/A		Drilling Equipment		PowerProbe 9100 (Bobcat-mounted)
Easting (X) Northing (Y)			1278566.748 146003.807		System Datum		WA State Plane North NAD83		See "Remarks" section for groundwater observed		
Notes:											

Elevation (feet)	Depth (feet)	FIELD DATA					Graphic Log	Group Classification	MATERIAL DESCRIPTION	Screen	Headspace Vapor (ppm)	REMARKS
		Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing						
	0		24			FL211-B5-0-0.5 CA		SP	Gray-brown fine to coarse sand with gravel (moist)	NS	<1	Perched water observed at 3½ feet during drilling
	36					FL211-B5-0.5-1 CA		SM	Brown silty fine to coarse sand (moist)	NS	<1	
								ML	Gray/brown mottled silt (moist)			
						FL211-B5-3.5-4 CA		SP	Brown fine to medium sand with trace silt (wet)	NS	<1	
								ML	Gray/brown mottled silt with sand (moist)			
						FL211-B5-5.5-6 CA		SM	Brown silty fine to coarse sand with gravel (moist)	NS	<1	
								ML	Gray silt with sand (moist to wet)			
								NR	No recovery			
						FL211-B5-11.5-12 CA		SM	Brown silty fine sand with occasional gravel (moist)	NS	<1	
						FL211-B5-13-14 CA		SP-SM	Gray fine to coarse sand with silt and gravel (moist) (native till)	NS	<1	

Note: See Figure A-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on GPS (Rec). Vertical approximated based on topographic map provided by HDR.

Log of Direct-Push Boring FL211-B5



Project: Sound Transit - Federal Way Link Extension FL-210 to FL-213
Project Location: 23431 30th Ave S., Kent, Washington
Project Number: 4082-039-01

Figure A-6
Sheet 1 of 1

Drilled	Start 5/2/2018	End 5/2/2018	Total Depth (ft)	20	Logged By Checked By	PDR AMW	Driller	ESN Northwest	Drilling Method	Direct-Push
Surface Elevation (ft) Vertical Datum	397.57 NAVD88				Hammer Data	N/A			Drilling Equipment	PowerProbe 9100 (Bobcat-mounted)
Easting (X) Northing (Y)	1278598.255 146070.781				System Datum	WA State Plane North NAD83			Groundwater not observed at time of exploration	
Notes:										

Elevation (feet)	FIELD DATA					MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval Depth (feet)	Recovered (in)	Blows/foot	Collected Sample Sample Name Testing	Graphic Log Group Classification				
0	24				AC	Asphalt concrete pavement			
					SP	Brown fine to medium sand with trace silt (moist)	NS	<1	
395	36			FL210-B6- 22.5 CA	SM	Brown silty fine sand (moist)	SS	<1	
					ML	Gray/brown mottled silt with sand (moist)			
5	60				SM	Gray-brown silty fine to coarse sand with gravel (moist)			
				FL210-B6- 6.7 CA	GP	Gray fine to medium gravel, angular (moist)	NS	<1	
390					SM	Gray silty fine to coarse sand with gravel (moist)			
							NS	<1	
10	60			FL210-B6- 9-10 CA	SP-SM	Gray fine to coarse sand with silt and gravel (moist) (native)			
385									
15	60								
380									
20									

Note: See Figure A-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on GPS (Rec). Vertical approximated based on topographic map provided by HDR.

Log of Direct-Push Boring FL210-B6



Project: Sound Transit - Federal Way Link Extension FL-210 to FL-213
Project Location: 23427 30th Ave S., Kent, Washington
Project Number: 4082-039-01

Figure A-7
Sheet 1 of 1

Date: 6/6/18 Path: P:\408203901\GINT_408203901 ENV LOGS.GPJ DBL library\Library\GEOENGINEERS_DF STD_US_JUNE_2017.dbl\GEB ENVIRONMENTAL STANDARD_NO.GW

Drilled	Start 5/2/2018	End 5/2/2018	Total Depth (ft)	20	Logged By Checked By	PDR AMW	Driller	ESN Northwest	Drilling Method	Direct-Push
Surface Elevation (ft) Vertical Datum	397.48 NAVD88				Hammer Data	N/A			Drilling Equipment	PowerProbe 9100 (Bobcat-mounted)
Easting (X) Northing (Y)	1278632.795 146017.459				System Datum	WA State Plane North NAD83			Groundwater not observed at time of exploration	
Notes:										

Elevation (feet)	FIELD DATA					MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing				
0	24					AC			
						GP			
395	36					SP			
					FL211-B7- 2.5-3.5 CA	SP-SM			
						SM			
5	60				FL211-B7- 5.6 CA				
					FL211-B7- 6.5-7 CA	SP			
390						SP			
10	60				FL211-B7- 10-11 CA				
385									
15	60					SP-SM			
380									
20									

Note: See Figure A-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on GPS (Rec). Vertical approximated based on topographic map provided by HDR.

Log of Direct-Push Boring FL211-B7



Project: Sound Transit - Federal Way Link Extension FL-210 to FL-213
Project Location: 23431 30th Ave S., Kent, Washington
Project Number: 4082-039-01

Figure A-8
Sheet 1 of 1

Date: 6/6/18 Path: P:\408203901\GINT_408203901\ENV LOGS.GPJ DBL library\Library\GEOENGINEERS_DF STD_US_JUNE_2017.GLB/GEIS ENVIRONMENTAL STANDARD_NO.GW

Drilled	Start 5/2/2018	End 5/2/2018	Total Depth (ft)	15	Logged By Checked By	PDR AMW	Driller	ESN Northwest	Drilling Method	Direct-Push
Surface Elevation (ft) Vertical Datum	397.7 NAVD88				Hammer Data	N/A			Drilling Equipment	PowerProbe 9100 (Bobcat-mounted)
Easting (X) Northing (Y)	1278621.31 145937.518				System Datum	WA State Plane North NAD83			Groundwater not observed at time of exploration	
Notes:										

Elevation (feet)	Depth (feet)	FIELD DATA					MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS		
		Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Graphic Log					Group Classification	
395	0	24			FL213-B8-0-0.5 CA		TS	Topsoil	NS	<1	Very hard drilling	
					FL213-B8-0.5-1 CA		SM	Brown silty fine to coarse sand (moist)	NS	<1		
	30					SM	Red-brown silty fine to medium sand (moist)					
							Becomes brown					
	5	42			FL213-B8-3.5-4.5 CA				NS	<1		
						SP-SM	Brown fine to coarse sand with silt and occasional gravel (moist to wet)	NS	<1			
						GP-GM	Brown fine to coarse gravel with silt and sand (moist)					
						ML	Gray silt with sand and occasional gravel (moist)	NS	<1			
	10	60			FL213-B8-7.5-8.5 CA		NR	No recovery				
						SP-SM	Gray fine to coarse sand with silt and gravel (moist)	NS	<1			
385	15				FL213-B8-14-15				NS	<1	Very hard drilling	

Note: See Figure A-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on GPS (Rec). Vertical approximated based on topographic map provided by HDR.

Log of Direct-Push Boring FL213-B8



Project: Sound Transit - Federal Way Link Extension FL-210 to FL-213
Project Location: 23451 30th Ave S., Kent, Washington
Project Number: 4082-039-01

Figure A-9
Sheet 1 of 1

Drilled	Start 5/2/2018	End 5/2/2018	Total Depth (ft)	7	Logged By Checked By	PDR AMW	Driller	ESN Northwest	Drilling Method	Direct-Push	
Surface Elevation (ft) Vertical Datum			398.66 NAVD88		Hammer Data		N/A		Drilling Equipment		PowerProbe 9100 (Bobcat-mounted)
Easting (X) Northing (Y)			1278524.625 145937.697		System Datum		WA State Plane North NAD83		Groundwater not observed at time of exploration		
Notes:											

Elevation (feet)	FIELD DATA					MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS	
	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing					
0	24					ML	Brown silt with sand (topsoil)	NS	<1	
395	36			FL213-B10-23 CA		SM	Light brown silty fine sand (moist)	NS	<1	
				FL213-B10-45 CA		SP	Gray fine to coarse sand with occasional gravel (moist to wet)	NS	<1	
5	24							NS	<1	

Note: See Figure A-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on GPS (Rec). Vertical approximated based on topographic map provided by HDR.

Log of Direct-Push Boring FL213-B10



Project: Sound Transit - Federal Way Link Extension FL-210 to FL-213
Project Location: 23451 30th Ave S., Kent, Washington
Project Number: 4082-039-01

Figure A-11
Sheet 1 of 1



Photograph 1 - FL-210 - Midway Auto & Detail Building, view looking west from 30th Street S.



Photograph 2 - FL-210 - Allison Marine office and boat engine repair garage, view looking north.

**FL-210, 211, 212, 213 Site Photos
March and May 2018**

Phase II Environmental Site Assessment
Federal Way Link Extension
Kent, Washington



Figure A-12



Photograph 3 - FL-210 - View inside Allison Marine boat engine repair north bay. Concrete floors.



Photograph 4 - FL-210 - View inside Allison Marine storage container used for small containers for oils and gasoline. This storage container is located east of engine repair shop.

**FL-210, 211, 212, 213 Site Photos
March and May 2018**

Phase II Environmental Site Assessment
Federal Way Link Extension
Kent, Washington



Figure A-13



Photograph 5 – FL-211 – General view of unpaved and paved areas used for boat storage, view looking south-southwest from 30th Street S entrance (composite photo).



Photograph 6 – FL-211 – Fenced equipment storage area in center of yard, between FL211-B3 and FL211-B5, view looking south.

**FL-210, 211, 212, 213 Site Photos
March and May 2018**

Phase II Environmental Site Assessment
Federal Way Link Extension
Kent, Washington



Figure A-14



Photograph 7 – FL-213 – General view of boat and auto storage, cell tower in background, view looking south-southwest.



Photograph 8 – FL-211 – View of mixed use building and apartment building fronting on Pacific Highway S, view looking west.

**FL-210, 211, 212, 213 Site Photos
March and May 2018**

Phase II Environmental Site Assessment
Federal Way Link Extension
Kent, Washington



Figure A-15



Photograph 9 – FL-212 – Black arrow points to possible UST vent pipe observed on the north side of the apartment building, near the northeast corner of the building.

**FL-210, 211, 212, 213 Site Photos
March and May 2018**

Phase II Environmental Site Assessment
Federal Way Link Extension
Kent, Washington



Figure A-16



Photograph 10 – FL-212 – Boring location FL212-B1 (white arrow near rear tire of truck), view looking west.



Photograph 11 – FL-212 – Boring location FL212-B2 (white arrow) looking southwest.

**FL-210, 211, 212, 213 Site Photos Mar/May 2018
Kent, WA**

Phase II Environmental Site Assessment
Federal Way Link Extension
Washington



Figure A-17



Photograph 12 – FL-211 – Boring location FL211-B5 (white arrow) looking southeast. Boat storage in photo background.



Photograph 13 – FL-211 – Boring location FL211-B5 showing soil core from 10 to 15 feet below ground surface. The concentration of cPAHs at 11.5-12 feet was > MTCA.

**FL-210, 211, 212, 213 Site Photos Mar/May 2018
Kent, WA**

Phase II Environmental Site Assessment
Federal Way Link Extension
Washington

GEOENGINEERS 

Figure A-18



Photograph 14 – FL-213 – Boring location FL213-B8 (white arrow), view looking west.



Photograph 15 – FL-213 – Boring location FL213-B10 (white arrow), view looking north.

**FL-210, 211, 212, 213 Site Photos Mar/May 2018
Kent, WA**

Phase II Environmental Site Assessment
Federal Way Link Extension
Washington



Figure A-19

APPENDIX B
CHEMICAL ANALYTICAL PROGRAM

APPENDIX B

CHEMICAL ANALYTICAL DATA

Analytical Methods

Chain-of-custody procedures were followed during the transport of the soil and groundwater samples to the analytical laboratory. The samples were held in cold storage pending extraction and/or analysis. The analytical results, analytical methods reference and laboratory quality control (QC) records are included in this appendix. The analytical results are also summarized in the text and tables of this report.

Analytical Data Review

The laboratory maintains an internal quality assurance program as documented in its laboratory quality assurance manual. The laboratory uses a combination of blanks, surrogate recoveries, duplicates, matrix spike recoveries, matrix spike duplicate recoveries, blank spike recoveries and blank spike duplicate recoveries to evaluate the validity of the analytical results. The laboratory also uses data quality goals for individual chemicals or groups of chemicals based on the long-term performance of the test methods. The data quality goals were included in the laboratory reports. The laboratory compared each group of samples with the existing data quality goals and noted any exceptions in the laboratory report. Data quality exceptions documented by the accredited laboratory were reviewed by GeoEngineers and are addressed in the data quality exception section of this appendix.

Analytical Data Review Summary

No data quality exceptions were noted in the laboratory reports during our review.



14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

May 15, 2018

Aaron Waggoner
GeoEngineers, Inc.
1101 Fawcett Avenue South, Suite 200
Tacoma, WA 98402

Re: Analytical Data for Project 4082-039-01
Laboratory Reference No. 1805-034

Dear Aaron:

Enclosed are the analytical results and associated quality control data for samples submitted on May 3, 2018.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 15, 2018
Samples Submitted: May 3, 2018
Laboratory Reference: 1805-034
Project: 4082-039-01

Case Narrative

Samples were collected on May 2, 2018 and received by the laboratory on May 3, 2018. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.



Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

ANALYTICAL REPORT FOR SAMPLES

Page 1 of 2

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
FL212-B1-0-.5	05-034-01	Soil	5-2-18	5-3-18	
FL212-B1-0.5-1	05-034-02	Soil	5-2-18	5-3-18	
FL212-B1-2.5-3.5	05-034-03	Soil	5-2-18	5-3-18	
FL212-B1-5-6	05-034-04	Soil	5-2-18	5-3-18	
FL212-B1-9-10	05-034-05	Soil	5-2-18	5-3-18	
FL212-B1-19-20	05-034-07	Soil	5-2-18	5-3-18	
FL212-B2-2-3	05-034-08	Soil	5-2-18	5-3-18	
FL212-B2-5.5-6.5	05-034-09	Soil	5-2-18	5-3-18	
FL212-B2-9-10	05-034-10	Soil	5-2-18	5-3-18	
FL211-B3-0-0.5	05-034-12	Soil	5-2-18	5-3-18	
FL211-B3-0.5-1	05-034-13	Soil	5-2-18	5-3-18	
FL211-B3-3-4	05-034-14	Soil	5-2-18	5-3-18	
FL211-B3-6-7	05-034-15	Soil	5-2-18	5-3-18	
FL211-B4-2-3	05-034-17	Soil	5-2-18	5-3-18	
FL211-B4-5-6	05-034-18	Soil	5-2-18	5-3-18	
FL211-B5-0-0.5	05-034-20	Soil	5-2-18	5-3-18	
FL211-B5-0.5-1	05-034-21	Soil	5-2-18	5-3-18	
FL211-B5-3.5-4	05-034-22	Soil	5-2-18	5-3-18	
FL211-B5-5.5-6	05-034-23	Soil	5-2-18	5-3-18	
FL211-B5-11.5-12	05-034-24	Soil	5-2-18	5-3-18	
FL211-B5-13-14	05-034-25	Soil	5-2-18	5-3-18	
FL210-B6-2-2.5	05-034-27	Soil	5-2-18	5-3-18	
FL210-B6-6-7	05-034-28	Soil	5-2-18	5-3-18	
FL210-B6-9-10	05-034-29	Soil	5-2-18	5-3-18	
FL211-B7-2.5-3.5	05-034-32	Soil	5-2-18	5-3-18	
FL211-B7-5-6	05-034-33	Soil	5-2-18	5-3-18	
FL211-B7-6.5-7	05-034-34	Soil	5-2-18	5-3-18	
FL211-B7-10-11	05-034-35	Soil	5-2-18	5-3-18	
FL213-B8-0-0.5	05-034-37	Soil	5-2-18	5-3-18	
FL213-B8-0.5-1	05-034-38	Soil	5-2-18	5-3-18	



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 15, 2018
Samples Submitted: May 3, 2018
Laboratory Reference: 1805-034
Project: 4082-039-01

ANALYTICAL REPORT FOR SAMPLES

Page 2 of 2

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
FL213-B8-3.5-4.5	05-034-39	Soil	5-2-18	5-3-18	
FL213-B8-7.5-8.5	05-034-40	Soil	5-2-18	5-3-18	
FL213-B9-0-0.5	05-034-42	Soil	5-2-18	5-3-18	
FL213-B9-0.5-1	05-034-43	Soil	5-2-18	5-3-18	
FL213-B9-4-5	05-034-44	Soil	5-2-18	5-3-18	
FL213-B9-6-7	05-034-45	Soil	5-2-18	5-3-18	
FL213-B10-2-3	05-034-49	Soil	5-2-18	5-3-18	
FL213-B10-4-5	05-034-50	Soil	5-2-18	5-3-18	



Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

NWTPH-HCID

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL212-B1-2.5-3.5					
Laboratory ID:	05-034-03					
Gasoline Range Organics	ND	24	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	59	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	120	NWTPH-HCID	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	93	50-150				
Client ID:	FL212-B1-5-6					
Laboratory ID:	05-034-04					
Gasoline Range Organics	ND	22	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	54	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	110	NWTPH-HCID	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	104	50-150				
Client ID:	FL212-B1-9-10					
Laboratory ID:	05-034-05					
Gasoline Range Organics	ND	21	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	52	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	110	NWTPH-HCID	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	100	50-150				
Client ID:	FL212-B1-19-20					
Laboratory ID:	05-034-07					
Gasoline Range Organics	ND	22	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	56	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	110	NWTPH-HCID	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	97	50-150				
Client ID:	FL212-B2-2-3					
Laboratory ID:	05-034-08					
Gasoline Range Organics	ND	24	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	59	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil	Detected	120	NWTPH-HCID	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	88	50-150				



Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

NWTPH-HCID

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL212-B2-5.5-6.5					
Laboratory ID:	05-034-09					
Gasoline Range Organics	ND	24	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	59	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	120	NWTPH-HCID	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	94	50-150				
Client ID:	FL212-B2-9-10					
Laboratory ID:	05-034-10					
Gasoline Range Organics	ND	22	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	54	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	110	NWTPH-HCID	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	93	50-150				
Client ID:	FL211-B3-3-4					
Laboratory ID:	05-034-14					
Gasoline Range Organics	ND	23	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	58	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	120	NWTPH-HCID	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	91	50-150				
Client ID:	FL211-B3-6-7					
Laboratory ID:	05-034-15					
Gasoline Range Organics	ND	23	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	56	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	110	NWTPH-HCID	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	91	50-150				
Client ID:	FL211-B4-2-3					
Laboratory ID:	05-034-17					
Gasoline Range Organics	ND	24	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	60	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	120	NWTPH-HCID	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	98	50-150				



Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

NWTPH-HCID

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL211-B4-5-6					
Laboratory ID:	05-034-18					
Gasoline Range Organics	ND	25	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	62	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	120	NWTPH-HCID	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	90	50-150				
Client ID:	FL211-B5-3.5-4					
Laboratory ID:	05-034-22					
Gasoline Range Organics	ND	25	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	63	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	130	NWTPH-HCID	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	93	50-150				
Client ID:	FL211-B5-5.5-6					
Laboratory ID:	05-034-23					
Gasoline Range Organics	ND	23	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	56	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	110	NWTPH-HCID	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	92	50-150				
Client ID:	FL211-B5-11.5-12					
Laboratory ID:	05-034-24					
Gasoline Range Organics	ND	23	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	56	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	110	NWTPH-HCID	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	91	50-150				
Client ID:	FL210-B6-2-2.5					
Laboratory ID:	05-034-27					
Gasoline Range Organics	ND	24	NWTPH-HCID	5-4-18	5-7-18	
Diesel Range Organics	ND	61	NWTPH-HCID	5-4-18	5-7-18	
Lube Oil	Detected	120	NWTPH-HCID	5-4-18	5-7-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	94	50-150				



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NWTPH-HCID

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL210-B6-6-7					
Laboratory ID:	05-034-28					
Gasoline Range Organics	ND	22	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	55	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	110	NWTPH-HCID	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	92	50-150				
Client ID:	FL210-B6-9-10					
Laboratory ID:	05-034-29					
Gasoline Range Organics	ND	21	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	54	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	110	NWTPH-HCID	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	90	50-150				
Client ID:	FL211-B7-2.5-3.5					
Laboratory ID:	05-034-32					
Gasoline Range Organics	ND	24	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	60	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	120	NWTPH-HCID	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	84	50-150				
Client ID:	FL211-B7-5-6					
Laboratory ID:	05-034-33					
Gasoline Range Organics	ND	25	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	61	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	120	NWTPH-HCID	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	91	50-150				
Client ID:	FL211-B7-6.5-7					
Laboratory ID:	05-034-34					
Gasoline Range Organics	ND	23	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	57	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	110	NWTPH-HCID	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	93	50-150				



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NWTPH-HCID

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL211-B7-10-11					
Laboratory ID:	05-034-35					
Gasoline Range Organics	ND	22	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	55	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	110	NWTPH-HCID	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	86	50-150				
Client ID:	FL213-B8-3.5-4.5					
Laboratory ID:	05-034-39					
Gasoline Range Organics	ND	23	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	57	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	110	NWTPH-HCID	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	86	50-150				
Client ID:	FL213-B8-7.5-8.5					
Laboratory ID:	05-034-40					
Gasoline Range Organics	ND	22	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	55	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	110	NWTPH-HCID	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	94	50-150				
Client ID:	FL213-B9-4-5					
Laboratory ID:	05-034-44					
Gasoline Range Organics	ND	23	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	58	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	120	NWTPH-HCID	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	88	50-150				
Client ID:	FL213-B9-6-7					
Laboratory ID:	05-034-45					
Gasoline Range Organics	ND	22	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	56	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	110	NWTPH-HCID	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	88	50-150				



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NWTPH-HCID

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL213-B10-2-3					
Laboratory ID:	05-034-49					
Gasoline Range Organics	ND	24	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	60	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	120	NWTPH-HCID	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
<i>o-Terphenyl</i>	82	50-150				

Client ID:	FL213-B10-4-5					
Laboratory ID:	05-034-50					
Gasoline Range Organics	ND	22	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	56	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	110	NWTPH-HCID	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
<i>o-Terphenyl</i>	82	50-150				



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NWTPH-Dx

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL212-B2-2-3					
Laboratory ID:	05-034-08					
Diesel Range Organics	ND	30	NWTPH-Dx	5-8-18	5-8-18	
Lube Oil	160	59	NWTPH-Dx	5-8-18	5-8-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	87	50-150				
Client ID:	FL210-B6-2-2.5					
Laboratory ID:	05-034-27					
Diesel Range Organics	ND	54	NWTPH-Dx	5-8-18	5-8-18	U1
Lube Oil	690	61	NWTPH-Dx	5-8-18	5-8-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	82	50-150				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: FL212-B1-2.5-3.5						
Laboratory ID: 05-034-03						
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Chloromethane	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
Vinyl Chloride	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Bromomethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Chloroethane	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Acetone	ND	0.0064	EPA 8260C	5-4-18	5-4-18	
Iodomethane	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
Carbon Disulfide	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Methylene Chloride	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Vinyl Acetate	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
2-Butanone	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
Bromochloromethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Chloroform	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Benzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Trichloroethene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Dibromomethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Bromodichloromethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
2-Chloroethyl Vinyl Ether	ND	0.0069	EPA 8260C	5-4-18	5-4-18	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Methyl Isobutyl Ketone	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
Toluene	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL212-B1-2.5-3.5				
Laboratory ID:		05-034-03				
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Tetrachloroethene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
2-Hexanone	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
Dibromochloromethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Chlorobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Ethylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
m,p-Xylene	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
o-Xylene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Styrene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Bromoform	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
Isopropylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Bromobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
n-Propylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
2-Chlorotoluene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
4-Chlorotoluene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
tert-Butylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
sec-Butylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
p-Isopropyltoluene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
n-Butylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
Naphthalene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	101	68-139				
Toluene-d8	100	79-128				
4-Bromofluorobenzene	92	71-132				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL212-B1-5-6					
Laboratory ID:	05-034-04					
Dichlorodifluoromethane	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
Chloromethane	ND	0.0041	EPA 8260C	5-4-18	5-4-18	
Vinyl Chloride	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
Bromomethane	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
Chloroethane	ND	0.0041	EPA 8260C	5-4-18	5-4-18	
Trichlorofluoromethane	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
Acetone	ND	0.0053	EPA 8260C	5-4-18	5-4-18	
Iodomethane	ND	0.0041	EPA 8260C	5-4-18	5-4-18	
Carbon Disulfide	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
Methylene Chloride	ND	0.0041	EPA 8260C	5-4-18	5-4-18	
(trans) 1,2-Dichloroethene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
Methyl t-Butyl Ether	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethane	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
Vinyl Acetate	ND	0.0041	EPA 8260C	5-4-18	5-4-18	
2,2-Dichloropropane	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
(cis) 1,2-Dichloroethene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
2-Butanone	ND	0.0041	EPA 8260C	5-4-18	5-4-18	
Bromochloromethane	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
Chloroform	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
1,1,1-Trichloroethane	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
Carbon Tetrachloride	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloropropene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
Benzene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloroethane	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
Trichloroethene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloropropane	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
Dibromomethane	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
Bromodichloromethane	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
2-Chloroethyl Vinyl Ether	ND	0.0057	EPA 8260C	5-4-18	5-4-18	
(cis) 1,3-Dichloropropene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
Methyl Isobutyl Ketone	ND	0.0041	EPA 8260C	5-4-18	5-4-18	
Toluene	ND	0.0041	EPA 8260C	5-4-18	5-4-18	
(trans) 1,3-Dichloropropene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL212-B1-5-6					
Laboratory ID:	05-034-04					
1,1,2-Trichloroethane	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
Tetrachloroethene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
1,3-Dichloropropane	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
2-Hexanone	ND	0.0041	EPA 8260C	5-4-18	5-4-18	
Dibromochloromethane	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromoethane	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
Chlorobenzene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
1,1,1,2-Tetrachloroethane	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
Ethylbenzene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
m,p-Xylene	ND	0.0041	EPA 8260C	5-4-18	5-4-18	
o-Xylene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
Styrene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
Bromoform	ND	0.0041	EPA 8260C	5-4-18	5-4-18	
Isopropylbenzene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
Bromobenzene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
1,1,2,2-Tetrachloroethane	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichloropropane	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
n-Propylbenzene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
2-Chlorotoluene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
4-Chlorotoluene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
1,3,5-Trimethylbenzene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
tert-Butylbenzene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trimethylbenzene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
sec-Butylbenzene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
1,3-Dichlorobenzene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
p-Isopropyltoluene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
1,4-Dichlorobenzene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
1,2-Dichlorobenzene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
n-Butylbenzene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromo-3-chloropropane	ND	0.0041	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trichlorobenzene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
Hexachlorobutadiene	ND	0.0041	EPA 8260C	5-4-18	5-4-18	
Naphthalene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichlorobenzene	ND	0.00083	EPA 8260C	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	101	68-139				
Toluene-d8	101	79-128				
4-Bromofluorobenzene	91	71-132				



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VOLATILES EPA 8260C

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL212-B1-9-10				
Laboratory ID:		05-034-05				
Dichlorodifluoromethane	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
Chloromethane	ND	0.0045	EPA 8260C	5-4-18	5-4-18	
Vinyl Chloride	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
Bromomethane	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
Chloroethane	ND	0.0045	EPA 8260C	5-4-18	5-4-18	
Trichlorofluoromethane	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
Acetone	ND	0.0057	EPA 8260C	5-4-18	5-4-18	
Iodomethane	ND	0.0045	EPA 8260C	5-4-18	5-4-18	
Carbon Disulfide	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
Methylene Chloride	ND	0.0045	EPA 8260C	5-4-18	5-4-18	
(trans) 1,2-Dichloroethene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
Methyl t-Butyl Ether	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethane	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
Vinyl Acetate	ND	0.0045	EPA 8260C	5-4-18	5-4-18	
2,2-Dichloropropane	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
(cis) 1,2-Dichloroethene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
2-Butanone	ND	0.0045	EPA 8260C	5-4-18	5-4-18	
Bromochloromethane	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
Chloroform	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
1,1,1-Trichloroethane	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
Carbon Tetrachloride	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloropropene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
Benzene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloroethane	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
Trichloroethene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloropropane	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
Dibromomethane	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
Bromodichloromethane	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
2-Chloroethyl Vinyl Ether	ND	0.0062	EPA 8260C	5-4-18	5-4-18	
(cis) 1,3-Dichloropropene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
Methyl Isobutyl Ketone	ND	0.0045	EPA 8260C	5-4-18	5-4-18	
Toluene	ND	0.0045	EPA 8260C	5-4-18	5-4-18	
(trans) 1,3-Dichloropropene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL212-B1-9-10					
Laboratory ID:	05-034-05					
1,1,2-Trichloroethane	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
Tetrachloroethene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
1,3-Dichloropropane	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
2-Hexanone	ND	0.0045	EPA 8260C	5-4-18	5-4-18	
Dibromochloromethane	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromoethane	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
Chlorobenzene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
1,1,1,2-Tetrachloroethane	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
Ethylbenzene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
m,p-Xylene	ND	0.0045	EPA 8260C	5-4-18	5-4-18	
o-Xylene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
Styrene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
Bromoform	ND	0.0045	EPA 8260C	5-4-18	5-4-18	
Isopropylbenzene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
Bromobenzene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
1,1,2,2-Tetrachloroethane	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichloropropane	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
n-Propylbenzene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
2-Chlorotoluene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
4-Chlorotoluene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
1,3,5-Trimethylbenzene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
tert-Butylbenzene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trimethylbenzene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
sec-Butylbenzene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
1,3-Dichlorobenzene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
p-Isopropyltoluene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
1,4-Dichlorobenzene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
1,2-Dichlorobenzene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
n-Butylbenzene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromo-3-chloropropane	ND	0.0045	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trichlorobenzene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
Hexachlorobutadiene	ND	0.0045	EPA 8260C	5-4-18	5-4-18	
Naphthalene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichlorobenzene	ND	0.00089	EPA 8260C	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	106	68-139				
Toluene-d8	103	79-128				
4-Bromofluorobenzene	97	71-132				



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL212-B1-19-20				
Laboratory ID:		05-034-07				
Dichlorodifluoromethane	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
Chloromethane	ND	0.0044	EPA 8260C	5-4-18	5-4-18	
Vinyl Chloride	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
Bromomethane	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
Chloroethane	ND	0.0044	EPA 8260C	5-4-18	5-4-18	
Trichlorofluoromethane	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
Acetone	ND	0.0056	EPA 8260C	5-4-18	5-4-18	
Iodomethane	ND	0.0044	EPA 8260C	5-4-18	5-4-18	
Carbon Disulfide	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
Methylene Chloride	ND	0.0044	EPA 8260C	5-4-18	5-4-18	
(trans) 1,2-Dichloroethene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
Methyl t-Butyl Ether	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethane	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
Vinyl Acetate	ND	0.0044	EPA 8260C	5-4-18	5-4-18	
2,2-Dichloropropane	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
(cis) 1,2-Dichloroethene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
2-Butanone	ND	0.0044	EPA 8260C	5-4-18	5-4-18	
Bromochloromethane	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
Chloroform	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
1,1,1-Trichloroethane	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
Carbon Tetrachloride	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloropropene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
Benzene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloroethane	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
Trichloroethene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloropropane	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
Dibromomethane	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
Bromodichloromethane	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
2-Chloroethyl Vinyl Ether	ND	0.0061	EPA 8260C	5-4-18	5-4-18	
(cis) 1,3-Dichloropropene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
Methyl Isobutyl Ketone	ND	0.0044	EPA 8260C	5-4-18	5-4-18	
Toluene	ND	0.0044	EPA 8260C	5-4-18	5-4-18	
(trans) 1,3-Dichloropropene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	



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 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL212-B1-19-20				
Laboratory ID:		05-034-07				
1,1,2-Trichloroethane	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
Tetrachloroethene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
1,3-Dichloropropane	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
2-Hexanone	ND	0.0044	EPA 8260C	5-4-18	5-4-18	
Dibromochloromethane	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromoethane	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
Chlorobenzene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
1,1,1,2-Tetrachloroethane	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
Ethylbenzene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
m,p-Xylene	ND	0.0044	EPA 8260C	5-4-18	5-4-18	
o-Xylene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
Styrene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
Bromoform	ND	0.0044	EPA 8260C	5-4-18	5-4-18	
Isopropylbenzene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
Bromobenzene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
1,1,2,2-Tetrachloroethane	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichloropropane	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
n-Propylbenzene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
2-Chlorotoluene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
4-Chlorotoluene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
1,3,5-Trimethylbenzene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
tert-Butylbenzene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trimethylbenzene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
sec-Butylbenzene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
1,3-Dichlorobenzene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
p-Isopropyltoluene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
1,4-Dichlorobenzene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
1,2-Dichlorobenzene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
n-Butylbenzene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromo-3-chloropropane	ND	0.0044	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trichlorobenzene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
Hexachlorobutadiene	ND	0.0044	EPA 8260C	5-4-18	5-4-18	
Naphthalene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichlorobenzene	ND	0.00088	EPA 8260C	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	103	68-139				
Toluene-d8	99	79-128				
4-Bromofluorobenzene	92	71-132				



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 Project: 4082-039-01

VOLATILES EPA 8260C

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL212-B2-2-3				
Laboratory ID:		05-034-08				
Dichlorodifluoromethane	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
Chloromethane	ND	0.0049	EPA 8260C	5-4-18	5-4-18	
Vinyl Chloride	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
Bromomethane	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
Chloroethane	ND	0.0049	EPA 8260C	5-4-18	5-4-18	
Trichlorofluoromethane	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
Acetone	ND	0.0062	EPA 8260C	5-4-18	5-4-18	
Iodomethane	ND	0.0049	EPA 8260C	5-4-18	5-4-18	
Carbon Disulfide	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
Methylene Chloride	ND	0.0049	EPA 8260C	5-4-18	5-4-18	
(trans) 1,2-Dichloroethene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
Methyl t-Butyl Ether	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethane	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
Vinyl Acetate	ND	0.0049	EPA 8260C	5-4-18	5-4-18	
2,2-Dichloropropane	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
(cis) 1,2-Dichloroethene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
2-Butanone	ND	0.0049	EPA 8260C	5-4-18	5-4-18	
Bromochloromethane	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
Chloroform	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
1,1,1-Trichloroethane	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
Carbon Tetrachloride	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloropropene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
Benzene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloroethane	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
Trichloroethene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloropropane	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
Dibromomethane	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
Bromodichloromethane	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
2-Chloroethyl Vinyl Ether	ND	0.0067	EPA 8260C	5-4-18	5-4-18	
(cis) 1,3-Dichloropropene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
Methyl Isobutyl Ketone	ND	0.0049	EPA 8260C	5-4-18	5-4-18	
Toluene	ND	0.0049	EPA 8260C	5-4-18	5-4-18	
(trans) 1,3-Dichloropropene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	



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 Project: 4082-039-01

VOLATILES EPA 8260C
 Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL212-B2-2-3					
Laboratory ID:	05-034-08					
1,1,2-Trichloroethane	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
Tetrachloroethene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
1,3-Dichloropropane	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
2-Hexanone	ND	0.0049	EPA 8260C	5-4-18	5-4-18	
Dibromochloromethane	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromoethane	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
Chlorobenzene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
1,1,1,2-Tetrachloroethane	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
Ethylbenzene	0.0011	0.00097	EPA 8260C	5-4-18	5-4-18	
m,p-Xylene	0.0056	0.0049	EPA 8260C	5-4-18	5-4-18	
o-Xylene	0.0027	0.00097	EPA 8260C	5-4-18	5-4-18	
Styrene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
Bromoform	ND	0.0049	EPA 8260C	5-4-18	5-4-18	
Isopropylbenzene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
Bromobenzene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
1,1,2,2-Tetrachloroethane	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichloropropane	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
n-Propylbenzene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
2-Chlorotoluene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
4-Chlorotoluene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
1,3,5-Trimethylbenzene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
tert-Butylbenzene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trimethylbenzene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
sec-Butylbenzene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
1,3-Dichlorobenzene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
p-Isopropyltoluene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
1,4-Dichlorobenzene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
1,2-Dichlorobenzene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
n-Butylbenzene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromo-3-chloropropane	ND	0.0049	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trichlorobenzene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
Hexachlorobutadiene	ND	0.0049	EPA 8260C	5-4-18	5-4-18	
Naphthalene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichlorobenzene	ND	0.00097	EPA 8260C	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	102	68-139				
Toluene-d8	98	79-128				
4-Bromofluorobenzene	91	71-132				



Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: FL212-B2-5.5-6.5						
Laboratory ID: 05-034-09						
Dichlorodifluoromethane	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
Chloromethane	ND	0.0047	EPA 8260C	5-4-18	5-4-18	
Vinyl Chloride	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
Bromomethane	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
Chloroethane	ND	0.0047	EPA 8260C	5-4-18	5-4-18	
Trichlorofluoromethane	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
Acetone	ND	0.0060	EPA 8260C	5-4-18	5-4-18	
Iodomethane	ND	0.0047	EPA 8260C	5-4-18	5-4-18	
Carbon Disulfide	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
Methylene Chloride	ND	0.0047	EPA 8260C	5-4-18	5-4-18	
(trans) 1,2-Dichloroethene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
Methyl t-Butyl Ether	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethane	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
Vinyl Acetate	ND	0.0047	EPA 8260C	5-4-18	5-4-18	
2,2-Dichloropropane	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
(cis) 1,2-Dichloroethene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
2-Butanone	ND	0.0047	EPA 8260C	5-4-18	5-4-18	
Bromochloromethane	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
Chloroform	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
1,1,1-Trichloroethane	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
Carbon Tetrachloride	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloropropene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
Benzene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloroethane	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
Trichloroethene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloropropane	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
Dibromomethane	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
Bromodichloromethane	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
2-Chloroethyl Vinyl Ether	ND	0.0065	EPA 8260C	5-4-18	5-4-18	
(cis) 1,3-Dichloropropene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
Methyl Isobutyl Ketone	ND	0.0047	EPA 8260C	5-4-18	5-4-18	
Toluene	ND	0.0047	EPA 8260C	5-4-18	5-4-18	
(trans) 1,3-Dichloropropene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL212-B2-5.5-6.5				
Laboratory ID:		05-034-09				
1,1,2-Trichloroethane	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
Tetrachloroethene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
1,3-Dichloropropane	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
2-Hexanone	ND	0.0047	EPA 8260C	5-4-18	5-4-18	
Dibromochloromethane	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromoethane	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
Chlorobenzene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
1,1,1,2-Tetrachloroethane	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
Ethylbenzene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
m,p-Xylene	ND	0.0047	EPA 8260C	5-4-18	5-4-18	
o-Xylene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
Styrene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
Bromoform	ND	0.0047	EPA 8260C	5-4-18	5-4-18	
Isopropylbenzene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
Bromobenzene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
1,1,2,2-Tetrachloroethane	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichloropropane	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
n-Propylbenzene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
2-Chlorotoluene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
4-Chlorotoluene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
1,3,5-Trimethylbenzene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
tert-Butylbenzene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trimethylbenzene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
sec-Butylbenzene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
1,3-Dichlorobenzene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
p-Isopropyltoluene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
1,4-Dichlorobenzene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
1,2-Dichlorobenzene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
n-Butylbenzene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromo-3-chloropropane	ND	0.0047	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trichlorobenzene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
Hexachlorobutadiene	ND	0.0047	EPA 8260C	5-4-18	5-4-18	
Naphthalene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichlorobenzene	ND	0.00094	EPA 8260C	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	102	68-139				
Toluene-d8	101	79-128				
4-Bromofluorobenzene	92	71-132				



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL212-B2-9-10				
Laboratory ID:		05-034-10				
Dichlorodifluoromethane	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
Chloromethane	ND	0.0045	EPA 8260C	5-4-18	5-4-18	
Vinyl Chloride	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
Bromomethane	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
Chloroethane	ND	0.0045	EPA 8260C	5-4-18	5-4-18	
Trichlorofluoromethane	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
Acetone	ND	0.0058	EPA 8260C	5-4-18	5-4-18	
Iodomethane	ND	0.0045	EPA 8260C	5-4-18	5-4-18	
Carbon Disulfide	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
Methylene Chloride	ND	0.0045	EPA 8260C	5-4-18	5-4-18	
(trans) 1,2-Dichloroethene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
Methyl t-Butyl Ether	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethane	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
Vinyl Acetate	ND	0.0045	EPA 8260C	5-4-18	5-4-18	
2,2-Dichloropropane	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
(cis) 1,2-Dichloroethene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
2-Butanone	ND	0.0045	EPA 8260C	5-4-18	5-4-18	
Bromochloromethane	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
Chloroform	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
1,1,1-Trichloroethane	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
Carbon Tetrachloride	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloropropene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
Benzene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloroethane	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
Trichloroethene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloropropane	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
Dibromomethane	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
Bromodichloromethane	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
2-Chloroethyl Vinyl Ether	ND	0.0062	EPA 8260C	5-4-18	5-4-18	
(cis) 1,3-Dichloropropene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
Methyl Isobutyl Ketone	ND	0.0045	EPA 8260C	5-4-18	5-4-18	
Toluene	ND	0.0045	EPA 8260C	5-4-18	5-4-18	
(trans) 1,3-Dichloropropene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	



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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL212-B2-9-10					
Laboratory ID:	05-034-10					
1,1,2-Trichloroethane	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
Tetrachloroethene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
1,3-Dichloropropane	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
2-Hexanone	ND	0.0045	EPA 8260C	5-4-18	5-4-18	
Dibromochloromethane	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromoethane	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
Chlorobenzene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
1,1,1,2-Tetrachloroethane	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
Ethylbenzene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
m,p-Xylene	ND	0.0045	EPA 8260C	5-4-18	5-4-18	
o-Xylene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
Styrene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
Bromoform	ND	0.0045	EPA 8260C	5-4-18	5-4-18	
Isopropylbenzene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
Bromobenzene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
1,1,2,2-Tetrachloroethane	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichloropropane	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
n-Propylbenzene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
2-Chlorotoluene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
4-Chlorotoluene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
1,3,5-Trimethylbenzene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
tert-Butylbenzene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trimethylbenzene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
sec-Butylbenzene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
1,3-Dichlorobenzene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
p-Isopropyltoluene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
1,4-Dichlorobenzene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
1,2-Dichlorobenzene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
n-Butylbenzene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromo-3-chloropropane	ND	0.0045	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trichlorobenzene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
Hexachlorobutadiene	ND	0.0045	EPA 8260C	5-4-18	5-4-18	
Naphthalene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichlorobenzene	ND	0.00091	EPA 8260C	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	102	68-139				
Toluene-d8	98	79-128				
4-Bromofluorobenzene	95	71-132				



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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL211-B3-3-4				
Laboratory ID:		05-034-14				
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Chloromethane	ND	0.0052	EPA 8260C	5-4-18	5-4-18	
Vinyl Chloride	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Bromomethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Chloroethane	ND	0.0052	EPA 8260C	5-4-18	5-4-18	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Acetone	ND	0.0067	EPA 8260C	5-4-18	5-4-18	
Iodomethane	ND	0.0052	EPA 8260C	5-4-18	5-4-18	
Carbon Disulfide	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Methylene Chloride	ND	0.0052	EPA 8260C	5-4-18	5-4-18	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Vinyl Acetate	ND	0.0052	EPA 8260C	5-4-18	5-4-18	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
2-Butanone	ND	0.0052	EPA 8260C	5-4-18	5-4-18	
Bromochloromethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Chloroform	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Benzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Trichloroethene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Dibromomethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Bromodichloromethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
2-Chloroethyl Vinyl Ether	ND	0.0072	EPA 8260C	5-4-18	5-4-18	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Methyl Isobutyl Ketone	ND	0.0052	EPA 8260C	5-4-18	5-4-18	
Toluene	ND	0.0052	EPA 8260C	5-4-18	5-4-18	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	



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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL211-B3-3-4					
Laboratory ID:	05-034-14					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Tetrachloroethene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
2-Hexanone	ND	0.0052	EPA 8260C	5-4-18	5-4-18	
Dibromochloromethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Chlorobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Ethylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
m,p-Xylene	ND	0.0052	EPA 8260C	5-4-18	5-4-18	
o-Xylene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Styrene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Bromoform	ND	0.0052	EPA 8260C	5-4-18	5-4-18	
Isopropylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Bromobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
n-Propylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
2-Chlorotoluene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
4-Chlorotoluene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
tert-Butylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
sec-Butylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
p-Isopropyltoluene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
n-Butylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromo-3-chloropropane	ND	0.0052	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Hexachlorobutadiene	ND	0.0052	EPA 8260C	5-4-18	5-4-18	
Naphthalene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	103	68-139				
Toluene-d8	100	79-128				
4-Bromofluorobenzene	90	71-132				



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL211-B3-6-7					
Laboratory ID:	05-034-15					
Dichlorodifluoromethane	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
Chloromethane	ND	0.0046	EPA 8260C	5-4-18	5-4-18	
Vinyl Chloride	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
Bromomethane	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
Chloroethane	ND	0.0046	EPA 8260C	5-4-18	5-4-18	
Trichlorofluoromethane	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
Acetone	ND	0.0059	EPA 8260C	5-4-18	5-4-18	
Iodomethane	ND	0.0046	EPA 8260C	5-4-18	5-4-18	
Carbon Disulfide	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
Methylene Chloride	ND	0.0046	EPA 8260C	5-4-18	5-4-18	
(trans) 1,2-Dichloroethene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
Methyl t-Butyl Ether	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethane	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
Vinyl Acetate	ND	0.0046	EPA 8260C	5-4-18	5-4-18	
2,2-Dichloropropane	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
(cis) 1,2-Dichloroethene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
2-Butanone	ND	0.0046	EPA 8260C	5-4-18	5-4-18	
Bromochloromethane	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
Chloroform	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
1,1,1-Trichloroethane	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
Carbon Tetrachloride	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloropropene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
Benzene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloroethane	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
Trichloroethene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloropropane	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
Dibromomethane	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
Bromodichloromethane	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
2-Chloroethyl Vinyl Ether	ND	0.0064	EPA 8260C	5-4-18	5-4-18	
(cis) 1,3-Dichloropropene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
Methyl Isobutyl Ketone	ND	0.0046	EPA 8260C	5-4-18	5-4-18	
Toluene	ND	0.0046	EPA 8260C	5-4-18	5-4-18	
(trans) 1,3-Dichloropropene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	



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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL211-B3-6-7					
Laboratory ID:	05-034-15					
1,1,2-Trichloroethane	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
Tetrachloroethene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
1,3-Dichloropropane	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
2-Hexanone	ND	0.0046	EPA 8260C	5-4-18	5-4-18	
Dibromochloromethane	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromoethane	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
Chlorobenzene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
1,1,1,2-Tetrachloroethane	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
Ethylbenzene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
m,p-Xylene	ND	0.0046	EPA 8260C	5-4-18	5-4-18	
o-Xylene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
Styrene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
Bromoform	ND	0.0046	EPA 8260C	5-4-18	5-4-18	
Isopropylbenzene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
Bromobenzene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
1,1,2,2-Tetrachloroethane	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichloropropane	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
n-Propylbenzene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
2-Chlorotoluene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
4-Chlorotoluene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
1,3,5-Trimethylbenzene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
tert-Butylbenzene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trimethylbenzene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
sec-Butylbenzene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
1,3-Dichlorobenzene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
p-Isopropyltoluene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
1,4-Dichlorobenzene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
1,2-Dichlorobenzene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
n-Butylbenzene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromo-3-chloropropane	ND	0.0046	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trichlorobenzene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
Hexachlorobutadiene	ND	0.0046	EPA 8260C	5-4-18	5-4-18	
Naphthalene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichlorobenzene	ND	0.00092	EPA 8260C	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	103	68-139				
Toluene-d8	100	79-128				
4-Bromofluorobenzene	91	71-132				



Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL211-B4-2-3				
Laboratory ID:		05-034-17				
Dichlorodifluoromethane	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
Chloromethane	ND	0.0075	EPA 8260C	5-4-18	5-4-18	
Vinyl Chloride	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
Bromomethane	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
Chloroethane	ND	0.0075	EPA 8260C	5-4-18	5-4-18	
Trichlorofluoromethane	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
Acetone	ND	0.0096	EPA 8260C	5-4-18	5-4-18	
Iodomethane	ND	0.0075	EPA 8260C	5-4-18	5-4-18	
Carbon Disulfide	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
Methylene Chloride	ND	0.0075	EPA 8260C	5-4-18	5-4-18	
(trans) 1,2-Dichloroethene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
Methyl t-Butyl Ether	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethane	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
Vinyl Acetate	ND	0.0075	EPA 8260C	5-4-18	5-4-18	
2,2-Dichloropropane	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
(cis) 1,2-Dichloroethene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
2-Butanone	ND	0.0075	EPA 8260C	5-4-18	5-4-18	
Bromochloromethane	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
Chloroform	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
1,1,1-Trichloroethane	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
Carbon Tetrachloride	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloropropene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
Benzene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloroethane	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
Trichloroethene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloropropane	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
Dibromomethane	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
Bromodichloromethane	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
2-Chloroethyl Vinyl Ether	ND	0.010	EPA 8260C	5-4-18	5-4-18	
(cis) 1,3-Dichloropropene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
Methyl Isobutyl Ketone	ND	0.0075	EPA 8260C	5-4-18	5-4-18	
Toluene	ND	0.0075	EPA 8260C	5-4-18	5-4-18	
(trans) 1,3-Dichloropropene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	



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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL211-B4-2-3					
Laboratory ID:	05-034-17					
1,1,2-Trichloroethane	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
Tetrachloroethene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
1,3-Dichloropropane	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
2-Hexanone	ND	0.0075	EPA 8260C	5-4-18	5-4-18	
Dibromochloromethane	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromoethane	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
Chlorobenzene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
1,1,1,2-Tetrachloroethane	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
Ethylbenzene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
m,p-Xylene	ND	0.0075	EPA 8260C	5-4-18	5-4-18	
o-Xylene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
Styrene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
Bromoform	ND	0.0075	EPA 8260C	5-4-18	5-4-18	
Isopropylbenzene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
Bromobenzene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
1,1,2,2-Tetrachloroethane	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichloropropane	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
n-Propylbenzene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
2-Chlorotoluene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
4-Chlorotoluene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
1,3,5-Trimethylbenzene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
tert-Butylbenzene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trimethylbenzene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
sec-Butylbenzene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
1,3-Dichlorobenzene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
p-Isopropyltoluene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
1,4-Dichlorobenzene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
1,2-Dichlorobenzene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
n-Butylbenzene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromo-3-chloropropane	ND	0.0075	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trichlorobenzene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
Hexachlorobutadiene	ND	0.0075	EPA 8260C	5-4-18	5-4-18	
Naphthalene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichlorobenzene	ND	0.0015	EPA 8260C	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	103	68-139				
Toluene-d8	98	79-128				
4-Bromofluorobenzene	84	71-132				



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 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL211-B4-5-6				
Laboratory ID:		05-034-18				
Dichlorodifluoromethane	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
Chloromethane	ND	0.0040	EPA 8260C	5-4-18	5-4-18	
Vinyl Chloride	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
Bromomethane	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
Chloroethane	ND	0.0040	EPA 8260C	5-4-18	5-4-18	
Trichlorofluoromethane	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
Acetone	ND	0.0051	EPA 8260C	5-4-18	5-4-18	
Iodomethane	ND	0.0040	EPA 8260C	5-4-18	5-4-18	
Carbon Disulfide	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
Methylene Chloride	ND	0.0040	EPA 8260C	5-4-18	5-4-18	
(trans) 1,2-Dichloroethene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
Methyl t-Butyl Ether	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethane	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
Vinyl Acetate	ND	0.0040	EPA 8260C	5-4-18	5-4-18	
2,2-Dichloropropane	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
(cis) 1,2-Dichloroethene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
2-Butanone	ND	0.0040	EPA 8260C	5-4-18	5-4-18	
Bromochloromethane	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
Chloroform	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
1,1,1-Trichloroethane	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
Carbon Tetrachloride	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloropropene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
Benzene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloroethane	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
Trichloroethene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloropropane	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
Dibromomethane	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
Bromodichloromethane	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
2-Chloroethyl Vinyl Ether	ND	0.0055	EPA 8260C	5-4-18	5-4-18	
(cis) 1,3-Dichloropropene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
Methyl Isobutyl Ketone	ND	0.0040	EPA 8260C	5-4-18	5-4-18	
Toluene	ND	0.0040	EPA 8260C	5-4-18	5-4-18	
(trans) 1,3-Dichloropropene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	



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 Project: 4082-039-01

VOLATILES EPA 8260C

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL211-B4-5-6					
Laboratory ID:	05-034-18					
1,1,2-Trichloroethane	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
Tetrachloroethene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
1,3-Dichloropropane	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
2-Hexanone	ND	0.0040	EPA 8260C	5-4-18	5-4-18	
Dibromochloromethane	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromoethane	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
Chlorobenzene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
1,1,1,2-Tetrachloroethane	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
Ethylbenzene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
m,p-Xylene	ND	0.0040	EPA 8260C	5-4-18	5-4-18	
o-Xylene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
Styrene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
Bromoform	ND	0.0040	EPA 8260C	5-4-18	5-4-18	
Isopropylbenzene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
Bromobenzene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
1,1,2,2-Tetrachloroethane	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichloropropane	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
n-Propylbenzene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
2-Chlorotoluene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
4-Chlorotoluene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
1,3,5-Trimethylbenzene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
tert-Butylbenzene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trimethylbenzene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
sec-Butylbenzene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
1,3-Dichlorobenzene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
p-Isopropyltoluene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
1,4-Dichlorobenzene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
1,2-Dichlorobenzene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
n-Butylbenzene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromo-3-chloropropane	ND	0.0040	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trichlorobenzene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
Hexachlorobutadiene	ND	0.0040	EPA 8260C	5-4-18	5-4-18	
Naphthalene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichlorobenzene	ND	0.00080	EPA 8260C	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	102	68-139				
Toluene-d8	100	79-128				
4-Bromofluorobenzene	94	71-132				



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL211-B5-3.5-4				
Laboratory ID:		05-034-22				
Dichlorodifluoromethane	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
Chloromethane	ND	0.0060	EPA 8260C	5-7-18	5-7-18	
Vinyl Chloride	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
Bromomethane	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
Chloroethane	ND	0.0060	EPA 8260C	5-7-18	5-7-18	
Trichlorofluoromethane	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
Acetone	ND	0.0060	EPA 8260C	5-7-18	5-7-18	
Iodomethane	ND	0.0086	EPA 8260C	5-7-18	5-7-18	
Carbon Disulfide	ND	0.0017	EPA 8260C	5-7-18	5-7-18	
Methylene Chloride	ND	0.0060	EPA 8260C	5-7-18	5-7-18	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
Methyl t-Butyl Ether	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethane	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
Vinyl Acetate	ND	0.0060	EPA 8260C	5-7-18	5-7-18	
2,2-Dichloropropane	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
(cis) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
2-Butanone	ND	0.0060	EPA 8260C	5-7-18	5-7-18	
Bromochloromethane	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
Chloroform	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
Carbon Tetrachloride	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloropropene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
Benzene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloroethane	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
Trichloroethene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloropropane	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
Dibromomethane	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
Bromodichloromethane	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
2-Chloroethyl Vinyl Ether	ND	0.0060	EPA 8260C	5-7-18	5-7-18	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
Methyl Isobutyl Ketone	ND	0.0060	EPA 8260C	5-7-18	5-7-18	
Toluene	ND	0.0060	EPA 8260C	5-7-18	5-7-18	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	



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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL211-B5-3.5-4					
Laboratory ID:	05-034-22					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
Tetrachloroethene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
1,3-Dichloropropane	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
2-Hexanone	ND	0.0060	EPA 8260C	5-7-18	5-7-18	
Dibromochloromethane	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromoethane	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
Chlorobenzene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
Ethylbenzene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
m,p-Xylene	ND	0.0060	EPA 8260C	5-7-18	5-7-18	
o-Xylene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
Styrene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
Bromoform	ND	0.0060	EPA 8260C	5-7-18	5-7-18	
Isopropylbenzene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
Bromobenzene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
1,1,2,2-Tetrachloroethane	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichloropropane	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
n-Propylbenzene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
2-Chlorotoluene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
4-Chlorotoluene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
1,3,5-Trimethylbenzene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
tert-Butylbenzene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trimethylbenzene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
sec-Butylbenzene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
1,3-Dichlorobenzene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
p-Isopropyltoluene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
1,4-Dichlorobenzene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
1,2-Dichlorobenzene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
n-Butylbenzene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromo-3-chloropropane	ND	0.0060	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trichlorobenzene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
Hexachlorobutadiene	ND	0.0060	EPA 8260C	5-7-18	5-7-18	
Naphthalene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichlorobenzene	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	99	68-139				
Toluene-d8	98	79-128				
4-Bromofluorobenzene	88	71-132				



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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL211-B5-5.5-6				
Laboratory ID:		05-034-23				
Dichlorodifluoromethane	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
Chloromethane	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
Vinyl Chloride	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
Bromomethane	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
Chloroethane	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
Trichlorofluoromethane	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
Acetone	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
Iodomethane	ND	0.0064	EPA 8260C	5-7-18	5-7-18	
Carbon Disulfide	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
Methylene Chloride	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
(trans) 1,2-Dichloroethene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
Methyl t-Butyl Ether	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethane	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
Vinyl Acetate	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
2,2-Dichloropropane	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
(cis) 1,2-Dichloroethene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
2-Butanone	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
Bromochloromethane	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
Chloroform	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
1,1,1-Trichloroethane	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
Carbon Tetrachloride	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloropropene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
Benzene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloroethane	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
Trichloroethene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloropropane	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
Dibromomethane	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
Bromodichloromethane	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
2-Chloroethyl Vinyl Ether	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
(cis) 1,3-Dichloropropene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
Methyl Isobutyl Ketone	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
Toluene	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
(trans) 1,3-Dichloropropene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	



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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL211-B5-5.5-6					
Laboratory ID:	05-034-23					
1,1,2-Trichloroethane	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
Tetrachloroethene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
1,3-Dichloropropane	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
2-Hexanone	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
Dibromochloromethane	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromoethane	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
Chlorobenzene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
1,1,1,2-Tetrachloroethane	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
Ethylbenzene	0.0017	0.00088	EPA 8260C	5-7-18	5-7-18	
m,p-Xylene	0.0068	0.0044	EPA 8260C	5-7-18	5-7-18	
o-Xylene	0.0022	0.00088	EPA 8260C	5-7-18	5-7-18	
Styrene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
Bromoform	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
Isopropylbenzene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
Bromobenzene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
1,1,2,2-Tetrachloroethane	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichloropropane	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
n-Propylbenzene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
2-Chlorotoluene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
4-Chlorotoluene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
1,3,5-Trimethylbenzene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
tert-Butylbenzene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trimethylbenzene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
sec-Butylbenzene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
1,3-Dichlorobenzene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
p-Isopropyltoluene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
1,4-Dichlorobenzene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
1,2-Dichlorobenzene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
n-Butylbenzene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromo-3-chloropropane	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trichlorobenzene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
Hexachlorobutadiene	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
Naphthalene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichlorobenzene	ND	0.00088	EPA 8260C	5-7-18	5-7-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	102	68-139				
Toluene-d8	99	79-128				
4-Bromofluorobenzene	93	71-132				



Date of Report: May 15, 2018
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 Project: 4082-039-01

VOLATILES EPA 8260C

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL211-B5-11.5-12				
Laboratory ID:		05-034-24				
Dichlorodifluoromethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Chloromethane	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
Vinyl Chloride	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Bromomethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Chloroethane	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
Trichlorofluoromethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Acetone	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
Iodomethane	ND	0.0069	EPA 8260C	5-7-18	5-7-18	
Carbon Disulfide	ND	0.0013	EPA 8260C	5-7-18	5-7-18	
Methylene Chloride	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
(trans) 1,2-Dichloroethene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Methyl t-Butyl Ether	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Vinyl Acetate	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
2,2-Dichloropropane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
(cis) 1,2-Dichloroethene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
2-Butanone	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
Bromochloromethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Chloroform	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,1,1-Trichloroethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Carbon Tetrachloride	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloropropene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Benzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloroethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Trichloroethene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloropropane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Dibromomethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Bromodichloromethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
2-Chloroethyl Vinyl Ether	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
(cis) 1,3-Dichloropropene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Methyl Isobutyl Ketone	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
Toluene	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
(trans) 1,3-Dichloropropene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	



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Date of Report: May 15, 2018
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 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL211-B5-11.5-12				
Laboratory ID:		05-034-24				
1,1,2-Trichloroethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Tetrachloroethene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,3-Dichloropropane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
2-Hexanone	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
Dibromochloromethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromoethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Chlorobenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,1,1,2-Tetrachloroethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Ethylbenzene	0.048	0.00096	EPA 8260C	5-7-18	5-7-18	
m,p-Xylene	0.24	0.0048	EPA 8260C	5-7-18	5-7-18	
o-Xylene	0.076	0.00096	EPA 8260C	5-7-18	5-7-18	
Styrene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Bromoform	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
Isopropylbenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Bromobenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,1,2,2-Tetrachloroethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichloropropane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
n-Propylbenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
2-Chlorotoluene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
4-Chlorotoluene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,3,5-Trimethylbenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
tert-Butylbenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trimethylbenzene	0.0013	0.00096	EPA 8260C	5-7-18	5-7-18	
sec-Butylbenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,3-Dichlorobenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
p-Isopropyltoluene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,4-Dichlorobenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,2-Dichlorobenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
n-Butylbenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromo-3-chloropropane	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trichlorobenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Hexachlorobutadiene	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
Naphthalene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichlorobenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	104	68-139				
Toluene-d8	101	79-128				
4-Bromofluorobenzene	91	71-132				



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL210-B6-2-2.5				
Laboratory ID:		05-034-27				
Dichlorodifluoromethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Chloromethane	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
Vinyl Chloride	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Bromomethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Chloroethane	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
Trichlorofluoromethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Acetone	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
Iodomethane	ND	0.0079	EPA 8260C	5-7-18	5-7-18	
Carbon Disulfide	ND	0.0015	EPA 8260C	5-7-18	5-7-18	
Methylene Chloride	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Methyl t-Butyl Ether	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Vinyl Acetate	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
2,2-Dichloropropane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
2-Butanone	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
Bromochloromethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Chloroform	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Carbon Tetrachloride	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloropropene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Benzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloroethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Trichloroethene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloropropane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Dibromomethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Bromodichloromethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
2-Chloroethyl Vinyl Ether	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Methyl Isobutyl Ketone	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
Toluene	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	



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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL210-B6-2-2.5					
Laboratory ID:	05-034-27					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Tetrachloroethene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,3-Dichloropropane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
2-Hexanone	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
Dibromochloromethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromoethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Chlorobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Ethylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
m,p-Xylene	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
o-Xylene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Styrene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Bromoform	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
Isopropylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Bromobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
n-Propylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
2-Chlorotoluene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
4-Chlorotoluene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,3,5-Trimethylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
tert-Butylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trimethylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
sec-Butylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
p-Isopropyltoluene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
n-Butylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromo-3-chloropropane	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Hexachlorobutadiene	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
Naphthalene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	102	68-139				
Toluene-d8	98	79-128				
4-Bromofluorobenzene	90	71-132				



Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
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 Project: 4082-039-01

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL210-B6-6-7				
Laboratory ID:		05-034-28				
Dichlorodifluoromethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Chloromethane	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
Vinyl Chloride	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Bromomethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Chloroethane	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
Trichlorofluoromethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Acetone	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
Iodomethane	ND	0.0069	EPA 8260C	5-7-18	5-7-18	
Carbon Disulfide	ND	0.0013	EPA 8260C	5-7-18	5-7-18	
Methylene Chloride	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
(trans) 1,2-Dichloroethene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Methyl t-Butyl Ether	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Vinyl Acetate	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
2,2-Dichloropropane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
(cis) 1,2-Dichloroethene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
2-Butanone	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
Bromochloromethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Chloroform	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,1,1-Trichloroethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Carbon Tetrachloride	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloropropene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Benzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloroethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Trichloroethene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloropropane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Dibromomethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Bromodichloromethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
2-Chloroethyl Vinyl Ether	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
(cis) 1,3-Dichloropropene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Methyl Isobutyl Ketone	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
Toluene	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
(trans) 1,3-Dichloropropene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	



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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL210-B6-6-7					
Laboratory ID:	05-034-28					
1,1,2-Trichloroethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Tetrachloroethene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,3-Dichloropropane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
2-Hexanone	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
Dibromochloromethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromoethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Chlorobenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,1,1,2-Tetrachloroethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Ethylbenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
m,p-Xylene	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
o-Xylene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Styrene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Bromoform	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
Isopropylbenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Bromobenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,1,2,2-Tetrachloroethane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichloropropane	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
n-Propylbenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
2-Chlorotoluene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
4-Chlorotoluene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,3,5-Trimethylbenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
tert-Butylbenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trimethylbenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
sec-Butylbenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,3-Dichlorobenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
p-Isopropyltoluene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,4-Dichlorobenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,2-Dichlorobenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
n-Butylbenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromo-3-chloropropane	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trichlorobenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Hexachlorobutadiene	ND	0.0048	EPA 8260C	5-7-18	5-7-18	
Naphthalene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichlorobenzene	ND	0.00096	EPA 8260C	5-7-18	5-7-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	106	68-139				
Toluene-d8	98	79-128				
4-Bromofluorobenzene	93	71-132				



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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL210-B6-9-10				
Laboratory ID:		05-034-29				
Dichlorodifluoromethane	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
Chloromethane	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
Vinyl Chloride	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
Bromomethane	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
Chloroethane	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
Trichlorofluoromethane	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
Acetone	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
Iodomethane	ND	0.0068	EPA 8260C	5-7-18	5-7-18	
Carbon Disulfide	ND	0.0013	EPA 8260C	5-7-18	5-7-18	
Methylene Chloride	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
(trans) 1,2-Dichloroethene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
Methyl t-Butyl Ether	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethane	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
Vinyl Acetate	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
2,2-Dichloropropane	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
(cis) 1,2-Dichloroethene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
2-Butanone	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
Bromochloromethane	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
Chloroform	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
1,1,1-Trichloroethane	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
Carbon Tetrachloride	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloropropene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
Benzene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloroethane	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
Trichloroethene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloropropane	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
Dibromomethane	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
Bromodichloromethane	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
2-Chloroethyl Vinyl Ether	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
(cis) 1,3-Dichloropropene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
Methyl Isobutyl Ketone	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
Toluene	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
(trans) 1,3-Dichloropropene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	



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 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL210-B6-9-10					
Laboratory ID:	05-034-29					
1,1,2-Trichloroethane	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
Tetrachloroethene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
1,3-Dichloropropane	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
2-Hexanone	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
Dibromochloromethane	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromoethane	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
Chlorobenzene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
1,1,1,2-Tetrachloroethane	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
Ethylbenzene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
m,p-Xylene	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
o-Xylene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
Styrene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
Bromoform	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
Isopropylbenzene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
Bromobenzene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
1,1,2,2-Tetrachloroethane	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichloropropane	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
n-Propylbenzene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
2-Chlorotoluene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
4-Chlorotoluene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
1,3,5-Trimethylbenzene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
tert-Butylbenzene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trimethylbenzene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
sec-Butylbenzene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
1,3-Dichlorobenzene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
p-Isopropyltoluene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
1,4-Dichlorobenzene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
1,2-Dichlorobenzene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
n-Butylbenzene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromo-3-chloropropane	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trichlorobenzene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
Hexachlorobutadiene	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
Naphthalene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichlorobenzene	ND	0.00095	EPA 8260C	5-7-18	5-7-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	103	68-139				
Toluene-d8	99	79-128				
4-Bromofluorobenzene	91	71-132				



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: FL211-B7-2.5-3.5						
Laboratory ID: 05-034-32						
Dichlorodifluoromethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Chloromethane	ND	0.0054	EPA 8260C	5-7-18	5-7-18	
Vinyl Chloride	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Bromomethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Chloroethane	ND	0.0054	EPA 8260C	5-7-18	5-7-18	
Trichlorofluoromethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Acetone	0.13	0.0054	EPA 8260C	5-7-18	5-7-18	
Iodomethane	ND	0.0078	EPA 8260C	5-7-18	5-7-18	
Carbon Disulfide	ND	0.0015	EPA 8260C	5-7-18	5-7-18	
Methylene Chloride	ND	0.0054	EPA 8260C	5-7-18	5-7-18	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Methyl t-Butyl Ether	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Vinyl Acetate	ND	0.0054	EPA 8260C	5-7-18	5-7-18	
2,2-Dichloropropane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
2-Butanone	0.0093	0.0054	EPA 8260C	5-7-18	5-7-18	
Bromochloromethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Chloroform	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Carbon Tetrachloride	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloropropene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Benzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloroethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Trichloroethene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloropropane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Dibromomethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Bromodichloromethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
2-Chloroethyl Vinyl Ether	ND	0.0054	EPA 8260C	5-7-18	5-7-18	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Methyl Isobutyl Ketone	ND	0.0054	EPA 8260C	5-7-18	5-7-18	
Toluene	ND	0.0054	EPA 8260C	5-7-18	5-7-18	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	



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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL211-B7-2.5-3.5					
Laboratory ID:	05-034-32					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Tetrachloroethene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,3-Dichloropropane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
2-Hexanone	ND	0.0054	EPA 8260C	5-7-18	5-7-18	
Dibromochloromethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromoethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Chlorobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Ethylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
m,p-Xylene	ND	0.0054	EPA 8260C	5-7-18	5-7-18	
o-Xylene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Styrene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Bromoform	ND	0.0054	EPA 8260C	5-7-18	5-7-18	
Isopropylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Bromobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
n-Propylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
2-Chlorotoluene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
4-Chlorotoluene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,3,5-Trimethylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
tert-Butylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trimethylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
sec-Butylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
p-Isopropyltoluene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
n-Butylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromo-3-chloropropane	ND	0.0054	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Hexachlorobutadiene	ND	0.0054	EPA 8260C	5-7-18	5-7-18	
Naphthalene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	105	68-139				
Toluene-d8	99	79-128				
4-Bromofluorobenzene	92	71-132				



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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL211-B7-5-6				
Laboratory ID:		05-034-33				
Dichlorodifluoromethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Chloromethane	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
Vinyl Chloride	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Bromomethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Chloroethane	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
Trichlorofluoromethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Acetone	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
Iodomethane	ND	0.0080	EPA 8260C	5-7-18	5-7-18	
Carbon Disulfide	ND	0.0015	EPA 8260C	5-7-18	5-7-18	
Methylene Chloride	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Methyl t-Butyl Ether	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Vinyl Acetate	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
2,2-Dichloropropane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
2-Butanone	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
Bromochloromethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Chloroform	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Carbon Tetrachloride	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloropropene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Benzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloroethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Trichloroethene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloropropane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Dibromomethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Bromodichloromethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
2-Chloroethyl Vinyl Ether	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Methyl Isobutyl Ketone	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
Toluene	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	



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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL211-B7-5-6					
Laboratory ID:	05-034-33					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Tetrachloroethene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,3-Dichloropropane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
2-Hexanone	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
Dibromochloromethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromoethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Chlorobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Ethylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
m,p-Xylene	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
o-Xylene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Styrene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Bromoform	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
Isopropylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Bromobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
n-Propylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
2-Chlorotoluene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
4-Chlorotoluene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,3,5-Trimethylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
tert-Butylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trimethylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
sec-Butylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
p-Isopropyltoluene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
n-Butylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromo-3-chloropropane	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Hexachlorobutadiene	ND	0.0055	EPA 8260C	5-7-18	5-7-18	
Naphthalene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	106	68-139				
Toluene-d8	101	79-128				
4-Bromofluorobenzene	93	71-132				



Date of Report: May 15, 2018
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 Project: 4082-039-01

VOLATILES EPA 8260C

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL211-B7-6.5-7				
Laboratory ID:		05-034-34				
Dichlorodifluoromethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Chloromethane	ND	0.0056	EPA 8260C	5-7-18	5-7-18	
Vinyl Chloride	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Bromomethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Chloroethane	ND	0.0056	EPA 8260C	5-7-18	5-7-18	
Trichlorofluoromethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Acetone	ND	0.0056	EPA 8260C	5-7-18	5-7-18	
Iodomethane	ND	0.0081	EPA 8260C	5-7-18	5-7-18	
Carbon Disulfide	ND	0.0016	EPA 8260C	5-7-18	5-7-18	
Methylene Chloride	ND	0.0056	EPA 8260C	5-7-18	5-7-18	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Methyl t-Butyl Ether	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Vinyl Acetate	ND	0.0056	EPA 8260C	5-7-18	5-7-18	
2,2-Dichloropropane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
2-Butanone	ND	0.0056	EPA 8260C	5-7-18	5-7-18	
Bromochloromethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Chloroform	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Carbon Tetrachloride	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloropropene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Benzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloroethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Trichloroethene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloropropane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Dibromomethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Bromodichloromethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
2-Chloroethyl Vinyl Ether	ND	0.0056	EPA 8260C	5-7-18	5-7-18	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Methyl Isobutyl Ketone	ND	0.0056	EPA 8260C	5-7-18	5-7-18	
Toluene	ND	0.0056	EPA 8260C	5-7-18	5-7-18	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	



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Date of Report: May 15, 2018
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 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL211-B7-6.5-7					
Laboratory ID:	05-034-34					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Tetrachloroethene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,3-Dichloropropane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
2-Hexanone	ND	0.0056	EPA 8260C	5-7-18	5-7-18	
Dibromochloromethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromoethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Chlorobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Ethylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
m,p-Xylene	ND	0.0056	EPA 8260C	5-7-18	5-7-18	
o-Xylene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Styrene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Bromoform	ND	0.0056	EPA 8260C	5-7-18	5-7-18	
Isopropylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Bromobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
n-Propylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
2-Chlorotoluene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
4-Chlorotoluene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,3,5-Trimethylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
tert-Butylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trimethylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
sec-Butylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
p-Isopropyltoluene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
n-Butylbenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromo-3-chloropropane	ND	0.0056	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Hexachlorobutadiene	ND	0.0056	EPA 8260C	5-7-18	5-7-18	
Naphthalene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260C	5-7-18	5-7-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	107	68-139				
Toluene-d8	100	79-128				
4-Bromofluorobenzene	94	71-132				



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL211-B7-10-11				
Laboratory ID:		05-034-35				
Dichlorodifluoromethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Chloromethane	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
Vinyl Chloride	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Bromomethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Chloroethane	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
Trichlorofluoromethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Acetone	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
Iodomethane	ND	0.0068	EPA 8260C	5-7-18	5-7-18	
Carbon Disulfide	ND	0.0013	EPA 8260C	5-7-18	5-7-18	
Methylene Chloride	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
(trans) 1,2-Dichloroethene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Methyl t-Butyl Ether	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Vinyl Acetate	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
2,2-Dichloropropane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
(cis) 1,2-Dichloroethene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
2-Butanone	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
Bromochloromethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Chloroform	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,1,1-Trichloroethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Carbon Tetrachloride	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloropropene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Benzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloroethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Trichloroethene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloropropane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Dibromomethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Bromodichloromethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
2-Chloroethyl Vinyl Ether	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
(cis) 1,3-Dichloropropene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Methyl Isobutyl Ketone	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
Toluene	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
(trans) 1,3-Dichloropropene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL211-B7-10-11				
Laboratory ID:		05-034-35				
1,1,2-Trichloroethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Tetrachloroethene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,3-Dichloropropane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
2-Hexanone	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
Dibromochloromethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromoethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Chlorobenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,1,1,2-Tetrachloroethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Ethylbenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
m,p-Xylene	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
o-Xylene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Styrene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Bromoform	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
Isopropylbenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Bromobenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,1,2,2-Tetrachloroethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichloropropane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
n-Propylbenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
2-Chlorotoluene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
4-Chlorotoluene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,3,5-Trimethylbenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
tert-Butylbenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trimethylbenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
sec-Butylbenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,3-Dichlorobenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
p-Isopropyltoluene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,4-Dichlorobenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,2-Dichlorobenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
n-Butylbenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromo-3-chloropropane	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trichlorobenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Hexachlorobutadiene	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
Naphthalene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichlorobenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	108	68-139				
Toluene-d8	98	79-128				
4-Bromofluorobenzene	92	71-132				



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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: FL213-B8-3.5-4.5						
Laboratory ID: 05-034-39						
Dichlorodifluoromethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Chloromethane	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
Vinyl Chloride	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Bromomethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Chloroethane	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
Trichlorofluoromethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Acetone	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
Iodomethane	ND	0.0068	EPA 8260C	5-7-18	5-7-18	
Carbon Disulfide	ND	0.0013	EPA 8260C	5-7-18	5-7-18	
Methylene Chloride	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
(trans) 1,2-Dichloroethene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Methyl t-Butyl Ether	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Vinyl Acetate	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
2,2-Dichloropropane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
(cis) 1,2-Dichloroethene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
2-Butanone	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
Bromochloromethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Chloroform	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,1,1-Trichloroethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Carbon Tetrachloride	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloropropene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Benzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloroethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Trichloroethene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloropropane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Dibromomethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Bromodichloromethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
2-Chloroethyl Vinyl Ether	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
(cis) 1,3-Dichloropropene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Methyl Isobutyl Ketone	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
Toluene	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
(trans) 1,3-Dichloropropene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL213-B8-3.5-4.5				
Laboratory ID:		05-034-39				
1,1,2-Trichloroethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Tetrachloroethene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,3-Dichloropropane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
2-Hexanone	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
Dibromochloromethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromoethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Chlorobenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,1,1,2-Tetrachloroethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Ethylbenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
m,p-Xylene	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
o-Xylene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Styrene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Bromoform	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
Isopropylbenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Bromobenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,1,2,2-Tetrachloroethane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichloropropane	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
n-Propylbenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
2-Chlorotoluene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
4-Chlorotoluene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,3,5-Trimethylbenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
tert-Butylbenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trimethylbenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
sec-Butylbenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,3-Dichlorobenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
p-Isopropyltoluene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,4-Dichlorobenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,2-Dichlorobenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
n-Butylbenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromo-3-chloropropane	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trichlorobenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Hexachlorobutadiene	ND	0.0047	EPA 8260C	5-7-18	5-7-18	
Naphthalene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichlorobenzene	ND	0.00094	EPA 8260C	5-7-18	5-7-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	105	68-139				
Toluene-d8	98	79-128				
4-Bromofluorobenzene	92	71-132				



Date of Report: May 15, 2018
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 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: FL213-B8-7.5-8.5						
Laboratory ID: 05-034-40						
Dichlorodifluoromethane	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
Chloromethane	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
Vinyl Chloride	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
Bromomethane	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
Chloroethane	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
Trichlorofluoromethane	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
Acetone	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
Iodomethane	ND	0.0063	EPA 8260C	5-7-18	5-7-18	
Carbon Disulfide	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
Methylene Chloride	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
(trans) 1,2-Dichloroethene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
Methyl t-Butyl Ether	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethane	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
Vinyl Acetate	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
2,2-Dichloropropane	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
(cis) 1,2-Dichloroethene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
2-Butanone	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
Bromochloromethane	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
Chloroform	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
1,1,1-Trichloroethane	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
Carbon Tetrachloride	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloropropene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
Benzene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloroethane	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
Trichloroethene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloropropane	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
Dibromomethane	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
Bromodichloromethane	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
2-Chloroethyl Vinyl Ether	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
(cis) 1,3-Dichloropropene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
Methyl Isobutyl Ketone	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
Toluene	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
(trans) 1,3-Dichloropropene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	



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 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL213-B8-7.5-8.5				
Laboratory ID:		05-034-40				
1,1,2-Trichloroethane	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
Tetrachloroethene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
1,3-Dichloropropane	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
2-Hexanone	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
Dibromochloromethane	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromoethane	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
Chlorobenzene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
1,1,1,2-Tetrachloroethane	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
Ethylbenzene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
m,p-Xylene	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
o-Xylene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
Styrene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
Bromoform	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
Isopropylbenzene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
Bromobenzene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
1,1,2,2-Tetrachloroethane	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichloropropane	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
n-Propylbenzene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
2-Chlorotoluene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
4-Chlorotoluene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
1,3,5-Trimethylbenzene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
tert-Butylbenzene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trimethylbenzene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
sec-Butylbenzene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
1,3-Dichlorobenzene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
p-Isopropyltoluene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
1,4-Dichlorobenzene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
1,2-Dichlorobenzene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
n-Butylbenzene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromo-3-chloropropane	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trichlorobenzene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
Hexachlorobutadiene	ND	0.0044	EPA 8260C	5-7-18	5-7-18	
Naphthalene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichlorobenzene	ND	0.00087	EPA 8260C	5-7-18	5-7-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	105	68-139				
Toluene-d8	99	79-128				
4-Bromofluorobenzene	95	71-132				



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL213-B9-4-5				
Laboratory ID:		05-034-44				
Dichlorodifluoromethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Chloromethane	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
Vinyl Chloride	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Bromomethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Chloroethane	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
Trichlorofluoromethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Acetone	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
Iodomethane	ND	0.0066	EPA 8260C	5-7-18	5-7-18	
Carbon Disulfide	ND	0.0013	EPA 8260C	5-7-18	5-7-18	
Methylene Chloride	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
(trans) 1,2-Dichloroethene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Methyl t-Butyl Ether	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Vinyl Acetate	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
2,2-Dichloropropane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
(cis) 1,2-Dichloroethene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
2-Butanone	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
Bromochloromethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Chloroform	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,1,1-Trichloroethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Carbon Tetrachloride	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloropropene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Benzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloroethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Trichloroethene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloropropane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Dibromomethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Bromodichloromethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
2-Chloroethyl Vinyl Ether	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
(cis) 1,3-Dichloropropene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Methyl Isobutyl Ketone	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
Toluene	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
(trans) 1,3-Dichloropropene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	



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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL213-B9-4-5					
Laboratory ID:	05-034-44					
1,1,2-Trichloroethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Tetrachloroethene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,3-Dichloropropane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
2-Hexanone	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
Dibromochloromethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromoethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Chlorobenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,1,1,2-Tetrachloroethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Ethylbenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
m,p-Xylene	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
o-Xylene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Styrene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Bromoform	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
Isopropylbenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Bromobenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,1,2,2-Tetrachloroethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichloropropane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
n-Propylbenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
2-Chlorotoluene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
4-Chlorotoluene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,3,5-Trimethylbenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
tert-Butylbenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trimethylbenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
sec-Butylbenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,3-Dichlorobenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
p-Isopropyltoluene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,4-Dichlorobenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,2-Dichlorobenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
n-Butylbenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromo-3-chloropropane	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trichlorobenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Hexachlorobutadiene	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
Naphthalene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichlorobenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	102	68-139				
Toluene-d8	98	79-128				
4-Bromofluorobenzene	92	71-132				



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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL213-B9-6-7					
Laboratory ID:	05-034-45					
Dichlorodifluoromethane	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
Chloromethane	ND	0.0042	EPA 8260C	5-7-18	5-7-18	
Vinyl Chloride	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
Bromomethane	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
Chloroethane	ND	0.0042	EPA 8260C	5-7-18	5-7-18	
Trichlorofluoromethane	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
Acetone	ND	0.0042	EPA 8260C	5-7-18	5-7-18	
Iodomethane	ND	0.0060	EPA 8260C	5-7-18	5-7-18	
Carbon Disulfide	ND	0.0012	EPA 8260C	5-7-18	5-7-18	
Methylene Chloride	ND	0.0042	EPA 8260C	5-7-18	5-7-18	
(trans) 1,2-Dichloroethene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
Methyl t-Butyl Ether	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethane	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
Vinyl Acetate	ND	0.0042	EPA 8260C	5-7-18	5-7-18	
2,2-Dichloropropane	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
(cis) 1,2-Dichloroethene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
2-Butanone	ND	0.0042	EPA 8260C	5-7-18	5-7-18	
Bromochloromethane	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
Chloroform	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
1,1,1-Trichloroethane	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
Carbon Tetrachloride	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloropropene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
Benzene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloroethane	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
Trichloroethene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloropropane	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
Dibromomethane	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
Bromodichloromethane	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
2-Chloroethyl Vinyl Ether	ND	0.0042	EPA 8260C	5-7-18	5-7-18	
(cis) 1,3-Dichloropropene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
Methyl Isobutyl Ketone	ND	0.0042	EPA 8260C	5-7-18	5-7-18	
Toluene	ND	0.0042	EPA 8260C	5-7-18	5-7-18	
(trans) 1,3-Dichloropropene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	



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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL213-B9-6-7					
Laboratory ID:	05-034-45					
1,1,2-Trichloroethane	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
Tetrachloroethene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
1,3-Dichloropropane	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
2-Hexanone	ND	0.0042	EPA 8260C	5-7-18	5-7-18	
Dibromochloromethane	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromoethane	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
Chlorobenzene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
1,1,1,2-Tetrachloroethane	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
Ethylbenzene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
m,p-Xylene	ND	0.0042	EPA 8260C	5-7-18	5-7-18	
o-Xylene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
Styrene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
Bromoform	ND	0.0042	EPA 8260C	5-7-18	5-7-18	
Isopropylbenzene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
Bromobenzene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
1,1,2,2-Tetrachloroethane	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichloropropane	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
n-Propylbenzene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
2-Chlorotoluene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
4-Chlorotoluene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
1,3,5-Trimethylbenzene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
tert-Butylbenzene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trimethylbenzene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
sec-Butylbenzene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
1,3-Dichlorobenzene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
p-Isopropyltoluene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
1,4-Dichlorobenzene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
1,2-Dichlorobenzene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
n-Butylbenzene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromo-3-chloropropane	ND	0.0042	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trichlorobenzene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
Hexachlorobutadiene	ND	0.0042	EPA 8260C	5-7-18	5-7-18	
Naphthalene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichlorobenzene	ND	0.00084	EPA 8260C	5-7-18	5-7-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	102	68-139				
Toluene-d8	97	79-128				
4-Bromofluorobenzene	95	71-132				



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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL213-B10-2-3				
Laboratory ID:		05-034-49				
Dichlorodifluoromethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Chloromethane	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
Vinyl Chloride	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Bromomethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Chloroethane	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
Trichlorofluoromethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Acetone	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
Iodomethane	ND	0.0066	EPA 8260C	5-7-18	5-7-18	
Carbon Disulfide	ND	0.0013	EPA 8260C	5-7-18	5-7-18	
Methylene Chloride	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
(trans) 1,2-Dichloroethene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Methyl t-Butyl Ether	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Vinyl Acetate	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
2,2-Dichloropropane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
(cis) 1,2-Dichloroethene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
2-Butanone	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
Bromochloromethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Chloroform	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,1,1-Trichloroethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Carbon Tetrachloride	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloropropene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Benzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloroethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Trichloroethene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloropropane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Dibromomethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Bromodichloromethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
2-Chloroethyl Vinyl Ether	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
(cis) 1,3-Dichloropropene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Methyl Isobutyl Ketone	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
Toluene	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
(trans) 1,3-Dichloropropene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	



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Date of Report: May 15, 2018
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 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL213-B10-2-3					
Laboratory ID:	05-034-49					
1,1,2-Trichloroethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Tetrachloroethene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,3-Dichloropropane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
2-Hexanone	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
Dibromochloromethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromoethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Chlorobenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,1,1,2-Tetrachloroethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Ethylbenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
m,p-Xylene	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
o-Xylene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Styrene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Bromoform	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
Isopropylbenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Bromobenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,1,2,2-Tetrachloroethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichloropropane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
n-Propylbenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
2-Chlorotoluene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
4-Chlorotoluene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,3,5-Trimethylbenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
tert-Butylbenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trimethylbenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
sec-Butylbenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,3-Dichlorobenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
p-Isopropyltoluene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,4-Dichlorobenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,2-Dichlorobenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
n-Butylbenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromo-3-chloropropane	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trichlorobenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Hexachlorobutadiene	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
Naphthalene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichlorobenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	101	68-139				
Toluene-d8	98	79-128				
4-Bromofluorobenzene	90	71-132				



Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL213-B10-4-5				
Laboratory ID:		05-034-50				
Dichlorodifluoromethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Chloromethane	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
Vinyl Chloride	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Bromomethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Chloroethane	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
Trichlorofluoromethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Acetone	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
Iodomethane	ND	0.0067	EPA 8260C	5-7-18	5-7-18	
Carbon Disulfide	ND	0.0013	EPA 8260C	5-7-18	5-7-18	
Methylene Chloride	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
(trans) 1,2-Dichloroethene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Methyl t-Butyl Ether	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Vinyl Acetate	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
2,2-Dichloropropane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
(cis) 1,2-Dichloroethene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
2-Butanone	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
Bromochloromethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Chloroform	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,1,1-Trichloroethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Carbon Tetrachloride	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloropropene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Benzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloroethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Trichloroethene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloropropane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Dibromomethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Bromodichloromethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
2-Chloroethyl Vinyl Ether	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
(cis) 1,3-Dichloropropene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Methyl Isobutyl Ketone	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
Toluene	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
(trans) 1,3-Dichloropropene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

VOLATILES EPA 8260C

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL213-B10-4-5					
Laboratory ID:	05-034-50					
1,1,2-Trichloroethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Tetrachloroethene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,3-Dichloropropane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
2-Hexanone	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
Dibromochloromethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromoethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Chlorobenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,1,1,2-Tetrachloroethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Ethylbenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
m,p-Xylene	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
o-Xylene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Styrene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Bromoform	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
Isopropylbenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Bromobenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,1,2,2-Tetrachloroethane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichloropropane	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
n-Propylbenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
2-Chlorotoluene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
4-Chlorotoluene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,3,5-Trimethylbenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
tert-Butylbenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trimethylbenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
sec-Butylbenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,3-Dichlorobenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
p-Isopropyltoluene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,4-Dichlorobenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,2-Dichlorobenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
n-Butylbenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromo-3-chloropropane	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trichlorobenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Hexachlorobutadiene	ND	0.0046	EPA 8260C	5-7-18	5-7-18	
Naphthalene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichlorobenzene	ND	0.00092	EPA 8260C	5-7-18	5-7-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	103	68-139				
Toluene-d8	100	79-128				
4-Bromofluorobenzene	92	71-132				



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Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

PAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: FL212-B1-2.5-3.5						
Laboratory ID: 05-034-03						
Naphthalene	ND	0.0078	EPA 8270D/SIM	5-7-18	5-9-18	
2-Methylnaphthalene	ND	0.0078	EPA 8270D/SIM	5-7-18	5-9-18	
1-Methylnaphthalene	ND	0.0078	EPA 8270D/SIM	5-7-18	5-9-18	
Acenaphthylene	ND	0.0078	EPA 8270D/SIM	5-7-18	5-9-18	
Acenaphthene	ND	0.0078	EPA 8270D/SIM	5-7-18	5-9-18	
Fluorene	ND	0.0078	EPA 8270D/SIM	5-7-18	5-9-18	
Phenanthrene	0.0093	0.0078	EPA 8270D/SIM	5-7-18	5-9-18	
Anthracene	ND	0.0078	EPA 8270D/SIM	5-7-18	5-9-18	
Fluoranthene	ND	0.0078	EPA 8270D/SIM	5-7-18	5-9-18	
Pyrene	ND	0.0078	EPA 8270D/SIM	5-7-18	5-9-18	
Benzo[a]anthracene	ND	0.0078	EPA 8270D/SIM	5-7-18	5-9-18	
Chrysene	0.016	0.0078	EPA 8270D/SIM	5-7-18	5-9-18	
Benzo[b]fluoranthene	ND	0.0078	EPA 8270D/SIM	5-7-18	5-9-18	
Benzo(j,k)fluoranthene	ND	0.0078	EPA 8270D/SIM	5-7-18	5-9-18	
Benzo[a]pyrene	ND	0.0078	EPA 8270D/SIM	5-7-18	5-9-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0078	EPA 8270D/SIM	5-7-18	5-9-18	
Dibenz[a,h]anthracene	ND	0.0078	EPA 8270D/SIM	5-7-18	5-9-18	
Benzo[g,h,i]perylene	0.0096	0.0078	EPA 8270D/SIM	5-7-18	5-9-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	64	40 - 117				
Pyrene-d10	77	38 - 119				
Terphenyl-d14	71	47 - 135				



Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

PAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL212-B1-5-6					
Laboratory ID:	05-034-04					
Naphthalene	ND	0.0072	EPA 8270D/SIM	5-7-18	5-7-18	
2-Methylnaphthalene	ND	0.0072	EPA 8270D/SIM	5-7-18	5-7-18	
1-Methylnaphthalene	ND	0.0072	EPA 8270D/SIM	5-7-18	5-7-18	
Acenaphthylene	ND	0.0072	EPA 8270D/SIM	5-7-18	5-7-18	
Acenaphthene	ND	0.0072	EPA 8270D/SIM	5-7-18	5-7-18	
Fluorene	ND	0.0072	EPA 8270D/SIM	5-7-18	5-7-18	
Phenanthrene	ND	0.0072	EPA 8270D/SIM	5-7-18	5-7-18	
Anthracene	ND	0.0072	EPA 8270D/SIM	5-7-18	5-7-18	
Fluoranthene	ND	0.0072	EPA 8270D/SIM	5-7-18	5-7-18	
Pyrene	ND	0.0072	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[a]anthracene	ND	0.0072	EPA 8270D/SIM	5-7-18	5-7-18	
Chrysene	ND	0.0072	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[b]fluoranthene	ND	0.0072	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo(j,k)fluoranthene	ND	0.0072	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[a]pyrene	ND	0.0072	EPA 8270D/SIM	5-7-18	5-7-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0072	EPA 8270D/SIM	5-7-18	5-7-18	
Dibenz[a,h]anthracene	ND	0.0072	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[g,h,i]perylene	ND	0.0072	EPA 8270D/SIM	5-7-18	5-7-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	83	40 - 117				
Pyrene-d10	85	38 - 119				
Terphenyl-d14	85	47 - 135				



Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

PAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL212-B2-2-3				
Laboratory ID:		05-034-08				
Naphthalene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-8-18	
2-Methylnaphthalene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-8-18	
1-Methylnaphthalene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthylene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-8-18	
Fluorene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-8-18	
Phenanthrene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-8-18	
Anthracene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-8-18	
Fluoranthene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-8-18	
Pyrene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]anthracene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-8-18	
Chrysene	0.0081	0.0079	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[b]fluoranthene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo(j,k)fluoranthene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]pyrene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-8-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-8-18	
Dibenz[a,h]anthracene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[g,h,i]perylene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-8-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	58	40 - 117				
Pyrene-d10	72	38 - 119				
Terphenyl-d14	69	47 - 135				



Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

PAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: FL212-B2-5.5-6.5						
Laboratory ID: 05-034-09						
Naphthalene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-7-18	
2-Methylnaphthalene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-7-18	
1-Methylnaphthalene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-7-18	
Acenaphthylene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-7-18	
Acenaphthene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-7-18	
Fluorene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-7-18	
Phenanthrene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-7-18	
Anthracene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-7-18	
Fluoranthene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-7-18	
Pyrene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[a]anthracene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-7-18	
Chrysene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[b]fluoranthene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo(j,k)fluoranthene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[a]pyrene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-7-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-7-18	
Dibenz[a,h]anthracene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[g,h,i]perylene	ND	0.0079	EPA 8270D/SIM	5-7-18	5-7-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	67	40 - 117				
Pyrene-d10	72	38 - 119				
Terphenyl-d14	71	47 - 135				



Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

PAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL211-B3-3-4					
Laboratory ID:	05-034-14					
Naphthalene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-7-18	
2-Methylnaphthalene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-7-18	
1-Methylnaphthalene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-7-18	
Acenaphthylene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-7-18	
Acenaphthene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-7-18	
Fluorene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-7-18	
Phenanthrene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-7-18	
Anthracene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-7-18	
Fluoranthene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-7-18	
Pyrene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[a]anthracene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-7-18	
Chrysene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[b]fluoranthene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo(j,k)fluoranthene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[a]pyrene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-7-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-7-18	
Dibenz[a,h]anthracene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[g,h,i]perylene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-7-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	77	40 - 117				
Pyrene-d10	83	38 - 119				
Terphenyl-d14	83	47 - 135				



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PAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL211-B3-6-7					
Laboratory ID:	05-034-15					
Naphthalene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-7-18	
2-Methylnaphthalene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-7-18	
1-Methylnaphthalene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-7-18	
Acenaphthylene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-7-18	
Acenaphthene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-7-18	
Fluorene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-7-18	
Phenanthrene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-7-18	
Anthracene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-7-18	
Fluoranthene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-7-18	
Pyrene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[a]anthracene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-7-18	
Chrysene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[b]fluoranthene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo(j,k)fluoranthene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[a]pyrene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-7-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-7-18	
Dibenz[a,h]anthracene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[g,h,i]perylene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-7-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	76	40 - 117				
Pyrene-d10	77	38 - 119				
Terphenyl-d14	76	47 - 135				



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PAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL211-B4-2-3				
Laboratory ID:		05-034-17				
Naphthalene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
2-Methylnaphthalene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
1-Methylnaphthalene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthylene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Fluorene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Phenanthrene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Anthracene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Fluoranthene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Pyrene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]anthracene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Chrysene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[b]fluoranthene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo(j,k)fluoranthene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]pyrene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Dibenz[a,h]anthracene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[g,h,i]perylene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	64	40 - 117				
Pyrene-d10	74	38 - 119				
Terphenyl-d14	73	47 - 135				



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PAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL211-B4-5-6				
Laboratory ID:		05-034-18				
Naphthalene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
2-Methylnaphthalene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
1-Methylnaphthalene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthylene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Fluorene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Phenanthrene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Anthracene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Fluoranthene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Pyrene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]anthracene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Chrysene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[b]fluoranthene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo(j,k)fluoranthene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]pyrene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Dibenz[a,h]anthracene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[g,h,i]perylene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	79	40 - 117				
Pyrene-d10	84	38 - 119				
Terphenyl-d14	82	47 - 135				



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PAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: FL211-B5-3.5-4						
Laboratory ID: 05-034-22						
Naphthalene	ND	0.0084	EPA 8270D/SIM	5-7-18	5-8-18	
2-Methylnaphthalene	ND	0.0084	EPA 8270D/SIM	5-7-18	5-8-18	
1-Methylnaphthalene	ND	0.0084	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthylene	ND	0.0084	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthene	ND	0.0084	EPA 8270D/SIM	5-7-18	5-8-18	
Fluorene	ND	0.0084	EPA 8270D/SIM	5-7-18	5-8-18	
Phenanthrene	ND	0.0084	EPA 8270D/SIM	5-7-18	5-8-18	
Anthracene	ND	0.0084	EPA 8270D/SIM	5-7-18	5-8-18	
Fluoranthene	ND	0.0084	EPA 8270D/SIM	5-7-18	5-8-18	
Pyrene	ND	0.0084	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]anthracene	ND	0.0084	EPA 8270D/SIM	5-7-18	5-8-18	
Chrysene	ND	0.0084	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[b]fluoranthene	ND	0.0084	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo(j,k)fluoranthene	ND	0.0084	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]pyrene	ND	0.0084	EPA 8270D/SIM	5-7-18	5-8-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0084	EPA 8270D/SIM	5-7-18	5-8-18	
Dibenz[a,h]anthracene	ND	0.0084	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[g,h,i]perylene	ND	0.0084	EPA 8270D/SIM	5-7-18	5-8-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	76	40 - 117				
Pyrene-d10	79	38 - 119				
Terphenyl-d14	80	47 - 135				



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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: FL211-B5-5.5-6						
Laboratory ID: 05-034-23						
Naphthalene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-8-18	
2-Methylnaphthalene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-8-18	
1-Methylnaphthalene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthylene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-8-18	
Fluorene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-8-18	
Phenanthrene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-8-18	
Anthracene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-8-18	
Fluoranthene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-8-18	
Pyrene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]anthracene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-8-18	
Chrysene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[b]fluoranthene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo(j,k)fluoranthene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]pyrene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-8-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-8-18	
Dibenz[a,h]anthracene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[g,h,i]perylene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-8-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	77	40 - 117				
Pyrene-d10	80	38 - 119				
Terphenyl-d14	80	47 - 135				



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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: FL211-B5-11.5-12						
Laboratory ID: 05-034-24						
Naphthalene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-9-18	
2-Methylnaphthalene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-9-18	
1-Methylnaphthalene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-9-18	
Acenaphthylene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-9-18	
Acenaphthene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-9-18	
Fluorene	ND	0.0075	EPA 8270D/SIM	5-7-18	5-9-18	
Phenanthrene	0.033	0.0075	EPA 8270D/SIM	5-7-18	5-9-18	
Anthracene	0.011	0.0075	EPA 8270D/SIM	5-7-18	5-9-18	
Fluoranthene	0.16	0.0075	EPA 8270D/SIM	5-7-18	5-9-18	
Pyrene	0.16	0.0075	EPA 8270D/SIM	5-7-18	5-9-18	
Benzo[a]anthracene	0.12	0.0075	EPA 8270D/SIM	5-7-18	5-9-18	
Chrysene	0.13	0.0075	EPA 8270D/SIM	5-7-18	5-9-18	
Benzo[b]fluoranthene	0.25	0.0075	EPA 8270D/SIM	5-7-18	5-9-18	
Benzo(j,k)fluoranthene	0.068	0.0075	EPA 8270D/SIM	5-7-18	5-9-18	
Benzo[a]pyrene	0.18	0.0075	EPA 8270D/SIM	5-7-18	5-9-18	
Indeno(1,2,3-c,d)pyrene	0.22	0.0075	EPA 8270D/SIM	5-7-18	5-9-18	
Dibenz[a,h]anthracene	0.029	0.0075	EPA 8270D/SIM	5-7-18	5-9-18	
Benzo[g,h,i]perylene	0.20	0.0075	EPA 8270D/SIM	5-7-18	5-9-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	61	40 - 117				
Pyrene-d10	82	38 - 119				
Terphenyl-d14	77	47 - 135				



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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL210-B6-2-2.5					
Laboratory ID:	05-034-27					
Naphthalene	0.013	0.0081	EPA 8270D/SIM	5-7-18	5-9-18	
2-Methylnaphthalene	0.025	0.0081	EPA 8270D/SIM	5-7-18	5-9-18	
1-Methylnaphthalene	0.020	0.0081	EPA 8270D/SIM	5-7-18	5-9-18	
Acenaphthylene	ND	0.0081	EPA 8270D/SIM	5-7-18	5-9-18	
Acenaphthene	ND	0.0081	EPA 8270D/SIM	5-7-18	5-9-18	
Fluorene	ND	0.0081	EPA 8270D/SIM	5-7-18	5-9-18	
Phenanthrene	0.019	0.0081	EPA 8270D/SIM	5-7-18	5-9-18	
Anthracene	ND	0.0081	EPA 8270D/SIM	5-7-18	5-9-18	
Fluoranthene	0.018	0.0081	EPA 8270D/SIM	5-7-18	5-9-18	
Pyrene	0.032	0.0081	EPA 8270D/SIM	5-7-18	5-9-18	
Benzo[a]anthracene	0.014	0.0081	EPA 8270D/SIM	5-7-18	5-9-18	
Chrysene	0.039	0.0081	EPA 8270D/SIM	5-7-18	5-9-18	
Benzo[b]fluoranthene	0.018	0.0081	EPA 8270D/SIM	5-7-18	5-9-18	
Benzo[j,k]fluoranthene	ND	0.0081	EPA 8270D/SIM	5-7-18	5-9-18	
Benzo[a]pyrene	0.015	0.0081	EPA 8270D/SIM	5-7-18	5-9-18	
Indeno(1,2,3-c,d)pyrene	0.010	0.0081	EPA 8270D/SIM	5-7-18	5-9-18	
Dibenz[a,h]anthracene	ND	0.0081	EPA 8270D/SIM	5-7-18	5-9-18	
Benzo[g,h,i]perylene	0.012	0.0081	EPA 8270D/SIM	5-7-18	5-9-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	72	40 - 117				
Pyrene-d10	84	38 - 119				
Terphenyl-d14	73	47 - 135				



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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL210-B6-6-7					
Laboratory ID:	05-034-28					
Naphthalene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
2-Methylnaphthalene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
1-Methylnaphthalene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthylene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Fluorene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Phenanthrene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Anthracene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Fluoranthene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Pyrene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]anthracene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Chrysene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[b]fluoranthene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo(j,k)fluoranthene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]pyrene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Dibenz[a,h]anthracene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[g,h,i]perylene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	83	40 - 117				
Pyrene-d10	84	38 - 119				
Terphenyl-d14	86	47 - 135				



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PAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: FL210-B6-9-10						
Laboratory ID: 05-034-29						
Naphthalene	ND	0.0071	EPA 8270D/SIM	5-7-18	5-7-18	
2-Methylnaphthalene	ND	0.0071	EPA 8270D/SIM	5-7-18	5-7-18	
1-Methylnaphthalene	ND	0.0071	EPA 8270D/SIM	5-7-18	5-7-18	
Acenaphthylene	ND	0.0071	EPA 8270D/SIM	5-7-18	5-7-18	
Acenaphthene	ND	0.0071	EPA 8270D/SIM	5-7-18	5-7-18	
Fluorene	ND	0.0071	EPA 8270D/SIM	5-7-18	5-7-18	
Phenanthrene	ND	0.0071	EPA 8270D/SIM	5-7-18	5-7-18	
Anthracene	ND	0.0071	EPA 8270D/SIM	5-7-18	5-7-18	
Fluoranthene	ND	0.0071	EPA 8270D/SIM	5-7-18	5-7-18	
Pyrene	ND	0.0071	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[a]anthracene	ND	0.0071	EPA 8270D/SIM	5-7-18	5-7-18	
Chrysene	ND	0.0071	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[b]fluoranthene	ND	0.0071	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo(j,k)fluoranthene	ND	0.0071	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[a]pyrene	ND	0.0071	EPA 8270D/SIM	5-7-18	5-7-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0071	EPA 8270D/SIM	5-7-18	5-7-18	
Dibenz[a,h]anthracene	ND	0.0071	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[g,h,i]perylene	ND	0.0071	EPA 8270D/SIM	5-7-18	5-7-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	79	40 - 117				
Pyrene-d10	80	38 - 119				
Terphenyl-d14	79	47 - 135				



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PAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: FL211-B7-2.5-3.5						
Laboratory ID: 05-034-32						
Naphthalene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
2-Methylnaphthalene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
1-Methylnaphthalene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthylene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Fluorene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Phenanthrene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Anthracene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Fluoranthene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Pyrene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]anthracene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Chrysene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[b]fluoranthene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo(j,k)fluoranthene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]pyrene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Dibenz[a,h]anthracene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[g,h,i]perylene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	65	40 - 117				
Pyrene-d10	77	38 - 119				
Terphenyl-d14	75	47 - 135				



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 Project: 4082-039-01

PAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL211-B7-5-6					
Laboratory ID:	05-034-33					
Naphthalene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
2-Methylnaphthalene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
1-Methylnaphthalene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthylene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Fluorene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Phenanthrene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Anthracene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Fluoranthene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Pyrene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]anthracene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Chrysene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[b]fluoranthene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo(j,k)fluoranthene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]pyrene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Dibenz[a,h]anthracene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[g,h,i]perylene	ND	0.0082	EPA 8270D/SIM	5-7-18	5-8-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	71	40 - 117				
Pyrene-d10	74	38 - 119				
Terphenyl-d14	74	47 - 135				



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PAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: FL211-B7-6.5-7						
Laboratory ID: 05-034-34						
Naphthalene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
2-Methylnaphthalene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
1-Methylnaphthalene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthylene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Fluorene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Phenanthrene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Anthracene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Fluoranthene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Pyrene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]anthracene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Chrysene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[b]fluoranthene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo(j,k)fluoranthene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]pyrene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Dibenz[a,h]anthracene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[g,h,i]perylene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	79	40 - 117				
Pyrene-d10	78	38 - 119				
Terphenyl-d14	77	47 - 135				



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PAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: FL213-B8-3.5-4.5						
Laboratory ID: 05-034-39						
Naphthalene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
2-Methylnaphthalene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
1-Methylnaphthalene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthylene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Fluorene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Phenanthrene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Anthracene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Fluoranthene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Pyrene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]anthracene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Chrysene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[b]fluoranthene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo(j,k)fluoranthene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]pyrene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Dibenz[a,h]anthracene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[g,h,i]perylene	ND	0.0076	EPA 8270D/SIM	5-7-18	5-8-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	72	40 - 117				
Pyrene-d10	76	38 - 119				
Terphenyl-d14	76	47 - 135				



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PAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: FL213-B8-7.5-8.5						
Laboratory ID: 05-034-40						
Naphthalene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
2-Methylnaphthalene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
1-Methylnaphthalene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthylene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Fluorene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Phenanthrene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Anthracene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Fluoranthene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Pyrene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]anthracene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Chrysene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[b]fluoranthene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo(j,k)fluoranthene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]pyrene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Dibenz[a,h]anthracene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[g,h,i]perylene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-8-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	70	40 - 117				
Pyrene-d10	78	38 - 119				
Terphenyl-d14	79	47 - 135				



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PAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		FL213-B9-4-5				
Laboratory ID:		05-034-44				
Naphthalene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-8-18	
2-Methylnaphthalene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-8-18	
1-Methylnaphthalene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthylene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-8-18	
Fluorene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-8-18	
Phenanthrene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-8-18	
Anthracene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-8-18	
Fluoranthene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-8-18	
Pyrene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]anthracene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-8-18	
Chrysene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[b]fluoranthene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo(j,k)fluoranthene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]pyrene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-8-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-8-18	
Dibenz[a,h]anthracene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[g,h,i]perylene	ND	0.0077	EPA 8270D/SIM	5-7-18	5-8-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	82	40 - 117				
Pyrene-d10	80	38 - 119				
Terphenyl-d14	81	47 - 135				



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PAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL213-B9-6-7					
Laboratory ID:	05-034-45					
Naphthalene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
2-Methylnaphthalene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
1-Methylnaphthalene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthylene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Fluorene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Phenanthrene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Anthracene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Fluoranthene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Pyrene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]anthracene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Chrysene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[b]fluoranthene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo(j,k)fluoranthene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]pyrene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Dibenz[a,h]anthracene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[g,h,i]perylene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	77	40 - 117				
Pyrene-d10	80	38 - 119				
Terphenyl-d14	81	47 - 135				



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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: FL213-B10-2-3						
Laboratory ID: 05-034-49						
Naphthalene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
2-Methylnaphthalene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
1-Methylnaphthalene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthylene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Fluorene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Phenanthrene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Anthracene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Fluoranthene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Pyrene	0.0084	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]anthracene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Chrysene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[b]fluoranthene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo(j,k)fluoranthene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]pyrene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Dibenz[a,h]anthracene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[g,h,i]perylene	ND	0.0080	EPA 8270D/SIM	5-7-18	5-8-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	63	40 - 117				
Pyrene-d10	74	38 - 119				
Terphenyl-d14	74	47 - 135				



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PAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: FL213-B10-4-5						
Laboratory ID: 05-034-50						
Naphthalene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
2-Methylnaphthalene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
1-Methylnaphthalene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthylene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Acenaphthene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Fluorene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Phenanthrene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Anthracene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Fluoranthene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Pyrene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]anthracene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Chrysene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[b]fluoranthene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo(j,k)fluoranthene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[a]pyrene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Dibenz[a,h]anthracene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Benzo[g,h,i]perylene	ND	0.0074	EPA 8270D/SIM	5-7-18	5-8-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	83	40 - 117				
Pyrene-d10	85	38 - 119				
Terphenyl-d14	85	47 - 135				



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**TOTAL METALS
 EPA 6010D**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-034-01					
Client ID:	FL212-B1-0-.5					
Arsenic	6.0	5.4	6010D	5-4-18	5-7-18	
Lead	73	5.4	6010D	5-4-18	5-7-18	

Lab ID:	05-034-02					
Client ID:	FL212-B1-0.5-1					
Arsenic	10	5.9	6010D	5-4-18	5-7-18	
Lead	59	5.9	6010D	5-4-18	5-7-18	



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**TOTAL METALS
 EPA 6010D/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-034-03					
Client ID:	FL212-B1-2.5-3.5					
Arsenic	ND	5.9	6010D	5-4-18	5-7-18	
Barium	60	2.9	6010D	5-4-18	5-7-18	
Cadmium	ND	0.59	6010D	5-4-18	5-7-18	
Chromium	41	0.59	6010D	5-4-18	5-7-18	
Lead	5.9	5.9	6010D	5-4-18	5-7-18	
Mercury	ND	0.29	7471B	5-8-18	5-8-18	
Selenium	ND	12	6010D	5-4-18	5-7-18	
Silver	ND	1.2	6010D	5-4-18	5-7-18	

Lab ID:	05-034-04					
Client ID:	FL212-B1-5-6					
Arsenic	ND	5.4	6010D	5-4-18	5-7-18	
Barium	44	2.7	6010D	5-4-18	5-7-18	
Cadmium	ND	0.54	6010D	5-4-18	5-7-18	
Chromium	30	0.54	6010D	5-4-18	5-7-18	
Lead	ND	5.4	6010D	5-4-18	5-7-18	
Mercury	ND	0.27	7471B	5-8-18	5-8-18	
Selenium	ND	11	6010D	5-4-18	5-7-18	
Silver	ND	1.1	6010D	5-4-18	5-7-18	



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**TOTAL METALS
 EPA 6010D/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-034-05					
Client ID:	FL212-B1-9-10					
Arsenic	ND	5.2	6010D	5-4-18	5-7-18	
Barium	43	2.6	6010D	5-4-18	5-7-18	
Cadmium	ND	0.52	6010D	5-4-18	5-7-18	
Chromium	14	0.52	6010D	5-4-18	5-7-18	
Lead	ND	5.2	6010D	5-4-18	5-7-18	
Mercury	ND	0.26	7471B	5-8-18	5-8-18	
Selenium	ND	10	6010D	5-4-18	5-7-18	
Silver	ND	1.0	6010D	5-4-18	5-7-18	

Lab ID:	05-034-08					
Client ID:	FL212-B2-2-3					
Arsenic	ND	5.9	6010D	5-4-18	5-7-18	
Barium	160	3.0	6010D	5-4-18	5-7-18	
Cadmium	ND	0.59	6010D	5-4-18	5-7-18	
Chromium	37	0.59	6010D	5-4-18	5-7-18	
Lead	ND	5.9	6010D	5-4-18	5-7-18	
Mercury	ND	0.30	7471B	5-8-18	5-8-18	
Selenium	ND	12	6010D	5-4-18	5-7-18	
Silver	ND	1.2	6010D	5-4-18	5-7-18	



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**TOTAL METALS
 EPA 6010D/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-034-09					
Client ID:	FL212-B2-5.5-6.5					
Arsenic	ND	5.9	6010D	5-4-18	5-7-18	
Barium	64	3.0	6010D	5-4-18	5-7-18	
Cadmium	ND	0.59	6010D	5-4-18	5-7-18	
Chromium	52	0.59	6010D	5-4-18	5-7-18	
Lead	ND	5.9	6010D	5-4-18	5-7-18	
Mercury	ND	0.30	7471B	5-8-18	5-8-18	
Selenium	ND	12	6010D	5-4-18	5-7-18	
Silver	ND	1.2	6010D	5-4-18	5-7-18	

Lab ID: 05-034-12
 Client ID: FL211-B3-0-0.5

Arsenic	16	5.7	6010D	5-4-18	5-7-18	
Lead	89	5.7	6010D	5-4-18	5-7-18	



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**TOTAL METALS
 EPA 6010D/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-034-13					
Client ID:	FL211-B3-0.5-1					
Arsenic	15	6.1	6010D	5-4-18	5-7-18	
Lead	72	6.1	6010D	5-4-18	5-7-18	

Lab ID:	05-034-14					
Client ID:	FL211-B3-3-4					
Arsenic	ND	5.7	6010D	5-4-18	5-7-18	
Barium	66	2.9	6010D	5-4-18	5-7-18	
Cadmium	ND	0.57	6010D	5-4-18	5-7-18	
Chromium	37	0.57	6010D	5-4-18	5-7-18	
Lead	ND	5.7	6010D	5-4-18	5-7-18	
Mercury	ND	0.29	7471B	5-8-18	5-8-18	
Selenium	ND	11	6010D	5-4-18	5-7-18	
Silver	ND	1.1	6010D	5-4-18	5-7-18	



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**TOTAL METALS
 EPA 6010D/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-034-15					
Client ID:	FL211-B3-6-7					
Arsenic	ND	5.6	6010D	5-4-18	5-7-18	
Barium	69	2.8	6010D	5-4-18	5-7-18	
Cadmium	ND	0.56	6010D	5-4-18	5-7-18	
Chromium	37	0.56	6010D	5-4-18	5-7-18	
Lead	ND	5.6	6010D	5-4-18	5-7-18	
Mercury	ND	0.28	7471B	5-8-18	5-8-18	
Selenium	ND	11	6010D	5-4-18	5-7-18	
Silver	ND	1.1	6010D	5-4-18	5-7-18	

Lab ID:	05-034-17					
Client ID:	FL211-B4-2-3					
Arsenic	ND	6.0	6010D	5-4-18	5-7-18	
Barium	89	3.0	6010D	5-4-18	5-7-18	
Cadmium	ND	0.60	6010D	5-4-18	5-7-18	
Chromium	34	0.60	6010D	5-4-18	5-7-18	
Lead	ND	6.0	6010D	5-4-18	5-7-18	
Mercury	ND	0.30	7471B	5-8-18	5-8-18	
Selenium	ND	12	6010D	5-4-18	5-7-18	
Silver	ND	1.2	6010D	5-4-18	5-7-18	



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**TOTAL METALS
 EPA 6010D/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-034-18					
Client ID:	FL211-B4-5-6					
Arsenic	13	6.2	6010D	5-4-18	5-7-18	
Barium	140	3.1	6010D	5-4-18	5-7-18	
Cadmium	ND	0.62	6010D	5-4-18	5-7-18	
Chromium	36	0.62	6010D	5-4-18	5-7-18	
Lead	70	6.2	6010D	5-4-18	5-7-18	
Mercury	ND	0.31	7471B	5-8-18	5-8-18	
Selenium	ND	12	6010D	5-4-18	5-7-18	
Silver	ND	1.2	6010D	5-4-18	5-7-18	

Lab ID: 05-034-21
 Client ID: FL211-B5-0.5-1

Arsenic	9.8	5.6	6010D	5-4-18	5-7-18	
Lead	18	5.6	6010D	5-4-18	5-7-18	



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**TOTAL METALS
 EPA 6010D/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-034-22					
Client ID:	FL211-B5-3.5-4					
Arsenic	12	6.3	6010D	5-4-18	5-7-18	
Barium	130	3.1	6010D	5-4-18	5-7-18	
Cadmium	ND	0.63	6010D	5-4-18	5-7-18	
Chromium	40	0.63	6010D	5-4-18	5-7-18	
Lead	54	6.3	6010D	5-4-18	5-7-18	
Mercury	ND	0.31	7471B	5-8-18	5-8-18	
Selenium	ND	13	6010D	5-4-18	5-7-18	
Silver	ND	1.3	6010D	5-4-18	5-7-18	



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**TOTAL METALS
 EPA 6010D/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-034-23					
Client ID:	FL211-B5-5.5-6					
Arsenic	ND	5.6	6010D	5-4-18	5-7-18	
Barium	59	2.8	6010D	5-4-18	5-7-18	
Cadmium	ND	0.56	6010D	5-4-18	5-7-18	
Chromium	30	0.56	6010D	5-4-18	5-7-18	
Lead	ND	5.6	6010D	5-4-18	5-7-18	
Mercury	ND	0.28	7471B	5-8-18	5-8-18	
Selenium	ND	11	6010D	5-4-18	5-7-18	
Silver	ND	1.1	6010D	5-4-18	5-7-18	

Lab ID:	05-034-24					
Client ID:	FL211-B5-11.5-12					
Arsenic	ND	5.6	6010D	5-7-18	5-7-18	
Barium	71	2.8	6010D	5-7-18	5-7-18	
Cadmium	ND	0.56	6010D	5-7-18	5-7-18	
Chromium	43	0.56	6010D	5-7-18	5-7-18	
Lead	ND	5.6	6010D	5-7-18	5-7-18	
Mercury	ND	0.28	7471B	5-8-18	5-8-18	
Selenium	ND	11	6010D	5-7-18	5-7-18	
Silver	ND	1.1	6010D	5-7-18	5-7-18	



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**TOTAL METALS
 EPA 6010D/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-034-27					
Client ID:	FL210-B6-2-2.5					
Arsenic	6.2	6.1	6010D	5-7-18	5-7-18	
Barium	110	3.0	6010D	5-7-18	5-7-18	
Cadmium	ND	0.61	6010D	5-7-18	5-7-18	
Chromium	42	0.61	6010D	5-7-18	5-7-18	
Lead	7.6	6.1	6010D	5-7-18	5-7-18	
Mercury	ND	0.30	7471B	5-8-18	5-8-18	
Selenium	ND	12	6010D	5-7-18	5-7-18	
Silver	ND	1.2	6010D	5-7-18	5-7-18	

Lab ID:	05-034-28					
Client ID:	FL210-B6-6-7					
Arsenic	ND	5.5	6010D	5-7-18	5-7-18	
Barium	56	2.7	6010D	5-7-18	5-7-18	
Cadmium	ND	0.55	6010D	5-7-18	5-7-18	
Chromium	44	0.55	6010D	5-7-18	5-7-18	
Lead	ND	5.5	6010D	5-7-18	5-7-18	
Mercury	ND	0.27	7471B	5-8-18	5-8-18	
Selenium	ND	11	6010D	5-7-18	5-7-18	
Silver	ND	1.1	6010D	5-7-18	5-7-18	



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**TOTAL METALS
 EPA 6010D/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-034-29					
Client ID:	FL210-B6-9-10					
Arsenic	ND	5.4	6010D	5-7-18	5-7-18	
Barium	46	2.7	6010D	5-7-18	5-7-18	
Cadmium	ND	0.54	6010D	5-7-18	5-7-18	
Chromium	40	0.54	6010D	5-7-18	5-7-18	
Lead	ND	5.4	6010D	5-7-18	5-7-18	
Mercury	ND	0.27	7471B	5-9-18	5-9-18	
Selenium	ND	11	6010D	5-7-18	5-7-18	
Silver	ND	1.1	6010D	5-7-18	5-7-18	

Lab ID:	05-034-32					
Client ID:	FL211-B7-2.5-3.5					
Arsenic	20	6.0	6010D	5-7-18	5-7-18	
Barium	160	3.0	6010D	5-7-18	5-7-18	
Cadmium	ND	0.60	6010D	5-7-18	5-7-18	
Chromium	48	0.60	6010D	5-7-18	5-7-18	
Lead	15	6.0	6010D	5-7-18	5-7-18	
Mercury	ND	0.30	7471B	5-9-18	5-9-18	
Selenium	ND	12	6010D	5-7-18	5-7-18	
Silver	ND	1.2	6010D	5-7-18	5-7-18	



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**TOTAL METALS
 EPA 6010D/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-034-33					
Client ID:	FL211-B7-5-6					
Arsenic	ND	6.1	6010D	5-7-18	5-7-18	
Barium	130	3.1	6010D	5-7-18	5-7-18	
Cadmium	ND	0.61	6010D	5-7-18	5-7-18	
Chromium	55	0.61	6010D	5-7-18	5-7-18	
Lead	ND	6.1	6010D	5-7-18	5-7-18	
Mercury	ND	0.31	7471B	5-9-18	5-9-18	
Selenium	ND	12	6010D	5-7-18	5-7-18	
Silver	ND	1.2	6010D	5-7-18	5-7-18	

Lab ID:	05-034-34					
Client ID:	FL211-B7-6.5-7					
Arsenic	ND	5.7	6010D	5-7-18	5-7-18	
Barium	84	2.8	6010D	5-7-18	5-7-18	
Cadmium	ND	0.57	6010D	5-7-18	5-7-18	
Chromium	34	0.57	6010D	5-7-18	5-7-18	
Lead	21	5.7	6010D	5-7-18	5-7-18	
Mercury	ND	0.28	7471B	5-9-18	5-9-18	
Selenium	ND	11	6010D	5-7-18	5-7-18	
Silver	ND	1.1	6010D	5-7-18	5-7-18	



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**TOTAL METALS
 EPA 6010D**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-034-37					
Client ID:	FL213-B8-0-0.5					
Arsenic	6.2	5.6	6010D	5-7-18	5-7-18	
Lead	23	5.6	6010D	5-7-18	5-7-18	
Lab ID:	05-034-38					
Client ID:	FL213-B8-0.5-1					
Arsenic	ND	5.8	6010D	5-7-18	5-7-18	
Lead	ND	5.8	6010D	5-7-18	5-7-18	



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**TOTAL METALS
 EPA 6010D/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-034-39					
Client ID:	FL213-B8-3.5-4.5					
Arsenic	ND	5.7	6010D	5-7-18	5-7-18	
Barium	67	2.9	6010D	5-7-18	5-7-18	
Cadmium	ND	0.57	6010D	5-7-18	5-7-18	
Chromium	41	0.57	6010D	5-7-18	5-7-18	
Lead	ND	5.7	6010D	5-7-18	5-7-18	
Mercury	ND	0.29	7471B	5-9-18	5-9-18	
Selenium	ND	11	6010D	5-7-18	5-7-18	
Silver	ND	1.1	6010D	5-7-18	5-7-18	

Lab ID:	05-034-40					
Client ID:	FL213-B8-7.5-8.5					
Arsenic	ND	5.5	6010D	5-7-18	5-7-18	
Barium	61	2.8	6010D	5-7-18	5-7-18	
Cadmium	ND	0.55	6010D	5-7-18	5-7-18	
Chromium	45	0.55	6010D	5-7-18	5-7-18	
Lead	ND	5.5	6010D	5-7-18	5-7-18	
Mercury	ND	0.28	7471B	5-9-18	5-9-18	
Selenium	ND	11	6010D	5-7-18	5-7-18	
Silver	ND	1.1	6010D	5-7-18	5-7-18	



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**TOTAL METALS
 EPA 6010D**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-034-42					
Client ID:	FL213-B9-0-0.5					
Arsenic	8.4	5.4	6010D	5-7-18	5-7-18	
Lead	60	5.4	6010D	5-7-18	5-7-18	

Lab ID: 05-034-43
Client ID: FL213-B9-0.5-1

Arsenic	15	6.1	6010D	5-7-18	5-7-18	
Lead	61	6.1	6010D	5-7-18	5-7-18	



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**TOTAL METALS
 EPA 6010D/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-034-44					
Client ID:	FL213-B9-4-5					
Arsenic	ND	5.8	6010D	5-7-18	5-7-18	
Barium	72	2.9	6010D	5-7-18	5-7-18	
Cadmium	ND	0.58	6010D	5-7-18	5-7-18	
Chromium	27	0.58	6010D	5-7-18	5-7-18	
Lead	ND	5.8	6010D	5-7-18	5-7-18	
Mercury	ND	0.29	7471B	5-8-18	5-8-18	
Selenium	ND	12	6010D	5-7-18	5-7-18	
Silver	ND	1.2	6010D	5-7-18	5-7-18	



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**TOTAL METALS
 EPA 6010D/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-034-45					
Client ID:	FL213-B9-6-7					
Arsenic	ND	5.6	6010D	5-7-18	5-7-18	
Barium	58	2.8	6010D	5-7-18	5-7-18	
Cadmium	ND	0.56	6010D	5-7-18	5-7-18	
Chromium	35	0.56	6010D	5-7-18	5-7-18	
Lead	ND	5.6	6010D	5-7-18	5-7-18	
Mercury	ND	0.28	7471B	5-8-18	5-8-18	
Selenium	ND	11	6010D	5-7-18	5-7-18	
Silver	ND	1.1	6010D	5-7-18	5-7-18	

Lab ID:	05-034-49					
Client ID:	FL213-B10-2-3					
Arsenic	ND	6.0	6010D	5-7-18	5-7-18	
Barium	120	3.0	6010D	5-7-18	5-7-18	
Cadmium	ND	0.60	6010D	5-7-18	5-7-18	
Chromium	54	0.60	6010D	5-7-18	5-7-18	
Lead	8.7	6.0	6010D	5-7-18	5-7-18	
Mercury	ND	0.30	7471B	5-8-18	5-8-18	
Selenium	ND	12	6010D	5-7-18	5-7-18	
Silver	ND	1.2	6010D	5-7-18	5-7-18	



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**TOTAL METALS
 EPA 6010D/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-034-50					
Client ID:	FL213-B10-4-5					
Arsenic	ND	5.5	6010D	5-7-18	5-7-18	
Barium	59	2.8	6010D	5-7-18	5-7-18	
Cadmium	ND	0.55	6010D	5-7-18	5-7-18	
Chromium	29	0.55	6010D	5-7-18	5-7-18	
Lead	ND	5.5	6010D	5-7-18	5-7-18	
Mercury	ND	0.28	7471B	5-8-18	5-8-18	
Selenium	ND	11	6010D	5-7-18	5-7-18	
Silver	ND	1.1	6010D	5-7-18	5-7-18	



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**SOLUBLE HEXAVALENT CHROMIUM
WATER EXTRACTION
EPA 7196A**

Matrix: Soil
Units: mg/kg (ppm)

				Date	Date	
Analyte	Result	PQL	EPA Method	Prepared	Analyzed	Flags
Lab ID:	05-034-33					
Client ID:	FL211-B7-5-6					
Hexavalent Chromium	ND	1.2	7196A mod	5-14-18	5-14-18	



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PAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: FL211-B5-13-14						
Laboratory ID: 05-034-25						
Naphthalene	ND	0.0072	EPA 8270D/SIM	5-14-18	5-14-18	
2-Methylnaphthalene	ND	0.0072	EPA 8270D/SIM	5-14-18	5-14-18	
1-Methylnaphthalene	ND	0.0072	EPA 8270D/SIM	5-14-18	5-14-18	
Acenaphthylene	ND	0.0072	EPA 8270D/SIM	5-14-18	5-14-18	
Acenaphthene	ND	0.0072	EPA 8270D/SIM	5-14-18	5-14-18	
Fluorene	ND	0.0072	EPA 8270D/SIM	5-14-18	5-14-18	
Phenanthrene	ND	0.0072	EPA 8270D/SIM	5-14-18	5-14-18	
Anthracene	ND	0.0072	EPA 8270D/SIM	5-14-18	5-14-18	
Fluoranthene	ND	0.0072	EPA 8270D/SIM	5-14-18	5-14-18	
Pyrene	ND	0.0072	EPA 8270D/SIM	5-14-18	5-14-18	
Benzo[a]anthracene	ND	0.0072	EPA 8270D/SIM	5-14-18	5-14-18	
Chrysene	ND	0.0072	EPA 8270D/SIM	5-14-18	5-14-18	
Benzo[b]fluoranthene	ND	0.0072	EPA 8270D/SIM	5-14-18	5-14-18	
Benzo(j,k)fluoranthene	ND	0.0072	EPA 8270D/SIM	5-14-18	5-14-18	
Benzo[a]pyrene	ND	0.0072	EPA 8270D/SIM	5-14-18	5-14-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0072	EPA 8270D/SIM	5-14-18	5-14-18	
Dibenz[a,h]anthracene	ND	0.0072	EPA 8270D/SIM	5-14-18	5-14-18	
Benzo[g,h,i]perylene	ND	0.0072	EPA 8270D/SIM	5-14-18	5-14-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	82	40 - 117				
Pyrene-d10	74	38 - 119				
Terphenyl-d14	85	47 - 135				



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 Laboratory Reference: 1805-034
 Project: 4082-039-01

**TOTAL METALS
 EPA 6010D**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-034-20					
Client ID:	FL211-B5-0-0.5					
Arsenic	ND	5.3	6010D	5-14-18	5-14-18	
Lead	31	5.3	6010D	5-14-18	5-14-18	



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**NWTPH-HCID
QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0504S2					
Gasoline Range Organics	ND	20	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	50	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	100	NWTPH-HCID	5-4-18	5-4-18	
Surrogate: o-Terphenyl	Percent Recovery 84	Control Limits 50-150				
Laboratory ID:	MB0504S3					
Gasoline Range Organics	ND	20	NWTPH-HCID	5-4-18	5-4-18	
Diesel Range Organics	ND	50	NWTPH-HCID	5-4-18	5-4-18	
Lube Oil Range Organics	ND	100	NWTPH-HCID	5-4-18	5-4-18	
Surrogate: o-Terphenyl	Percent Recovery 82	Control Limits 50-150				



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**NWTPH-Dx
QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0508S2					
Diesel Range Organics	ND	25	NWTPH-Dx	5-8-18	5-8-18	
Lube Oil Range Organics	ND	50	NWTPH-Dx	5-8-18	5-8-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	95	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	05-044-20							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	
Surrogate:								
o-Terphenyl				100	93	50-150		



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VOLATILES EPA 8260C
METHOD BLANK QUALITY CONTROL
 Page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0504S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Chloromethane	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
Vinyl Chloride	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Bromomethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Chloroethane	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Acetone	ND	0.0064	EPA 8260C	5-4-18	5-4-18	
Iodomethane	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
Carbon Disulfide	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Methylene Chloride	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Vinyl Acetate	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
2-Butanone	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
Bromochloromethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Chloroform	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Benzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Trichloroethene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Dibromomethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Bromodichloromethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
2-Chloroethyl Vinyl Ether	ND	0.0069	EPA 8260C	5-4-18	5-4-18	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Methyl Isobutyl Ketone	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
Toluene	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	



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VOLATILES EPA 8260C
METHOD BLANK QUALITY CONTROL
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0504S1						
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Tetrachloroethene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
2-Hexanone	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
Dibromochloromethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Chlorobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Ethylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
m,p-Xylene	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
o-Xylene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Styrene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Bromoform	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
Isopropylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Bromobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
n-Propylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
2-Chlorotoluene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
4-Chlorotoluene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
tert-Butylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
sec-Butylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
p-Isopropyltoluene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
n-Butylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
Naphthalene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	102	68-139				
Toluene-d8	99	79-128				
4-Bromofluorobenzene	93	71-132				



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VOLATILES EPA 8260C
METHOD BLANK QUALITY CONTROL
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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0507S2					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
Chloromethane	ND	0.0050	EPA 8260C	5-7-18	5-7-18	
Vinyl Chloride	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
Bromomethane	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
Chloroethane	ND	0.0050	EPA 8260C	5-7-18	5-7-18	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
Acetone	ND	0.0050	EPA 8260C	5-7-18	5-7-18	
Iodomethane	ND	0.0072	EPA 8260C	5-7-18	5-7-18	
Carbon Disulfide	ND	0.0014	EPA 8260C	5-7-18	5-7-18	
Methylene Chloride	ND	0.0050	EPA 8260C	5-7-18	5-7-18	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
Vinyl Acetate	ND	0.0050	EPA 8260C	5-7-18	5-7-18	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
2-Butanone	ND	0.0050	EPA 8260C	5-7-18	5-7-18	
Bromochloromethane	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
Chloroform	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
Benzene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
Trichloroethene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
Dibromomethane	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
Bromodichloromethane	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	5-7-18	5-7-18	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
Methyl Isobutyl Ketone	ND	0.0050	EPA 8260C	5-7-18	5-7-18	
Toluene	ND	0.0050	EPA 8260C	5-7-18	5-7-18	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	



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VOLATILES EPA 8260C
METHOD BLANK QUALITY CONTROL
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0507S2						
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
Tetrachloroethene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
2-Hexanone	ND	0.0050	EPA 8260C	5-7-18	5-7-18	
Dibromochloromethane	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
Chlorobenzene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
Ethylbenzene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
m,p-Xylene	ND	0.0050	EPA 8260C	5-7-18	5-7-18	
o-Xylene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
Styrene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
Bromoform	ND	0.0050	EPA 8260C	5-7-18	5-7-18	
Isopropylbenzene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
Bromobenzene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
n-Propylbenzene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
2-Chlorotoluene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
4-Chlorotoluene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
tert-Butylbenzene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
sec-Butylbenzene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
p-Isopropyltoluene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
n-Butylbenzene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	5-7-18	5-7-18	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	5-7-18	5-7-18	
Naphthalene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	5-7-18	5-7-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	100	68-139				
Toluene-d8	100	79-128				
4-Bromofluorobenzene	96	71-132				



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 Project: 4082-039-01

**VOLATILES EPA 8260C
 SB/SBD QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0504S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0421	0.0480	0.0500	0.0500	84	96	53-141	13	17	
Benzene	0.0416	0.0466	0.0500	0.0500	83	93	70-130	11	15	
Trichloroethene	0.0405	0.0458	0.0500	0.0500	81	92	74-122	12	16	
Toluene	0.0404	0.0462	0.0500	0.0500	81	92	76-130	13	15	
Chlorobenzene	0.0402	0.0454	0.0500	0.0500	80	91	75-120	12	14	
Surrogate:										
Dibromofluoromethane					99	99	68-139			
Toluene-d8					99	100	79-128			
4-Bromofluorobenzene					92	96	71-132			



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 Project: 4082-039-01

**VOLATILES EPA 8260C
 SB/SBD QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	Limit			
SPIKE BLANKS										
Laboratory ID:	SB0507S2									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0536	0.0470	0.0500	0.0500	107	94	53-141	13	17	
Benzene	0.0511	0.0460	0.0500	0.0500	102	92	70-130	11	15	
Trichloroethene	0.0489	0.0443	0.0500	0.0500	98	89	74-122	10	16	
Toluene	0.0503	0.0456	0.0500	0.0500	101	91	76-130	10	15	
Chlorobenzene	0.0465	0.0422	0.0500	0.0500	93	84	75-120	10	14	
Surrogate:										
Dibromofluoromethane					99	98	68-139			
Toluene-d8					98	99	79-128			
4-Bromofluorobenzene					92	93	71-132			



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 Laboratory Reference: 1805-034
 Project: 4082-039-01

**PAHs EPA 8270D/SIM
 METHOD BLANK QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0507S2						
Naphthalene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
2-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
1-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Acenaphthylene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Acenaphthene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Fluorene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Phenanthrene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Anthracene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Fluoranthene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Pyrene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[a]anthracene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Chrysene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[a]pyrene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	88	40 - 117				
Pyrene-d10	92	38 - 119				
Terphenyl-d14	94	47 - 135				



Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

**PAHs EPA 8270D/SIM
 METHOD BLANK QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0507S3						
Naphthalene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
2-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
1-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Acenaphthylene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Acenaphthene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Fluorene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Phenanthrene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Anthracene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Fluoranthene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Pyrene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[a]anthracene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Chrysene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[a]pyrene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	82	40 - 117				
Pyrene-d10	86	38 - 119				
Terphenyl-d14	89	47 - 135				



Date of Report: May 15, 2018
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 Laboratory Reference: 1805-034
 Project: 4082-039-01

**PAHs EPA 8270D/SIM
 MS/MSD QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES								
Laboratory ID:	05-034-29							
	MS	MSD	MS	MSD	MS	MSD		
Naphthalene	0.120	0.121	0.167	0.167	ND	72	72	45 - 114
Acenaphthylene	0.137	0.125	0.167	0.167	ND	82	75	49 - 119
Acenaphthene	0.132	0.127	0.167	0.167	ND	79	76	47 - 117
Fluorene	0.137	0.129	0.167	0.167	ND	82	77	50 - 123
Phenanthrene	0.134	0.132	0.167	0.167	ND	80	79	46 - 122
Anthracene	0.147	0.142	0.167	0.167	ND	88	85	49 - 130
Fluoranthene	0.141	0.139	0.167	0.167	ND	84	83	48 - 127
Pyrene	0.143	0.139	0.167	0.167	ND	86	83	43 - 131
Benzo[a]anthracene	0.158	0.156	0.167	0.167	ND	95	93	55 - 132
Chrysene	0.132	0.142	0.167	0.167	ND	79	85	51 - 126
Benzo[b]fluoranthene	0.159	0.141	0.167	0.167	ND	95	84	45 - 133
Benzo(j,k)fluoranthene	0.139	0.149	0.167	0.167	ND	83	89	49 - 131
Benzo[a]pyrene	0.156	0.155	0.167	0.167	ND	93	93	50 - 127
Indeno(1,2,3-c,d)pyrene	0.162	0.147	0.167	0.167	ND	97	88	45 - 133
Dibenz[a,h]anthracene	0.149	0.147	0.167	0.167	ND	89	88	46 - 132
Benzo[g,h,i]perylene	0.155	0.144	0.167	0.167	ND	93	86	48 - 127
Surrogate:								
2-Fluorobiphenyl						78	74	40 - 117
Pyrene-d10						86	84	38 - 119
Terphenyl-d14						84	85	47 - 135



Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

**PAHs EPA 8270D/SIM
 MS/MSD QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent	Recovery	RPD		Flags
					Result	Recovery	Limits	RPD	Limit	
MATRIX SPIKES										
Laboratory ID:	05-034-50									
	MS	MSD	MS	MSD		MS	MSD			
Naphthalene	0.131	0.125	0.167	0.167	ND	78	75	45 - 114	5	21
Acenaphthylene	0.143	0.133	0.167	0.167	ND	86	80	49 - 119	7	21
Acenaphthene	0.143	0.133	0.167	0.167	ND	86	80	47 - 117	7	19
Fluorene	0.138	0.128	0.167	0.167	ND	83	77	50 - 123	8	20
Phenanthrene	0.132	0.124	0.167	0.167	ND	79	74	46 - 122	6	20
Anthracene	0.149	0.141	0.167	0.167	ND	89	84	49 - 130	6	19
Fluoranthene	0.138	0.133	0.167	0.167	ND	83	80	48 - 127	4	21
Pyrene	0.140	0.136	0.167	0.167	ND	84	81	43 - 131	3	22
Benzo[a]anthracene	0.155	0.151	0.167	0.167	ND	93	90	55 - 132	3	20
Chrysene	0.139	0.140	0.167	0.167	ND	83	84	51 - 126	1	20
Benzo[b]fluoranthene	0.144	0.143	0.167	0.167	ND	86	86	45 - 133	1	21
Benzo(j,k)fluoranthene	0.146	0.142	0.167	0.167	ND	87	85	49 - 131	3	24
Benzo[a]pyrene	0.148	0.146	0.167	0.167	ND	89	87	50 - 127	1	21
Indeno(1,2,3-c,d)pyrene	0.149	0.148	0.167	0.167	ND	89	89	45 - 133	1	22
Dibenz[a,h]anthracene	0.141	0.141	0.167	0.167	ND	84	84	46 - 132	0	20
Benzo[g,h,i]perylene	0.144	0.141	0.167	0.167	ND	86	84	48 - 127	2	20
Surrogate:										
2-Fluorobiphenyl						76	78	40 - 117		
Pyrene-d10						83	82	38 - 119		
Terphenyl-d14						83	83	47 - 135		



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Project: 4082-039-01

**TOTAL METALS
EPA 6010D
METHOD BLANK QUALITY CONTROL**

Date Extracted: 5-4-18
Date Analyzed: 5-4-18

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0504SM1

Analyte	Method	Result	PQL
Arsenic	6010D	ND	5.0
Barium	6010D	ND	2.5
Cadmium	6010D	ND	0.50
Chromium	6010D	ND	0.50
Lead	6010D	ND	5.0
Selenium	6010D	ND	10
Silver	6010D	ND	1.0



Date of Report: May 15, 2018
Samples Submitted: May 3, 2018
Laboratory Reference: 1805-034
Project: 4082-039-01

**TOTAL METALS
EPA 6010D
METHOD BLANK QUALITY CONTROL**

Date Extracted: 5-7-18
Date Analyzed: 5-7-18

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0507SM1

Analyte	Method	Result	PQL
Arsenic	6010D	ND	5.0
Barium	6010D	ND	2.5
Cadmium	6010D	ND	0.50
Chromium	6010D	ND	0.50
Lead	6010D	ND	5.0
Selenium	6010D	ND	10
Silver	6010D	ND	1.0



Date of Report: May 15, 2018
Samples Submitted: May 3, 2018
Laboratory Reference: 1805-034
Project: 4082-039-01

**TOTAL MERCURY
EPA 7471B
METHOD BLANK QUALITY CONTROL**

Date Extracted: 5-8-18
Date Analyzed: 5-8-18

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0508S1

Analyte	Method	Result	PQL
Mercury	7471B	ND	0.25



Date of Report: May 15, 2018
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Project: 4082-039-01

**TOTAL MERCURY
EPA 7471B
METHOD BLANK QUALITY CONTROL**

Date Extracted: 5-8-18
Date Analyzed: 5-8-18

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0508S2

Analyte	Method	Result	PQL
Mercury	7471B	ND	0.25



Date of Report: May 15, 2018
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 Project: 4082-039-01

**TOTAL METALS
 EPA 6010D
 DUPLICATE QUALITY CONTROL**

Date Extracted: 5-4-18

Date Analyzed: 5-4-18

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 05-042-05

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	ND	ND	NA	5.0	
Barium	41.4	41.0	1	2.5	
Cadmium	ND	ND	NA	0.50	
Chromium	22.6	24.5	8	0.50	
Lead	ND	ND	NA	5.0	
Selenium	ND	ND	NA	10	
Silver	ND	ND	NA	1.0	



Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

**TOTAL METALS
 EPA 6010D
 DUPLICATE QUALITY CONTROL**

Date Extracted: 5-7-18

Date Analyzed: 5-7-18

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 05-034-28

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	ND	ND	NA	5.0	
Barium	51.4	53.9	5	2.5	
Cadmium	ND	ND	NA	0.50	
Chromium	40.2	35.2	13	0.50	
Lead	ND	ND	NA	5.0	
Selenium	ND	ND	NA	10	
Silver	ND	ND	NA	1.0	



Date of Report: May 15, 2018
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Laboratory Reference: 1805-034
Project: 4082-039-01

**TOTAL MERCURY
EPA 7471B
DUPLICATE QUALITY CONTROL**

Date Extracted: 5-8-18

Date Analyzed: 5-8-18

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 05-035-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Mercury	ND	ND	NA	0.25	



Date of Report: May 15, 2018
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Laboratory Reference: 1805-034
Project: 4082-039-01

**TOTAL MERCURY
EPA 7471B
DUPLICATE QUALITY CONTROL**

Date Extracted: 5-9-18

Date Analyzed: 5-9-18

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 05-034-29

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Mercury	ND	ND	NA	0.25	



Date of Report: May 15, 2018
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 Project: 4082-039-01

**TOTAL METALS
 EPA 6010D
 MS/MSD QUALITY CONTROL**

Date Extracted: 5-4-18

Date Analyzed: 5-4-18

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 05-042-05

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	101	101	101	101	0	
Barium	100	147	105	150	109	3	
Cadmium	50.0	50.3	101	51.2	102	2	
Chromium	100	126	103	131	108	4	
Lead	250	249	100	253	101	2	
Selenium	100	104	104	102	102	2	
Silver	25.0	21.8	87	21.0	84	4	



Date of Report: May 15, 2018
 Samples Submitted: May 3, 2018
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 Project: 4082-039-01

**TOTAL METALS
 EPA 6010D
 MS/MSD QUALITY CONTROL**

Date Extracted: 5-7-18

Date Analyzed: 5-7-18

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 05-034-28

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	92.9	93	101	101	9	
Barium	100	149	98	159	108	6	
Cadmium	50.0	48.2	96	51.3	103	6	
Chromium	100	127	87	131	91	3	
Lead	250	236	94	253	101	7	
Selenium	100	94.1	94	100	100	6	
Silver	25.0	20.1	80	21.2	85	5	



Date of Report: May 15, 2018
Samples Submitted: May 3, 2018
Laboratory Reference: 1805-034
Project: 4082-039-01

**TOTAL MERCURY
EPA 7471B
MS/MSD QUALITY CONTROL**

Date Extracted: 5-8-18

Date Analyzed: 5-8-18

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 05-035-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Mercury	0.500	0.438	88	0.429	86	2	



Date of Report: May 15, 2018
Samples Submitted: May 3, 2018
Laboratory Reference: 1805-034
Project: 4082-039-01

**TOTAL MERCURY
EPA 7471B
MS/MSD QUALITY CONTROL**

Date Extracted: 5-9-18

Date Analyzed: 5-9-18

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 05-034-29

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Mercury	0.500	0.509	102	0.522	104	3	



Date of Report: May 15, 2018
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Laboratory Reference: 1805-034
Project: 4082-039-01

**SOLUBLE HEXAVALENT CHROMIUM
WATER EXTRACTION
EPA 7196A
METHOD BLANK QUALITY CONTROL**

Date Extracted: 5-14-18
Date Analyzed: 5-14-18

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0514S1

Analyte	Method	Result	PQL
Hexavalent Chromium	7196A mod	ND	1.0



Date of Report: May 15, 2018
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Laboratory Reference: 1805-034
Project: 4082-039-01

**SOLUBLE HEXAVALENT CHROMIUM
WATER EXTRACTION
EPA 7196A
DUPLICATE QUALITY CONTROL**

Date Extracted: 5-14-18
Date Analyzed: 5-14-18

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 05-034-33

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Hexavalent Chromium	ND	ND	NA	1.0	



Date of Report: May 15, 2018
Samples Submitted: May 3, 2018
Laboratory Reference: 1805-034
Project: 4082-039-01

**SOLUBLE HEXAVALENT CHROMIUM
WATER EXTRACTION
EPA 7196A
MS/MSD QUALITY CONTROL**

Date Extracted: 5-14-18
Date Analyzed: 5-14-18

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 05-034-33

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Hexavalent Chromium	5.00	3.89	78	4.44	89	13	



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 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-034
 Project: 4082-039-01

**PAHs EPA 8270D/SIM
 METHOD BLANK QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0514S1					
Naphthalene	ND	0.0067	EPA 8270D/SIM	5-14-18	5-14-18	
2-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	5-14-18	5-14-18	
1-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	5-14-18	5-14-18	
Acenaphthylene	ND	0.0067	EPA 8270D/SIM	5-14-18	5-14-18	
Acenaphthene	ND	0.0067	EPA 8270D/SIM	5-14-18	5-14-18	
Fluorene	ND	0.0067	EPA 8270D/SIM	5-14-18	5-14-18	
Phenanthrene	ND	0.0067	EPA 8270D/SIM	5-14-18	5-14-18	
Anthracene	ND	0.0067	EPA 8270D/SIM	5-14-18	5-14-18	
Fluoranthene	ND	0.0067	EPA 8270D/SIM	5-14-18	5-14-18	
Pyrene	ND	0.0067	EPA 8270D/SIM	5-14-18	5-14-18	
Benzo[a]anthracene	ND	0.0067	EPA 8270D/SIM	5-14-18	5-14-18	
Chrysene	ND	0.0067	EPA 8270D/SIM	5-14-18	5-14-18	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270D/SIM	5-14-18	5-14-18	
Benzo[j,k]fluoranthene	ND	0.0067	EPA 8270D/SIM	5-14-18	5-14-18	
Benzo[a]pyrene	ND	0.0067	EPA 8270D/SIM	5-14-18	5-14-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270D/SIM	5-14-18	5-14-18	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270D/SIM	5-14-18	5-14-18	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270D/SIM	5-14-18	5-14-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	72	40 - 117				
Pyrene-d10	77	38 - 119				
Terphenyl-d14	83	47 - 135				



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**PAHs EPA 8270D/SIM
 SB/SBD QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0514S1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	0.0577	0.0592	0.0833	0.0833	69	71	54 - 114	3	15	
Acenaphthylene	0.0629	0.0634	0.0833	0.0833	76	76	59 - 119	1	15	
Acenaphthene	0.0631	0.0626	0.0833	0.0833	76	75	58 - 117	1	15	
Fluorene	0.0624	0.0648	0.0833	0.0833	75	78	61 - 122	4	15	
Phenanthrene	0.0593	0.0611	0.0833	0.0833	71	73	58 - 121	3	15	
Anthracene	0.0655	0.0686	0.0833	0.0833	79	82	66 - 126	5	15	
Fluoranthene	0.0635	0.0654	0.0833	0.0833	76	79	62 - 126	3	15	
Pyrene	0.0629	0.0648	0.0833	0.0833	76	78	61 - 126	3	15	
Benzo[a]anthracene	0.0731	0.0719	0.0833	0.0833	88	86	64 - 132	2	15	
Chrysene	0.0651	0.0695	0.0833	0.0833	78	83	64 - 127	7	15	
Benzo[b]fluoranthene	0.0660	0.0653	0.0833	0.0833	79	78	57 - 128	1	15	
Benzo(j,k)fluoranthene	0.0677	0.0648	0.0833	0.0833	81	78	62 - 130	4	15	
Benzo[a]pyrene	0.0702	0.0753	0.0833	0.0833	84	90	62 - 125	7	15	
Indeno(1,2,3-c,d)pyrene	0.0721	0.0757	0.0833	0.0833	87	91	55 - 130	5	15	
Dibenz[a,h]anthracene	0.0695	0.0712	0.0833	0.0833	83	85	58 - 129	2	15	
Benzo[g,h,i]perylene	0.0660	0.0697	0.0833	0.0833	79	84	57 - 129	5	15	
Surrogate:										
2-Fluorobiphenyl					68	67	40 - 117			
Pyrene-d10					78	78	38 - 119			
Terphenyl-d14					86	85	47 - 135			



Date of Report: May 15, 2018
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Project: 4082-039-01

**TOTAL METALS
EPA 6010D
METHOD BLANK QUALITY CONTROL**

Date Extracted: 5-14-18
Date Analyzed: 5-14-18

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0514SM1

Analyte	Method	Result	PQL
Arsenic	6010D	ND	5.0
Lead	6010D	ND	5.0



Date of Report: May 15, 2018
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Laboratory Reference: 1805-034
Project: 4082-039-01

**TOTAL METALS
EPA 6010D
DUPLICATE QUALITY CONTROL**

Date Extracted: 5-14-18
Date Analyzed: 5-14-18

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 05-103-03

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	ND	ND	NA	5.0	
Lead	7.45	7.20	3	5.0	



Date of Report: May 15, 2018
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 Project: 4082-039-01

**TOTAL METALS
 EPA 6010D
 MS/MSD QUALITY CONTROL**

Date Extracted: 5-14-18
 Date Analyzed: 5-14-18

 Matrix: Soil
 Units: mg/kg (ppm)

 Lab ID: 05-103-03

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	101	101	102	102	0	
Lead	250	255	99	257	100	1	



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% MOISTURE

Date Analyzed: 5-4&7&14-18

Client ID	Lab ID	% Moisture
FL212-B1-0-.5	05-034-01	7
FL212-B1-0.5-1	05-034-02	16
FL212-B1-2.5-3.5	05-034-03	15
FL212-B1-5-6	05-034-04	8
FL212-B1-9-10	05-034-05	4
FL212-B1-19-20	05-034-07	11
FL212-B2-2-3	05-034-08	15
FL212-B2-5.5-6.5	05-034-09	15
FL212-B2-9-10	05-034-10	8
FL211-B3-0-0.5	05-034-12	12
FL211-B3-0.5-1	05-034-13	18
FL211-B3-3-4	05-034-14	13
FL211-B3-6-7	05-034-15	11
FL211-B4-2-3	05-034-17	16
FL211-B4-5-6	05-034-18	19
FL211-B5-0-0.5	05-034-20	5
FL211-B5-0.5-1	05-034-21	10
FL211-B5-3.5-4	05-034-22	20
FL211-B5-5.5-6	05-034-23	11
FL211-B5-11.5-12	05-034-24	11
FL211-B5-13-14	05-034-25	8
FL210-B6-2-2.5	05-034-27	18
FL210-B6-6-7	05-034-28	8
FL210-B6-9-10	05-034-29	7
FL211-B7-2.5-3.5	05-034-32	17
FL211-B7-5-6	05-034-33	19
FL211-B7-6.5-7	05-034-34	12



Date of Report: May 15, 2018
Samples Submitted: May 3, 2018
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% MOISTURE

Date Analyzed: 5-4&7&14-18

Client ID	Lab ID	% Moisture
FL211-B7-10-11	05-034-35	8
FL213-B8-0-0.5	05-034-37	11
FL213-B8-0.5-1	05-034-38	14
FL213-B8-3.5-4.5	05-034-39	12
FL213-B8-7.5-8.5	05-034-40	9
FL213-B9-0-0.5	05-034-42	8
FL213-B9-0.5-1	05-034-43	19
FL213-B9-4-5	05-034-44	14
FL213-B9-6-7	05-034-45	10
FL213-B10-2-3	05-034-49	17
FL213-B10-4-5	05-034-50	10





Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical _____.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- Z -
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference





**Onsite
Environmental Inc.**

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Chain of Custody

Page 1 of 6

Turnaround Request
(in working days)

(Check One)

☐ Same Day ☐ 1 Day

☐ 2 Days ☐ 3 Days

☒ Standard (7 Days)
(TTPH analysis 5 Days)

☐ _____ (other)

Laboratory Number: **05-034**

Company: GEI
Project Number: 4082-039-01
Project Name: FWLE-ST
Project Manager: Aaron Wagner
Sampled by: CDG / PR

Lab ID Sample Identification

Number of Containers

NWTPH-HCID	
NWTPH-Gx/BTEX	
NWTPH-Gx	
NWTPH-Dx (☐ Acid / SG Clean-up)	
Volatiles 8260C	
Halogenated Volatiles 8260C	
EDB EPA 8011 (Waters Only)	
Semivolatiles 8270D/SIM (with low-level PAHs)	
PAHs 8270D/SIM (low-level)	
PCBs 8082A	
Organochlorine Pesticides 8081B	
Organophosphorus Pesticides 8270D/SIM	
Chlorinated Acid Herbicides 8151A	
Total RCRA Metals	☒
Total MTCA Metals	
TCLP Metals	
HEM (oil and grease) 1664A	
Metals As, Pb, Hg, Cd	
% Moisture	

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	Metals As, Pb, Hg, Cd	% Moisture
1	FL212-B1-0-0.5	5/21/18	1250	S	1																			
2	FL212-B1-0.5-1		1252		1																			
3	FL212-B1-2.5-3.5		1255		6	X				X										X				
4	FL212-B1-5-6		1300		6	X				X										X				
5	FL212-B1-9-10		1305		6	X				X										X				
6	FL212-B1-12-13		1308		6	X				X										X				
7	FL212-B1-14-20		1312		6	X				X										X				
8	FL212-B2-2-3		1225		6	X				X										X				
9	FL212-B2-5.5-6.5		1230		6	X				X										X				
10	FL212-B2-9-10		1235		6	X				X										X				

Signature

Company

Date

Time

Comments/Special Instructions

Relinquished

Signature

Company

Date

Time

Comments/Special Instructions

Received

Signature

Company

Date

Time

Comments/Special Instructions

Relinquished

Signature

Company

Date

Time

Comments/Special Instructions

Received

Signature

Company

Date

Time

Comments/Special Instructions

Relinquished

Signature

Company

Date

Time

Comments/Special Instructions

Received

Signature

Company

Date

Time

Comments/Special Instructions

Reviewed/Date

Reviewed/Date

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

PAHs reporting limit < 7 mg/kg

Appropriate followup on HCLD

Added 5/31/18 STA

Added 5/11/18 STA

Added 5/11/18 STA



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Chain of Custody

Turnaround Request
(in working days)

(Check One)

☐ Same Day ☐ 1 Day

☒ 2 Days ☐ 3 Days

☒ Standard (7 Days)
(TPH analysis 5 Days)

☐ _____ (other)

Laboratory Number: **05-034**

Company: GEI

Project Number: 4082-039-D1

Project Name: ST-FWLE

Project Manager: Arnon Waggoner

Sampled by: CSG/PP

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix
31	FL210-B4-19-20	5/21/18	9:55	S
32	FL211-B7-2.5-3.5		10:34	
33	FL211-B7-5-6		10:40	
34	FL211-B7-6.5-7		10:42	
35	FL211-B7-10-11		10:50	
36	FL211-B7-19-20		10:55	
37	FL213-B8-0-0.5		14:34	
38	FL213-B8-0.5-1		14:35	
39	FL213-B8-3.5-4.5		14:38	
40	FL213-B8-7.5-8.5		14:44	

Number of Containers		Laboratory Analysis													
NWTPH-HCID															
NWTPH-Gx/BTEX															
NWTPH-Gx															
NWTPH-Dx (☐ Acid / SG Clean-up)															
Volatiles 8260C															
Halogenated Volatiles 8260C															
EDB EPA 8011 (Waters Only)															
Semivolatiles 8270D/SIM (with low-level PAHs)															
PAHs 8270D/SIM (low-level)															
PCBs 8082A															
Organochlorine Pesticides 8081B															
Organophosphorus Pesticides 8270D/SIM															
Chlorinated Acid Herbicides 8151A															
Total RCRA Metals															
Total MTCA Metals															
TCLP Metals															
HEM (oil and grease) 1664A															
% Moisture															

Signature: [Signature] Company: GEI

Received: [Signature] Date: 5/31/18 Time: 2:00pm

Relinquished: [Signature] Date: 5/31/18 Time: 2:00pm

Received: [Signature] Date: 5/31/18 Time: 3:25pm

Relinquished: [Signature] Date: 5/31/18 Time: 15:25

Comments/Special Instructions: * As reporting limit < 7mg/kg
Appropriate followup on HCLD

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐



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Chain of Custody

Page 5 of 6

Company: GEI		Turnaround Request (in working days)		Laboratory Number: 05-034													
Project Number: 4082-039-01		(Check One)															
Project Name: ST-FULLE		☐ Same Day ☐ 1 Day															
Project Manager: Tricia DeOne / Aeriallygoner		☐ 2 Days ☐ 3 Days															
Sampled by: CSG/PR		☒ Standard (7 Days) (TPH analysis 5 Days)															
		☐ (other)															
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers												
41	FL213- B8-14-15	5/21/18	1450	S	6												
42	FL213- B9-0-0.5		1350	I	1												
43	FL213- B9-0.5-1		1352	I	1												
44	FL213- B9-4-5		1355	I	6												
45	FL213- B9-6-7		1414	I	6												
46	FL213- B9-9-10		1420	I	6												
47	FL213- B10-0-0.5		1510	I	1												
48	FL213- B10-0.5-1		1512	I	1												
49	FL213- B10-2-3		1515	I	6												
50	FL213- B10-4-5		1517	I	6												
Signature: [Signature]		Company: GEI		Date	Time	Comments/Special Instructions											
Received: [Signature]		ACPHH		5/31/18	2:00pm	* As reporting limit < 7mg/kg											
Relinquished: [Signature]		ACPHH		5/31/18	3:25pm	Appropriate follow-up on HCD											
Received: [Signature]		OGE		5/31/18	1525												
Relinquished																	
Received																	
Reviewed/Date		Reviewed/Date		Data Package: Standard ☐ Level III ☐ Level IV ☐													
				Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐													

Turnaround Request
(in working days)

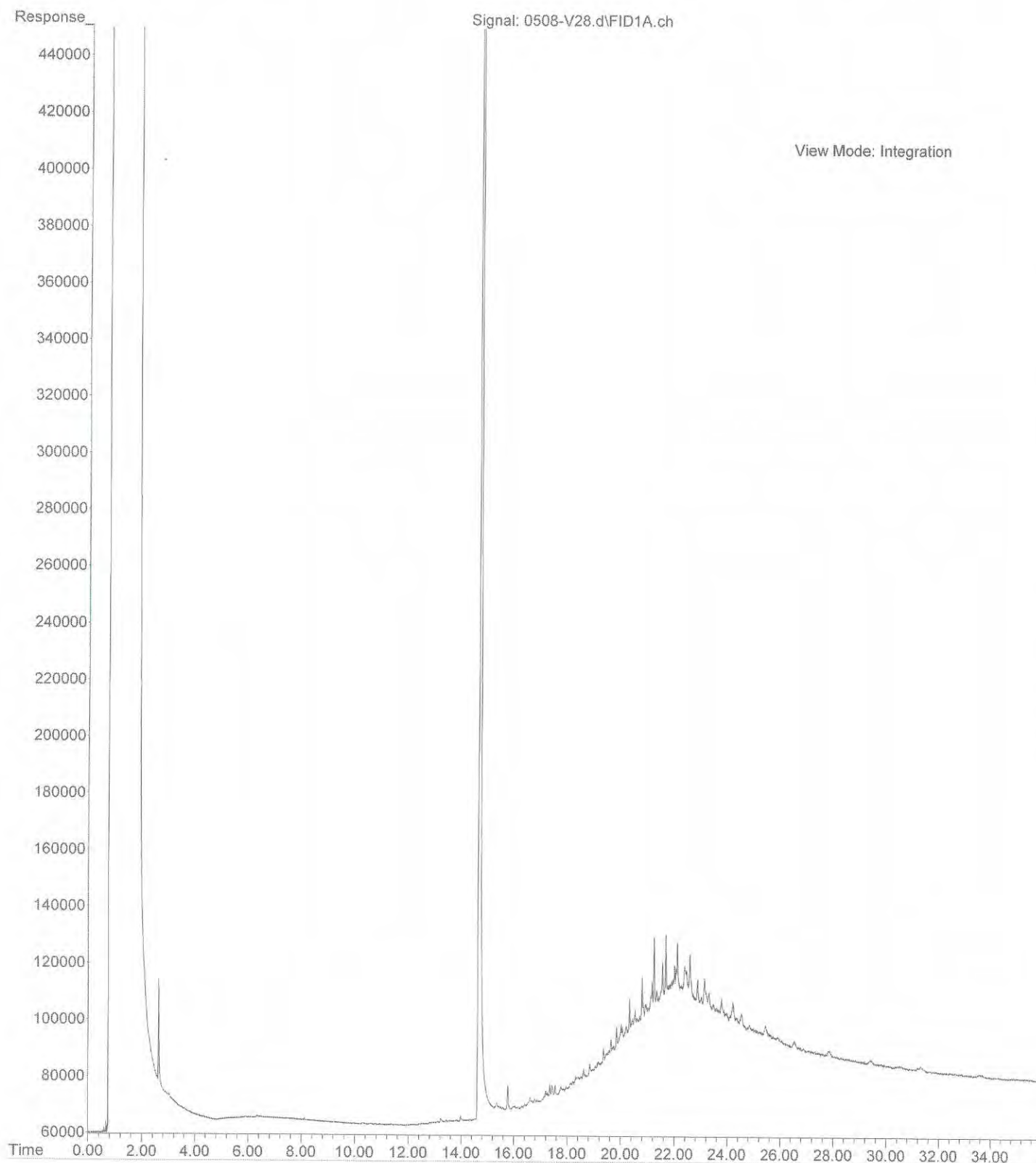
Laboratory Number: 05-034

Chain of Custody

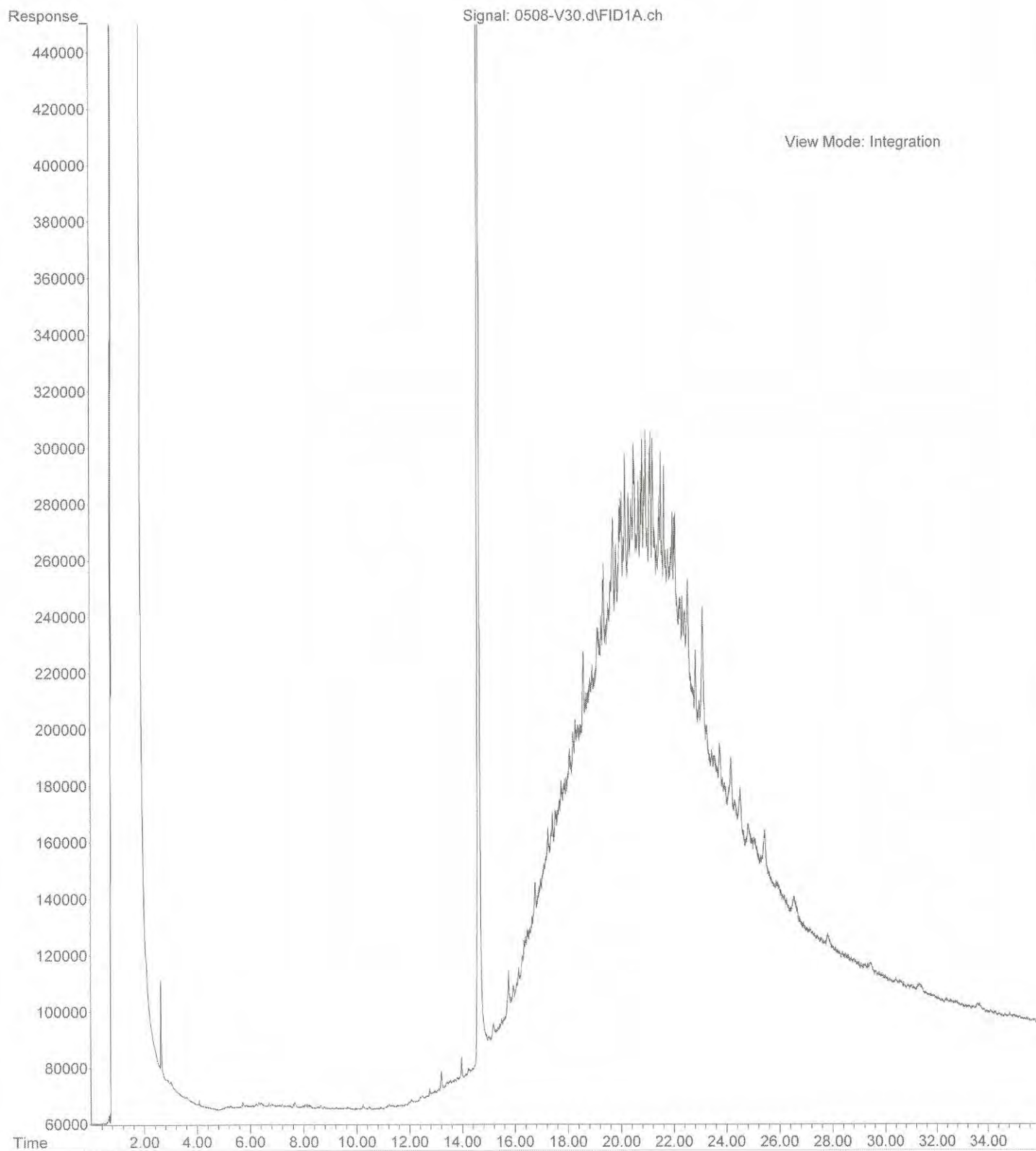
Page 6 of 6

Company: GEI		(Check One)			
Project Number: 4082-039-01	☐ Same Day	☐ 1 Day			
Project Name: ST-FWE	☐ 2 Days	☐ 3 Days			
Project Manager: Aaron Waggoner	☒ Standard (7 Days) (TPH analysis 5 Days)				
Sampled by: W6 / PR	☐ _____ (other)				
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
51F213-B10-6-7		5/21/18	1519	S	6
					NWTPH-HCID
					NWTPH-Gx/BTEX
					NWTPH-Gx
					NWTPH-Dx (☐ Acid / SG Clean-up)
					Volatiles 8260C
					Halogenated Volatiles 8260C
					EDB EPA 8011 (Waters Only)
					Semivolatiles 8270D/SIM (with low-level PAHs)
					PAHs 8270D/SIM (low-level)
					PCBs 8082A
					Organochlorine Pesticides 8081B
					Organophosphorus Pesticides 8270D/SIM
					Chlorinated Acid Herbicides 8151A
					Total RCRA Metals
					Total MTCA Metals
					TCLP Metals
					HEM (oil and grease) 1664A
					X Hold
					% Moisture
Relinquished	Signature: [Signature]	Company: GEI	Date: 5/31/18	Time: 2:00 PM	Comments/Special Instructions
Received	Signature: [Signature]	Company: ACRHA	Date: 5/31/18	Time: 2:00 PM	
Relinquished	Signature: [Signature]	Company: ACRHA	Date: 5/31/18	Time: 3:25 PM	
Received	Signature: [Signature]	Company: QBE	Date: 5/31/18	Time: 1525	
Relinquished	Signature: [Signature]	Company: QBE	Date: 5/31/18	Time: 1525	
Received					
Reviewed/Date					Data Package: Standard ☐ Level III ☐ Level IV ☐
					Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

File :C:\msdchem\2\data\V180508\0508-V28.d
Operator : JT
Acquired : 9 May 2018 2:01 using AcqMethod V180313F.M
Instrument : Vigo
Sample Name: 05-034-08
Misc Info :
Vial Number: 28



File :C:\msdchem\2\data\V180508\0508-V30.d
Operator : JT
Acquired : 9 May 2018 3:21 using AcqMethod V180313F.M
Instrument : Vigo
Sample Name: 05-034-27
Misc Info :
Vial Number: 30





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May 11, 2018

Aaron Waggoner
GeoEngineers, Inc.
1101 Fawcett Avenue South, Suite 200
Tacoma, WA 98402

Re: Analytical Data for Project 4082-039-01
Laboratory Reference No. 1805-035

Dear Aaron:

Enclosed are the analytical results and associated quality control data for samples submitted on May 3, 2018.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read 'DB', with a long horizontal stroke extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 11, 2018
Samples Submitted: May 3, 2018
Laboratory Reference: 1805-035
Project: 4082-039-01

Case Narrative

Samples were collected on May 2, 2018 and received by the laboratory on May 3, 2018. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.



Date of Report: May 11, 2018
Samples Submitted: May 3, 2018
Laboratory Reference: 1805-035
Project: 4082-039-01

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
FL210-213-DRUM-1	05-035-01	Soil	5-2-18	5-3-18	



Date of Report: May 11, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-035
 Project: 4082-039-01

NWTPH-Gx

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FL210-213-DRUM-1					
Laboratory ID:	05-035-01					
Gasoline	ND	5.7	NWTPH-Gx	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	95	57-129				



Date of Report: May 11, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-035
 Project: 4082-039-01

NWTPH-Dx

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FLZ10-213-DRUM-1					
Laboratory ID:	05-035-01					
Diesel Range Organics	ND	27	NWTPH-Dx	5-4-18	5-4-18	
Lube Oil	150	55	NWTPH-Dx	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
<i>o</i>-Terphenyl	75	50-150				



Date of Report: May 11, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-035
 Project: 4082-039-01

VOLATILES EPA 8260C

Page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: FLZ10-213-DRUM-1						
Laboratory ID: 05-035-01						
Dichlorodifluoromethane	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
Chloromethane	ND	0.0049	EPA 8260C	5-4-18	5-4-18	
Vinyl Chloride	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
Bromomethane	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
Chloroethane	ND	0.0049	EPA 8260C	5-4-18	5-4-18	
Trichlorofluoromethane	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
Acetone	ND	0.0062	EPA 8260C	5-4-18	5-4-18	
Iodomethane	ND	0.0049	EPA 8260C	5-4-18	5-4-18	
Carbon Disulfide	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
Methylene Chloride	ND	0.0049	EPA 8260C	5-4-18	5-4-18	
(trans) 1,2-Dichloroethene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
Methyl t-Butyl Ether	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethane	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
Vinyl Acetate	ND	0.0049	EPA 8260C	5-4-18	5-4-18	
2,2-Dichloropropane	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
(cis) 1,2-Dichloroethene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
2-Butanone	ND	0.0049	EPA 8260C	5-4-18	5-4-18	
Bromochloromethane	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
Chloroform	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
1,1,1-Trichloroethane	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
Carbon Tetrachloride	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloropropene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
Benzene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloroethane	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
Trichloroethene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloropropane	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
Dibromomethane	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
Bromodichloromethane	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
2-Chloroethyl Vinyl Ether	ND	0.0067	EPA 8260C	5-4-18	5-4-18	
(cis) 1,3-Dichloropropene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
Methyl Isobutyl Ketone	ND	0.0049	EPA 8260C	5-4-18	5-4-18	
Toluene	ND	0.0049	EPA 8260C	5-4-18	5-4-18	
(trans) 1,3-Dichloropropene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	



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Date of Report: May 11, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-035
 Project: 4082-039-01

VOLATILES EPA 8260C

Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: FLZ10-213-DRUM-1						
Laboratory ID: 05-035-01						
1,1,2-Trichloroethane	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
Tetrachloroethene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
1,3-Dichloropropane	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
2-Hexanone	ND	0.0049	EPA 8260C	5-4-18	5-4-18	
Dibromochloromethane	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromoethane	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
Chlorobenzene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
1,1,1,2-Tetrachloroethane	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
Ethylbenzene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
m,p-Xylene	ND	0.0049	EPA 8260C	5-4-18	5-4-18	
o-Xylene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
Styrene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
Bromoform	ND	0.0049	EPA 8260C	5-4-18	5-4-18	
Isopropylbenzene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
Bromobenzene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
1,1,2,2-Tetrachloroethane	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichloropropane	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
n-Propylbenzene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
2-Chlorotoluene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
4-Chlorotoluene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
1,3,5-Trimethylbenzene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
tert-Butylbenzene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trimethylbenzene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
sec-Butylbenzene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
1,3-Dichlorobenzene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
p-Isopropyltoluene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
1,4-Dichlorobenzene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
1,2-Dichlorobenzene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
n-Butylbenzene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromo-3-chloropropane	ND	0.0049	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trichlorobenzene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
Hexachlorobutadiene	ND	0.0049	EPA 8260C	5-4-18	5-4-18	
Naphthalene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichlorobenzene	ND	0.00098	EPA 8260C	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	103	68-139				
Toluene-d8	100	79-128				
4-Bromofluorobenzene	93	71-132				



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Date of Report: May 11, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-035
 Project: 4082-039-01

PAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: FL210-213-DRUM-1						
Laboratory ID: 05-035-01						
Naphthalene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-9-18	
2-Methylnaphthalene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-9-18	
1-Methylnaphthalene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-9-18	
Acenaphthylene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-9-18	
Acenaphthene	0.0077	0.0073	EPA 8270D/SIM	5-7-18	5-9-18	
Fluorene	ND	0.0073	EPA 8270D/SIM	5-7-18	5-9-18	
Phenanthrene	0.083	0.0073	EPA 8270D/SIM	5-7-18	5-9-18	
Anthracene	0.028	0.0073	EPA 8270D/SIM	5-7-18	5-9-18	
Fluoranthene	0.18	0.0073	EPA 8270D/SIM	5-7-18	5-9-18	
Pyrene	0.15	0.0073	EPA 8270D/SIM	5-7-18	5-9-18	
Benzo[a]anthracene	0.10	0.0073	EPA 8270D/SIM	5-7-18	5-9-18	
Chrysene	0.089	0.0073	EPA 8270D/SIM	5-7-18	5-9-18	
Benzo[b]fluoranthene	0.13	0.0073	EPA 8270D/SIM	5-7-18	5-9-18	
Benzo(j,k)fluoranthene	0.032	0.0073	EPA 8270D/SIM	5-7-18	5-9-18	
Benzo[a]pyrene	0.097	0.0073	EPA 8270D/SIM	5-7-18	5-9-18	
Indeno(1,2,3-c,d)pyrene	0.080	0.0073	EPA 8270D/SIM	5-7-18	5-9-18	
Dibenz[a,h]anthracene	0.012	0.0073	EPA 8270D/SIM	5-7-18	5-9-18	
Benzo[g,h,i]perylene	0.071	0.0073	EPA 8270D/SIM	5-7-18	5-9-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	77	40 - 117				
Pyrene-d10	82	38 - 119				
Terphenyl-d14	79	47 - 135				



Date of Report: May 11, 2018
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 Laboratory Reference: 1805-035
 Project: 4082-039-01

**TOTAL METALS
 EPA 6010D/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

				Date	Date	
Analyte	Result	PQL	EPA Method	Prepared	Analyzed	Flags
Lab ID:	05-035-01					
Client ID:	FLZ10-213-DRUM-1					
Arsenic	ND	11	6010D	5-4-18	5-7-18	
Barium	78	2.7	6010D	5-4-18	5-7-18	
Cadmium	ND	0.55	6010D	5-4-18	5-7-18	
Chromium	38	0.55	6010D	5-4-18	5-7-18	
Lead	23	5.5	6010D	5-4-18	5-7-18	
Mercury	ND	0.27	7471B	5-8-18	5-8-18	
Selenium	ND	11	6010D	5-4-18	5-7-18	
Silver	ND	1.1	6010D	5-4-18	5-7-18	



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**NWTPH-Gx
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0504S1					
Gasoline	ND	5.0	NWTPH-Gx	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	92	57-129				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	05-009-02							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	30	
Surrogate:								
Fluorobenzene				94	94	57-129		



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**NWTPH-Dx
QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0504S4					
Diesel Range Organics	ND	25	NWTPH-Dx	5-4-18	5-4-18	
Lube Oil Range Organics	ND	50	NWTPH-Dx	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	103	50-150				

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	05-035-01									
	ORIG	DUP								
Diesel Range	ND	ND	NA	NA		NA	NA	NA	NA	
Lube Oil	135	95.9	NA	NA		NA	NA	34	NA	
Surrogate:										
o-Terphenyl						75	77	50-150		



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VOLATILES EPA 8260C
METHOD BLANK QUALITY CONTROL
 Page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0504S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Chloromethane	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
Vinyl Chloride	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Bromomethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Chloroethane	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Acetone	ND	0.0064	EPA 8260C	5-4-18	5-4-18	
Iodomethane	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
Carbon Disulfide	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Methylene Chloride	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Vinyl Acetate	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
2-Butanone	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
Bromochloromethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Chloroform	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Benzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Trichloroethene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Dibromomethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Bromodichloromethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
2-Chloroethyl Vinyl Ether	ND	0.0069	EPA 8260C	5-4-18	5-4-18	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Methyl Isobutyl Ketone	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
Toluene	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	



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VOLATILES EPA 8260C
METHOD BLANK QUALITY CONTROL
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0504S1						
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Tetrachloroethene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
2-Hexanone	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
Dibromochloromethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Chlorobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Ethylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
m,p-Xylene	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
o-Xylene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Styrene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Bromoform	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
Isopropylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Bromobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
n-Propylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
2-Chlorotoluene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
4-Chlorotoluene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
tert-Butylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
sec-Butylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
p-Isopropyltoluene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
n-Butylbenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	5-4-18	5-4-18	
Naphthalene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	5-4-18	5-4-18	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	102	68-139				
Toluene-d8	99	79-128				
4-Bromofluorobenzene	93	71-132				



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 Project: 4082-039-01

**VOLATILES EPA 8260C
 SB/SBD QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	Limits		Limit	
SPIKE BLANKS										
Laboratory ID:	SB0504S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0421	0.0480	0.0500	0.0500	84	96	53-141	13	17	
Benzene	0.0416	0.0466	0.0500	0.0500	83	93	70-130	11	15	
Trichloroethene	0.0405	0.0458	0.0500	0.0500	81	92	74-122	12	16	
Toluene	0.0404	0.0462	0.0500	0.0500	81	92	76-130	13	15	
Chlorobenzene	0.0402	0.0454	0.0500	0.0500	80	91	75-120	12	14	
Surrogate:										
Dibromofluoromethane					99	99	68-139			
Toluene-d8					99	100	79-128			
4-Bromofluorobenzene					92	96	71-132			



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 Project: 4082-039-01

**PAHs EPA 8270D/SIM
 METHOD BLANK QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0507S3					
Naphthalene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
2-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
1-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Acenaphthylene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Acenaphthene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Fluorene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Phenanthrene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Anthracene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Fluoranthene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Pyrene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[a]anthracene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Chrysene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[j,k]fluoranthene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[a]pyrene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270D/SIM	5-7-18	5-7-18	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	82	40 - 117				
Pyrene-d10	86	38 - 119				
Terphenyl-d14	89	47 - 135				



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**PAHs EPA 8270D/SIM
 MS/MSD QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent Recovery		Recovery Limits	RPD	Limit	Flags
MATRIX SPIKES											
Laboratory ID:	05-034-50										
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	0.131	0.125	0.167	0.167	ND	78	75	45 - 114	5	21	
Acenaphthylene	0.143	0.133	0.167	0.167	ND	86	80	49 - 119	7	21	
Acenaphthene	0.143	0.133	0.167	0.167	ND	86	80	47 - 117	7	19	
Fluorene	0.138	0.128	0.167	0.167	ND	83	77	50 - 123	8	20	
Phenanthrene	0.132	0.124	0.167	0.167	ND	79	74	46 - 122	6	20	
Anthracene	0.149	0.141	0.167	0.167	ND	89	84	49 - 130	6	19	
Fluoranthene	0.138	0.133	0.167	0.167	ND	83	80	48 - 127	4	21	
Pyrene	0.140	0.136	0.167	0.167	ND	84	81	43 - 131	3	22	
Benzo[a]anthracene	0.155	0.151	0.167	0.167	ND	93	90	55 - 132	3	20	
Chrysene	0.139	0.140	0.167	0.167	ND	83	84	51 - 126	1	20	
Benzo[b]fluoranthene	0.144	0.143	0.167	0.167	ND	86	86	45 - 133	1	21	
Benzo(j,k)fluoranthene	0.146	0.142	0.167	0.167	ND	87	85	49 - 131	3	24	
Benzo[a]pyrene	0.148	0.146	0.167	0.167	ND	89	87	50 - 127	1	21	
Indeno(1,2,3-c,d)pyrene	0.149	0.148	0.167	0.167	ND	89	89	45 - 133	1	22	
Dibenz[a,h]anthracene	0.141	0.141	0.167	0.167	ND	84	84	46 - 132	0	20	
Benzo[g,h,i]perylene	0.144	0.141	0.167	0.167	ND	86	84	48 - 127	2	20	
Surrogate:											
2-Fluorobiphenyl						76	78	40 - 117			
Pyrene-d10						83	82	38 - 119			
Terphenyl-d14						83	83	47 - 135			



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Project: 4082-039-01

**TOTAL METALS
EPA 6010D
METHOD BLANK QUALITY CONTROL**

Date Extracted: 5-4&7-18
Date Analyzed: 5-7-18

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0504SM1

Analyte	Method	Result	PQL
Arsenic	6010D	ND	10
Barium	6010D	ND	2.5
Cadmium	6010D	ND	0.50
Chromium	6010D	ND	0.50
Lead	6010D	ND	5.0
Selenium	6010D	ND	10
Silver	6010D	ND	1.0



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**TOTAL MERCURY
EPA 7471B
METHOD BLANK QUALITY CONTROL**

Date Extracted: 5-8-18
Date Analyzed: 5-8-18

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0508S2

Analyte	Method	Result	PQL
Mercury	7471B	ND	0.25



Date of Report: May 11, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-035
 Project: 4082-039-01

**TOTAL METALS
 EPA 6010D
 DUPLICATE QUALITY CONTROL**

Date Extracted: 5-4&7-18
 Date Analyzed: 5-7-18

 Matrix: Soil
 Units: mg/kg (ppm)

 Lab ID: 05-042-05

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	ND	ND	NA	10	
Barium	41.4	41.0	1	2.5	
Cadmium	ND	ND	NA	0.50	
Chromium	22.6	24.5	8	0.50	
Lead	ND	ND	NA	5.0	
Selenium	ND	ND	NA	10	
Silver	ND	ND	NA	1.0	



Date of Report: May 11, 2018
Samples Submitted: May 3, 2018
Laboratory Reference: 1805-035
Project: 4082-039-01

**TOTAL MERCURY
EPA 7471B
DUPLICATE QUALITY CONTROL**

Date Extracted: 5-8-18
Date Analyzed: 5-8-18

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 05-035-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Mercury	ND	ND	NA	0.25	



Date of Report: May 11, 2018
 Samples Submitted: May 3, 2018
 Laboratory Reference: 1805-035
 Project: 4082-039-01

**TOTAL METALS
 EPA 6010D
 MS/MSD QUALITY CONTROL**

Date Extracted: 5-4&7-18
 Date Analyzed: 5-7-18

 Matrix: Soil
 Units: mg/kg (ppm)

 Lab ID: 05-042-05

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	101	101	101	101	0	
Barium	100	147	105	150	109	3	
Cadmium	50.0	50.3	101	51.2	102	2	
Chromium	100	126	103	131	108	4	
Lead	250	249	100	253	101	2	
Selenium	100	104	104	102	102	2	
Silver	25.0	21.8	87	21.0	84	4	



Date of Report: May 11, 2018
Samples Submitted: May 3, 2018
Laboratory Reference: 1805-035
Project: 4082-039-01

**TOTAL MERCURY
EPA 7471B
MS/MSD QUALITY CONTROL**

Date Extracted: 5-8-18

Date Analyzed: 5-8-18

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 05-035-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Mercury	0.500	0.438	88	0.429	86	2	



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% MOISTURE

Date Analyzed: 5-4-18

Client ID	Lab ID	% Moisture
FLZ10-213-DRUM-1	05-035-01	9





Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical _____.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- X1- Sample extract treated with a sulfuric acid/silica gel cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- Z -
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference





**Onsite
Environmental Inc.**

Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
(in working days)

(Check One)

☐ Same Day ☐ 1 Day

☐ 2 Days ☐ 3 Days

☒ Standard (7 Days)
(TPH analysis 5 Days)

☐ _____
(other)

Laboratory Number: **05-035**

Number of Containers

NWTPH-HCID	
NWTPH-Gx/BTEX	
NWTPH-Gx	X
NWTPH-Dx (☐ Acid / SG Clean-up)	X
Volatiles 8260C	X
Halogenated Volatiles 8260C	
EDB EPA 8011 (Waters Only)	
Semivolatiles 8270D/SIM (with low-level PAHs)	
PAHs 8270D/SIM (low-level)	X
PCBs 8082A	
Organochlorine Pesticides 8081B	
Organophosphorus Pesticides 8270D/SIM	
Chlorinated Acid Herbicides 8151A	
Total RCRA Metals	X
Total MTCA Metals	
TCLP Metals	
HEM (oil and grease) 1664A	
% Moisture	X

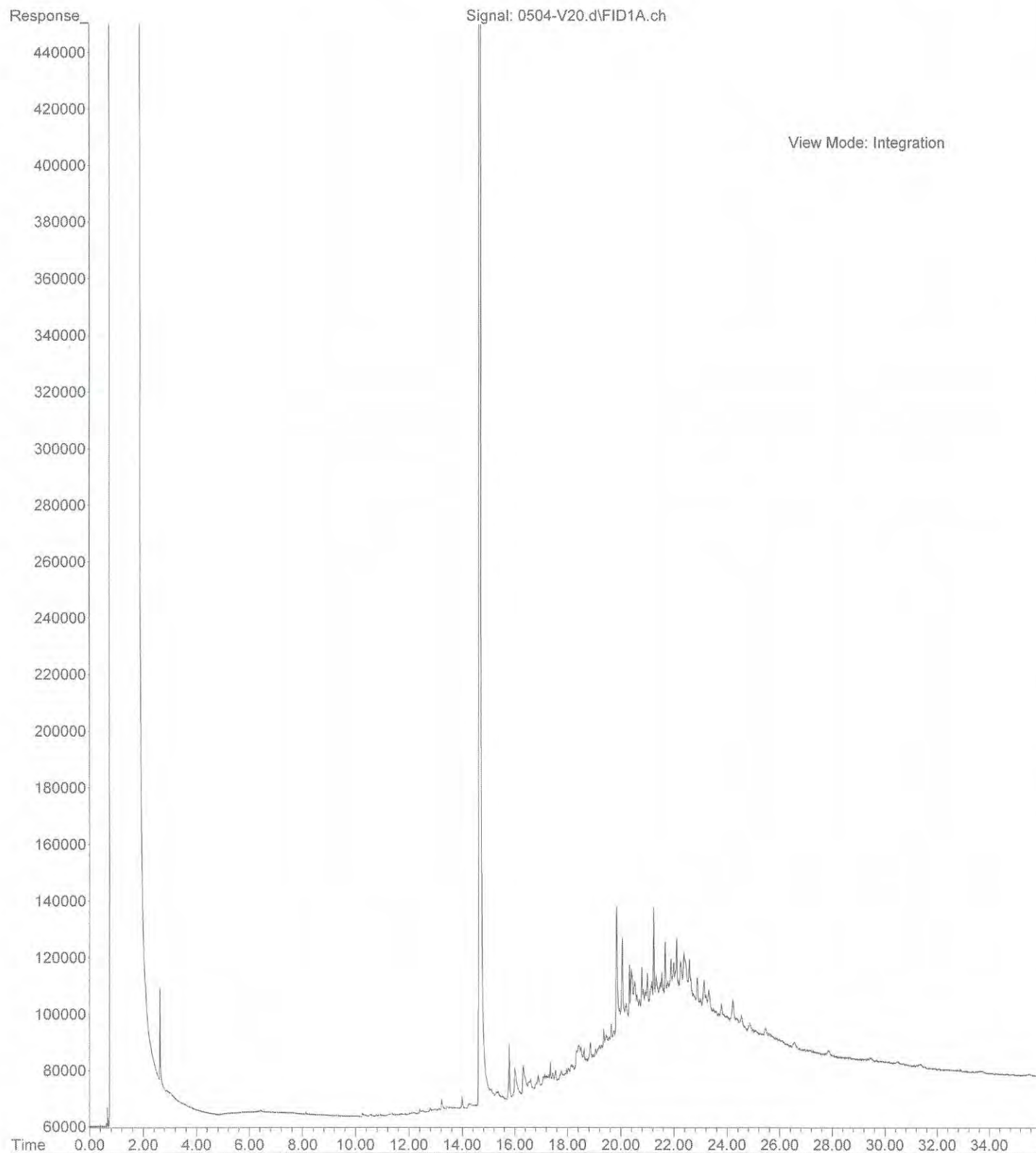
Company:	GEI
Project Number:	4082-039-01
Project Name:	ST-FWUE
Project Manager:	Aaron Waggoner
Sampled by:	CLG/CR
Lab ID	Sample Identification
1	FLZ10-213-Drum-1

Date Sampled	Time Sampled	Matrix
5/2/18	1530	5
		6

Signature	Company	Date	Time	Comments/Special Instructions
	GEI	5/3/18	2:00 PM	
	ALPHA	5/3/18	2:00 PM	
	ALPHA	5/3/18	3:25 PM	
	Q88E	5/3/18	1525	
Received				
Relinquished				
Received				
Relinquished				
Reviewed/Date	Reviewed/Date			

Data Package: Standard ☐ Level III ☐ Level IV ☐
Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

File :X:\DIESELS\VIGO\DATA\V180504\0504-V20.d
Operator : JT
Acquired : 4 May 2018 20:21 using AcqMethod V180313F.M
Instrument : Vigo
Sample Name: 05-035-01
Misc Info :
Vial Number: 20



APPENDIX C

REPORT LIMITATIONS AND GUIDELINES FOR USE

APPENDIX C

REPORT LIMITATIONS AND GUIDELINES FOR USE²

This appendix provides information to help you manage your risks with respect to the use of this report. Please confer with GeoEngineers if you need to know more about how these “Report Limitations and Guidelines for Use” apply to your project or property.

Read These Provisions Closely

It is important to recognize that environmental engineering and geoscience practices (geotechnical engineering, geology and environmental science) are less exact than other engineering and natural science disciplines. GeoEngineers includes these explanatory “limitations” provisions in our reports to help reduce the risk of misunderstandings or unrealistic expectations that lead to disappointments, claims and disputes.

Environmental Services Are Performed for Specific Purposes, Persons and Projects

GeoEngineers has performed this Phase II ESA of the four contiguous King County Tax Parcels 2500600481, 2500600486, 2500600485, and 2500600490 with the following current addresses: 23427 30th Avenue South, 23431 30th Avenue South, 23434 Pacific Highway South, and 23451 30th Avenue South, respectively, in Kent, Washington, in general accordance with the scope and limitations of the subcontract between HDR and GeoEngineers dated August 24, 2012, along with Amendments 1 through 12 and Agreement No. RTA/AE 044-12 between HDR and Sound Transit. This report has been prepared for the exclusive use of Sound Transit and their authorized agents. This report is not intended for use by others, and the information contained herein is not applicable to other properties.

GeoEngineers structures its services to meet the specific needs of its clients. For example, an ESA study conducted for a property owner may not fulfill the needs of a prospective purchaser of the same property. Because each environmental study is unique, each environmental report is unique, prepared solely for the specific client and property. Use of this report is not recommended for any purpose or project other than as expressly stated in this report.

This Environmental Report is Based on a Unique Set of Project-Specific Factors

This report has been prepared for the four contiguous King County Tax Parcels 2500600481, 2500600486, 2500600485, and 2500600490 with the following current addresses: 23427 30th Avenue South, 23431 30th Avenue South, 23434 Pacific Highway South, and 23451 30th Avenue South, respectively, in Kent, Washington. GeoEngineers considered a number of unique, project-specific factors when establishing the scope of services for this Project. Unless GeoEngineers specifically

² Developed based on material provided by ASFE, Professional Firms Practicing in the Geosciences; www.asfe.org.

indicates otherwise, it is important not to rely on this report if it was:

- not prepared for you,
- not prepared for your Project,
- not prepared for the specific site explored, or
- completed before Project changes were made.

If changes to the Project or property occur after the date of this report, GeoEngineers cannot be responsible for any consequences of such changes in relation to this report unless we have been given the opportunity to review our interpretations and recommendations in the context of such changes. Based on that review, we can provide written modifications or confirmation, as appropriate.

Reliance Conditions for Third Parties

This report was prepared for the exclusive use of Sound Transit and their authorized agents. No other party may rely on the product of our services unless we agree to such reliance in advance and in writing. Within the limitations of the agreed Project scope, schedule and budget, our services have been executed in accordance with our Agreement with the Client and generally accepted environmental practices in this area at the time this report was prepared.

Understand That Geotechnical Issues Have Not Been Addressed

Unless geotechnical engineering was specifically included in our scope of service, this report does not provide any geotechnical findings, conclusions, or recommendations, including but not limited to, the suitability of subsurface materials for construction purposes.

Do Not Separate Documentation from the Report

Environmental reports often include supplemental documentation, such as maps, figures and tables. Do not separate such documentation from the report. Further, do not, and do not permit any other party to redraw or modify any of the supplemental documentation for incorporation into other professionals' instruments of service.

Environmental Regulations Change and Evolve

Some substances may be present in the vicinity of the subject property in quantities or under conditions that may have led, or may lead, to contamination of the subject property, but are not included in current local, state or federal regulatory definitions of hazardous substances or do not otherwise present current potential liability. GeoEngineers cannot be responsible if the standards for appropriate inquiry, or regulatory definitions of hazardous substances, change or if more stringent environmental standards are developed in the future.

Uncertainty May Remain Even After This Phase II ESA is Completed

Performance of a Phase II ESA is intended to reduce uncertainty regarding the potential for contamination in connection with a property, but no ESA can wholly eliminate that uncertainty. Our interpretation of subsurface conditions in this study is based on field observations and chemical

analytical data from widely spaced sampling locations. It is always possible that contamination exists in areas that were not explored, sampled or analyzed.

Information Provided by Others

GeoEngineers has relied upon certain data or information provided or compiled by others in the performance of our services. Although we use sources that we reasonably believe to be trustworthy, GeoEngineers cannot warrant or guarantee the accuracy or completeness of information provided or compiled by others.

Subsurface Conditions Can Change

This environmental 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, by man-made events such as construction on or adjacent to the subject property, by new releases of hazardous substances, new information or technology that become available subsequent to the report date, or by natural events such as floods, earthquakes, slope instability or groundwater fluctuations. Please contact GeoEngineers before applying this report for its intended purpose so that GeoEngineers may evaluate whether changed conditions affect the continued applicability of the report.

Soil and Groundwater End Use

The cleanup levels referenced in this report are site- and situation-specific. The cleanup levels may not be applicable for other properties or for other on-site uses of the affected soil and/or groundwater. Note that hazardous substances may be present in some of the on-site soil and/or groundwater at detectable concentrations that are less than the referenced cleanup levels. GeoEngineers should be contacted prior to the export of soil or groundwater from the subject property or reuse of the affected soil or groundwater on-site to evaluate the potential for associated environmental liabilities. GeoEngineers will not assume responsibility for potential environmental liability arising out of the transfer of soil and/or groundwater from the subject property to another location, or the reuse of such soil and/or groundwater on-site in any instances that we did not recommend, know of, or control.

Our interpretations of subsurface conditions are based on field observations and chemical analytical data from widely spaced sampling locations at the subject property. Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted and/or samples are taken. GeoEngineers reviewed field and laboratory data and then applied our professional judgment to render an informed opinion about subsurface conditions throughout the property. Actual subsurface conditions may differ significantly from those indicated in this report. Our report, conclusions and interpretations should not be construed as a warranty of the subsurface conditions.

Do Not Redraw the Exploration Logs

Environmental scientists prepare final exploration logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions by others, the logs included in an environmental report should never be redrawn for inclusion in other design documents. Only photographic or electronic reproduction that preserves the entire original exploration log is acceptable, but separating logs from the report can create increase the risk of potential misinterpretation.

Biological Pollutants

GeoEngineers' Scope of Work specifically excludes the investigation, detection, prevention or assessment of the presence of Biological Pollutants. Accordingly, this report does not include any interpretations, recommendations, findings or conclusions regarding the detecting, assessing, preventing or abating of Biological Pollutants, and no conclusions or inferences should be drawn regarding Biological Pollutants as they may relate to this Project. The term "Biological Pollutants" includes, but is not limited to, molds, fungi, spores, bacteria and viruses, and/or any of their byproducts.

A Client that desires these specialized services is advised to obtain them from a consultant who offers services in this specialized field.