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REMEDIAL INVESTIGATION REPORT

THOMPSON FIELD SITE PORTION OF KING COUNTY PARCEL NO. 0825069104 REDMOND, WASHINGTON

Submitted by: Farallon Consulting, L.L.C. 975 5th Avenue Northwest Issaquah, Washington 98027

Farallon PN: 650-031

For:

Estate of Barbara J. Nelson and WCN GST Non-Exempt Marital Trust No. 2 c/o Nelson Legacy Group, LLC 16508 Northeast 79th Street Redmond, Washington 98052

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Prepared by:

Stuart Brown Project Environmental Scientist

Reviewed by:

My ord T. Selm

Clifford T. Schmitt, L.G., L.H.G. Principal Hydrogeologist





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ACRONYMS AND ABBREVIATIONS

AESI	Associated Earth Sciences Incorporated		
bgs	below ground surface		
BTEX	benzene, toluene, ethylbenzene, and xylenes		
cPAHs	carcinogenic polycyclic aromatic hydrocarbons		
COPCs	constituents of potential concern		
DRO	TPH as diesel-range organics		
E&E	Ecology and Environment, Inc.		
Ecology	Washington State Department of Ecology		
EPA	United States Environmental Protection Agency		
Farallon	arallon Farallon Consulting, L.L.C.		
GRO	TPH as gasoline-range organics		
mg/kg	milligrams per kilogram		
µg/kg	micrograms per kilogram		
msl	mean sea level		
MTCA	Washington State Model Toxics Control Act		
ORO	TPH as oil-range organics		
PAHs	Polycyclic aromatic hydrocarbons		
PQL	practical quantitation limit		
QA	quality assurance		
QC	quality control		
RI	remedial investigation		

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Property	King County Parcel Nos. 0825069012, 0825069067, 0825069013, 0825069102, 0825069103, 0825069104, 0825069105
TEC	toxic equivalent concentration
TEE	Terrestrial Ecological Evaluation
The Estate	Estate of Barbara J. Nelson and WCN GST Non-Exempt Marital Trust No. 2
Thompson Field	Approximately 12-acre portion of King County Parcel No. 0825069104
Thompson Field Site	Area where hazardous substances have come to be located at concentrations exceeding applicable cleanup levels in soil or groundwater.
ТРН	Total Petroleum Hydrocarbons
VOCs	Volatile Organic Compounds
USACE	United States Army Corp of Engineers
WAC	Washington Administrative Code

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1.0 INTRODUCTION

Farallon Consulting, L.L.C. (Farallon) has prepared this Remedial Investigation (RI) Report on behalf of the Estate of Barbara J. Nelson and WCN GST Non-Exempt Marital Trust No. 2 (the Estate) for the 12-acre portion of the property at King County Parcel No. 0825069104 in the area known as Thompson Field in Redmond, Washington (herein referred to as Thompson Field) (Figures 1, 2). This RI Report summarizes the results from the RI conducted to characterize the nature and extent of contamination at Thompson Field in accordance with the Washington State Model Toxics Control Act Cleanup Regulation (MTCA), as established in Chapter 173-340 of the Washington Administrative Code (WAC 173-340). Sufficient characterization has been performed to support preparation of a Feasibility Study evaluating remedial alternatives.

As defined under MTCA and Section 020(4) of Chapter 70A.305 of the Revised Code of Washington, a "site" includes all areas where hazardous substances have come to be located at concentrations exceeding MTCA cleanup levels. The results of the RI completed between 2019 and 2021 at Thompson Field indicate there is a localized area of fill material on the western portion of Thompson Field where total carcinogenic polycyclic aromatic hydrocarbons (cPAHs), calculated as a toxic equivalent concentration (TEC) using a method prescribed by MTCA (WAC 173-340-708[e]), exceed the MTCA Method A cleanup level for soil. The calculation is based on a toxicity equivalency factor-weighted sum of concentrations of individual cPAHs.¹ The site is limited to a localized area where cPAHs are present in soil at TECs exceeding the cleanup level, herein referred to as the Thompson Field Site.

In accordance with WAC 173-340-300, a release notification was submitted to Washington State Department of Ecology (Ecology) on behalf of the Estate, reporting a release of hazardous substances to the environment at Thompson Field (Farallon 2020). The release was detected during the course of a preliminary assessment conducted on October 23 and November 11, 2019, by Ecology and Environment, Inc. (E&E) on behalf of the United States Environmental Protection Agency (EPA). In response to the release notification letter, Ecology assigned Facility/Site identification number (ID No.) 8042 and Cleanup Site ID no. 15285 to the Thompson Field Site (Ecology 2020).

While generating the RI Report, Farallon reviewed multiple outside documents including historical records related to King County Parcel Nos. 0825069012, 0825069067, 0825069013, 0825069102, 0825069103, 0825069104, 0825069105 (Property), aerial photos of the Property, the results of the E&E preliminary assessment (E&E 2020), logs of geotechnical test pits completed at the Property (AESI 2018), and multiple environmental documents generated for the Puget Sound region relevant to conditions at the Property. Following a review of outside documents and the results of the subsurface investigations conducted by Farallon, fill material which was the subject of the E&E preliminary assessment was determined to be limited to Thompson Field, and constituents of concern (COCs) were identified solely in fill material in a localized area on the western portion

¹ The cPAHs used to calculate the TEC include benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(j,k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene.



of Thompson Field² (Figure 3). Additional information regarding the origin of the Thompson Field fill material is provided in Section 2.2 below.

1.1 PURPOSE AND OBJECTIVES

The purpose of an RI is to collect data necessary to adequately characterize a site for the purpose of developing and evaluating technically feasible cleanup alternatives (WAC 173-340-350(7)). The RI conducted by Farallon, summarized in this report, provides sufficient data to develop the conceptual site model and define the Thompson Field Site boundaries. This information can then be used to prepare a feasibility study that develops and evaluates cleanup action alternatives to enable a cleanup action to be selected for the Thompson Field Site.

1.2 REPORT ORGANIZATION

This RI Report includes the following sections:

- Section 2, Background, presents relevant background information pertaining to the Thompson Field Site, including a description of its location and features, and a summary of current and historical uses of Thompson Field and the surrounding area.
- Section 3, Remedial Investigation, summarizes the subsurface investigations that together constitute the RI, presents the analytical results for soil and groundwater samples collected at and near the Thompson Field Site, describes the local geology and hydrogeology, describes the nature and extent of contamination at the Thompson Field Site, identifies the known or suspected sources of contamination, and the constituents of potential concern (COPCs).
- Section 4, Conceptual Site Model, includes a discussion of the COCs, media of concern, source areas, contaminant fate and transport, an exposure assessment for human and ecological receptors, the results from the site-specific Terrestrial Ecological Evaluation (TEE), and develops cleanup standard for the Thompson Field Site.
- Section 5, Summary and Conclusions, summarizes general conclusions of the RI.
- Section 6, References, provides a list of the source materials used in preparing this RI Report.
- Section 7, Limitations, provides the limitations associated with this RI Report.

² The Thompson Field Site is limited to a localized area where cPAHs are present in soil at TECs exceeding the cleanup level.



2.0 BACKGROUND

This section includes a description of Thompson Field and a summary of current and historical uses of Thompson Field and surrounding properties.

2.1 THOMPSON FIELD PROPERTY DESCRIPTION

Thompson Field comprises the western portion of King County Parcel No. 0825069104 located within the Evans Creek Valley in unincorporated King County, Washington (Figures 2 and 3, Redmond 1997). The coordinates for Thompson Field are 47° 40' 11.78" north and -122° 4' 30.13" west; the Public Land Survey System location is described as the southwestern quarter of the northwestern quarter of Section 08, Township 25 North, Range 6 East. According to the King County Department of Assessments (2021), King County Parcel No. 0825069104 totals 38.14 acres in area; Thompson Field consists of approximately 12 acres within the parcel (Figure 3).

According to the King County Department of Assessments (2021), Thompson Field and the surrounding area are zoned as RA-5 Rural. Residential properties and housing developments are located to the north, east, and west of Thompson Field and the Evans Creek Natural Area is to the south. Evans Creek is located approximately 600 feet to the west. According to the Ecology Well Construction and Licensing Search Tools (2021), one irrigation well is present east and hydraulically cross- or up-gradient of Thompson Field at a higher elevation. Eight monitoring wells are present on Thompson Field (Figure 3).

The Thompson Field Site lies on the western portion of the larger open space referred to as Thompson Field, Thompson Field in turn, is located on the western portion of the Property (Figures 2 and 3). Future land use at the Property includes development of up to 23 building sites for single family homes on the portion of the Property located east of Thompson Field, while Thompson Field will remain as undeveloped permanent open space.

The U.S. Geological Survey (2017) topographic map for Redmond, Washington depicted Thompson Field at an elevation of approximately 80 feet above mean sea level (msl). Topography at Thompson Field is relatively flat-lying, with top-of-monument elevations for monitoring wells at Thompson Field ranging from 66.37 msl at monitoring well FMW-07 to 69.10 msl at monitoring well FMW-05 (Figure 3, Table 1). Regional topography around Thompson Field is relatively flat to the north, west, and south, and a steeply rising hillside is present to the east. Surface water is present in agricultural ditches that surround Thompson Field to the north, east, south, and west. Due to the flat-lying nature of the surface topography at Thompson Field and the Thompson Field Site, no sheet flow runoff to the agricultural ditches is suspected except for very minor locations from the sidewalls of the ditch(es).

Weather in Redmond, Washington is moderated by the city's proximity to Puget Sound. The average low temperature in the winter is approximately 37 degrees Fahrenheit; the average high temperate in the summer is approximately 73 degrees Fahrenheit. An average of 26.11 inches of



rain typically falls in the area between October and March. An average of 7.99 inches of rain typically falls between April and September (Redmond 1997).

2.2 CURRENT AND HISTORICAL USES OF THOMPSON FIELD

Thompson Field currently consists of a grass-covered field, with no structures. Thompson Field was previously used as a hayfield for horses boarded at the property. The land comprising Thompson Field was obtained by the Estate in 1975 and is a portion of the Property, which was purchased by Bill and Barbara Nelson in 1957. Operations at the Property included the raising of cattle and horses (E&E 2020).

Historically, Thompson Field was a forested area, which was cleared of trees sometime after 1975 (E&E 2020). In late 1982 or early 1983, an unknown volume of fill soil from the Interstate 90 tunnel project in the Mount Baker Ridge area of Seattle was placed on Thompson Field to raise the field to its current elevation and create pastureland (E&E 2020).

On March 20, 1984, the United States Army Corp of Engineers (USACE) performed an inspection at Thompson Field to investigate the potential for fill soil having been placed in wetlands adjacent to Evans Creek (E&E 2020). A letter from the USACE dated April 27, 1984, notified Mr. William Nelson that the inspection discovered fill material placed on wetlands adjacent to waters of the United States without a USACE permit (USACE 1984). Following a notification by the USACE on March 26, 1986, a portion of the fill material was removed by the property owners. The fill removal was determined to be satisfactory to address the issue and no further action was anticipated by King County and USACE (E&E 2020).

On February 18, 2015, representatives of Ecology, EPA, USACE, and the National Oceanic and Atmospheric Administration conducted a site visit at Thompson Field to collect soil samples following a report that fill material was placed into wetlands adjacent to the southern portion of Thompson Field (EPA 2016). As a result of the investigation, EPA determined that the fill was placed without a permit on or before January 2010 and was in violation of the Clean Water Act, which resulted in the property owner entering into an Administrative Order on Consent detailing restoration and mitigation requirements at Thompson Field (EPA 2016).

From September 2009 to March 2018, Associated Earth Sciences Incorporated (AESI), completed 48 test pits (SL-1 through SL-17, SLA-1 through SLA-17, EP-1 through EP-10, and IT-1 through IT-4) at the Property to the east of Thompson Field (AESI 2018). Of the 48 test pits completed by AESI, fill soils were encountered at three locations (EP-1, EP-3, and EP-5) to a maximum depth of 3 feet below ground surface (bgs). According to AESI's site figure, the test pits where fill soils were encountered are in wooded portions of the property in the vicinity of historical residential operations. A review of the test pit logs indicates that the fill material at test pit EP-3 was backfill in a utility trench, and the fill material encountered at test pit EP-5 was topsoil or fill.

In 2018, members of the community notified EPA of their concern that imported fill material residing on Thompson Field may contain hazardous substances (E&E 2020). On October 23 and



November 11, 2019, E&E, on behalf of EPA, conducted a preliminary assessment during which soil and reconnaissance groundwater samples were collected from the imported fill and/or native soil at six boring locations (BH01 through BH06) and a boring considered by EPA to be representative of background (BK01³) (Figure 2, Tables 2 through 9) (E&E 2020). The analytical results of the investigation indicated the presence of hazardous substances at concentrations exceeding MTCA Method A cleanup levels in soil at Thompson Field (E&E 2020).

2.3 CURRENT AND HISTORICAL USES OF SURROUNDING AREA

Current uses of properties surrounding Thompson Field are as follows (see Figure 2):

- The north-adjacent property is developed with a 3,300-square-foot private residence.
- The east-adjacent property is owned by the Estate and operated as agricultural fields. A residential development is located further to the east and up a steep hillside.
- The south-adjacent property is undeveloped wetland and is operated as the Evans Creek Natural Area.
- The west-adjacent property is owned by the Estate and developed with a 1,440-square-foot private residence. Farther to the west across 196th Avenue North East is vacant industrial land.

Farallon reviewed historical aerial photographs of Thompson Field and the surrounding area for the years 1943, 1965, 1969, 1977, 1980, 1990, 2006, 2009, 2013, and 2017 (Appendix A). Historically the properties surrounding Thompson Field appear to be primarily undeveloped and wooded from at least 1943 through 1969, with the exception of agricultural operations located to the east and west. In the 1977 aerial photograph, residential homes are visible to the north and east of Thompson Field, with the density of homes increasing through 2017. Adjacent properties appeared similar to the present condition by 2006.

³E&E boring BG01 and associated samples are referenced in Farallon documents as BK01.



3.0 REMEDIAL INVESTIGATION

This section describes the results from the RI for Thompson Field. Multiple subsurface investigations have been conducted at Thompson Field over three years. The subsurface investigations have assessed the condition of soil and groundwater under Thompson Field, and characterized the source, nature, and extent of the hazardous substances under Thompson Field. The investigations indicate that contaminated soil in one distinct area of Thompson Field, which constitutes a 'site' under MTCA. These results from the investigations together constitute the RI for the Thompson Field Site, which is limited to the area of contaminated soil.

This section summarizes the subsurface investigations that together constitute the RI, presents the analytical results of soil and groundwater samples collected at and near Thompson Field, describes the local geology and hydrogeology, describes the nature and extent of contamination at the Thompson Field Site, and identifies the source of hazardous substances at the Thompson Field Site.

3.1 SUMMARY OF ENVIRONMENTAL INVESTIGATIONS

Environmental investigations have been conducted by E&E on behalf of EPA and by Farallon on behalf of the Estate. A summary of environmental investigations conducted at Thompson Field by E&E and Farallon is provided below.

Laboratory analytical reports are provided in Appendix B. Borings logs and well construction diagrams are provided in Appendix C.

3.1.1 Environmental Investigations by Others

E&E conducted a preliminary assessment at Thompson Field on behalf of EPA in October and November of 2019 (E&E 2020). E&E advanced four borings (BH01 through BH03, and BK01) using a direct-push drill rig to a maximum depth of 16 feet bgs), and three borings (BH04 through BH06) to a maximum depth of 3 feet bgs using a hand auger (Appendix B, Figures 2 and 3). Reconnaissance groundwater samples were collected from borings BH01, BH02, and BK01. E&E also collected groundwater samples from off-Property monitoring wells located approximately 0.4 mile northwest of Thompson Field. Soil and reconnaissance groundwater samples collected by E&E were analyzed for the following:

- Total petroleum hydrocarbons (TPH) as diesel-range organics (DRO) and oil-range organics (ORO) using Northwest Method NWTPH-Dx;
- TPH as gasoline-range organics (GRO) using Northwest Method NWTPH-Gx;
- Semi-volatile organic compounds including polycyclic aromatic hydrocarbons (PAHs) using EPA Method 8270D;
- Target analyte list metals analyzed using EPA Method 6010D/7471B for soil samples and EPA Method 200.8/7470A for groundwater samples,



- Polychlorinated biphenyls using EPA Method 8082A, and
- Volatile organic compounds (VOCs) using EPA Method 8260C.

Soil and groundwater samples analyzed as part of the Thompson Field preliminary assessment were compared to risk-based screening levels identified by E&E (E&E 2020). Screening levels include MTCA Method A and Method B cleanup levels, and the May 2019 EPA Regional Screening Levels in a residential setting. Additional matrix-specific screening levels included the most current EPA Regional Screening Levels (tap water values) for groundwater samples, and Washington State Background metals concentrations for soil samples (Ecology 1994).

Four target list analyte metals (arsenic, iron, mercury, and selenium), PAHs, dimethyl phthalate, ORO, and four VOCs (2-butanone, acetone, methylene chloride, and m,p-xylene were detected at concentrations exceeding background levels (E&E 2020). Arsenic and manganese were the only analytes detected in groundwater samples at concentrations exceeding background concentrations.

Aluminum and iron are common earth crust metals, therefore based on EPA Region 10 Policy, the detections of aluminum and iron in soil and groundwater were not discussed in the preliminary assessment (E&E 2020).

Total cPAHs were detected at a TEC of 0.23 milligrams per kilogram (mg/kg) in one soil sample collected from boring BH01 at a depth of 4.5 to 6.0 feet bgs, which exceeded risk-based screening levels identified by E&E that included the MTCA Method A cleanup level of 0.1 mg/kg (E&E 2020). Total cPAHs were detected at TECs less than the MTCA Method A cleanup level in soil samples collected from boring BH01 at depths of 1.5 to 3.0 feet bgs and 8.0 to 10.0 feet bgs (Table 4). Individual cPAHs were not detected at a concentration exceeding laboratory practical quantitation limits (PQLs) in a reconnaissance groundwater sample collected from boring BH01 (Table 8).

Benzo(a)pyrene was detected at a concentration of 0.16 mg/kg, which slightly exceeds the MTCA Method A cleanup level of 0.1 mg/kg, in one soil sample collected from boring BH01 at a depth of 4.5 to 6.0 feet bgs. Benzo(a)pyrene was detected at a concentration less than the MTCA Method A cleanup level and was not detected at a concentration exceeding the laboratory PQL in soil samples collected from boring BH01 at depths of 1.5 to 3.0 feet bgs and 8.0 to 10.0 feet bgs, respectively (Table 4). Benzo(a)pyrene was not detected at a concentration exceeding the laboratory PQL in a reconnaissance groundwater sample collected from boring BH01 (Table 8).

Dimethyl phthalate was detected in multiple soil samples collected at Thompson Field at concentrations exceeding the laboratory PQL, including a concentration of 0.43 mg/kg in a soil sample collected at a depth of 8 to 10 feet bgs from background boring BK01 (E&E 2020). No risk-based screening levels were identified by E&E for dimethyl phthalate.

2-butanone, acetone, m,p-xylene, and methylene chloride were detected at concentrations exceeding the laboratory PQL in one or more soil samples collected at Thompson Field (E&E 2020). Methylene chloride was detected at a concentration of 0.023 mg/kg which exceeds the



MTCA Method A cleanup level of 0.02 mg/kg, in one soil sample collected from boring BH03 at a depth of 4.5 to 6.0 feet bgs. Methylene chloride was the only VOC detected at a concentration exceeding a risk-based screening level.

ORO was detected at a concentration exceeding the laboratory PQL but less than the MTCA Method A cleanup level in two soil samples collected from borings BH02 and BH05 at depths of 0.5 to 2 feet and 1.5 to 2 feet bgs (respectively) (E&E 2020).

Arsenic was reported at concentrations exceeding risk-based screening levels in one or more soil samples collected at Thompson Field, including a detection of 47.1 mg/kg, which exceeds the MTCA Method A cleanup level of 20 mg/kg, in one soil sample collected from native soil in boring BH02 at a depth of 8 to 10 feet bgs. The arsenic detection was "J+" flagged by the laboratory as an estimated quantity due to the reported concentration being less than the sample quantitation limits and for high bias. Arsenic was detected at concentrations less than the MTCA Method A cleanup level in two soil samples collected from the fill material overlaying native soil at this location (Figure 5, Table 5, E&E 2020). Mercury and selenium were detected at concentrations exceeding their lowest risk-based screening levels identified by E&E in soil samples collected at borings BH05 and BH02 (respectively); these concentrations did not exceed MTCA cleanup levels.

Arsenic, aluminum, iron, and manganese were reported in one or more reconnaissance groundwater samples collected at Thompson Field. Arsenic and manganese were detected at elevated concentrations compared to background concentrations identified by E&E (E&E 2020) but did not exceed MTCA cleanup levels. Arsenic and manganese were also detected at elevated concentrations in one or more of the off-site monitoring wells sampled (E&E 2020). E&E determined that concentrations of arsenic and manganese observed in the reconnaissance groundwater samples were likely the result of naturally occurring conditions rather than potential releases at Thompson Field due to placement of fill (E&E 2020).

3.1.2 Subsurface Investigations by Farallon

Farallon reviewed the results from the preliminary assessment completed by E&E, and identified the following data gaps associated with Thompson Field:

- The groundwater flow direction had not been defined at Thompson Field;
- COPCs, defined in further detail in section 3.2, identified in soil during the preliminary assessment were not adequately characterized to assess the occurrence and concentrations at Thompson Field; and
- Metals concentrations in groundwater had not been adequately characterized following detections of aluminum, arsenic, iron, and manganese at concentrations exceeding background concentrations identified by E&E, in the reconnaissance groundwater samples collected from boring BH01, BH02, and BK01.



Farallon conducted additional characterization activities from July 2020 to February 2021 to address the data gaps summarized above. Prior to conducting the field work, Farallon prepared a site-specific Health and Safety Plan as required by Part 1910 of Title 29 of the Code of Federal Regulations and WAC 173-0340-810.

The locations and depths of borings and monitoring wells advanced by Farallon were based on the locations of borings advanced by E&E during the preliminary assessment and the thickness of historical fill placed on Thompson Field.

Soil samples were collected continuously during advancement of borings. A Farallon Geologist observed subsurface conditions and retained soil samples from selected intervals based on field indications of potential contamination or based on historical sample depths where additional analytical data were needed to characterize the depth or lateral extent of contamination. The information recorded on the boring logs included soil types encountered, visual and olfactory evidence of contamination, and volatile organic vapor concentrations as measured using a photoionization detector. The completed boring logs are provided in Appendix B. Soil samples were collected and transferred directly into laboratory-prepared glass sample containers fitted with a Teflon-lined lid in accordance with Farallon's standard sampling procedures.

Groundwater samples from monitoring wells were collected in general accordance with standard EPA low-flow groundwater sampling procedures. Groundwater was extracted through 0.25-inchdiameter tubing inserted down the well casing using a peristaltic pump with a flow rate of less than 300 milliliters per minute until a steady flow was established. Water quality was monitored during purging using a Horiba or YSI multi-parameter meter equipped with a flow-through cell. The water-quality parameters monitored and recorded included temperature, pH, specific conductance, turbidity, oxidation-reduction potential, and dissolved oxygen. The monitoring wells were purged until all parameters stabilized. Monitoring well locations and top of casing elevations were surveyed by a licensed surveyor following the installation of each monitoring well.

Soil and groundwater samples were placed on ice in a cooler under standard chain-of-custody procedures and delivered to OnSite Environmental Inc. of Redmond, Washington for analysis. Quality assurance/quality control (QA/QC) data provided by the analytical laboratory were reviewed by a Farallon QA/QC specialist upon receipt of each analytical laboratory report (Appendix C). QA/QC data included surrogate recovery results, laboratory duplicate results, method blank results, matrix spike and matrix spike duplicate results, and spike blank and spike blank duplicate results. Any QA/QC issues flagged in the laboratory analytical reports were evaluated by the QA/QC specialist and included in the summary tables (Tables 2 through 9). Laboratory-provided electronic data deliverables containing the analytical results and QA/QC data were uploaded directly into Farallon's project database. The contents of the electronic data deliverables were compared to the printed laboratory analytical reports so any discrepancies could be addressed with the laboratory. The Farallon QA/QC specialist then produced the analytical summary tables included in this RI Report (Tables 2 through 9).



Soil cuttings, decontamination wastewater, and monitoring well purge and development wastewater were placed into labeled U.S. Department of Transportation-approved steel drums for temporary storage, transport, and disposal.

3.1.2.1 October and November 2019

On October 23 and November 6, 2019, E&E, acting at EPA's request, advanced borings BH01 through BH06 and BG01 at Thompson Field (Figure 3). Farallon collected split soil samples from borings BH01 through BH06 and BK01 and reconnaissance ground samples from borings BH01, BH02, and BK01. Farallon collected an additional soil sample (Farallon Background) in the wetland area to the south of Thompson Field, beneath the root structure of an overturned tree. Select split soil and reconnaissance groundwater samples were submitted for laboratory analysis for the following (Tables 2 and 6):

- DRO and ORO by Northwest Method NWTHP-Dx; and
- DRO and ORO by Northwest Method NWTPH-Dx with acid silica gel cleanup.

3.1.2.2 July and August 2020

On July 30 and 31, 2020 Farallon advanced borings FB-01 through FB-09 and FMW-01 through FMW-04 at Thompson Field in the immediate vicinity of E&E borings BH01 through BH03 and BH06 to further assess for potential soil and groundwater contamination (Figures 2 through 5, Appendix B).

Borings FB-01 through FB-9, FMW-02, and FMW-03 were advanced to a total depth 15 feet bgs and borings FMW-01 and FMW-04 were advanced to a total depth of 20 feet bgs using a track-mounted direct-push dill rig. Borings FMW-01 through FMW-04 were completed as groundwater monitoring wells and developed. Boring logs and well construction details for borings FB-01 through FB-09 and FMW-01 through FMW-04 are included in Appendix B. Monitoring well FMW-01 was installed proximate to the northeastern corner of Thompson Field to a depth of 20 feet bgs, with a 10-foot screen from a depth of 6 to 16 feet bgs. Monitoring well FMW-02 was installed proximate to E&E boring BH01 on the west side of Thompson Field to a depth of 15 feet bgs, with a 10-foot screen from a depth of 3 to 13 feet bgs. Monitoring well FMW-03 was installed proximate to E&E boring BH02 on the southside of Thompson Field to a depth of 15 feet bgs, with a 10-foot screen from a depth of 5 to 15 feet bgs. Monitoring well FMW-04 was installed proximate to E&E boring BH03 on the southeast side of Thompson Field to a depth of 20 feet bgs, with a 10-foot screen from a depth of 10 to 20 feet bgs. Each borehole was 5 inches in diameter, and each well casing was 2 inches in diameter. The screened interval of each monitoring well comprised a 0.010-inch slotted pre-pack screen. The annular space of each monitoring well was filled with 10-20 silica sand to the top of the screened interval, sealed with bentonite to within 1 foot of the ground surface, sealed at the surface with concrete, and completed with an 8-inch-diameter flush-mounted monument. Boring logs and well construction details for monitoring wells FMW-01 through FMW-04 are included in Appendix B.



Select soil and groundwater samples collected from borings advanced between July and August 2020 were analyzed for the following analyses to further evaluate the occurrence and concentrations of COPCs in soil and groundwater identified during the preliminary assessment conducted by E&E. (Tables 2 through 9):

- DRO and ORO by Northwest Method NWTPH-Dx with acid silica gel cleanup;
- VOCs by EPA Method 8260D;
- PAHs by EPA Method 8270D; and
- Arsenic by EPA Method 6000/7000 series.

Farallon collected groundwater samples at monitoring wells FMW-01 through FMW-04 on August 8, 2020 and had the northern edge of each well casing surveyed by a surveyor licensed in the Washington State. Prior to sampling, the depth to groundwater was measured to the nearest 0.01 foot in each monitoring well using an electronic water-level measuring device to evaluate the direction of groundwater flow and hydraulic gradient across Thompson Field. Depth to groundwater ranged from 3.95 feet below top of casing at monitoring well FMW-03 to 6.60 feet below top of casing at monitoring well FMW-01 (Table 1). Based on the depth to water measurements collected from monitoring wells FMW-01 through FMW-04, the flow direction of groundwater at Thompson Field on August 8, 2020 is interpreted to be towards the north-northeast with a gradient of approximately 0.006 feet per foot (Figure 6).

3.1.2.3 September and October 2020

On September 30, 2020, Farallon advanced borings FB-10 through FB-14 to a final depth of 10 feet bgs, using a track-mounted direct-push drill rig at locations adjacent to the eastern boundary of Thompson Field to assess the potential for fill material to be present outside the boundaries of Thompson Field (Figure 2, Appendix B). Select soils samples were analyzed for DRO, ORO, PAHs, and arsenic based on COPCs identified at Thompson Field by Farallon and others. All constituents were reported either non-detect at the laboratory PQL or at concentrations less than the MTCA Method A cleanup levels in the soil samples analyzed from borings FB-10 through FB-14 (Tables 2, 4, and 5). No fill material or groundwater was encountered during the advancement of borings FB-10 through FB-14 (Appendix B).

During September 30 and October 1, 2020, Farallon advanced borings FB-15 through FB-27, and FMW-05 through FMW-07 at Thompson Field using a track-mounted direct-push drill rig to further assess the extent of COPCs in soil and groundwater reported during the previous investigations conducted by Farallon and E&E.

Borings FMW-05 through FMW-07 were completed as monitoring wells and developed following installation (Figure 3, Appendix B). Monitoring well FMW-05 was installed proximate to the northwestern corner of Thompson Field to a depth of 15 feet bgs, with a 10-foot screen from a depth of 3 to 13 feet bgs. Monitoring well FMW-06 was installed



proximate to E&E boring BH05 in the approximate center of Thompson Field to a depth of 15 feet bgs, with a 10-foot screen from a depth of 3 to 13 feet bgs. Monitoring well FMW-07 was installed proximate to the southeastern corner of Thompson Field to a depth of 15 feet bgs, with a 10-foot screen from a depth of 3 to 13 feet bgs. Each borehole was 5 inches in diameter, and each well casing was 2 inches in diameter. The screened interval of each monitoring well was comprised of a 0.010-inch slotted pre-pack screen. The annular space of each monitoring well was filled with 10-20 silica sand to the top of the screened interval, sealed with bentonite to within 1 foot of the ground surface, sealed at the surface with concrete, and completed with an 8-inch-diameter flush-mounted monument (Appendix B).

Farallon collected groundwater samples at monitoring wells FMW-05 through FMW-07 on October 9, 2020 and had the northern edge of each well casing surveyed by a surveyor licensed in Washington State. Prior to sampling, the depth to groundwater was measured to the nearest 0.01 foot in monitoring wells FMW-01 through FMW-07 using an electronic water-level measuring device to evaluate the direction of groundwater flow and hydraulic gradient across Thompson Field. Depth to groundwater ranged from 3.00 feet below top of casing at monitoring well FMW-06 to 6.33 feet below top of casing at monitoring well FMW-07, the flow direction of groundwater at Thompson Field on October 10, 2020 is interpreted to be nearly radial with a gradient of approximately 0.05 to 0.007 feet per foot (Figure 7).

Select soil and groundwater samples collected from borings FB-15 through FB-27 and FMW-05 through FMW-07 and groundwater samples from monitoring wells FMW-05 through FMW-07 were analyzed for the following (Tables 2, 4 through 6, 8, and 9):

- DRO and ORO by Northwest Method NWTPH-Dx with and without acid silica gel cleanup;
- PAHs by EPA Method 8270D; and
- Arsenic by EPA Method 6000/7000 series.

3.1.2.4 November 2020 through February 2021

On November 30, 2020, Farallon redeveloped monitoring wells FMW-05 through FMW-07 using surging and bailing techniques due to the potential for excess turbidity within the monitoring wells to affect arsenic analytical results.

Farallon returned to Thompson Field on December 11, 2020, to gauge depth to groundwater at monitoring wells FMW-01 through FMW-07, surface water elevations at the agricultural ditch surrounding Thompson Field, resample monitoring wells FMW-02, FMW-03, FMW-06, and FMW-07, and to advance boring FB-28 (Figure 3, Table 1). Groundwater samples were collected from the monitoring wells and submitted for laboratory analysis for one or more of the following constituents: total and dissolved



aluminum; total and dissolved arsenic; total and dissolved iron; and total and dissolved manganese.

Boring FB-28 was advanced using a hand auger to a depth of approximately 2 feet bgs adjacent to E&E boring BH05. A soil sample was collected at boring FB-28 at a depth of approximately 1.5 to 2.0 feet bgs to confirm the mercury detection reported in the soil sample collected by E&E at a depth of 1.5 to 2.0 feet bgs at boring BH05 (Figure 3, E&E 2020).

On January 8, 2021 boring FB-29 was advanced and monitoring well FMW-08 was installed near the west side of Thompson Field to further assess for potential soil and groundwater contamination in this area. Drilling was conducted using a track-mounted direct-push drill rig. Monitoring well FMW-08 was installed to a depth of 13 feet bgs, with a 10-foot screen from a depth of 3 to 13 feet bgs (Figure 3). The borehole was approximately 5 inches in diameter and the well casing was 2 inches in diameter. The screened interval of the monitoring well was comprised of a 0.010-inch slotted pre-pack screen. The annular space of the monitoring well was filled with 10-20 silica sand to the top of the screened interval, sealed with bentonite to within 1 foot of the ground surface, sealed at the surface with concrete, and completed with an 8-inch-diameter flush-mounted monument (Appendix B). Boring FB-29 was advanced adjacent to boring FMW-02 to a depth of 14 feet bgs to confirm a detection of total cPAHs at a TEC of 0.43 mg/kg in a soil sample collected boring FMW-02 at a depth of approximately 14 feet bgs (Figure 3, Table 4). In addition, Farallon gauged depth to groundwater at monitoring wells FMW-01 through FMW-07 and surface water elevations at the agricultural ditch surrounding Thompson Field (Table 1).

On January 18, 2021, the depth to groundwater was measured to the nearest 0.01 foot in monitoring wells FMW-01 through FMW-08 and at surface water monitoring locations using an electronic water-level measuring device to evaluate the direction of groundwater flow and hydraulic gradient across Thompson Field. Depth to groundwater ranged from 1.91 feet below top of casing at monitoring well FMW-08 to 4.67 feet below top of casing at monitoring well FMW-08 to 4.67 feet below top of casing at monitoring wells FMW-01 through FMW-08, groundwater measurements collected from monitoring wells FMW-01 through FMW-08, groundwater on January 18, 2021 is interpreted as being mounded in the center of Thompson Field before flowing out radially with a trend to the northwest and northeast with a gradient of approximately 0.02 to 0.0125 feet per foot.

Farallon returned to Thompson Field on February 16, 2021 to collect a groundwater sample from monitoring well FMW-08 to be analyzed for PAHs and to survey the top of casing and top-of-monument elevation at FMW-08 (Table 1). Groundwater samples collected on February 16, 2021 from monitoring well FMW-08 were analyzed for iron and manganese.



3.2 CONSTITUENTS OF POTENTIAL CONCERN

Soil and reconnaissance groundwater samples collected by E&E at Thompson Field were analyzed for a wide variety of constituents including target analyte metals, TPH, PCBs, VOCs, and semi volatile organic compounds including PAHs. The following analytes, identified as COPCs, were reported at concentrations exceeding risk-based screening levels identified by E&E and were carried forward for additional assessment by Farallon:

- DRO;
- ORO;
- GRO;
- Benzene, toluene, ethylbenzene, and xylenes (BTEX);
- Methylene chloride;
- PAHs;
- Aluminum;
- Arsenic;
- Iron;
- Manganese;
- Mercury; and
- Selenium.

Based on the laboratory analysis of soil and reconnaissance groundwater samples collected at and adjacent to Thompson Field, other constituents analyzed by E&E and not listed above were either not detected at concentrations at or exceeding laboratory PQLs or were detected but at concentrations typical of background concentrations (metals) or less than potentially applicable MTCA cleanup levels and other screening levels.

3.3 AFFECTED MEDIA

Based on geological and hydrogeological conditions and the current and future land use at Thompson Field, the media of potential concern evaluated during the RI were soil, groundwater, and surface water. Indoor air is not a media of concern at Thompson Field because no buildings are present on the Thompson Field Site and no buildings will be constructed in the future due to wetlands and wetland buffers on Thompson Field (Talasea 2018).

3.4 REMEDIAL INVESTIGATION RESULTS

This section presents the results of the RI field program performed by Farallon, including a description of Thompson Field geology and hydrogeology, and soil and groundwater analytical



results. Select laboratory analytical results for soil and groundwater are summarized on Figures 4 and 5 and Tables 2 through 9.

3.4.1 Geology and Hydrogeology

The Puget Sound region is underlain by Quaternary sediments deposited by a number of glacial episodes. Deposition occurred prior to, during, and following glacial advances and retreats, creating the existing subsurface conditions. The sediments in the Evans Creek Valley consist primarily of alluvium and Vashon recession outwash situated over deposits of glacial till that consist of silty sand to sandy silt with gravel. Shallow alluvium consisting of relatively fine-grained sands, silts, clays, and organic matter were deposited by rivers, streams, and post-glacial lakes during glacial advances and recessions. Advance outwash sediments have been largely over-consolidated by the overriding ice sheets. These advance outwash sediments are overlain by a till-like layer and recessional outwash sediments that are less consolidated (Redmond 1997, Redmond 1999).

According to Farallon's observations during the RI and review of boring logs from the preliminary assessment (E&E 2020), the general stratigraphy at Thompson Field comprises a fill layer of variable thickness to depths ranging from approximately 2 to 6 feet bgs, with the fill thickness increasing from east to west (see boring logs in Appendix B). The fill layer is present across much of Thompson Field, but was not observed during the advancement of borings FB-10 through FB-14 proximate to the eastern boundary of Thompson Field. The fill material observed is comprised of silty sand, sandy silt, and silt containing varying amounts of gravel, wood, and brick. Native soil underlaying the fill is an approximately 3- to 8-foot-thick layer of alluvium consisting of silt and organic material which is further underlain by glacial outwash consisting of gravel, sand, and silt extending to the maximum depth explored of 20 feet bgs. Northwest to southeast and west to east cross-sections across the western portion of Thompson Field depicting the lithology, water-bearing zones, and analytical results for select constituents detected in soil and groundwater samples are presented on Figures 8 and 9 (respectively). The location of the cross-sections is shown on Figure 3.

The interval where first-encountered groundwater is present in the fill and underlying recent alluvium at Thompson Field varies from a depth of approximately 1 to 6.5 feet bgs, depending on location and seasonal fluctuations (Table 1).

Farallon measured groundwater levels at the Thompson Field monitoring well network up to seven times and selected the groundwater elevations from the most recent groundwater monitoring event on January 18, 2021 to depict groundwater elevations and the flow direction for the RI (Figure 10). Based on the groundwater levels measured on January 18, 2021, the groundwater flow direction is radial from the center of Thompson Field with an overall trend to the northwest and northeast at an average gradient of 0.011 feet per foot at that time (Figure 10). Surface water in the agricultural ditches surrounding Thompson were measured at 60.19 to 61.90 feet NAVD88 with a general flow to the south on the eastern half of Thompson Field and to the west on the western half of Thompson Field. Groundwater and surface water elevation measurements collected during



the RI are provided in Table 1. A map showing groundwater elevation contours inferred from January 18, 2021 groundwater elevation measurements is provided as Figure 10.

Groundwater at Thompson Field and surface water in the surrounding agricultural ditches are interpreted as being in communication based upon the groundwater and surface water elevations measured in December 2020 and January 2021 (Figure 10, Table 1).

3.4.2 Soil Analytical Results

All constituents analyzed in soil samples collected from borings FB-09 through FB-14 advanced at locations adjacent to Thompson Field were reported either non-detect at the laboratory PQL or at concentrations less than the MTCA Method A cleanup levels (Tables 2, 4, and 5). No fill material was encountered during the advancement of borings FB-10 through FB-14 (Appendix B).

Analytical results for soil samples collected at Thompson Field are discussed below and compared to MTCA Method A cleanup levels for unrestricted land use. COPCs detected in soil at Thompson Field were determined not to be of ecological concern as described in the site-specific TEE conducted for the Thompson Field Site and included as Appendix D (See section 4.4.2 for discussions on Ecological Screening Levels.

3.4.2.1 PAHs

Total cPAHs are present at TECs exceeding the MTCA Method A cleanup level of 0.1 mg/kg in fill at depths ranging from 1 to 6 feet bgs on the western portion of Thompson Field (Figure 5, Table 4). Total cPAHs were detected at TECs exceeding the MTCA Method A cleanup level of 0.1 mg/kg in soil samples collected from borings FB-02, FB-03, FB-17, FB-19 through FB-21, FB-24, and FMW-02 on the western portion of Thompson Field. The extent of total cPAHs at TECs exceeding the MTCA Method A cleanup level in soil is laterally bounded to the north by borings FB-22 and FB-23, to the east by borings FB-16 and FB-18, to the south by borings FB-04, FB-05, and FB-18, and to the west by borings FB-25 through FB-27 (Figure 5). Total cPAHs at a TEC of 0.43 mg/kg detected in a soil sample collected at a depth of 14 feet bgs at boring FB-29 advanced immediately adjacent to boring FMW-02.

The soil sample collected at boring FMW-02 at a depth of approximately 14 feet bgs is interpreted as being within native soil and is attributed to be the result of impacted fill potentially transferred vertically downward from shallower depths during direct-push drilling activities because the reported detection could not be replicated with a sample collected at 14 feet bgs from boring FB-29 advanced immediately adjacent to FMW-02 (Figure 8, Table 4, Appendix B).

Total naphthalenes, calculated as the sum of 1-methylnaphthalene and 2methylnaphthalene, were detected at concentrations exceeding the MTCA Method A cleanup level of 5 mg/kg in soil samples collected at depths ranging from 4 to 6 feet bgs in



borings FB-02, FB-20, and FMW-02 (Figure 3, Table 4). All other PAHs were either not detected at concentrations at or exceeding the laboratory PQL or detected at concentrations less than the MTCA Method A cleanup level in all remaining soil samples collected at Thompson Field (Figure 5, Table 4, Appendix C).

3.4.2.2 Metals

Arsenic was reported at a concentration of 23 mg/kg in a soil sample collected from approximately 10 feet bgs at boring FMW-03 which exceeds the MTCA Method A cleanup level of 20 mg/kg. Arsenic was reported non-detect at the laboratory PQL in all other soil samples analyzed from the borings advanced by Farallon at Thompson Field (Table 5, Appendix C). The soil samples collected from monitoring well boring FMW-03 and E&E boring BH02 were collected on the south side of Thompson Field at a depth of approximately 10 feet bgs, which is interpreted to be approximately 4.5 feet into the native material, and therefore the reported arsenic exceedances are attributed to naturally occurring background concentrations (Figures 8, and 9, Appendix B). Furthermore, arsenic concentrations in soil samples collected from fill material overlaying native soil at monitoring well boring FMW-03 and E&E boring BH02 were reported as non-detect at the laboratory PQL (Figures 3, 8 and 9, Table 5) (E&E 2020).

Mercury was not detected at a concentration at or exceeding the laboratory PQL in the soil sample collected at a depth of 1.5 to 2.0 feet bgs from boring FB-28. Boring FB-28 was advanced immediately adjacent to E&E boring BH05 where mercury was detected at a concentration of 0.15 mg/kg (Figure 3, Table 5) (E&E 2020).

Selenium was detected at a concentration exceeding the laboratory PQL but less than the MTCA Method A cleanup level in a soil sample collected by E&E at boring BH02 at a depth of 8 to 10 ft bgs (E&E 2020). The depth from which the sample was collected is interpreted to be within native material (Figure 9). Selenium was not detected at a concentration at or exceeding the laboratory PQL in soil samples collected from boring BH02 at shallower depths of 0.5 to 2 and 4 to 5 feet bgs, interpreted to be within the fill layer (E&E 2020). Detected concentrations of selenium were either flagged by the laboratory as being an estimate or selenium was not detected at a concentration at or exceeding the laboratory PQL in all other soil samples analyzed for selenium from Thompson Field (Table 5).

3.4.2.3 TPH

DRO and ORO were detected at concentrations less than MTCA Method A cleanup levels in soil samples collected at 10 locations at Thompson Field including the Farallon Background soil sample collected from the within the adjacent wetland (Figure 2, Table 2). DRO and ORO were not dectected at concentrations at or exceeding the laboratory PQL in all other soil samples analyzed (Table 2).



A comparison of DRO and ORO analytical results with and without using the acid/silica gel cleanup procedure indicates that some upwards bias due to the presence of naturally occurring biogenic material, including background samples in which DRO or ORO were detected, was present in all samples analyzed for TPH (Table 2, Appendices A and B).

3.4.2.4 VOCs

Methylene chloride was reported non-detect at the laboratory PQL in soil samples collected from borings FB-07 through FB-09 and FMW-04 advanced adjacent to E&E boring BH03 where methylene chloride was previously detected at a concentration of 0.23 mg/kg in a soil sample collected at a depth of 4.5 to 6 feet bgs (Figure 3, Table 3) (E&E 2020). All other VOCs were reported either non-detect at the laboratory PQL or at concentrations less than MTCA Method A cleanup levels in the soil samples analyzed (Table 3, Appendix C).

3.4.3 Groundwater Analytical Results

Analytical results for groundwater samples collected at Thompson Field are discussed below and compared to MTCA Method A cleanup levels for groundwater. COPCs detected in groundwater at Thompson Field were determined not to be of ecological concern as described in the site-specific TEE conducted for the Thompson Field Site and included as Appendix D (See section 4.4.2 for discussions on Ecological Screening Levels.

3.4.3.1 Metals

Total arsenic was reported at concentrations exceeding the MTCA Method A cleanup level of 5 micrograms per liter(μ g/l) in groundwater samples collected from monitoring wells FMW-03, FMW-06, and FMW-07. Dissolved arsenic was reported at concentrations exceeding the MTCA Method A cleanup level of 5 μ g/l in groundwater samples collected from monitoring wells FMW-06 and FMW-07. Following redevelopment of the monitoring wells on November 30, 2020, total arsenic was reported at a concentration of 5.3 μ g/l in a groundwater sample collected from monitoring well FMW-7, which slightly exceeds the MTCA Method A cleanup level of 5 μ g/l. Dissolved arsenic was reported at a concentration of 0.3 μ g/l in a groundwater sample collected from monitoring well FMW-7, which slightly exceeds the MTCA Method A cleanup level of 5 μ g/l. Dissolved arsenic was reported at a concentration less than the MTCA Method A cleanup level in the groundwater sample collected from monitoring well FMW-07. Total and dissolved arsenic were reported either non-detect at the laboratory PQL or at concentrations less than the MTCA Method A cleanup levels in all other groundwater samples analyzed (Table 9, Appendix C).

The concentrations of arsenic reported in groundwater at Thompson Field ranges from nondetect ($<3.3 \mu g/l$) to 14 $\mu g/l$, which falls within the natural background concentration range of 0.8 to 76 $\mu g/l$ for the Puget Sound Lowlands (Ecology 2018). The arsenic exceedances reported in the groundwater samples collected at Thompson Field are likely the result of metals associated with total suspended solids in the groundwater sample matrix and do not reflect the actual quality of groundwater at Thompson Field. This position is supported with the significantly lower concentrations of total arsenic in monitoring wells FMW-03, FMW-06 and FMW-07 following redevelopment of the wells. In addition, no known anthropogenic source of arsenic is known to be present at Thompson Field, with the highest



concentrations of arsenic in soil being located not within fill material but within native soil at depths of 10 feet bgs (Tables 5 and 9, Appendices A and B)

Total and dissolved iron and manganese were detected at concentrations less than MTCA Method A cleanup levels in groundwater samples collected from monitoring wells FMW-02 and FMW-08 (Table 9).

Total aluminum was detected at a concentration less than the MTCA Method A cleanup level in a groundwater sample collected from monitoring well FMW-02, dissolved aluminum was not detected at a concentration at or exceeding laboratory PQLs in the same groundwater sample (Table 9).

All remaining metals were either reported non-detect at concentrations at or exceeding the laboratory PQL or at concentrations less than their respective MTCA Method A cleanup levels in the groundwater samples analyzed (Table 9, Appendix C).

3.4.3.2 PAHs

PAHs were reported at concentrations less than MTCA Method A cleanup levels for groundwater in the sample collected from monitoring well FMW-02. PAHs were not detected at concentrations at or exceeding the laboratory PQL in all other groundwater samples collected from monitoring wells on Thompson Field, including monitoring well FMW-08 which is interpreted as being hydraulically downgradient from monitoring well FMW-02 (Figures 9 and 10, Table 8). The results of the groundwater sampling at Thompson Field indicate that PAH impacts present on the western portion of Thompson Field are limited in extent and are not in communication with surface water.

3.4.3.3 TPH

TPH as DRO and ORO were either not detected at concentrations at or exceeding the laboratory PQL or at concentrations less than MTCA Method A cleanup levels in all groundwater samples analyzed (Table 6). A comparison of DRO and ORO analytical results with and without using the acid/silica gel cleanup procedure indicates that some upwards bias due to the presence of naturally occurring biogenic material was present in all samples in which DRO or ORO were detected (Table 6, Appendix C).

3.4.3.4 VOCs

All VOCs were reported non-detect at the laboratory PQLs in a groundwater sample collected from monitoring well FMW-04 installed adjacent to E&E boring BH03 (Table 7, Appendix C).



4.0 CONCEPTUAL SITE MODEL

This section provides a summary of the conceptual site model derived from the results of the RI. Included in this section is a discussion of COCs, media of concern, source areas, contaminant fate and transport, and an exposure assessment that included a human health risk evaluation and a TEE.

4.1 SOURCE AREA

Based on the results of the field program, the source of contamination is impacted fill material placed on the Thompson Field Site. The fill layer varies from a depth of 2 to 6 feet at the locations explored within Thompson Field (Figure 3). Brick and wood debris were encountered in the fill and laboratory analytical results confirmed that fill in a limited area contained co-located total naphthalene concentrations and total cPAHs TECs exceeding the MTCA Method A cleanup levels.

4.2 AFFECTED ENVIRONMENTAL MEDIUM

Based on the results of the RI, the affected environmental medium at the Thompson Field Site is soil with total naphthalene concentrations and total cPAHs TECs exceeding the MTCA Method A cleanup levels.

Groundwater and surface water are not media of concern because the site-specific TEE discussed in Section 4.4.2 determined that concentrations of COPCs at Thompson of Field were not of ecological concern, and with the exception of naturally occurring arsenic, no COPCs were detected in groundwater at concentrations exceeding MTCA Method A cleanup levels (Tables 5 through 9, Appendix D). In addition, PAHs were not detected at concentrations at or exceeding the laboratory PQL in all other groundwater samples collected from monitoring wells on Thompson Field, including monitoring wells FMW-01, FMW-05, and FMW-08 which are located on the boundaries of Thompson Field, and interpreted as being hydraulically down-gradient from monitoring well FMW-02 (Figures 9 and 10, Table 8). Therefore, the groundwater to surface water exposure pathway at the Thompson Field Site is not complete.

Indoor air is not a media of concern because no structures are present on the Thompson Field Site and none will be constructed there in the future because of wetland setbacks and related development restrictions (Figure 2).

4.3 CONTAMINANT FATE AND TRANSPORT

Potential exposure pathways for soil contamination includes the direct contact pathway, which comprises direct contact via dermal contact with and/or ingestion of soil.

PAHs are present in fill material on the western portion of Thompson Field and PAHs are present in groundwater in a limited area in the vicinity of monitoring well FMW-02. The low mobility of cPAHs at the Thompson Field Site is attributed to their very low aqueous solubility and their penchant to sorb to organic carbon (Ecology 2012, EPA 2007b). This is particularly relevant for



higher weight cPAHs when in the presence of organic carbon, which is prevalent in wetland soils and pasture or cropland, both of which are present at and beneath the Thompson Field Site. The physical and chemical properties attributed to cPAHs are consistent with the limited transport of cPAHs observed at the Thompson Field Site; cPAHs have not been detected in groundwater.

PAHs have not been detected at concentrations at or exceeding the laboratory PQL in groundwater samples collected from monitoring wells located on the boundaries of Thompson Field indicating that groundwater transport of PAHs is minimal at the Thompson Field Site (Figure 4). Because the area of Thompson Field where total cPAH TECs were confirmed to exceed the MTCA Method A cleanup level for soil is flat lying, the potential for overland transport of impacted soil via sheet flow is de minimis, so the only mechanism for surface water to be impacted is via groundwater flow to surface water. The results of the RI confirm that groundwater is not a medium of concern (see Sections 3.4.3, Groundwater Analytical Results and 4.3, Affected Environmental Media), therefore, there is no completed transport pathway for cPAHs in soil to impact surface water.

4.4 EXPOSURE PATHWAYS AND RECEPTORS

Two types of exposure pathways associated with the potential for COPCs to be present at Thompson Field are identified for the Thompson Field Site. These exposure risks include human health and terrestrial ecological receptors. This subsection presents the evaluation and conclusions pertaining to the exposure pathways at the Thompson Field Site including the results of the TEE completed for the Thompson Field Site.

4.4.1 Human Health Risk

Human exposure pathways for shallow soil at the Thompson Field Site include the direct contact pathway, which comprises both the dermal contact and ingestion pathways. The standard point of compliance for the direct contact exposure pathway is a depth of 15 feet bgs for human health and 6 feet bgs for terrestrial receptors (WAC 173-340-740[6][d] and WAC 173-340-7490[4][b]). Total cPAHs at TECs exceeding the MTCA Method A cleanup level were detected in shallow subsurface fill within a depth of 6 feet bgs.

4.4.2 Terrestrial Ecological Evaluation

A completed TEE Form is provided in Appendix D. The Thompson Field Site is within 500 feet of undeveloped land totaling more than 0.25 acre; therefore, the Thompson Field Site does not qualify for an exclusion from a TEE. The Thompson Field Site is directly adjacent to the Evans Creek Natural Area, and concentrations of COPCs in soil samples collected from the Thompson Field Site exceed the Ecological Indicator Soil Concentrations for Protection of Terrestrial Plants and Animals (Appendix D). Therefore, the Thompson Field Site did not qualify for evaluation under a simplified TEE. Thus, a site-specific TEE was conducted for the Thompson Field Site according to procedures specified in MTCA (WAC 173-340-7493(1)(c)).

The site-specific TEE conducted for the Thompson Field Site evaluated the potential ecological risks presented by the concentrations of COPCs detected in soil and groundwater samples collected



at Thompson Field. The process and results of the site-specific TEE are summarized below (Appendix D):

- Soil chemicals of ecological concern at Thompson Field were identified in accordance with WAC 173-340-7493(2)(a)(i), by determining if the exposure point concentration of COPCs identified in soil exceed the ecological indicator soil concentrations identified for plants, soil biota, or wildlife. Based on this screening, combined DRO and ORO and selenium were retained as soil chemicals of ecological concern for further evaluation.
- Groundwater chemicals of ecological concern at Thompson Field were identified using a two-step process in accordance with WAC 173-340-730. The first step involved identifying COPCs in groundwater with maximum detected concentrations exceeding relevant surface water benchmark criteria. The second step involved comparing concentrations of COPCs in groundwater samples collected from monitoring wells located most downgradient prior to discharge to surface water to surface water concentrations protective of aquatic life. As described in Section 3.4.1, Geology and Hydrogeology, groundwater flows to the northeast and to the northwest prior to discharging to the agricultural ditches surrounding Thompson Field. Thus, concentrations of chemicals in groundwater samples collected from monitoring wells FMW-08, FMW-05, and FMW-01 represent the most downgradient groundwater sampling points prior to potential discharge to surface water (Figure 3). Based on this two-step screening process for groundwater chemicals of ecological concern, iron and manganese were retained for further evaluation.
- A review of habitats and ecological receptors of concern was conducted to identify species that may potentially be present at Thompson Field.
- An ecological risk assessment was conducted based on the identified soil COPCs and species recognized as being potentially present at the Thompson Field Site. Site-specific exposure data and the underlying toxicological information associated with selected ecological indicator soil concentrations were reviewed for each receptor and chemical of concern to evaluate the risk of adverse ecological effects for each receptor. The results of the ecological risk assessment determined that the low combined DRO and ORO concentrations pose negligible risk to ecological receptors. The presence of selenium poses negligible risk to ecological receptors and the elevated concentration in the one sample is likely associated with background concentrations.
- Concentrations of iron and manganese in groundwater exceed respective screening level values identified in the site-specific TEE for groundwater in down-gradient monitoring well FMW-08 at the Thompson Field Site. These chemicals could potentially leach to surface water resulting in exposure to aquatic biota receptors using the adjacent Evans Creek. Based on the available information, risk to surface water receptors from concentrations of iron is highly uncertain and concentrations of iron in soil samples collected at the Thompson Field Site are believed to be representative of natural occurring background concentrations. Based on the available information, risk to surface water receptors from concentrations of manganese at the Thompson Field Site is highly uncertain



and concentrations in groundwater are believed to be representative of natural occurring background concentrations.

4.5 CLEANUP STANDARDS

The following is a discussion of the proposed cleanup standards for the cPAHs in soil at the Thompson Field Site, including applicable cleanup levels and points of compliance for soil. As described in Section 4.2, Affected Environmental Medium, groundwater, surface water, and indoor air are not media of concern for the Thompson Field Site; therefore, cleanup standards are not specified below for these media.

4.6 CONSTITUENTS OF CONCERN

The COCs for the Thompson Field Site include hazardous substances detected at concentrations exceeding MTCA cleanup levels in soil that are not the result of naturally occurring background concentrations (Section 3.4.2 Soil Analytical Results). The COCs for soil at the Thompson Field Site are total naphthalenes exceeding the MTCA Method A cleanup level and cPAHs exceeding the MTCA Method A cleanup level for cPAHs TEC.

4.6.1 Cleanup Levels

MTCA Method A soil cleanup levels for unrestricted land use are appropriate for the contamination affecting the Thompson Field Site. The Thompson Field Site is currently a fallow hay field, following the conclusion of remedial activities the Thompson Field Site will be allowed to revert to a natural state and will remain open space as mandated by the anticipated development process.

The MTCA Method A cleanup level for cPAHs in soil at the Thompson Field Site is 0.1 mg/kg cPAH TEC.

The MTCA Method A cleanup level for total naphthalenes in soil at the Thompson Field Site is 5.0 mg/kg.

4.6.2 Points of Compliance

The points of compliance are the locations at which the cleanup level in soil must be attained to meet the requirements of MTCA. The point of compliance for the Thompson Field Site was established in accordance with WAC 173-340-704(1).

The point of compliance for soil is defined as all soil throughout the Thompson Field Site (standard point of compliance under MTCA).



5.0 SUMMARY AND CONCLUSIONS

Farallon performed remedial investigations at Thompson Field from June 2020 to February 2021 to evaluate COPCs in soil and groundwater identified during the preliminary assessment conducted by E&E on behalf of EPA (E&E 2020). The remedial investigations conducted by Farallon comprised of advancing 37 borings to a maximum depth of 20 feet bgs and installing groundwater monitoring wells in eight of the borings for collection of soil and groundwater samples at Thompson Field, collection of background samples at a maximum depth of 10 feet bgs from seven additional locations surrounding Thompson Field, and completing a site-specific TEE (Appendix D). Soil and groundwater samples collected during the course of the subsurface investigation were analyzed for one or more of the following: TPH as DRO and ORO with and without acid/silica gel cleanup; VOCs; PAHs; aluminum; arsenic; iron; manganese; mercury; and selenium (Tables 2 through 9).

Farallon observed subsurface conditions during drilling; soils at Thompson Field are comprised of a fill layer of variable thickness ranging from approximately 2 to 6 feet bgs in depth, with the fill thickness increasing from east to west. The fill soils overlay native soil consisting of silt and organic material, which is further underlain by gravel (Appendix A). Groundwater is first-encountered in the fill and underlying native silt at Thompson Field and varies from depths of approximately 1 to 6.5 feet bgs, depending on location and seasonal fluctuations (Table 1). Groundwater is interpreted as being mounded in the center of Thompson Field before flowing out radially with a trend to the northwest and northeast.

The results of the site-specific TEE conducted for the Thompson Field Site determined that analytes detected in soil and groundwater at Thompson Field were not to be of ecological concern (Appendix D).

The subsurface investigations conducted by Farallon identified co-located total naphthalene concentrations and total cPAHs TECs exceeding MTCA Method A cleanup levels in soil, as the COCs for the Thompson Field Site. The extent of total naphthalene concentrations and total cPAHs TECs exceeding MTCA Method A cleanup levels is limited to fill soils in a discrete area on the western portion of Thompson Field. PAHs are present in groundwater at concentrations exceeding applicable ecological screening levels but less than MTCA Method A cleanup levels in groundwater samples collected from monitoring well FMW-02 at the Thompson Field Site. PAHs have not been detected at concentrations at or exceeding the laboratory PQL in groundwater samples collected from down-gradient monitoring wells surrounding the Thompson Field Site, indicating that groundwater transport of PAHs is not occurring at the Thompson Field Site and that PAHs are not reaching surface waters surrounding Thompson Field (Figure 4). Therefore, groundwater does not have a complete pathway to ecological receptors, poses a negligible risk to ecological receptors and does not exceed Method A cleanup levels, thereby meeting a "throughout the Site" compliance point. The limited transport of PAHs observed at the Thompson Field Site is attributed to the hydrophobic nature of PAHs, coupled with the high organic carbon present in soils associated with conditions encountered at Thompson Field.



DRO and ORO were detected in soil samples collected at Thompson Field and in the Farallon Background sample at concentrations exceeding ecological screening levels but less than MTCA Method A cleanup levels (Figure 2, Table 2). DRO and ORO samples analyzed with and without acid/silica gel cleanup indicate that all samples in which DRO and ORO were detected had some upward bias due to the presence of naturally occurring biogenic material, i.e., in all cases, concentrations were lower for the samples analyzed using the acid/silica gel cleanup procedure than for non-treated samples. DRO and ORO were not detected at a concentration at or exceeding the laboratory PQL in all groundwater samples collected from monitoring wells FMW-01 through FMW-06 at Thompson Field. DRO and ORO were detected at concentrations less than the MTCA Method A cleanup levels in one groundwater sample collected from monitoring well FMW-07, but were not detected at concentrations at or exceeding the laboratory PQL when the same sample was analyzed using the acid/silica gel cleanup procedure. The presence of ORO in the Farallon Background sample collected within the wetland south of Thompson Field from beneath the root structure of an overturned tree furthers the conclusion that the presence of DRO and ORO in samples collected at Thompson Field is due to naturally occurring biogenic material present in soil.

Arsenic detected at concentrations exceeding the MTCA Method A cleanup level for soil in samples collected at Farallon boring FMW-03 and E&E boring BH02 are attributed to naturally occurring background concentrations. The soil samples were collected at depths of 8 to 10 feet bgs, which is interpreted as being in native soil (Figure 9). Arsenic concentrations for soil samples collected from shallower depths interpreted to be within the fill layer at borings FMW-03 and BH02, were either not detected at or exceeding the laboratory PQL or were reported at a concentration less than the MTCA Method A cleanup level despite being flagged by the laboratory as a biased high estimate (respectively) (Table 5) (E&E 2020). The elevated concentrations of arsenic observed in groundwater samples collected at Thompson Field are also attributed to naturally occurring background concentrations, rather than from sources at the Thompson Field Site (Table 9). The same conclusion is drawn by E&E in the Preliminary Assessment Report (E&E 2020). This conclusion is further substantiated by the elevated arsenic concentration detected in a groundwater sample collected by E&E at off-site monitoring well MW356, located approximately 0.4 mile northwest of the Thompson Field Site at a location on the west side of Evans Creek and interpreted as potentially hydrologically divided from the Thompson Field Site.

Selenium was detected at a concentration of 3.2 mg/kg in one soil sample collected at boring BH02 at a depth of 8 to 10 feet bgs, which is less than the MTCA Method A Cleanup level but exceeds the most restrictive risk-based screening level identified by E&E for selenium (Table 5) (E&E 2020). (Appendix D). The 8-to-10-foot bgs sample interval at boring BH02 is interpreted as native material below the fill material. Selenium was not detected at a concentration at or exceeding the laboratory PQL in the surface soil sample collected from the fill layer at boring BH02. Selenium was not reported at concentrations exceeding risk-based screening levels identified during the site-specific TEE in any other soil sample collected at Thompson Field, including the surface soil sample collected from the depth of the sample with a selenium concentration exceeding risk-based screening levels (8 to 10 feet bgs), low detection frequency,



and low detected concentrations in other samples, the elevated concentration detected in sample BH02 is believed to be associated with naturally occurring background.

Mercury was detected at a concentration of 0.15 mg/kg in E&E soil sample BH05SB01 collected from boring BH05 at a depth of 1.5 to 2.0 feet bgs, which exceeds the most restrictive risk-based screening level identified by E&E but does not exceed the MTCA Method A screening level (Table 5, Appendix D) (E&E 2020). Mercury was not detected at a concentration at or exceeding the laboratory PQL in a soil sample collected at a depth of 1.5 feet bgs from Farallon boring FB-28 advanced immediately adjacent to boring BH-5 (Table 5).

Manganese was detected in groundwater samples collected from monitoring wells FMW-02, FMW-03, and FMW-08 at concentrations ranging from 200 to 570 µg/l (Table 9). A groundwater sample collected from monitoring well FWM-08, which is reflective of concentrations near the Thompson Field Site boundary prior to discharge to surface water, had a concentration of 200 µg/l which exceeds the ecological screening level of $120 \,\mu g/l$ identified in the TEE as being protective of surface water aquatic organisms (Figure 2, Table 9, Appendix D). Elevated concentrations of manganese were also detected in all but one of the groundwater samples collected by E&E from off-site monitoring wells located up to 0.4 miles from the Thompson Field Site. E&E attributed the manganese concentrations in groundwater to naturally occurring background concentrations (E&E 2020). While manganese can be toxic at high concentrations, manganese is among the most common elements in soil and there is no known source of a release of manganese at the Thompson Field Site. Concentrations of manganese in soil ranged from 159 to 424 mg/kg, which are less than the Washington State natural background concentration of 1,100 mg/kg (Ecology 1994) and are similar to concentrations reported by EPA for nearby background samples (E&E 2020). Based on the available information, concentrations of manganese detected in soil and groundwater at Thompson Field are believed to be representative of naturally occurring background concentrations (Appendix D).

Dissolved iron was detected at concentrations ranging from 1,500 to 7,100 µg/l in groundwater samples collected from monitoring wells FMW-02, FMW-03 and FMW-08 (Table 9). A groundwater sample collected from monitoring well FMW-08, which is reflective of concentrations near the Thompson Field Site boundary prior to discharge to surface water, had a total iron concentration of 6,800 µg/l, which exceeds the ecological screening level of 1,000 µg/l identified in the TEE as being protective of surface water aquatic organisms (Figure 2, Table 9, Appendix D). While iron can be toxic at high concentrations, iron is among the most common elements in soil and there is no known source of a release of iron at the Thompson Field Site. Iron was detected at concentrations exceeding the ecological screening level protective of surface water aquatic organisms of 1,000 µg/l in three of four groundwater samples collected by E&E from offsite monitoring wells located approximately 0.4 mile to the northwest of Thompson Field (E&E 2020). Concentrations of iron in soil samples collected at Thompson Field by E&E at depths of 0.5 to 10 feet bgs ranged from 12,700 to 21,400 mg/kg, which are less than the Washington State natural background concentration of 42,100 mg/kg (Ecology 1994) and are similar to concentrations reported by EPA for nearby background samples (E&E 2020). Based on the available information, concentrations of iron in soil and groundwater samples collected at



Thompson Field are believed to be representative of naturally occurring background concentrations (Appendix D).

Total aluminum was detected at concentrations less than the MTCA Method A cleanup level in groundwater samples collected at monitoring well FMW-02, E&E reconnaissance groundwater samples BH01, BH02 and E&E background groundwater sample BK01 (Table 9) (E&E 2020). Dissolved aluminum was not detected at a concentration at or exceeding the laboratory PQL in any of the groundwater samples collected at Thompson Field. Total aluminum detected in groundwater is likely the result of metals associated with total suspended solids in the groundwater sample matrix and do not reflect the true condition of groundwater quality at Thompson Field. This conclusion is corroborated further with the presence of total aluminum in the E&E background sample, and the fact that dissolved aluminum has not been detected in groundwater at a concentration at or exceeding the laboratory PQL at Thompson Field (E&E 2020).

Methylene chloride was detected at a concentration of 0.023 mg/kg, which slightly exceeds the MTCA Method A cleanup level of 0.020 mg/kg, in one soil sample collected from E&E boring BH03 at a depth of 4.5 to 6.0 feet bgs (Table 3). Methylene chloride was not detected at or exceeding the laboratory PQL in a soil sample collected from the same boring at a depth of 1.5 to 3.0 feet bgs. Methylene chloride was not detected at or exceeding the laboratory PQL in soil samples collected from borings FB-07 through FB-09 and FMW-04 at depths of 5 to 6 feet bgs, which were advanced in the immediately adjacent to boring BH03 to the north, east, south, and west (Figure 2). Methylene chloride also was not detected at a concentration at or exceeding the laboratory PQL in a groundwater sample collected from monitoring well FMW-04 (Table 7). Methylene chloride is a known laboratory contaminant and the inability to reproduce the initial detection at BHO3 despite multiple samples collected in the immediate vicinity of boring BH03 from the same depth of the reported methylene chloride detection indicates that the initial detection of methylene chloride was likely the result of laboratory contamination.

The information provided in this RI Report is sufficient to assess the nature and extent of contamination at Thompson Field. The information in this RI Report is sufficient to prepare a Feasibility Study that will screen cleanup technologies and evaluate technically feasible cleanup alternatives and identify a preferred cleanup alternative for the Thompson Field Site that meets MTCA requirements.



6.0 REFERENCES

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7.0 LIMITATIONS

7.1 GENERAL LIMITATIONS

The conclusions contained in this report/assessment are based on professional opinions with regard to the subject matter. These opinions have been arrived at in accordance with currently accepted hydrogeologic and engineering standards and practices applicable to this location. The conclusions contained herein are subject to the following inherent limitations:

- Accuracy of Information. Farallon obtained, reviewed, and evaluated certain information used in this report/assessment from sources that were believed to be reliable. Farallon's conclusions, opinions, and recommendations are based in part on such information. Farallon's services did not include verification of its accuracy or authenticity. Should the information upon which Farallon relied prove to be inaccurate or unreliable, Farallon reserves the right to amend or revise its conclusions, opinions, and/or recommendations.
- **Reconnaissance and/or Characterization**. Farallon performed a reconnaissance and/or characterization of the Thompson Field Site that is the subject of this report/assessment to document current conditions. Farallon focused on areas deemed more likely to exhibit hazardous materials conditions. Contamination may exist in other areas of the Thompson Field Site that were not investigated or were inaccessible. Site activities beyond Farallon's control could change at any time after the completion of this report/assessment.

For the foregoing reasons, Farallon cannot and does not warrant or guarantee that the Thompson Field Site is free of hazardous or potentially hazardous substances or conditions, or that latent or undiscovered conditions will not become evident in the future. Farallon's observations, findings, and opinions can be considered valid only as of the date of the report.

This report/assessment has been prepared in accordance with the contract for services between Farallon and The Estate, and currently accepted industry standards. No other warranties, representations, or certifications are made.

7.2 LIMITATION ON RELIANCE BY THIRD PARTIES

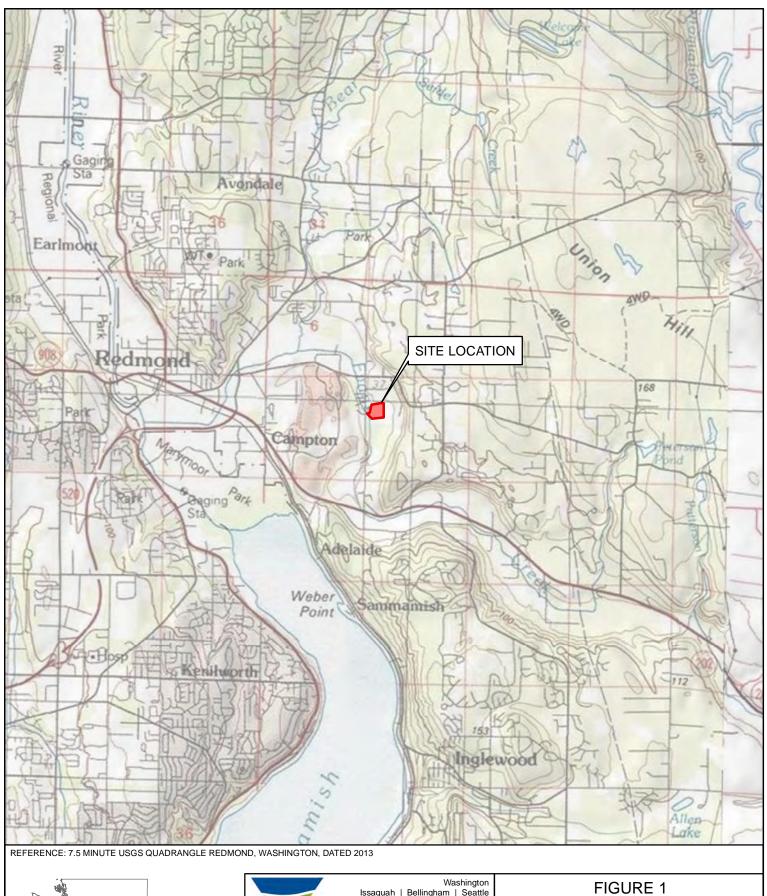
Reliance by third parties is prohibited. This report/assessment has been prepared for the exclusive use of The Estate to address the unique needs of The Estate at the Thompson Field Site at a specific point in time. Nelson Legacy Group, LLC is recognized as an intended user of this report/assessment, subject to the same limitations as The Estate.

This is not a general grant of reliance. No one other than The Estate may rely on this report unless Farallon agrees in advance to such reliance in writing. Any unauthorized use, interpretation, or reliance on this report/assessment is at the sole risk of that party and Farallon will have no liability for such unauthorized use, interpretation, or reliance.

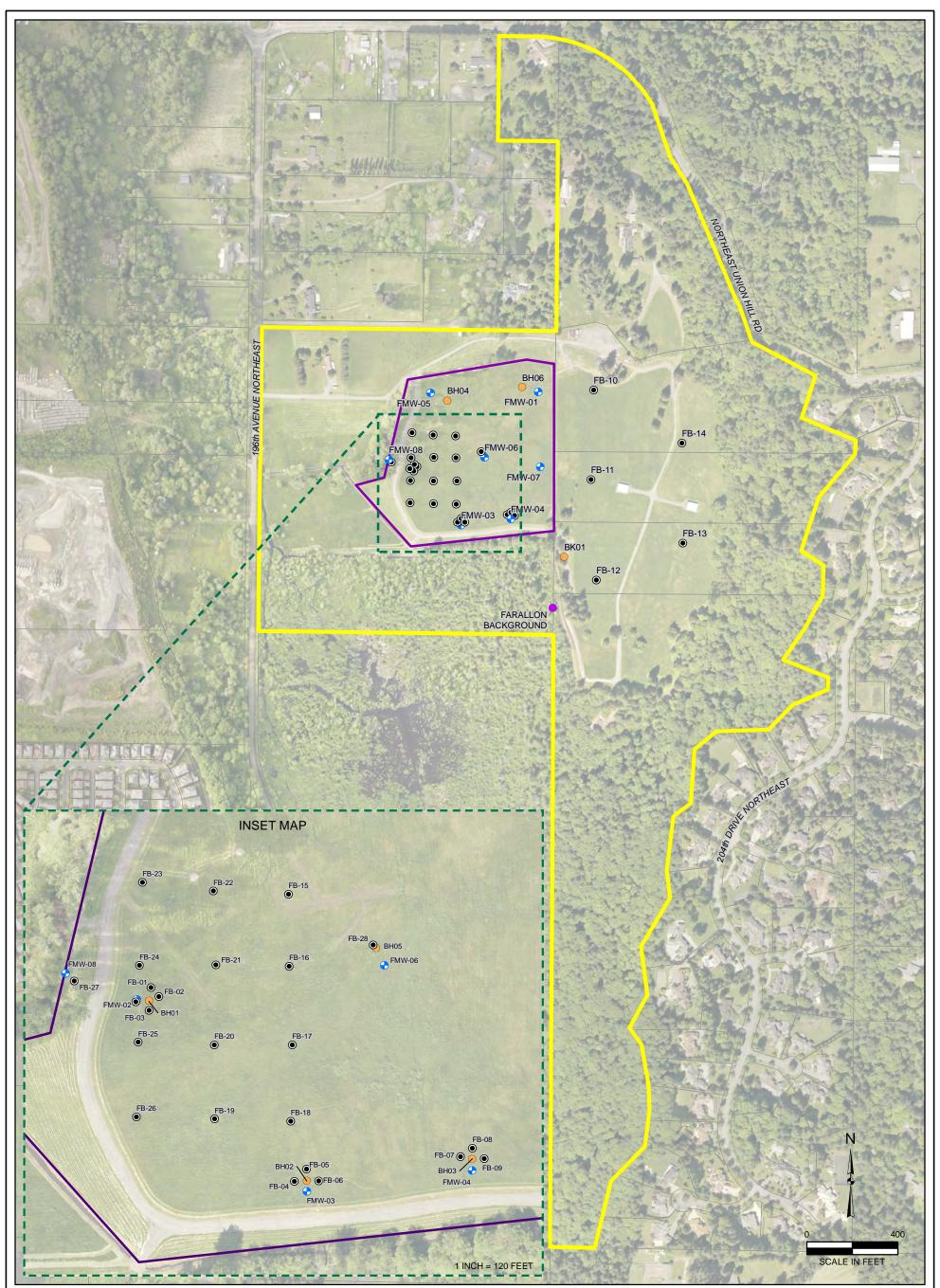
FIGURES

REMEDIAL INVESTGATION REPORT Thompson Field Site Portion of King County Parcel No. 0825069104 Redmond, WA

Farallon PN: 650-031







- MONITORING WELL (FARALLON, 2020)
- BORING (FARALLON, 2020)
- BORING (ECOLOGY & ENVIRONMENT, INC, 2019)
- BACKGROUND GRAB SAMPLE (FARALLON, 2019)

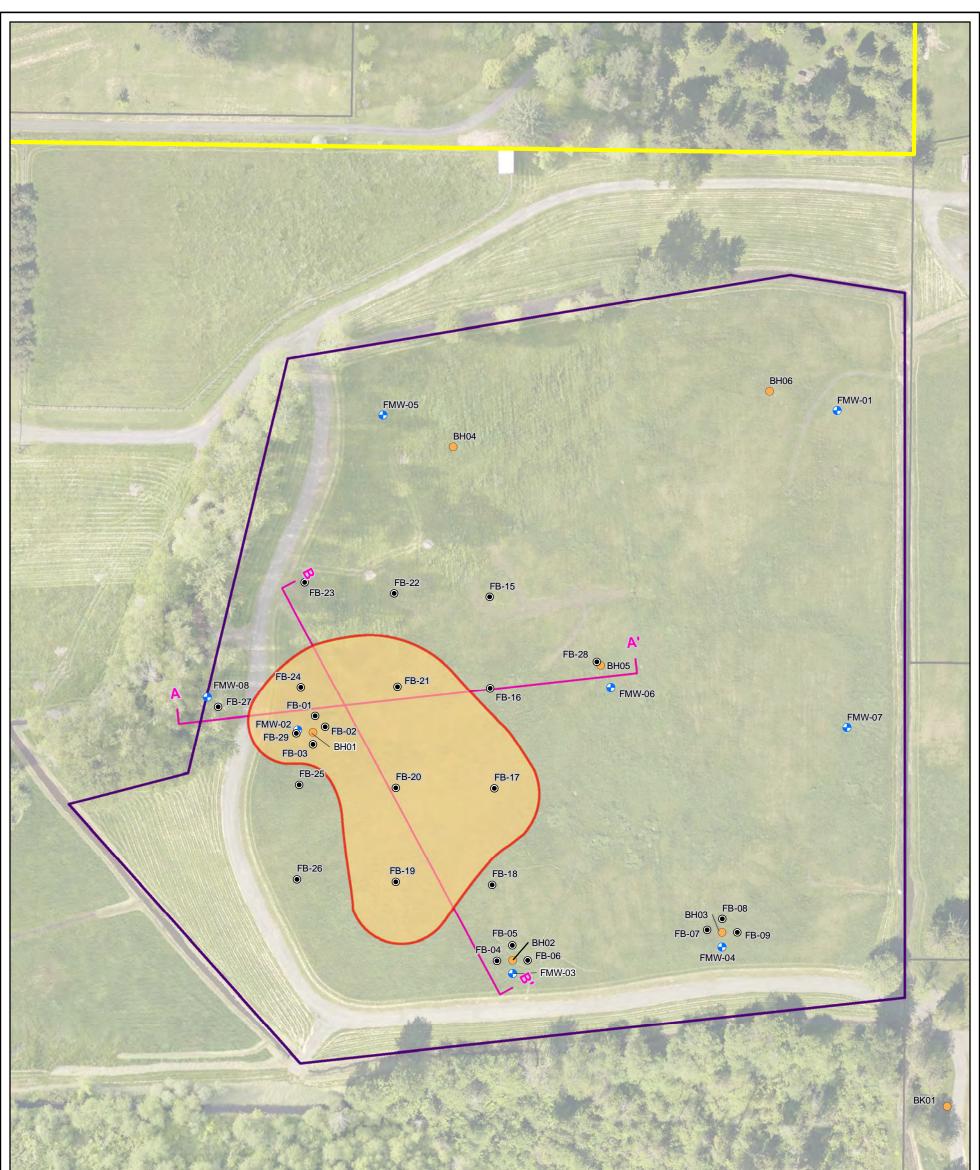
THOMPSON FIELD BOUNDARY

PROPERTY BOUNDARY

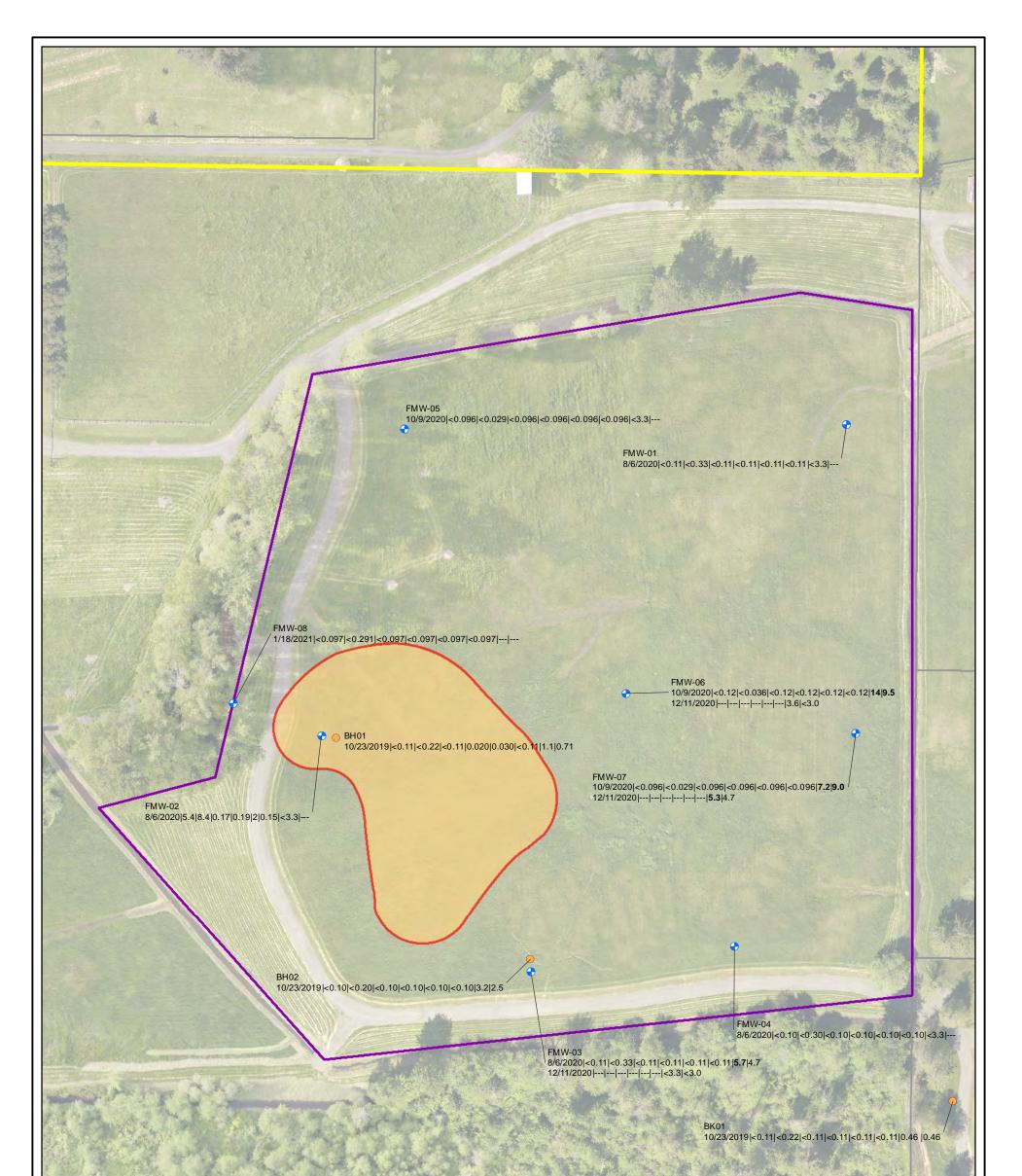
KING COUNTY PARCEL BOUNDARY

NOTES: 1. ALL LOCATIONS ARE APPROXIMATE. 2. FIGURES WERE PRODUCED IN COLOR. GRAYSCALE COPIES MAY NOT REPRODUCE ALL ORIGINAL INFORMATION.

	Washington Issaquah Bellingham Seattle	FIGURE 2	
	Oregon Portland Baker City	PROPERTY PLAN THOMPSON FIELD	
FARALLON Consulting	California Oakland Folsom Irvine	PORTION OF KING COUNTY PARCEL NUMBER 0825069104 REDMOND, WASHINGTON	
Quality Service for Environmenta	al Solutions farallonconsulting.com		
		FARALLON PN: 650-031	
Drawn By: jjones	Checked By: SB	Date: 3/24/2021	Disc Reference:
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N 0 100 SCALE IN FEET				FARALLON BACKGROUND
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BORING (FARALLON, 2020)	2.11001	Washington		
BORING (ECOLOGY & ENVIRONMENT, INC, 2019)		Issaquah Bellingham Seattle	FIGU	RF 3
BACKGROUND GRAB SAMPLE (FARALLON, 2019)				
SOIL CONTAMINATION IDENTIFIED BY THE INVESTIGATIONS CONDUCTED TO DATE		Oregon Portland Baker City	SITE F THOMPSO	
ESTIMATED SITE BOUNDARY	Farallon	California	PORTION OF K	
PROPERTY BOUNDARY	CONSULTING	Oakland Folsom Irvine	PARCEL NUMB	
THOMPSON FIELD BOUNDARY	Quality Service for Environmer	ntal Solutions farallonconsulting.com	REDMOND, W	ASHINGTON
KING COUNTY PARCEL BOUNDARY			FARALLON	PN: 650-031
	Drawn By: jjones	Checked By: SB	Date: 3/24/2021	Disc Reference:
CROSS-SECTION		Path: Q:\Projects\650 Nelson P	roperties\650031 Gunshy Farm\Mapfiles\006	_Results_202103\Figure-03_SiteFigure.mxd



NOTES GROUNDWATER RESULTS SHOWN AS SAMPLE DATE | NAPHTHALENE | TOTAL NAPHTHALENE | ANTHRACENE | FLUORANTHENE | PHENANTHRENE | PYRENE | TOTAL ARSENIC | DISSOLVED ARSENIC ANALYTICAL RESULTS IN MICROGRAMS PER LITER **BOLD** = CONCENTRATIONS THAT EXCEED MTCA CLEANUP LEVELS < = ANALYTE NOT DETECTED AT OR EXCEEDING THE REPORTING LIMIT LISTED = SAMPLE NOT ANALYZED MTCA = WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION

- cPAH TEC = CARCINOGENIC POLYCYCLIC AROMATIC HYDROCARBON TOXIC EQUIVALENT CONCENTRATION PAH = POLYCYCLIC AROMATIC HYDROCARBON

LEGEND

- MONITORING WELL (FARALLON, 2020) •
- BORING (ECOLOGY & ENVIRONMENT, INC, 2019) \bigcirc
- SOIL WITH cPAH TECs ABOVE MTCA METHOD A CLEANUP LEVEL

ESTIMATED SITE BOUNDARY

THOMPSON FIELD BOUNDARY

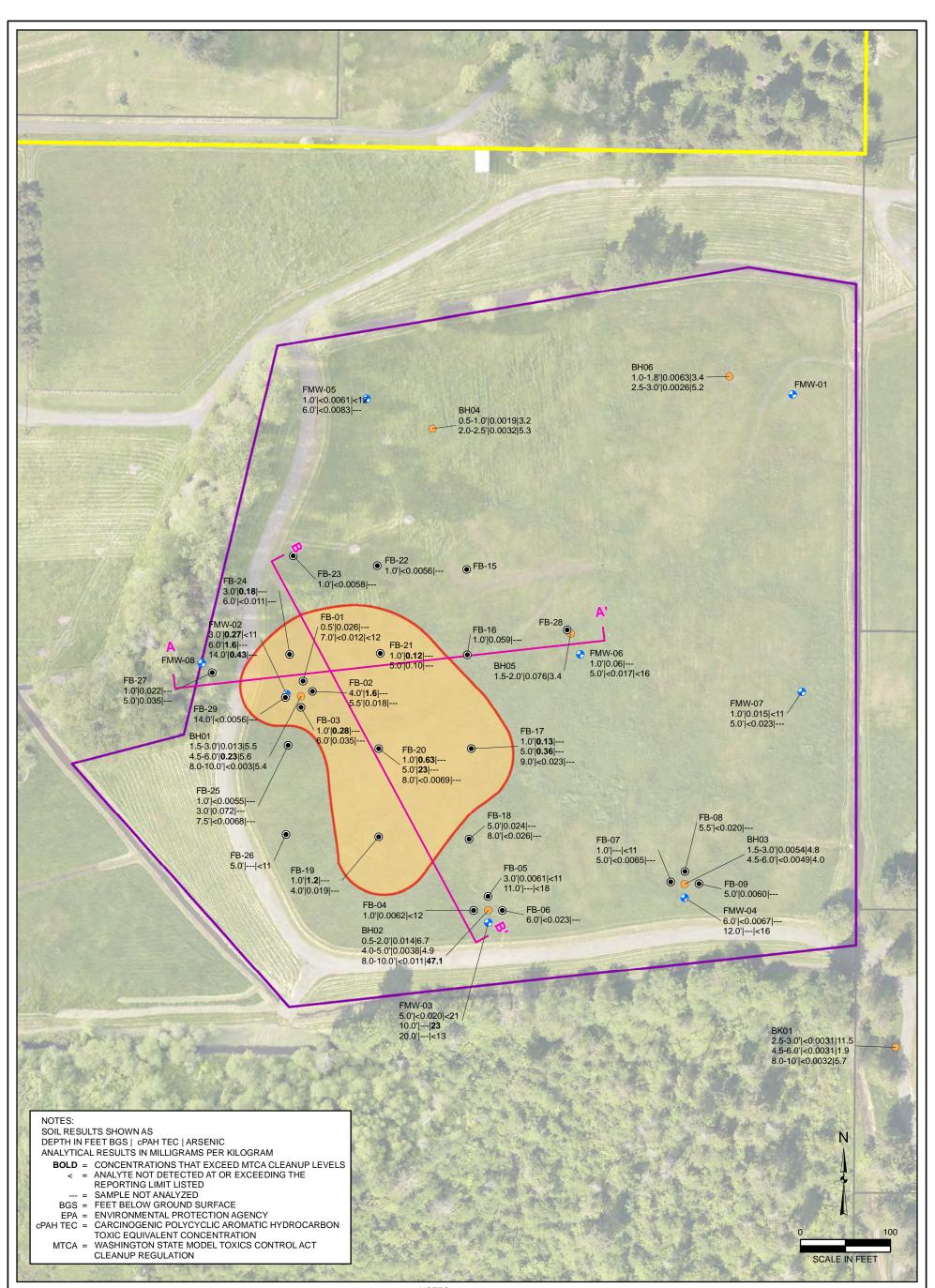
PROPERTY BOUNDARY

KING COUNTY PARCEL BOUNDARY

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	Washington Issaquah Bellingham Seattle	FIGURE 4
	Oregon Portland Baker City	GROUNDWATER ANALYTICAL RESULTS FOR PAHs AND ARSENIC THOMPSON FIELD
FARALLON Consulting	California Oakland Folsom Irvine	PORTION OF KING COUNTY PARCEL NUMBER 0825069104
Quality Service for Environmer	ntal Solutions farallonconsulting.com	REDMOND, WASHINGTON FARALLON PN: 650-031
Drawn By: jjones	Checked By: SB	Date: 3/24/2021 Disc Reference:
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- MONITORING WELL (FARALLON, 2020)
- BORING (FARALLON, 2020)
- BORING (ECOLOGY & ENVIRONMENT, INC, 2019)
 SOIL WITH cPAH TECs ABOVE MTCA METHOD A
 CLEANUP LEVEL

ESTIMATED SITE BOUNDARY

THOMPSON FIELD BOUNDARY

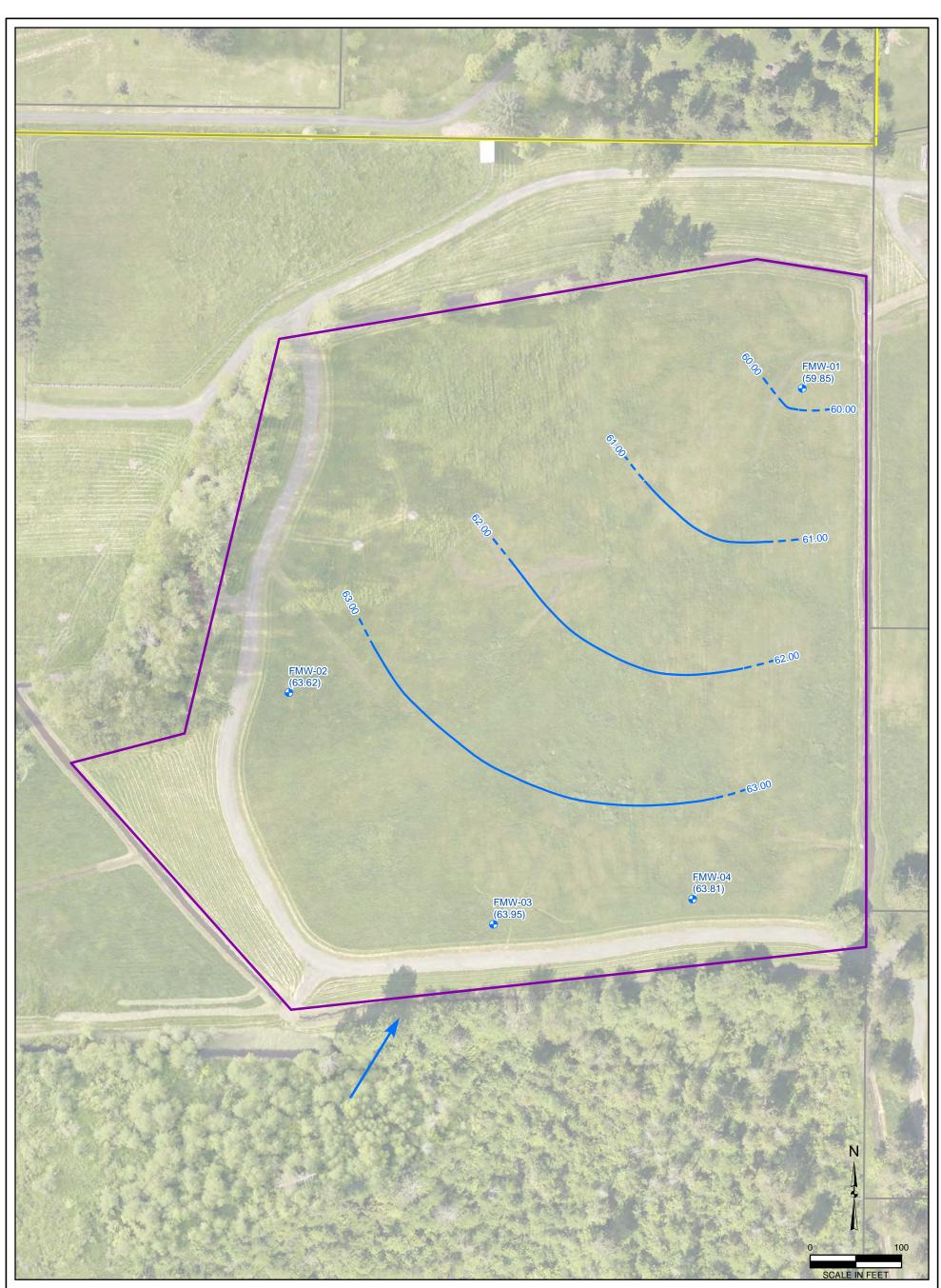
PROPERTY BOUNDARY

KING COUNTY PARCEL BOUNDARY

CROSS-SECTION

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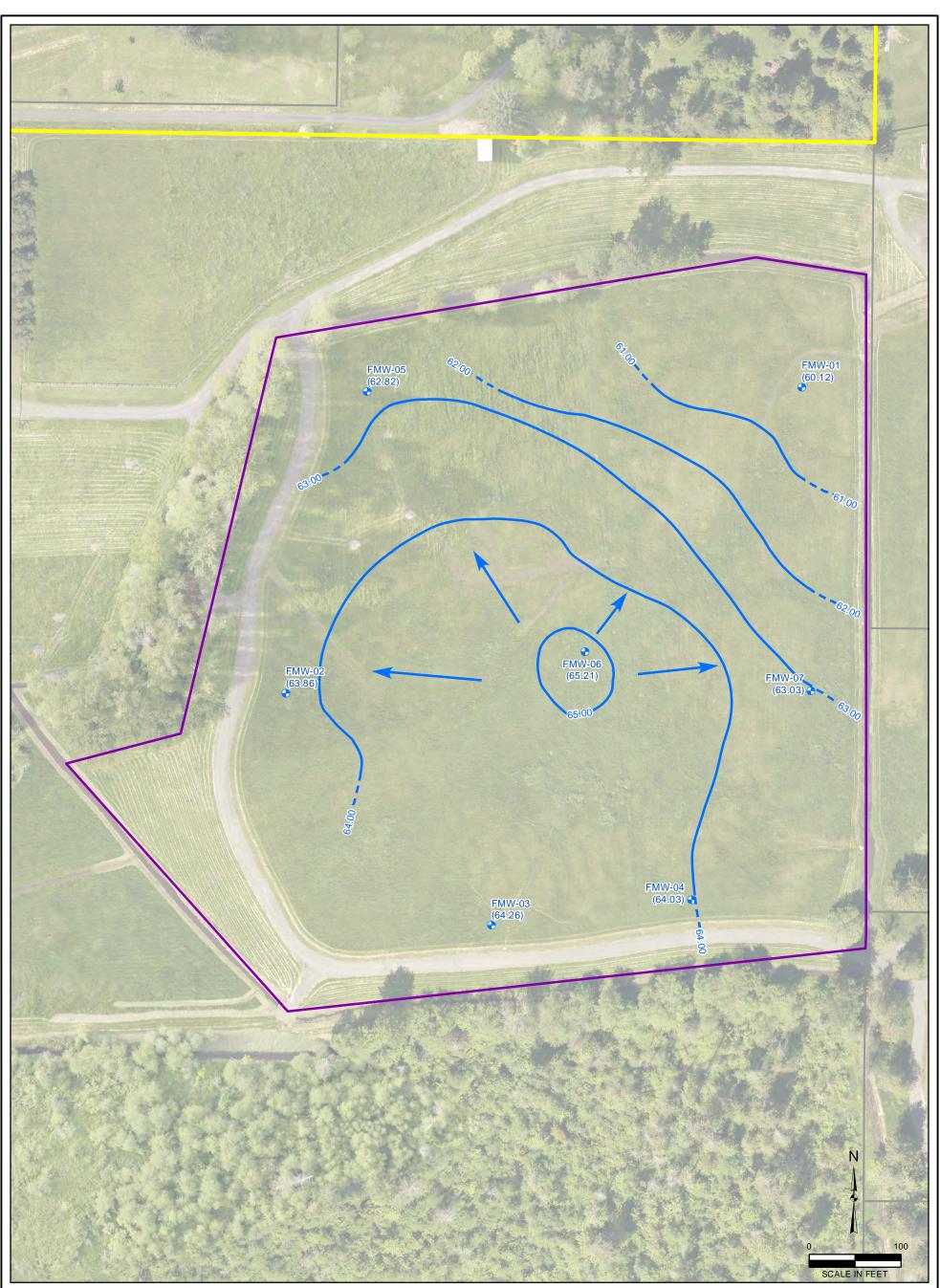
	Washington Issaquah Bellingham Seattle	FIGURE 5				
-	Oregon Portland Baker City	SOIL ANALYTICAL RESULTS FOR CPAH TEC AND ARSENIC THOMPSON FIELD	t l			
FARALLON Consulting	California Oakland Folsom Irvine	PORTION OF KING COUNTY PARCEL NUMBER 0825069104				
Quality Service for Environmen	tal Solutions farallonconsulting.com					
		FARALLON PN: 650-031				
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	MONITORING WELL (FARALLON, 2020)
	THOMPSON FIELD BOUNDARY
	PROPERTY BOUNDARY
	KING COUNTY PARCEL BOUNDARY
\rightarrow	INFERRED GROUNDWATER FLOW DIRECTION
65.00	GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
(63.95)	GROUNDWATER ELEVATION IN FEET RELATIVE TO NORTH AMERICAN VERTICAL DATUM OF 1988
	GROUNDWATER GRADIENT OF 0.006 FEET/FOOT

NOTES: 1. ALL LOCATIONS ARE APPROXIMATE. 2. FIGURES WERE PRODUCED IN COLOR. GRAYSCALE COPIES MAY NOT REPRODUCE ALL ORIGINAL INFORMATION. Washington

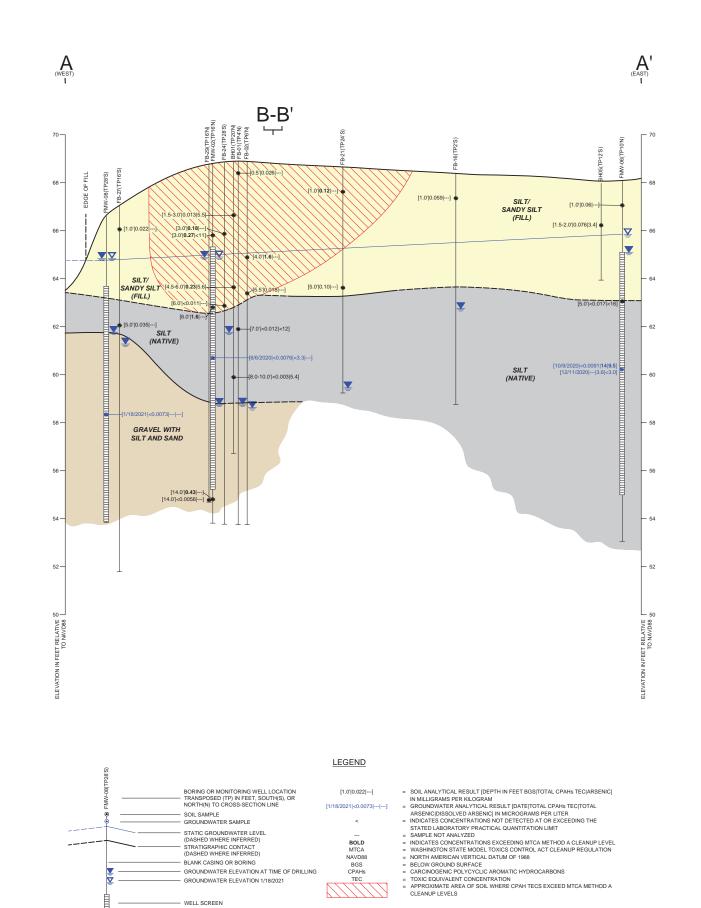
	Issaquah Bellingham Seattle	FIGURE 6	
FARALLON CONSULTING	Oregon Portland Baker City California Oakland Folsom Irvine	GROUNDWATER FLOW DIRECTION AUGUST 6, 2020 THOMPSON FIELD PORTION OFbKING COUNTY PARCEL NUMBER 0825069104	
Quality Service for Environmental	Solutions farallonconsulting.com	REDMOND, WASHINGTON FARALLON PN: 650-031	
Drawn By: jjones	Checked By: SB	Date: 3/24/2021 Disc	Reference:
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•	MONITORING WELL (FARALLON, 2020) THOMPSON FIELD BOUNDARY		CATIONS ARE APPROXIMATE. S WERE PRODUCED IN COLOR. GRAYS	CALE COPIES MAY NOT REPRODUCE ALL ORIGINAL IN	NFORMATION.
	PROPERTY BOUNDARY		Washington Issaquah Bellingham Seattle	FIGURE 7	
	KING COUNTY PARCEL BOUNDARY INFERRED GROUNDWATER FLOW DIRECTION		Oregon Portland Baker City	GROUNDWATER FLOW DIRECTIO OCTOBER 9, 2020 THOMPSON FIELD	NC
5.00	GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)	FARALLON Consulting	California Oakland Folsom Irvine	PORTION OF KING COUNTY PARCEL NUMBER 0825069104	
(65.21)	GROUNDWATER ELEVATION IN FEET RELATIVE TO NORTH AMERICAN VERTICAL DATUM OF 1988	Quality Service for Environmental	I Solutions farallonconsulting.com	REDMOND, WASHINGTON FARALLON PN: 650-031	
	GROUNDWATER GRADIENT OF 0.05 TO 0.007 FEET/FOOT	Drawn By: jjones	Checked By: SB	Date: 3/24/2021	Disc Reference

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WELL SCREEN

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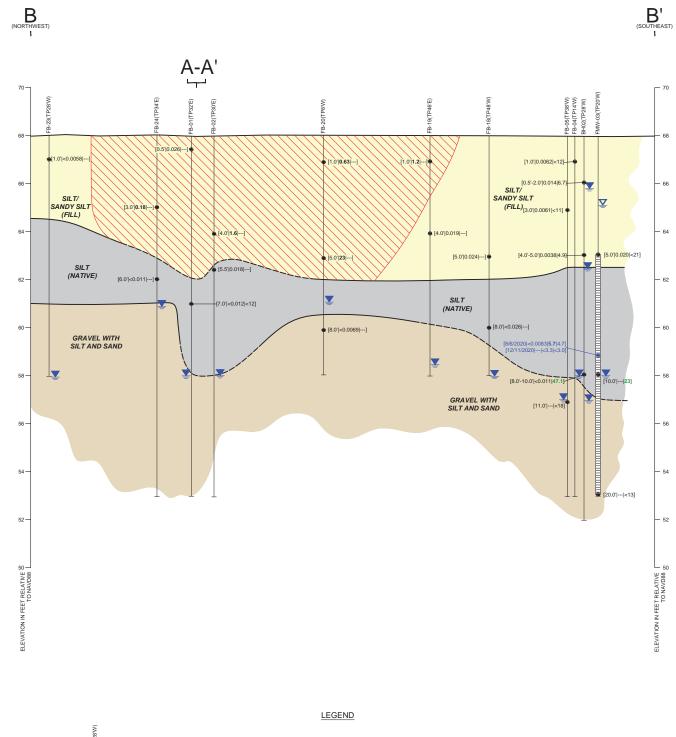


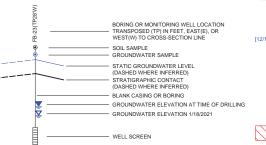
FIGURE 8

CROSS SECTION A-A' THOMPSON FIELD PORTION OF KING COUNTY PARCEL NUMBER 0825069104 REDMOND, WASHINGTON

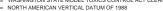
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FARALLON PN:650-031 Date: 3/4/2021









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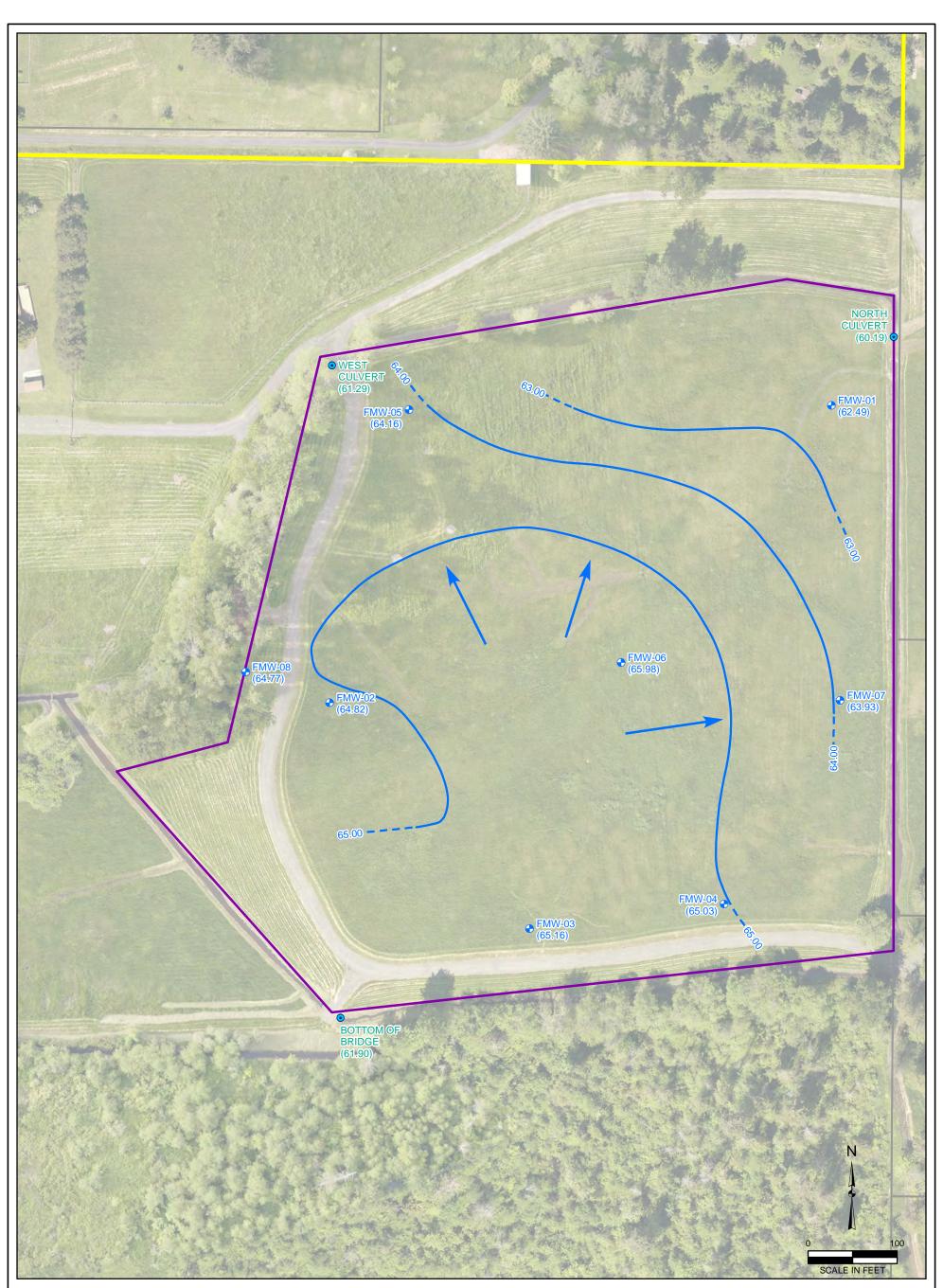
Oregc Portland | Baker City Californ

FIGURE 9

CROSS SECTION B-B' THOMPSON FIELD PORTION OF KING COUNTY PARCEL NUMBER 0825069104 REDMOND, WASHINGTON

Drawn By: NM Checked By: SB

FARALLON PN:650-03 Date: 3/4/2021



۲	ſ	GROUNDWATER GRADIENT OF 0.02 TO 0.0125 FEET/FOOT	NOTES: 1. ALL LOCATIONS ARE APPROXIMAT 2. EICURES WERE PRODUCED IN CO	E. LOR. GRAYSCALE COPIES MAY NOT REPRODUCE ALL ORIGINAL INF	
	MONITORING WELL (FARALLON, 2020) THOMPSON FIELD BOUNDARY		Washington Issaquah Bellingham Seattle	FIGURE 10	ORMATION.
	PROPERTY BOUNDARY KING COUNTY PARCEL BOUNDARY		Oregon Portland Baker City	GROUNDWATER FLOW DIRECTION JANUARY 18, 2021	
65.00	INFERRED GROUNDWATER FLOW DIRECTION GROUNDWATER ELEVATION CONTOUR	FARALLON Consulting	California Oakland Folsom Irvine	THOMPSON FIELD PORTION OF KING COUNTY PARCEL NUMBER 0825069104	
(65.21)	(DASHED WHERE INFERRED) GROUNDWATER ELEVATION IN FEET RELATIVE TO NORTH AMERICAN VERTICAL DATUM OF 1988	Quality Service for Environmental	Solutions farallonconsulting.com	REDMOND, WASHINGTON FARALLON PN: 650-031	
(61.90)	SURFACE GROUNDWATER ELEVATION IN FEET RELATIVE TO NORTH AMERICAN VERTICAL DATUM OF 1988	Drawn By: jjones	Checked By: SB Path: Q:\Projects\650 Nelson Propert	Date: 3/24/2021 Disc ies\650031 Gunshy Farm\Mapfiles\006_Results_202103\Figure-10_GW-20	c Reference: 021-01-18.mxd

TABLES

REMEDIAL INVESTGATION REPORT Thompson Field Site Portion of King County Parcel No. 0825069104 Redmond, WA

Farallon PN: 650-031

Table 1Groundwater ElevationsThompson FieldKing County Parcel No. 0825069104Redmond, WashingtonFarallon PN: 650-031

Location	Top of Monument Elevation (feet NAVD88) ¹	Top of Casing Elevation (feet NAVD88) ¹	Monitoring Date	Depth to Water (feet) ²	Water Level Elevation (feet NAVD88) ¹
Location	(Itel IAV Doo)	(leet IVA V Doo)	8/6/2020	6.60	59.85
					60.12
			10/9/2020	6.33	
FMW-01	66.86	66.45	11/9/2020	5.61	60.84
FIVI W-01	00.80	00.43	11/30/2020	5.20	61.25
			12/11/2020 1/8/2021	5.31 3.50	61.14
					62.95
			1/18/2021	3.96	62.49
			8/6/2020	5.18	63.62
			10/9/2020	4.94	63.86
	CO 00	CO OO	11/9/2020	4.64	64.16
FMW-02	69.09	68.80	11/30/2020	4.48	64.32
			12/11/2020	4.46	64.34
			1/8/2021	3.73	65.07
			1/18/2021	3.98	64.82
			8/6/2020	3.95	63.95
			10/9/2020	3.64	64.26
		67.90	11/9/2020	3.36	64.54
FMW-03	68.22		11/30/2020	3.20	64.70
			12/11/2020	3.17	64.73
			1/8/2021	2.51	65.39
			1/18/2021	2.74	65.16
			8/6/2020	4.28	63.81
			10/9/2020	4.06	64.03
			11/9/2020	3.76	64.33
FMW-04	68.45	68.09	11/30/2020	3.59	64.50
			12/11/2020	3.55	64.54
			1/8/2021	2.55	65.54
			1/18/2021	3.06	65.03
			10/9/2020	6.01	62.82
			11/9/2020	5.61	63.22
FMW-05	69.10	68.83	11/30/2020	5.36	63.47
			12/11/2020	5.41	63.42
			1/8/2021	4.39	64.44
			1/18/2021	4.67	64.16
			10/9/2020	3.00	65.21
			11/9/2020	2.66	65.55
FMW-06	68.46	68.21	11/30/2020	2.28	65.93
	00.10		12/11/2020	2.26	65.95
			1/8/2021	1.15	67.06
			1/18/2021	2.23	65.98
			10/9/2020	3.01	63.03
			11/9/2020	2.22	63.82
FMW-07	66.37	66.04	11/30/2020	1.92	64.12
11111 07	00.07	00.04	12/11/2020	2.03	64.01
			1/8/2021	1.96	64.08
			1/18/2021	2.11	63.93
FMW-08	66.91	66.68	1/18/2021	1.91	64.77

Table 1 Groundwater Elevations Thompson Field King County Parcel No. 0825069104 Redmond, Washington Farallon PN: 650-031

Location	Top of Monument Elevation (feet NAVD88) ¹	Top of Casing Elevation (feet NAVD88) ¹	Monitoring Date	Depth to Water (feet) ²	Water Level Elevation (feet NAVD88) ¹
		Surface	e Water		
			12/11/2020	5.15	61.85
Bottom of Bridge	NA	67.00	1/8/2021	4.74	62.26
			1/18/2021	5.10	61.90
			12/11/2020		
West Culvert	NA	62.44	1/8/2021	0.85	61.59
			1/18/2021	1.15	61.29
			12/11/2020	2.31	60.23
North Culvert	NA	62.54	1/8/2021	2.15	60.39
			1/18/2021	2.35	60.19

Notes:

¹ In feet referenced to North American Vertical Datum of 1988 (NAVD88).

² In feet below top of well casing.

Table 2Soil Analytical Results for Total Petroleum Hydrocarbons and BTEX
Thompson FieldKing County Parcel No. 0825069104
Redmond, Washington
Farallon PN: 650-031

								An	alytical Results (1	nilligrams per k	ilogram)		
						NWTP	PH-Dx ²	NWTPH-Dx Sili	ca Gel Cleanup ²		EPA	8260D ³	
	Sample	Complet Dr.		Sample Depth (feet) ¹	Sample Date	DRO	ORO	DRO	ORO	D	Toluene	F41	V-l
Sample Location	Туре	Sampled By	Sample Identification	· · ·	· ·			1		Benzene		Ethylbenzene	Xylenes
	Split	E&E	BH01SB01	1.5-3.0	10/23/2019	< 39	< 97			< 0.0055	< 0.0055	< 0.0055	< 0.011
		Farallon	BH01-01	2.5	10/23/2019	< 29	64	< 29	< 58				
BH01	Split	E&E	BH01SB02	4.5-6.0	10/23/2019	< 42	< 110			< 0.0055	< 0.0055	0.0029 J	0.00636 J
		Farallon	BH01-02	7.5	10/23/2019	40 N	180	40 N	130				
	Split	E&E	BH01SB03	8.0-10.0	10/23/2019	< 36	< 89			< 0.010	< 0.010	< 0.010	< 0.020
	-	Farallon	BH01-03	10.0	10/23/2019	< 29	< 59	< 29	< 59				
	Split	E&E	BH02SB01	0.5-2.0	10/23/2019	< 38	500			< 0.0045	< 0.0045	< 0.0045	< 0.0090
	1	Farallon	BH02-01	2.0-4.0	10/23/2019	< 45	490	< 55	340				
BH02	Split	E&E	BH02SB02	4.0-5.0	10/23/2019	< 64	< 160			< 0.0065	< 0.0065	< 0.0065	< 0.013
-		Farallon	BH02-02	5.0-6.0	10/23/2019	190 N	1,000	46 N	200				
	Split	Farallon	BH02-03	8.0-10.0	10/23/2019	< 120	740	< 120	< 230				
	opin	E&E	BH02SB03	8.0-10.0	10/23/2019	< 140	< 360			< 0.071 UJ	0.014 J	< 0.071 UJ	< 0.142 UJ
	Split	E&E	BH03SB01	1.5-3.0	10/23/2019	< 40	< 99			< 0.0049	< 0.0049	< 0.0049	< 0.0098
BH03	opin	Farallon	BH03-01	2.0-4.0	10/23/2019	< 28	110	< 28	77				
DII05	Split	E&E	BH03SB02	4.5-6.0	10/23/2019	< 61	< 150			< 0.017	0.0047 J	< 0.017	< 0.034
	Spiit	Farallon	BH03-02	6.0-7.5	10/23/2019	200 N	710	60 N	100				
	Normal	E&E	BH04SB01	0.5-1.0	11/6/2019	< 40	< 100			< 0.0045	< 0.0045	< 0.0045	< 0.0090
BH04	Salit	E&E	BH04SB02	2.0-2.5	11/6/2019	< 42	< 100			< 0.0057	0.00083 J	< 0.0057	< 0.0114
	Split	Farallon	BH04-02	2.0-2.5	11/6/2019	< 29	450	< 29	270				
		E&E	BH05SB01	1.5-2.0	11/6/2019	< 38	< 96			< 0.0051	< 0.0051	< 0.0051	< 0.0102
BH05	Split	Farallon	BH05-02	1.5-2.0	11/6/2019	< 29	170	< 29	110				
		E&E	BH05SB02	1.5-2.0	11/6/2019	< 39	140			< 0.0060	< 0.0060	< 0.0060	< 0.0120
	Normal	E&E	BH06SB01	1.0-1.8	11/6/2019	< 39	< 97			< 0.0049	< 0.0049	< 0.0049	< 0.0098
BH06	G 11.	E&E	BH06SB02	2.5-3.0	11/6/2019	< 38	< 96			< 0.0065	< 0.0065	< 0.0065	< 0.0130
	Split	Farallon	BH06-02	2.5-3.0	11/6/2019	< 32	< 63	< 32	< 63				
Farallon Background	Normal	Farallon	Farallon Background	0.0	11/6/2019	< 54	320	< 54	< 110				
FB-01	Normal	Farallon	FB-01-7.0	7.0	7/30/2020			< 59	< 120				
FB-02	Normal	Farallon	FB-02-5.5	5.5	7/30/2020			< 32	80				
FB-03	Normal	Farallon	FB-03-6.0	6.0	7/30/2020			< 72	230				
FB-04	Normal	Farallon	FB-04-1.0	1.0	7/30/2020			< 29	65				
FB-05	Normal	Farallon	FB-05-3.0	3.0	7/30/2020			< 28	61				
FB-06	Normal	Farallon	FB-06-6.0	6.0	7/30/2020			< 120	340				
FB-07	Normal	Farallon	FB-07-5.0	5.0	7/31/2020			41 N	160	< 0.0021	< 0.010	< 0.0021	< 0.0062
FB-08	Normal	Farallon	FB-08-5.5	5.5	7/31/2020			< 99	260	< 0.0068	< 0.034	< 0.0068	< 0.0208
FB-09	Normal	Farallon	FB-09-5.0	5.0	7/31/2020			34 N	88	< 0.0012	< 0.0061	< 0.0012	< 0.0036
FB-26	Normal	Farallon	FB-26-5.0	5.0	10/1/2020	< 56	310	< 56	< 110				
MTCA Method A Clean						2,000	2,000	2,000	2,000	0.03	7	6	9

Table 2 Soil Analytical Results for Total Petroleum Hydrocarbons and BTEX Thompson Field King County Parcel No. 0825069104 **Redmond**, Washington Farallon PN: 650-031

						Analytical Results (milligrams per kilogram)							
						NWTP	PH-Dx ²	NWTPH-Dx Sili	ca Gel Cleanup ²		EPA	A 8260D ³	
	Sample			Sample Depth									
Sample Location	Туре	Sampled By	Sample Identification	(feet) ¹	Sample Date	DRO	ORO	DRO	ORO	Benzene	Toluene	Ethylbenzene	Xylenes
FMW-02	Normal	Farallon	FMW-02-3.0	3.0	7/30/2020			60 N	260				
FMW-03	Normal	Farallon	FMW-03-5.0	5.0	7/31/2020			< 100	210				
FMW-04	Normal	Farallon	FMW-04-6.0	6.0	7/31/2020			41 N	120	< 0.0017	< 0.0084	< 0.0017	< 0.0050
FMW-05	Normal	Farallon	FMW-05-1.0	1.0	10/1/2020	< 30	210	< 30	120				
FMW-06	Normal	Farallon	FMW-06-5.0	5.0	10/1/2020	< 81	300	< 81	< 160				
FMW-07	Normal	Farallon	FMW-07-1.0	1.0	10/1/2020	< 28	< 57	< 28	< 57				
	-					Upland Sample	Locations	•					
FB-10	Normal	Farallon	FB-10-1.0	1.0	9/30/2020	< 29	73	< 29	< 59				
FB-12	Normal	Farallon	FB-12-1.0	1.0	9/30/2020	< 29	< 58	< 29	< 58				
FB-13	Normal	Farallon	FB-13-3.0	3.0	9/30/2020	< 28	< 55	< 28	< 55				
MTCA Method A Clear	nup Levels fo	or Soil ⁴				2,000	2,000	2,000	2,000	0.03	7	6	9

NOTES:

< denotes analyte not detected at or exceeding the laboratory reporting limit listed.

- denotes sample not analyzed.

¹Depth in feet below ground surface.

²Analyzed by Northwest Method NWTPH-Dx treated without and with a silica gel cleanup process.

³Analyzed by U.S. Environmental Protection Agency (EPA) Method 8260D.

⁴Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A Soil Cleanup Levels for Unrestricted Land Uses, Table 740-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised 2013.

BTEX = benzene, toluene, ethylbenzene, and xylenes DRO = total petroleum hydrocarbons (TPH) as diesel-range organics E&E = Ecology and Environment, Inc. Farallon = Farallon Consulting, L.L.C. J = result is an estimate

ORO = TPH as oil-range organics

UJ = analyte not detected and reporting limit is an estimate

N = hydrocarbons in the oil-range are impacting the diesel-range result

Table 3 Soil Analytical Results for Volatile Organic Compounds Thompson Field King County Parcel No. 0825069104 Redmond, Washington Farallon PN: 650-031

					Analytical Results (milligrams per kilogram) ²
ample Location	Sample Identification	Sample Depth (feet) ¹	Sample Date	2-Butanone (Methyl Ethyl Ketone)	Acetone	Carbon Disulfide
	BH01SB01	1.5-3.0	10/23/2019	< 0.011	0.0077 J	< 0.0055
BH01	BH01SB02	4.5-6.0	10/23/2019	0.017	0.055	0.00091 J
-	BH01SB03	8.0-10.0	10/23/2019	< 0.020	0.025	< 0.010
	BH02SB01	0.5-2.0	10/23/2019	< 0.0091	0.019	< 0.0045
BH02	BH02SB02	4.0-5.0	10/23/2019	< 0.013	0.026	< 0.0065
	BH02SB03	8.0-10.0	10/23/2019	0.25 J	0.66 J	0.025 J
BH03	BH03SB01	1.5-3.0	10/23/2019	0.0079 J	0.041	< 0.0049
BH05	BH03SB02	4.5-6.0	10/23/2019	0.26	0.78	< 0.017
DU04	BH04SB01	0.5-1.0	11/6/2019	< 0.0089	< 0.0089	< 0.0045
BH04	BH04SB02	2.0-2.5	11/6/2019	0.0055 J	< 0.031	< 0.0057
BH05	BH05SB01	1.5-2.0	11/6/2019	< 0.010	< 0.025	< 0.0051
BH06	BH06SB01	1.0-1.8	11/6/2019	< 0.0099	< 0.011	< 0.0049
DH00	BH06SB02	2.5-3.0	11/6/2019	0.006 J	< 0.070	< 0.0065
FB-07	FB-07-5.0	5.0	7/31/2020	0.23	1.0 J	0.024
FB-08	FB-08-5.5	5.5	7/31/2020	0.94	4.5 E	< 0.0068
FB-09	FB-09-5.0	5.0	7/31/2020	0.031	0.22 J	< 0.0012
FMW-04	FMW-04-6.0	6.0	7/31/2020	0.049	0.50 J	< 0.0017
CA Cleanup Lev	vels for Soil ³			48,000	72,000	8,000

NOTES:

Results in **bold** and highlighted yellow denote concentrations exceeding MTCA cleanup levels.

< denotes analyte not detected at or exceeding the reporting limit listed.

¹Depth in feet below ground surface.

²Analyzed by U.S. Environmental Protection Agency Method 8260/8260D. Only detected and select analytes shown in table; see lab report for full list of analytes.

³Washington State Cleanup Levels and Risk Calculations (CLARC) under Washington State MTCA, Standard Method B Formula Values for Soil from CLARC Master spreadsheet updated January 2020,

https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Contamination-clean-up-tools/CLARC unless otherwise noted.

⁴Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A Soil Cleanup Levels for Unrestricted Land Uses, Table 740-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised 2013. E = result exceeds the quantitation range and is an estimate J = result is an estimate

Methylene Chloride
0.0036 J
< 0.0055
< 0.010
< 0.0045
< 0.0065
0.062 J
< 0.0049
0.023
< 0.0045
< 0.0057
< 0.0051
< 0.0049
< 0.0065
< 0.010
< 0.034
< 0.0061
< 0.0084
0.024

Table 4Soil Analytical Results for PAHsThompson FieldKing County Parcel No. 0825069104Redmond, WashingtonFarallon PN: 650-031

												Analytical R	esults (millig	rams per kil	ogram) ²								
									Non-Carcin	ogenic PAH			usuus (iiiiig	, and per in	ogram)				Carcinog	enic PAHs			
					lene	lene	les ³				ene						ene	thene	nthene		racene	yrene	
Sample Location	Sample Identification	Sample Depth (feet) ¹	Sample Date	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Total Naphthalenes	Acenaphthene	Acenaphthylene	Anthracene	Benzo(g,h,i)Perylene	Fluoranthene	Fluorene	Phenanthrene	Pyrene	Benzo(a)Pyrene	Benzo(a)Anthracene	Benzo(b)Fluoranthene	Benzo(j,k)Fluoranthene	Chrysene	Dibenzo(a,h)Anthracene	Indeno(1,2,3-cd)Py	Total cPAHs TEC ^{4,5}
	BK01SB01	2.5-3.0	10/23/2019	< 0.0041		< 0.0041	< 0.0082	< 0.0041	< 0.0041	< 0.0041	< 0.0041	< 0.0041	< 0.0041	< 0.0041	< 0.0041	< 0.0041	< 0.0041	< 0.0041	< 0.0041	< 0.0041	< 0.0041	< 0.0041	< 0.0031
BK01	BK01SB02	4.5-6.0	10/23/2019	< 0.0041		< 0.0041	< 0.0082	< 0.0041	< 0.0041	< 0.0041	< 0.0041	< 0.0041	< 0.0041	< 0.0041	< 0.0041	< 0.0041	< 0.0041	< 0.0041	< 0.0041	< 0.0041	< 0.0041	< 0.0041	< 0.0031
	BK01SB03	8.0-10	10/23/2019	< 0.0042		< 0.0042	< 0.0084	< 0.0042	< 0.0042	< 0.0042	< 0.0042	< 0.0042	< 0.0042	< 0.0042	< 0.0042	< 0.0042	< 0.0042	< 0.0042	< 0.0042	< 0.0042	< 0.0042	< 0.0042	< 0.0032
BH01	BH01SB01	1.5-3.0	10/23/2019	0.0026 J		0.0011 J	0.0037	0.0042	< 0.0039	0.0062	0.0064	0.025	0.005	0.026	0.022	0.010	0.0099	0.013	0.0041	0.0093	0.0014 J	0.0055	0.013 0.23
BH01	BH01SB02	4.5-6.0	10/23/2019	0.14		0.033	0.173	0.077	0.0035 J	0.12	0.089	0.58 J	0.12	0.61	0.55	0.16	0.23	0.23	0.061	0.24	0.031	0.082	< 0.003
	BH01SB03 BH02SB01	8.0-10.0 0.5-2.0	10/23/2019 10/23/2019	< 0.004 0.0055		< 0.004 0.006	< 0.008 0.0115	< 0.004 0.0046	< 0.004 0.0038 J	< 0.004	< 0.004 0.0067	< 0.004 0.043	< 0.004	< 0.004 0.053	< 0.004 0.0310	< 0.004 0.0096	< 0.004 0.019	< 0.004	< 0.004	< 0.004	< 0.004 0.0019 J	< 0.004 0.0048	0.014
BH02	BH02SB01 BH02SB02	4.0-5.0	10/23/2019	0.0055 0.0011 J		< 0.0051	0.00115	0.0046 0.0013 J	< 0.0051	< 0.009	< 0.0051	0.043 0.0016 J	0.0081 0.0012 J	0.053 0.0026 J	0.0310 0.0015 J	< 0.0096	< 0.0051	0.016 0.0017 J	< 0.0041	0.024 0.0013 J	< 0.0019 J	< 0.0048	0.0038
D1102	BH02SB03	8.0-10.0	10/23/2019	< 0.011 J		< 0.0031	< 0.028	< 0.013 J	< 0.0031	< 0.0031	< 0.0031	< 0.010 J	< 0.012 J	< 0.014	< 0.013 J	< 0.0031	< 0.0031	< 0.0114	< 0.0031	< 0.013 J	< 0.0031	< 0.0031	< 0.011
	BH03SB01	1.5-3.0	10/23/2019	0.0054		0.0064	0.0118	0.0095	< 0.0037	0.013	0.0018 J	0.026	0.011	0.032	0.021	0.0036 J	0.007	0.0054	0.0019 J	0.0048	< 0.0037	0.0018 J	0.0054
BH03	BH03SB02	4.5-6.0	10/23/2019	0.0023 J		0.0020 J	0.0043	< 0.0065	< 0.0065	< 0.0065	< 0.0065	< 0.0065	< 0.0065	< 0.0065	< 0.0065	< 0.0065	< 0.0065	< 0.0065	< 0.0065	< 0.0065	< 0.0065	< 0.0065	< 0.0049
	BH04SB01	0.5-1.0	11/6/2019	< 0.0039		< 0.0039	< 0.0078	< 0.0039	< 0.0039	< 0.0039	0.0010 J	0.0025 J	< 0.0039	0.0021 J	0.0032 J	0.0012 J	0.0016 J	0.0017 J	0.0011 J	0.0017 J	< 0.0039	0.0008 J	0.0019
BH04	BH04SB02	2.0-2.5	11/6/2019	0.0010 J		0.0010 J	0.0020	< 0.0038	< 0.0038	0.0012 J	0.0025 J	0.0028 J	0.0009 J	0.0027 J	0.0038	0.0021 J	0.0022 J	0.0030 J	0.0021 J	0.0031 J	0.0014 J	0.0020 J	0.0032
	BH05SB01	1.5-2.0	11/6/2019	0.0085		0.0049	0.0134	0.0042	0.0056	0.012	0.039	0.11	0.0032 J	0.051	0.14	0.054	0.068	0.078	0.025	0.072	0.009	0.031	0.076
BH05	BH05SB02	1.5-2.0	11/6/2019	0.002 J		0.0018 J	0.0038	0.0032 J	0.0017 J	0.0066	0.014	0.038	0.0022 J	0.032	0.054	0.019	0.02	0.021	0.0081	0.023	0.0031	0.011	0.026
DUOC	BH06SB01	1.0-1.8	11/6/2019	< 0.0040		< 0.0040	< 0.0080	< 0.0040	< 0.0040	< 0.0040	0.0035 J	0.0062	< 0.0040	0.0036 J	0.0094	0.0047	0.0044	0.0057	0.0022 J	0.0049	0.0009 J	0.0027 J	0.0063
BH06	BH06SB02	2.5-3.0	11/6/2019	< 0.0037		< 0.0037	< 0.0074	< 0.0037	< 0.0037	< 0.0037	0.0012 J	0.0024 J	< 0.0037	0.0014 J	0.0042	0.0018 J	0.0019 J	0.0024 J	0.0011 J	0.0021 J	< 0.0037	0.0010 J	0.0026
FB-01	FB-01-0.5	0.5	7/30/2020	0.0079	< 0.0074	< 0.0074	0.0079	< 0.0074	< 0.0074	< 0.0074	0.013	0.034	< 0.0074	0.028	0.033	0.020	0.017	0.022	< 0.0074	0.019	< 0.0074	0.013	0.026
FB-01	FB-01-7.0	7.0	7/30/2020	< 0.016	< 0.016	< 0.016	< 0.048	< 0.016	< 0.016	< 0.016	< 0.016	< 0.016	< 0.016	< 0.016	< 0.016	< 0.016	< 0.016	< 0.016	< 0.016	< 0.016	< 0.016	< 0.016	< 0.012
FB-02	FB-02-4.0	4.0	7/30/2020	4.6	1.4	2.0	8.0	3.0	0.045	1.4	0.59	5.7	3.2	9.5	4.3	1.2	1.6	1.2	0.49	1.5	0.13	0.60	1.6
FB-02	FB-02-5.5	5.5	7/30/2020	0.17	< 0.018	< 0.018	0.17	< 0.018	< 0.018	< 0.018	0.019	0.04	0.025	0.044	0.033	< 0.018	< 0.018	0.037	< 0.018	0.028	< 0.018	0.019	0.018
FB-03	FB-03-1.0	1.0	7/30/2020	0.025	0.0084	0.018	0.0514	0.034	0.010	0.069	0.12	0.40	0.029	0.29	0.40	0.21	0.20	0.21	0.077	0.20	0.025	0.13	0.28
110-05	FB-03-6.0	6.0	7/30/2020	2.1	0.18	0.25	2.5	0.12	< 0.019	0.028	0.023	0.12	0.074	0.17	0.082	0.022	0.037	0.044	< 0.019	0.042	< 0.019	0.023	0.035
FB-04	FB-04-1.0	1.0	7/30/2020	< 0.0077	< 0.0077	< 0.0077	< 0.0231	< 0.0077	< 0.0077	< 0.0077	< 0.0077	0.0098	< 0.0077	< 0.0077	0.0097	< 0.0077	< 0.0077	0.0079	< 0.0077	< 0.0077	< 0.0077	< 0.0077	0.0062
FB-05	FB-05-3.0	3.0	7/30/2020	< 0.0075	< 0.0075	< 0.0075	< 0.0225	< 0.0075	< 0.0075	< 0.0075	< 0.0075	0.012	< 0.0075	0.0085	0.012	< 0.0075	< 0.0075	0.0077	< 0.0075	< 0.0075	< 0.0075	< 0.0075	0.0061
FB-06	FB-06-6.0	6.0	7/30/2020	< 0.031	0.036	< 0.031	0.036	0.10	< 0.031	0.037	< 0.031	0.10	0.15	0.28	0.055	< 0.031	< 0.031	< 0.031	< 0.031	< 0.031	< 0.031	< 0.031	< 0.023
FB-07	FB-07-5.0	5.0	7/31/2020	0.041	0.028	0.031	0.10	< 0.0086	< 0.0086	< 0.0086	< 0.0086	< 0.0086	< 0.0086	0.016	< 0.0086	< 0.0086	< 0.0086	< 0.0086	< 0.0086	< 0.0086	< 0.0086	< 0.0086	< 0.0065
FB-08	FB-08-5.5	5.5	7/31/2020	< 0.026	< 0.026	< 0.026	< 0.078	< 0.026	< 0.026	< 0.026	< 0.026	< 0.026	< 0.040 U1	< 0.026	< 0.026	< 0.026	< 0.026	< 0.026	< 0.026	< 0.026	< 0.026	< 0.026	< 0.020
FB-09	FB-09-5.0	5.0	7/31/2020	0.031	0.031	0.049	0.11	0.068	< 0.0079	0.017	< 0.0079	0.039	0.081	0.19	0.030	< 0.0079	< 0.0079	< 0.0079	< 0.0079	0.0079	< 0.0079	< 0.0079	0.0060
FB-16	FB-16-1.0	1.0	9/30/2020	< 0.0079	< 0.0079	< 0.0079	< 0.0237	< 0.0079	< 0.0079	0.0088	0.038	0.083	< 0.0079	0.041	0.078	0.052	0.040	0.073	0.017	0.051	< 0.0079	0.042	0.059
	FB-17-1.0	1.0	9/30/2020	0.094	< 0.0081	< 0.0081	0.094	< 0.0081	0.0087	0.023	0.052	0.13	< 0.0081	0.024	0.12	0.091	0.093	0.13	0.030	0.079	0.010	0.058	0.13
FB-17	FB-17-5.0	5.0	9/30/2020	0.21	0.12	0.14	0.47	0.26	0.0083	0.22	0.13	0.81	0.32	0.96	0.76	0.26	0.28	0.28	0.073	0.29	0.029	0.14	0.36
├	FB-17-9.0	9.0	9/30/2020	< 0.030	< 0.030	< 0.030	< 0.090	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.023
FB-18	FB-18-5.0	5.0	9/30/2020	0.013	0.0096	0.011	0.0336	0.0077	< 0.0076	< 0.0076	0.0082	0.031	< 0.0076	0.023	0.035	0.018	0.020	0.020	< 0.0076	0.021	< 0.0076	0.0095	0.024
	FB-18-8.0	8.0	9/30/2020	< 0.035	< 0.035	< 0.035	< 0.105	< 0.035	< 0.035	< 0.035	< 0.035	< 0.035	< 0.035	< 0.035	< 0.035	< 0.035	< 0.035	< 0.035	< 0.035	< 0.035	< 0.035	< 0.035	< 0.026
FB-19	FB-19-1.0	1.0	9/30/2020	0.024	< 0.0083	< 0.0083	0.024	< 0.0083	0.084	0.24	0.29	0.92	0.020	0.086	0.99	0.68	0.93	0.92	0.28	1.0	0.076	0.39	0.019
	FB-19-4.0 FB-20-1.0	4.0	9/30/2020	0.028	0.022	0.025	0.028	0.013 0.052	< 0.0075 0.042	0.0080	0.0089	0.029	0.018 0.058	0.046	0.035	0.014	0.014	0.015	< 0.0075	0.015 0.56	< 0.0075 0.050	0.0083	0.019
FB-20		5.0	9/30/2020	0.11	< 0.036	< 0.036				64	7.4	1.3	0.058	250	1.1 84	0.46	27	19	0.18	21	< 2.0	7.3	23
1.0-20	FB-20-5.0 FB-20-8.0	5.0 8.0	9/30/2020 9/30/2020	91 < 0.0091	< 0.0091	< 0.0091	153 < 0.0273	110	3.2 < 0.0091	64 < 0.0091	< 0.0091	< 0.0091	×0.0091	< 0.0091	84 < 0.0091	17	< 0.0091	< 0.0091	6.1 < 0.0091	< 0.0091	< 2.0	< 0.0091	< 0.0069
	leanup Level for Soi		9/30/2020	< 0.0091	< 0.0071	< 0.0091	< 0.0273 5	< 0.0091 4,800 ⁷	< 0.0091 NE	24,000 ⁷	< 0.0091 NE	< 0.0091 3,200 ⁷	3,200 ⁷	< 0.0091 NE	2,400 ⁷	< 0.0091	< 0.0091	< 0.0091	< 0.0091	< 0.0091	< 0.0091	< 0.0091	0.1

Table 4 Soil Analytical Results for PAHs **Thompson Field** King County Parcel No. 0825069104 **Redmond**, Washington Farallon PN: 650-031

									10	in union 1	IN: 050-		esulte (millio	rams per kil	ogram) ²								
									Non-Carcin	ogenic PAH		Marytical K	courts (mining	rans per ki	ograin)				Carcinoge	enic PAHs			
Sample Location	Sample Identification	Sample Depth (feet) ¹	Sample Date	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Total Naphthalenes ³	Acenaphthene	Acenaphthylene	Anthracene	Benzo(g,h,i)Perylene	Fluoranthene	Fluorene	Phenanthrene	Pyrene	Benzo(a)Pyrene	Benzo(a)Anthracene	Benzo(b)Fluoranthene	Benzo(j,k)Fluoranthene	Chrysene	Dibenzo(a,h)Anthracene	Indeno(1,2,3-cd)Pyrene	Total cPAHs TEC ^{4,5}
FB-21	FB-21-1.0	1.0	9/30/2020	0.084	< 0.038	< 0.038	0.084	< 0.038	< 0.038	0.046	0.063	0.18	< 0.038	0.13	0.16	0.094	0.076	0.12	< 0.038	0.11	< 0.038	0.052	0.12
	FB-21-5.0	5.0	9/30/2020	0.027	0.0087	0.011	0.0467	0.016	< 0.0076	0.031	0.053	0.17	0.016	0.13	0.18	0.079	0.073	0.078	0.029	0.075	0.0096	0.047	0.10
FB-22	FB-22-1.0	1.0	9/30/2020	0.023	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	0.0076	< 0.0074	< 0.0074	0.0077	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0056
FB-23	FB-23-1.0	1.0	10/1/2020	< 0.0077	< 0.0077	< 0.0077	< 0.0231	< 0.0077	< 0.0077	< 0.0077	< 0.0077	< 0.0077	< 0.0077	< 0.0077	< 0.0077	< 0.0077	< 0.0077	< 0.0077	< 0.0077	< 0.0077	< 0.0077	< 0.0077	< 0.0058
FB-24	FB-24-3.0	3.0	10/1/2020	0.16	0.078	0.12	0.358	0.13	< 0.038	0.12	0.088	0.40	0.26	0.78	0.37	0.14	0.14	0.15	0.048	0.14	< 0.038	0.075	0.18
	FB-24-6.0	6.0	10/1/2020	0.017	< 0.015	< 0.015	0.017	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.011
	FB-25-1.0	1.0	10/1/2020	< 0.0073	< 0.0073	< 0.0073	< 0.0219	< 0.0073	< 0.0073	< 0.0073	< 0.0073	0.0086	< 0.0073	< 0.0073	0.0084	< 0.0073	< 0.0073	< 0.0073	< 0.0073	< 0.0073	< 0.0073	< 0.0073	< 0.0055
FB-25	FB-25-3.0	3.0	10/1/2020	0.24	0.041	0.052	0.333	0.050	< 0.0075	0.037	0.031	0.20	0.047	0.21	0.17	0.053	0.069	0.059	0.023	0.069	< 0.0075	0.028	0.072
	FB-25-7.5	7.5	10/1/2020	< 0.0090	< 0.0090	< 0.0090	< 0.027	< 0.0090	< 0.0090	< 0.0090	< 0.0090	< 0.0090	< 0.0090	< 0.0090	< 0.0090	< 0.0090	< 0.0090	< 0.0090	< 0.0090	< 0.0090	< 0.0090	< 0.0090	< 0.0068
FB-27	FB-27-1.0	1.0	10/1/2020	< 0.0071	< 0.0071	< 0.0071	< 0.0213	< 0.0071	< 0.0071	0.0086	0.011	0.043	< 0.0071	0.042	0.038	0.016	0.017	0.019	0.0080	0.017	< 0.0071	0.010	0.022
	FB-27-5.0	5.0	10/1/2020	< 0.0074	< 0.0074	< 0.0074	< 0.0222	0.010	< 0.0074	0.021	0.012	0.079	< 0.0074	0.064	0.083	0.026	0.033	0.028	0.012	0.036	< 0.0074	0.013	0.035
FB-29	FB-29-14.0	14.0	1/8/2021	< 0.0074	< 0.0074	< 0.0074	< 0.0222	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0074	< 0.0056
	FMW-02-3.0	3.0	7/30/2020	1.1	0.36	0.54	2.0	0.70	0.012	0.28	0.11	0.94	1.1	2.1	0.78	0.20	0.26	0.23	0.081	0.25	0.025	0.11	0.27
FMW-02	FMW-02-6.0	6.0	7/30/2020	2.5	1.2	1.7	5.4	3.3	0.055	1.7	0.64	5.5	4.9	13	4.2	1.2	1.5	1.3	0.48	1.5	0.15	0.63	1.6
	FMW-02-14.0	14.0	7/30/2020	0.86 H	0.44 H	0.56 H	1.86 H	1.2 H	0.031 H	0.53 H	0.16 H	2.6 H	1.5 H	4.6 H	2.1 H	0.30 H	0.57 H	0.38 H	0.11 H	0.48 H	0.036 H	0.19 H	0.43
FMW-03	FMW-03-5.0	5.0	7/31/2020	< 0.027	< 0.027	< 0.027	< 0.081	< 0.027	< 0.027	< 0.027	< 0.027	< 0.027	< 0.027	< 0.027	< 0.027	< 0.027	< 0.027	< 0.027	< 0.027	< 0.027	< 0.027	< 0.027	< 0.020
FMW-04	FMW-04-6.0	6.0	7/31/2020	0.051	0.059	0.092	0.20	< 0.0089	< 0.0089	< 0.0089	< 0.0089	< 0.0089	0.013	0.023	< 0.0089	< 0.0089	< 0.0089	< 0.0089	< 0.0089	< 0.0089	< 0.0089	< 0.0089	< 0.0067
FMW-05	FMW-05-1.0	1.0	10/1/2020	< 0.0081	< 0.0081	< 0.0081	< 0.0243	< 0.0081	< 0.0081	< 0.0081	< 0.0081	< 0.0081	< 0.0081	< 0.0081	< 0.0081	< 0.0081	< 0.0081	< 0.0081	< 0.0081	< 0.0081	< 0.0081	< 0.0081	< 0.0061
	FMW-05-6.0	6.0	10/1/2020	0.029	< 0.011	< 0.011	0.029	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	0.018	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.0083
FMW-06	FMW-06-1.0	1.0	10/1/2020	< 0.015	< 0.015	< 0.015	< 0.045	< 0.015	0.017	0.026	0.039	0.030	< 0.015	< 0.015	0.029	0.043	0.034	0.064	0.017	0.075	< 0.015	0.044	0.06
	FMW-06-5.0	5.0	10/1/2020	< 0.022	< 0.022	< 0.022	< 0.066	< 0.022	< 0.022	< 0.022	< 0.022	< 0.022	< 0.022	< 0.022	< 0.022	< 0.022	< 0.022	< 0.022	< 0.022	< 0.022	< 0.022	< 0.022	< 0.017
FMW-07	FMW-07-1.0	1.0	10/1/2020	< 0.0075	< 0.0075	< 0.0075	< 0.0225	< 0.0075	< 0.0075	< 0.0075	< 0.0075	0.021	< 0.0075	0.019	0.021	0.011	0.012	0.015	< 0.0075	0.012	< 0.0075	< 0.0075	0.015
	FMW-07-5.0	5.0	10/1/2020	< 0.031	< 0.031	< 0.031	< 0.093	< 0.031	< 0.031	< 0.031	< 0.031	< 0.031	< 0.031	< 0.031	< 0.031	< 0.031	< 0.031	< 0.031	< 0.031	< 0.031	< 0.031	< 0.031	< 0.023
				0.040					0.000		nple Location		0.001	0.045	0.0000	0.000				0.0000	0.0000	0.0000	0.0050
FB-10	FB-10-3.0	3.0	9/30/2020	0.048	0.011	0.020	0.079	0.033	< 0.0083	0.016	< 0.0083	0.012	0.024	0.045	0.0083	< 0.0083	< 0.0083	< 0.0083	< 0.0083	< 0.0083	< 0.0083	< 0.0083	< 0.0063
FB-11	FB-11-5.0	5.0	9/30/2020	< 0.0080	< 0.0080	< 0.0080	< 0.024	< 0.0080	< 0.0080	< 0.0080	< 0.0080	< 0.0080	< 0.0080	< 0.0080	< 0.0080	< 0.0080	< 0.0080	< 0.0080	< 0.0080	< 0.0080	< 0.0080	< 0.0080	< 0.0060
FB-12	FB-12-5.0	5.0	9/30/2020	< 0.0080	< 0.0080	< 0.0080	< 0.024	< 0.0080	< 0.0080	< 0.0080	< 0.0080	< 0.0080	< 0.0080	< 0.0080	< 0.0080	< 0.0080	< 0.0080	< 0.0080	< 0.0080	< 0.0080	< 0.0080	< 0.0080	< 0.0060
FB-13	FB-13.1.0	1.0	9/30/2020	< 0.0082	< 0.0082	< 0.0082	< 0.0246	< 0.0082	< 0.0082	< 0.0082	< 0.0082	0.031	< 0.0082	< 0.0082	0.010	< 0.0082	< 0.0082	< 0.0082	< 0.0082	< 0.0082	< 0.0082	< 0.0082	< 0.0062
FB-14	FB-14-1.0	1.0	9/30/2020	< 0.0078	< 0.0078	< 0.0078	< 0.0234	< 0.0078	< 0.0078	< 0.0078	< 0.0078	< 0.0078	< 0.0078	< 0.0078	< 0.0078	< 0.0078	< 0.0078	< 0.0078	< 0.0078	< 0.0078	< 0.0078	< 0.0078	< 0.0059
MTCA Method A C	Cleanup Level for Soi	ľ					5	4,8007	NE	24,000 ⁷	NE	3,2007	3,2007	NE	2,4007								0.1

NOTES:

Results in **bold** and highlighted yellow denote concentrations exceeding MTCA cleanup levels.

< denotes analyte not detected at or exceeding the reporting limit listed.

- denotes sample not analyzed.

¹Depth in feet below ground surface.

²Analyzed by U.S. Environmental Protection Agency Method 8270E/SIM.

³Sum of naphthalene, 1-methylnaphthalene and 2-methylnaphthalene.

⁴Total carcinogenic polycyclic aromatic hydrocarbons derived using the total toxicity equivalency method in Section 708(8) of Chapter 173-340 of the

Washington Administrative Code.

⁵ For concentrations reported at less than the laboratory reporting limit, half the reporting limit was used to calculate the TEC.
⁶ Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A Soil Cleanup Levels for Unrestricted Land Uses,

Table 740-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised 2013, unless otherwise noted.

⁷Washington State Department of Ecology Cleanup Levels and Risk Calculations, under the Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Standard Method B Formula Values for Soil (Unrestricted Land Use) - Direct Contact (Ingestion Only) and Leaching Pathway, https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Contamination-clean-up-tools/CLARC

H = sample analyzed outsdie of holding time NE = not established PAHs = polycyclic aromatic hydrocarbons TEC = toxic equivalent concentration

cPAHs = carcinogenic polycyclic aromatic hydrocarbons

U1 = The reporting limit is elevated due to interferences present in the sample.

Table 5Soil Analytical Results for MetalsThompson FieldKing County Parcel No. 0825069104Redmond, WashingtonFarallon PN: 650-031

	Sample	Sample Depth		(n	Analytical Results nilligrams per kilogra	$(m)^2$
Sample Location	Identification	(feet) ¹	Sample Date	Arsenic	Mercury	Selenium
-	BK01SB01	2.0-3.5	10/23/2019	11.5 J+	0.029 J	< 3.0
BK01	BK01SB02	4.5-6.0	10/23/2019	1.9 J+	0.019 J	< 2.4
	BK01SB03	8.0-10	10/23/2019	5.7 J+	0.031 J	< 2.7
	BH01SB01	1.5-3.0	10/23/2019	5.5 J+	0.046 J	< 2.9
BH01	BH01SB02	4.5-6.0	10/23/2019	5.6 J+	0.045 J	< 3.2
	BH01SB03	8.0-10.0	10/23/2019	5.4 J+	< 0.14	< 3.3
	BH02SB01	0.5-2.0	10/23/2019	6.7 J+	0.042 J	< 2.6
BH02	BH02SB02	4.0-5.0	10/23/2019	4.9 J+	0.075 J	< 4.4
	BH02SB03	8.0-10.0	10/23/2019	47.1 J+	0.07 J	3.2
D1102	BH03SB01	1.5-3.0	10/23/2019	4.8 J+	0.036 J	< 2.7
BH03	BH03SB02	4.5-6.0	10/23/2019	4.0 J+	0.120 J	< 4
D1104	BH04SB01	0.5-1.0	11/6/2019	3.2	0.028 J	0.2 J
BH04	BH04SB02	2.0-2.5	11/6/2019	5.3	0.034 J	0.4 J
D1105	BH05SB01	1.5-2.0	11/6/2019	3.4	0.15	< 2.8
BH05	BH05SB02	1.5-2.0	11/6/2019	3.9	0.094 J	0.2 J
BH06	BH06SB01	1.0-1.8	11/6/2019	3.4	0.045 J	< 2.8
BH00	BH06SB02	2.5-3.0	11/6/2019	5.2	0.037 J	0.2 J
FB-01	FB-01-7.0	7.0	7/30/2020	< 12		
FB-04	FB-04-1.0	1.0	7/30/2020	< 12		
ED 05	FB-05-3.0	3.0	7/30/2020	< 11		
FB-05	FB-05-11.0	11.0	7/30/2020	< 18		
FB-07	FB-07-1.0	1.0	7/31/2020	< 11		
FB-26	FB-26-5.0	5.0	10/1/2020	< 11		
FB-28	FB-28-1.5	1.5	12/11/2020		< 0.31	
FMW-02	FMW-02-3.0	3.0	7/30/2020	< 11		
MTCA Cleanup Leve	els for Soil ³			20	2	400 ⁴

Table 5 Soil Analytical Results for Metals Thompson Field King County Parcel No. 0825069104 Redmond, Washington Farallon PN: 650-031

	Sample	Sample Depth		(n	Analytical Results nilligrams per kilogra	\mathbf{m}) ²
Sample Location	Identification	(feet) ¹	Sample Date	Arsenic	Mercury	Selenium
-	FMW-03-5.0	5.0	7/31/2020	< 21		
FMW-03	FMW-03-10.0	10.0	7/31/2020	23		
	FMW-03-20.0	20.0	7/31/2020	< 13		
FMW-04	FMW-04-12.0	12.0	7/31/2020	< 16		
FMW-05	FMW-05-1.0	1.0	10/1/2020	< 12		
FMW-06	FMW-06-5.0	5.0	10/1/2020	< 16		
FMW-07	FMW-07-1.0	1.0	10/1/2020	< 11		
		Up	land Sample Locat	tions		
FB-10	FB-10-1.0	1.0	9/30/2020	< 12		
FB-12	FB-12-1.0	1.0	9/30/2020	< 12		
FB-13	FB-13-3.0	3.0	9/30/2020	< 11		
MTCA Cleanup Lev	els for Soil ³			20	2	400 ⁴

NOTES:

Results in **bold** denote concentrations exceeding MTCA cleanup levels.

< denotes analyte not detected at or exceeding the laboratory reporting limit listed.

- denotes sample not analyzed.

¹Depth in feet below ground surface.

²Analyzed by U.S. Environmental Protection Agency Methods 6010D/7471B.

³Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A Soil Cleanup Levels for Unrestricted Land Uses, Table 740-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised 2013.

⁴Washington State Cleanup Levels and Risk Calculations under the Washington State MTCA, Standard Method B Formula Values for Soil from CLARC Master spreadsheet, https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Contamination-clean-up-tools/CLARC

J = result is an estimate

J+ = result is an estimate with a high bias

Table 6 Groundwater Analytical Results for Total Petroleum Hydrocarbons and BTEX Thompson Field King County Parcel No. 0825069104 Redmond, Washington Farallon PN: 650-031

							Ar	nalytical Results (m	nicrograms per	· liter)		
					NWTI	PH-Dx ¹	NWTPH-Dx Sil	lica Gel Cleanup ¹		EF	PA 8260D ²	
Sample Location	Sample Type	Sampled By	Sample Date	Sample Identification	DRO	ORO	DRO	ORO	Benzene	Toluene	Ethylbenzene	Xylenes
				Reconna	aissance Boring	Groundwater	Samples					
BH01	Split	Farallon	10/23/2019	BH01-GW-102319	< 290	< 470	< 290	< 470				
DHOT	Bpiit	E&E	10/23/2019	BH01GW	< 190	< 480			< 0.50	< 0.50	< 0.50	< 1.0
BH02	Split	Farallon	10/23/2019	BH02-GW-102319	< 280	< 460	< 280	< 460				
D1102	Spin	E&E	10/23/2019	BH02GW	< 190	< 480			< 0.50	< 0.50	< 0.50	< 1.0
BKGRSB01	Split	Farallon	10/23/2019	BKGRSB01-GW-102319	< 290	< 470	< 290	< 470				
DKOKSBUI	Spin	E&E	10/23/2019	BK01GW	< 190	< 480			< 0.50	< 0.50	< 0.50	< 1.0
				Mon	itoring Well Gr	oundwater Sai	nples					
MW-01	Normal	E&E	10/22/2019	MW01GW	< 190	< 480			< 0.50	< 0.50	< 0.50	< 1.0
MW-02	Normal	E&E	10/22/2019	MW02GW	< 190	< 480			< 0.50	< 0.50	< 0.50	< 1.0
MW-355	Normal	E&E	10/22/2019	MW355	< 190	< 480			< 0.50	< 0.50	< 0.50	< 1.0
MW-356	Normal	E&E	10/22/2019	MW356	< 190	< 480			< 0.50	< 0.50	< 0.50	< 1.0
FMW-01	Normal	Farallon	8/6/2020	FMW-01-080620			< 230	< 230				
FIVI W-01	Normal	Farallon	12/11/2020	FMW-01-121120	< 210	< 210	< 210	< 210				
FMW-02	Normal	Farallon	8/6/2020	FMW-02-080620			< 230	< 230				
FIVI W-02	Normal	Farallon	12/11/2020	FMW-02-121120	< 210	< 210	< 210	< 210				
FMW-03	Normal	Farallon	8/6/2020	FMW-03-080620			< 220	< 220				
11VI W-03	Normal	Farallon	12/11/2020	FMW-03-121120	< 220	< 220	< 220	< 220				
FMW-04	Normal	Farallon	8/6/2020	FMW-04-080620			< 220	< 220	< 0.20	< 1.0	< 0.20	0.91
1'1v1 vv -04	Normal	Farallon	12/11/2020	FMW-04-121120	< 210	< 210	< 210	< 210				
FMW-05	Normal	Farallon	12/11/2020	FMW-05-121120	< 210	< 210	< 210	< 210				
FMW-06	Normal	Farallon	12/11/2020	FMW-06-121120	< 210	340	< 210	< 210				
FMW-07	Normal	Farallon	12/11/2020	FMW-07-121120	240	290	< 210	< 210				
TCA Method A Clean	up Level for	Groundwater ³			500	500	500	500	5	1,000	700	1,000

NOTES:

< denotes analyte not detected at or exceeding the reporting limit listed.

- denotes sample not analyzed.

¹Analyzed by Northwest Method NWTPH-Dx treated without and with a silica gel cleanup process.

²Analyzed by U.S. Environmental Protection Agency (EPA) Method 8260D.

³Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A Cleanup Levels for Groundwater, Table 720-1 of Section 900 of Chapter 173-340 of the Washington Administrative

Code, as amended 2013.

BTEX = benzene, toluene, ethylbenzene, and xylenes

DRO = total petroleum hydrocarbons (TPH) as diesel-range organics E&E = Ecology and Environment, Inc. Farallon = Farallon Consulting, L.L.C. NE = not established ORO = TPH as oil-range organics

Table 7 Groundwater Analytical Results for Select VOCs Thompson Field King County Parcel No. 0825069104 Redmond, Washington Farallon PN: 650-031

					Analytical Results	(micrograms per li	ter) ¹							
Sample					cis-1,2-	trans-1,2-		Methylene						
Location	Sample Date	Sample Identification	PCE	TCE	Dichloroethene	Dichloroethene	Vinyl Chloride	Chloride						
	Monitoring Well Groundwater Samples													
FMW-04	8/6/2020	FMW-04-080620	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 1.0						
MTCA Cleanu	1p Levels for Grou	indwater ²	5	5	16 ³	160³	0.2	5						

NOTES:

< denotes analyte not detected at or exceeding the reporting limit listed.

¹Analyzed by U.S. Environmental Protection Agency Method 8260D. Only select analytes shown in table; see lab report for full list of other non-detected analytes.

²Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A Cleanup Levels for Groundwater, Table 720-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised 2013, unless otherwise noted.

Table 720-1 of Section 900 of Chapter 175-540 of the washington Administrative Code, as revised 2015, unless otherwise noted.

³Washington State Model Toxics Control Act Cleanup Regulation Cleanup Levels and Risk Calculations, Standard Method B Values for Groundwater, https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Contamination-clean-up-tools/CLARC

PCE = tetrachloroethene TCE = trichloroethene VOC = volatile organic compound

Table 8 Groundwater Analytical Results for PAHs Thompson Field King County Parcel No. 0825069104 **Redmond**, Washington Farallon PN: 650-031

											Analytica	l Results (n	nicrograms	per liter) ¹								
							Ν	Non-Carcino	ogenic PAH	s			-					Carcinoge	enic PAHs			
Sample Location	Sample Date	Sample Identification	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Total Naphthalenes ²	Acenaphthene	Acenaphthylene	Anthracene	Benzo(g,h,i)Perylene	Fluoranthene	Fluorene	Phenanthrene	Pyrene	Benzo(a)Pyrene	Benzo(a)Anthracene	Benzo(b)Fluoranthene	Benzo(j,k)Fluoranthene	Chrysene	Dibenzo(a,h)Anthracene	Indeno(1,2,3-cd)Pyrene	Total cPAHs TEC ^{3,4}
BK01	10/23/2019	BK01GW	< 0.11		< 0.11	< 0.22	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.083
BH01	10/23/2019	BH01GW	< 0.11		< 0.11	< 0.22	< 0.11	< 0.11	< 0.11	< 0.11	0.020 J	< 0.11	0.030 JQ	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.083
BH02	10/23/2019	BH02GW	< 0.10		< 0.10	< 0.20	<0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.076
								Monito	oring Well	Groundwat	er Samples											
FMW-01	8/6/2020	FMW-01-080620	< 0.11	< 0.11	< 0.11	< 0.33	< 0.11	< 0.11	< 0.11	< 0.011	< 0.11	< 0.11	< 0.11	< 0.11	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.0083
FMW-02	8/6/2020	FMW-02-080620	5.4	1.3	1.7	8.4	2.4	< 0.10	0.17	< 0.010	0.19	2.1	2.0	0.15	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0076
FMW-03	8/6/2020	FMW-03-080620	< 0.11	< 0.11	< 0.11	< 0.33	< 0.11	< 0.11	< 0.11	< 0.011	< 0.11	< 0.17	< 0.11	< 0.11	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.0083
FMW-04	8/6/2020	FMW-04-080620	< 0.10	< 0.10	< 0.10	< 0.30	< 0.10	< 0.10	< 0.10	< 0.010	< 0.10	< 0.10	< 0.10	< 0.10	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.0076
FMW-05	10/9/2020	FMW-05-100920	< 0.096	< 0.096	< 0.096	< 0.029	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0.0073
FMW-06	10/9/2020	FMW-06-100920	< 0.12	< 0.12	< 0.12	< 0.036	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	< 0.012	< 0.0091
FMW-07	10/9/2020	FMW-07-100920	< 0.096	< 0.096	< 0.096	< 0.029	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0.0073
FMW-08	1/18/2021	FMW-08-011821	< 0.097	< 0.097	< 0.097	< 0.291	< 0.097	< 0.097	< 0.097	< 0.0097	< 0.097	< 0.097	< 0.097	< 0.097	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.0073
MTCA Method A Cl	leanup Level for Gr	oundwater ⁵				160	960 ⁶	NE	4,800 ⁶	NE	640 ⁶	640 ⁶	NE	480 ⁶								0.1

NOTES:

< denotes analyte not detected at or exceeding the reporting limit listed.

¹Analyzed by U.S. Environmental Protection Agency Method 8270D/SIM, 8270E/SIM.

²Sum of naphthalene, 1-methylnaphthalene and 2-methylnaphthalene.

³Total carcinogenic polycyclic aromatic hydrocarbons derived using the total toxicity equivalency method in Section 708(8) of Chapter 173-340 of the Washington Administrative Code.

⁴For concentrations reported at less than the laboratory reporting limit, half the reporting limit was used to calculate the TEC.

⁵Washington State Model Toxics Control Act Cleanup Regulation Method A Cleanup Levels for Groundwater, Table 720-1 of Section 900 of Chapter 173-340 of the

Washington Administrative Code, as revised 2013, unless otherwise noted.

⁶Washington State Model Toxics Control Act Cleanup Regulation Cleanup Levels and Risk Calculations, Standard Method B Values for Groundwater, updated May 2019, https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Contamination-clean-up-tools/CLARC

NE = not established

cPAHs = carcinogenic polycyclic aromatic hydrocarbons

PAHs = polycyclic aromatic hydrocarbons

TEC = toxic equivalent concentration

Table 9 Groundwater Analytical Results for Metals Thompson Field King County Parcel No. 0825069104 Redmond, Washington Farallon PN: 650-031

					Analy	tical Results (n	nicrograms pe	er liter) ¹		
Sample Location	Sample Date	Sample Identification	Total Aluminum	Dissolved Aluminum	Total Arsenic	Dissolved Arsenic	Total Iron	Dissolved Iron	Total Manganese	Dissolved Manganese
BK01	10/23/2019	BK01GW	429		0.46 J		377 J+		18.4 J+	
DK01	10/23/2019	BK01GW-D	< 200			0.46 J		< 100		< 15.0
BH01	10/23/2019	BH01GW	1,520		1.1		5,170 J+		218 J+	
BH01	10/23/2019	BH01GW-D	24.4 J			0.71 J		4,330		226
BH02	10/23/2019	BH02GW	618		3.2		910 J+		140 J+	
BH02	10/23/2019	BH02GW-D	< 200			2.5		241		134
FMW-01	8/6/2020	FMW-01-080620			< 3.3					
FMW-02	8/6/2020	FMW-02-080620			< 3.3					
11 111 W - 02	12/11/2020	FMW-02-121120	2,200	< 110			8,900	7,100	570	530
FMW-03	8/6/2020	FMW-03-080620			5.7	4.7				
FIVI W-05	12/11/2020	FMW-03-121120	< 110	< 110	< 3.3	< 3.0	1,800	1,500	500	480
FMW-04	8/6/2020	FMW-04-080620			< 3.3					
FMW-05	10/9/2020	FMW-05-100920			< 3.3					
FMW-06	10/9/2020	FMW-06-100920			14	9.5				
11111 44 -00	12/11/2020	FMW-06-121120			3.6	< 3.0				
FMW-07	10/9/2020	FMW-07-100920			7.2	9.0				
1.101 00 -0 /	12/11/2020	FMW-07-121120			5.3	4.7				
FMW-08	2/16/2021	FMW-08-021621					6,800	5,700	200	190
MTCA Cleanur	A Cleanup Levels for Groundwater			00 ²	5	3	11,	000^{2}	7	50 ²

NOTES:

Results in **bold** denote concentrations exceeding MTCA cleanup levels.

< denotes analyte not detected at or exceeding the reporting limit listed.

- denotes sample not analyzed.

¹Analyzed by U.S. Environmental Protection Agency Method 200.8/6010D.

²Washington State Model Toxics Control Act Cleanup Regulation Cleanup Levels and Risk Calculations, Standard Method B

Values for Groundwater, https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Contamination-clean-up-tools/CLARC

³Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A Cleanup Levels for Groundwater, Table 720-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised 2013. J = result is an estimate

J+ = result is an estimate with a high bias

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Table 10Soil Ecological Screening Levels and Contaminants of ConcernThompson Field SiteRedmond, WashingtonFarallon PN: 650-031

								Ecological	Indicator Soil C (EISC)	Concentration		EISC Source		
Chemical	Maximum Concentration (mg/kg-dw)	EF	EF (%)	UCL	Distribution	UCL Method	Screening Level	Plants (mg	Soil Biota /kg dw)	Wildlife	Plants	Soil Biota	Wildlife	Chemical Class
2-Butanone	0.94	0/14	0.0%	NC	NC	NA	89.6	89.6	89.6	89.6	EPA 2003	EPA 2003	EPA 2003	VOC
(Methyl Ethyl Ketone) Acetone	4.5	1/18	5.6%	1.6	Gamma	95% Gamma Adjusted KM-UCL	2.5	2.5	2.5	2.5	EPA 2003	EPA 2003	EPA 2003	VOC
Carbon Disulfide	0.024	0/4	0.0%	NC	NC	NA	94.1	94.1	94.1	94.1	EPA 2003	EPA 2003	EPA 2003	VOC
m,p-Xylene	0.0057	0/14	0.0%	NC	NC	NA	10	10	10	10	EPA 2003	EPA 2003	EPA 2003	VOC
Methylene Chloride	0.023	0/18	0.0%	NC	NC	NA	4.05	4.05	4.05	4.05	EPA 2003	EPA 2003	EPA 2003	VOC
Dimethylphthalate	0.99	0/14	0.0%	NC	NC	NA	200	734	200	734	EPA 2003	MTCA Table 749-3	EPA 2003	SVOC
Diesel-Range Organics (DRO+ORO)	460	8/30	26.7%	210	Normal	95% KM (t) UCL	260	1,600	260	6,000	Ecology 2017	Ecology 2017	MTCA Table 749-3	TPH
Naphthalene	91	1/64	1.6%	11	No discernable distribution (log SD = 2.2)	97.5% KM Chebyshev UCL	20	20	30	100	assumed acenaphthene	assumed fluorene	EPA 2007b	LPAH
1-Methylnaphthalene	23	1/64	1.6%	4	No discernable distribution (SD = 2.9)	99% KM (Chebyshev) UCL	20	20	30	100	assumed acenaphthene	assumed fluorene	EPA 2007b	LPAH
2-Methylnaphthalene	39	1/64	1.6%	4.5	lognormal $(\log SD = 2.5)$	97.5% KM (Chebyshev) UCL	20	20	30	100	assumed acenaphthene	assumed fluorene	EPA 2007b	LPAH
Acenaphthene	110	1/64	1.6%	13	lognormal $(\log SD = 2.9)$	97.5% KM (Chebyshev) UCL	20	20	30	100	MTCA Table 749-3	assumed fluorene	EPA 2007b	LPAH
Acenaphthylene	3.2	0/64	0.0%	NC	NC	NA	20	20	30	100	assumed acenaphthene	assumed fluorene	EPA 2007b	LPAH
Anthracene	64	1/64	1.6%	7.4	No discernable distribution (log SD = 2.2)	97.5% KM (Chebyshev) UCL	20	20	30	100	assumed acenaphthene	assumed fluorene	EPA 2007b	LPAH
Fluorene	86	1/64	1.6%	10	lognormal $(\log SD = 2.8)$	97.5% KM (Chebyshev) UCL	20	20	30	100	assumed acenaphthene	MTCA Table 749-3	EPA 2007b	LPAH
Phenanthrene	250	1/64	1.6%	29	lognormal $(\log SD = 2.7)$	97.5% KM (Chebyshev) UCL	20	20	30	100	assumed acenaphthene	assumed fluorene	EPA 2007b	LPAH
Benzo(a)Anthracene	27	1/64	1.6%	3.2	lognormal $(\log SD = 2.3)$	97.5% KM (Chebyshev) UCL	12	18	18	12	assumed soil biota	EPA 2007b	Assumed BaP	НРАН
Benzo(a)Pyrene	17	1/64	1.6%	2	lognormal $(\log SD = 2.2)$	97.5% KM (Chebyshev) UCL	12	18	18	12	assumed soil biota	EPA 2007b	MTCA Table 749-3	НРАН
Benzo(b)Fluoranthene	19	1/64	1.6%	2.3	lognormal $(\log SD = 2.1)$	97.5% KM (Chebyshev) UCL	12	18	18	12	assumed soil biota	EPA 2007b	Assumed BaP	НРАН
Benzo(j,k)Fluoranthene	6.1	0/64	0.0%	NC	NC	NA	12	18	18	12	assumed soil biota	EPA 2007a	Assumed BaP	HPAH
Chrysene	21	1/64	1.6%	2.5	lognormal $(\log SD = 2.2)$	97.5% KM (Chebyshev) UCL	12	18	18	12	assumed soil biota	EPA 2007b	Assumed BaP	НРАН
Dibenzo(a,h)Anthracene	2	0/64	0.0%	NC	NC	NA	12	18	18	12	assumed soil biota	EPA 2007b	Assumed BaP	HPAH
Fluoranthene	110	1/64	1.6%	13	lognormal (log SD = 2.5)	97.5% KM (Chebyshev) UCL	18	18	18	122	assumed soil biota	EPA 2007b	EPA 2003	НРАН

Table 10 Soil Ecological Screening Levels and Contaminants of Concern **Thompson Field Site Redmond**, Washington Farallon PN: 650-031

								Ecological	Indicator Soil C (EISC)	Concentration		EISC Source		
	Maximum Concentration						Screening Level	Plants	Soil Biota	Wildlife				Chemical
Indeno(1,2,3-cd)Pyrene	7.3	0/64	0.0%	NC	NC	NA	12	18	18	12	assumed soil biota	EPA 2007b	Assumed BaP	HPAH
Pyrene	84	1/64	1.6%	9.8	lognormal (log SD = 2.4)	97.5% KM (Chebyshev) UCL	12	18	18	12	assumed soil biota	EPA 2007b	Assumed BaP	НРАН
Aluminum	20,700	0/14	0.0%	NC	NC	NA	37,200	37,200	37,200	37,200	Bac	kground (Ecology 1994	4)	Metal
Arsenic	47.1	2/31	6.5%	13.3	Undefined $(\log SD = 0.53)$	95% KM Chebyshev UCL	20	20	60	132	Table 740-1 footnote	MTCA Table 749-3	MTCA Table 749-3	Metal
Barium	125	0/14	0.0%	NC	NC	NA	330	500	330	2,000	MTCA Table 749-3	EPA 2005a	EPA 2005a	Metal
Chromium	48.2	0/14	0.0%	NC	NC	NA	48.2	48.2	48.2	67	Background (E	cology 1994)	MTCA Table 749-3	Metal
Cobalt	12.5	0/14	0.0%	NC	NC	NA	20	20	20	120	MTCA Table 749-3	assumed plant SL	EPA 2005b	Metal
Copper	35.9	0/14	0.0%	NC	NC	NA	80	100	80	217	MTCA Table 749-3	EPA 2006	MTCA Table 749-3	Metal
Iron	20,800	0/14	0.0%	NC	NC	NA	42,100	42,100	42,100	42,100	Bac	kground (Ecology 1994	4)	Metal
Lead	41.3	0/14	0.0%	NC	NC	NA	118	120	1,700	118	EPA 2005c	EPA 2005c	MTCA Table 749-3	Metal
Manganese	350	0/14	0.0%	NC	NC	NA	450	1,100	450	4,000	MTCA Table 749-3	EPA 2007a	EPA 2007a	Metal
Mercury	0.15	1/14	1.6%	0.09	Gamma	95% KM Bootstrap t UCL	0.1	0.3	0.1	5.5	MTCA Table 749-3	MTCA Table 749-3	MTCA Table 749-3	Metal
Nickel	50.3	0/14	0.0%	NC	NC	NA	70	70	200	980	Background (Smith et al. 2013)	MTCA Table 749-3	MTCA Table 749-3	Metal
Selenium	3.2	1/14	7.1%	1.8	Undefined (log SD = 0.71)	95% KM (Chebyshev) UCL	0.63	1	70	0.63	MTCA Table 749-3	MTCA Table 749-3	EPA 2007d	Metal
Vanadium	75.8	0/14	0.0%	NC	NC	NA	178	178	178	178	Back	ground (Smith et al. 20	13)	Metal
Zinc	55.1	0/14	0.0%	NC	NC	NA	160	160	200	360	EPA 2007c	MTCA Table 749-3	MTCA Table 749-3	Metal

NOTES:

Chemicals in **bold** and highlighted yellow are identified as contaminants of concern (COCs).

background = natural background concentration reported in Ecology (1994) or Smith et al. (2013) BaP = benzo(a)pyrene

DRO+ORO = sum of total petroleum hydrocarbons as diesel-range organics and as oil-range organics

EF = exceedance frequency (number of exceedances/number of samples)

EPA = U.S. Environmental Protection Agency

KM = Kaplan Meier

LPAH = Low molecular weight PAHs including all PAHs with three or fewer benzene rings

log SD = standard deviation in log scale

mg/kg dw = milligrams per kilogram dry weight

MTCA = Washington State Model Toxics Control Act Cleanup Regulation (MTCA)

NA = not applicable

NC = not calculated

SL = screening level (lowest EISC) TPH = total petroleum hydrocarbons

UCL = 95% upper confidence limit on the mean

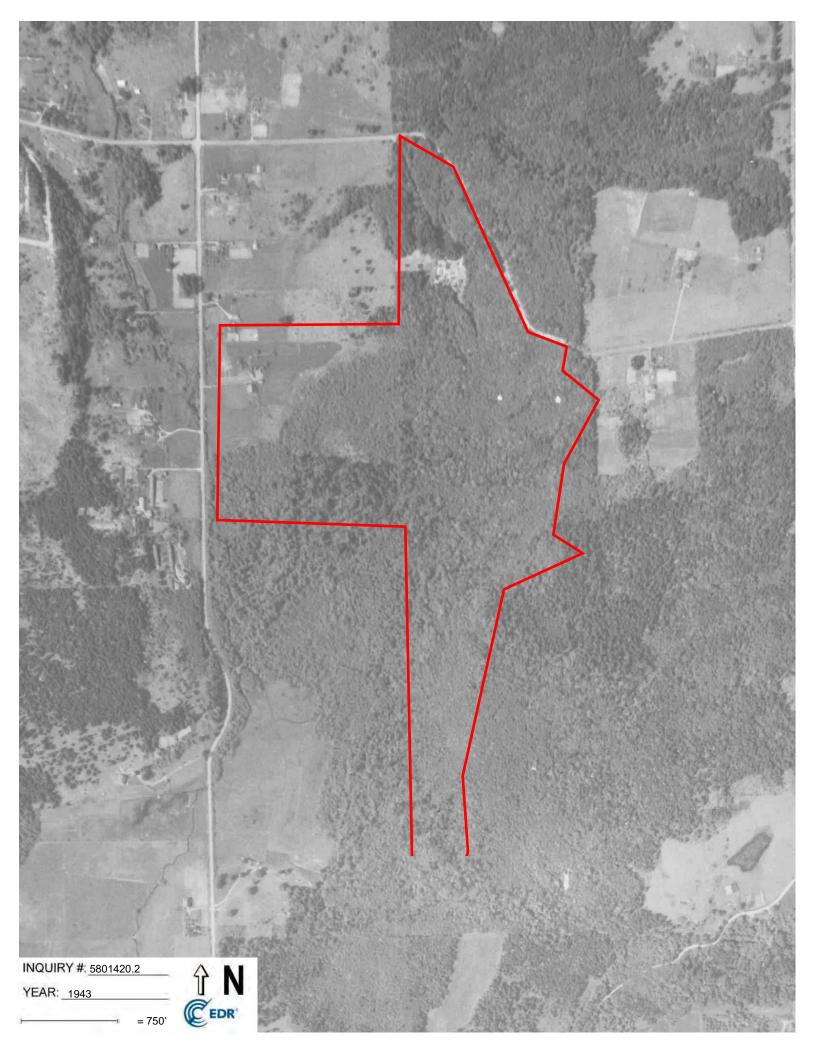
VOC = volatile organic compound

HPAH = high molecular weight polycyclic aromatic hydrocarbons (PAHs) including all PAHs with four or more benzene rings

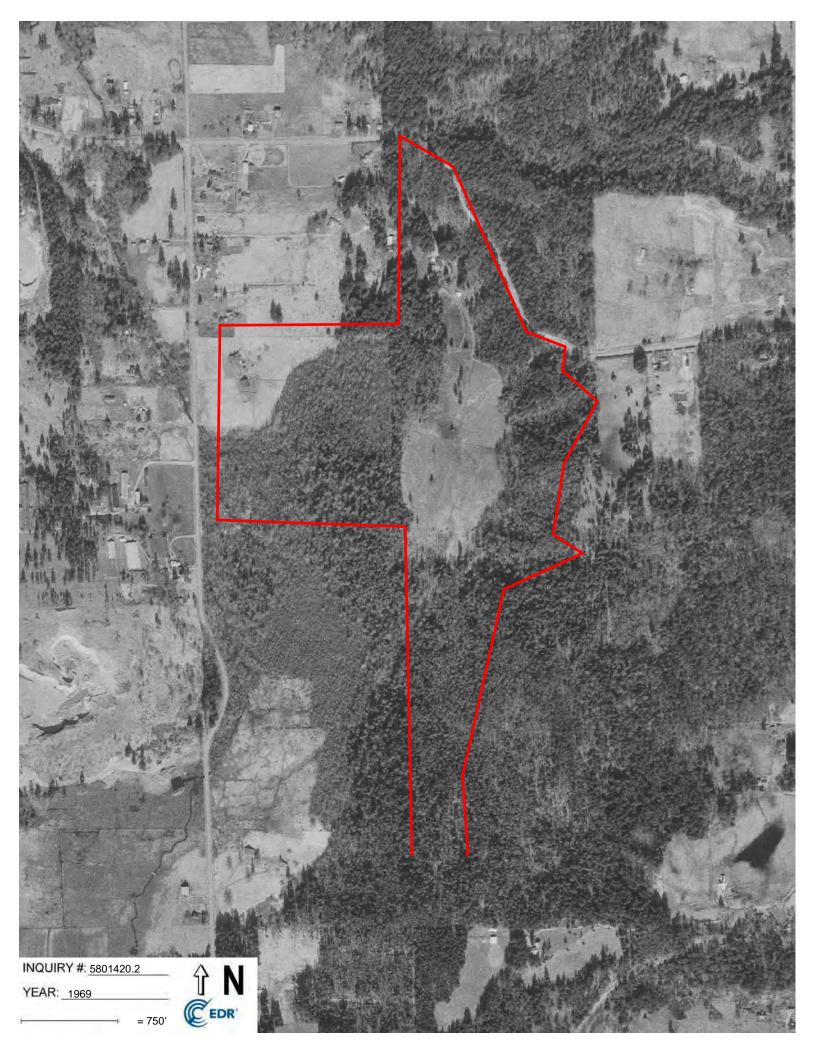
APPENDIX A AERIAL PHOTOGRAPHS

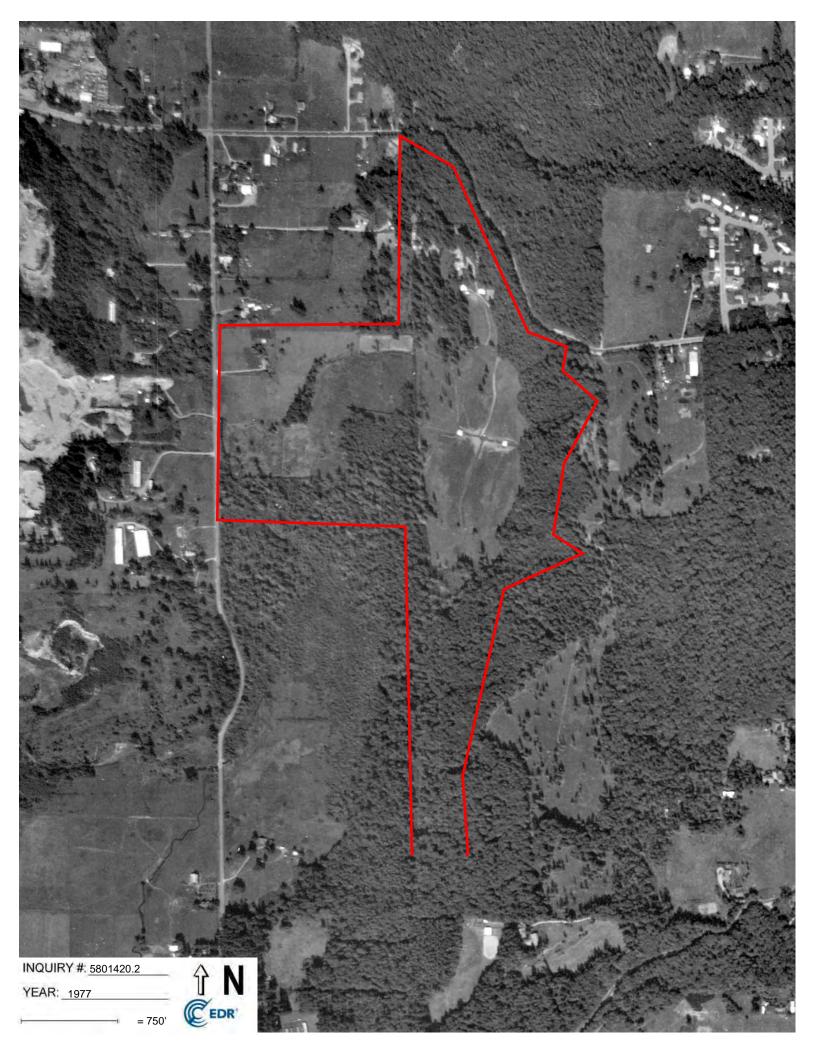
REMEDIAL INVESTGATION REPORT Thompson Field Site Portion of King County Parcel No. 0825069104 Redmond, WA

Farallon PN: 650-031

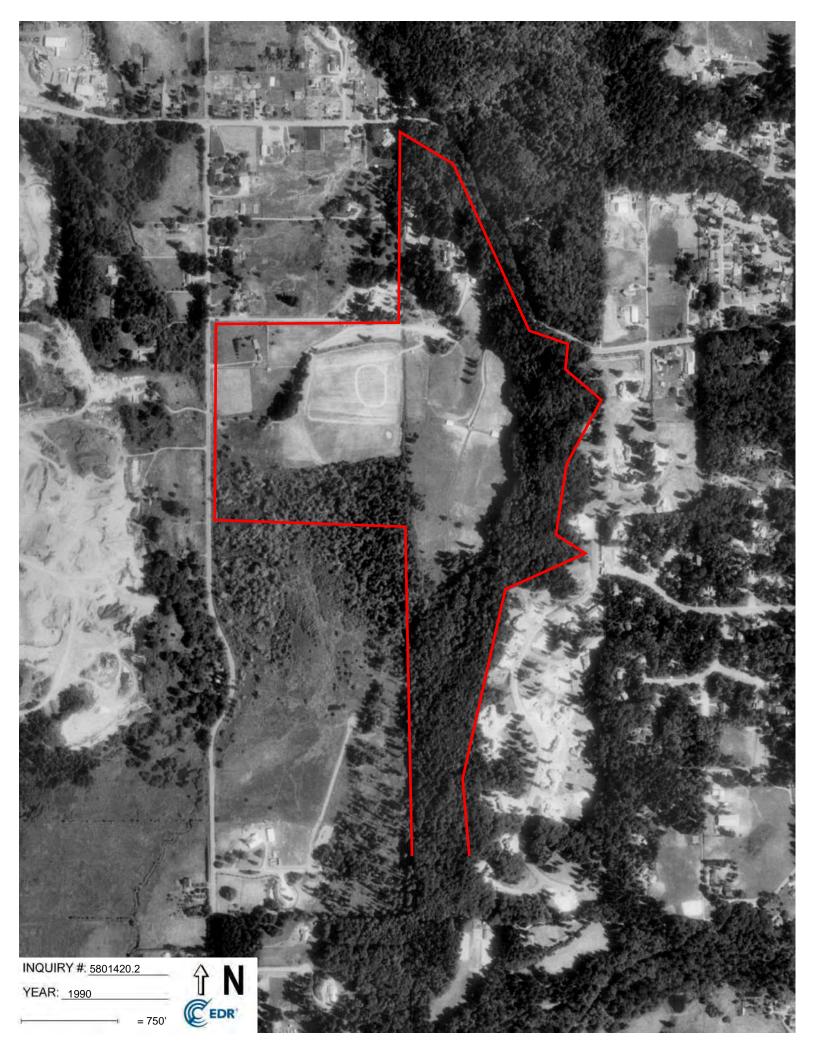


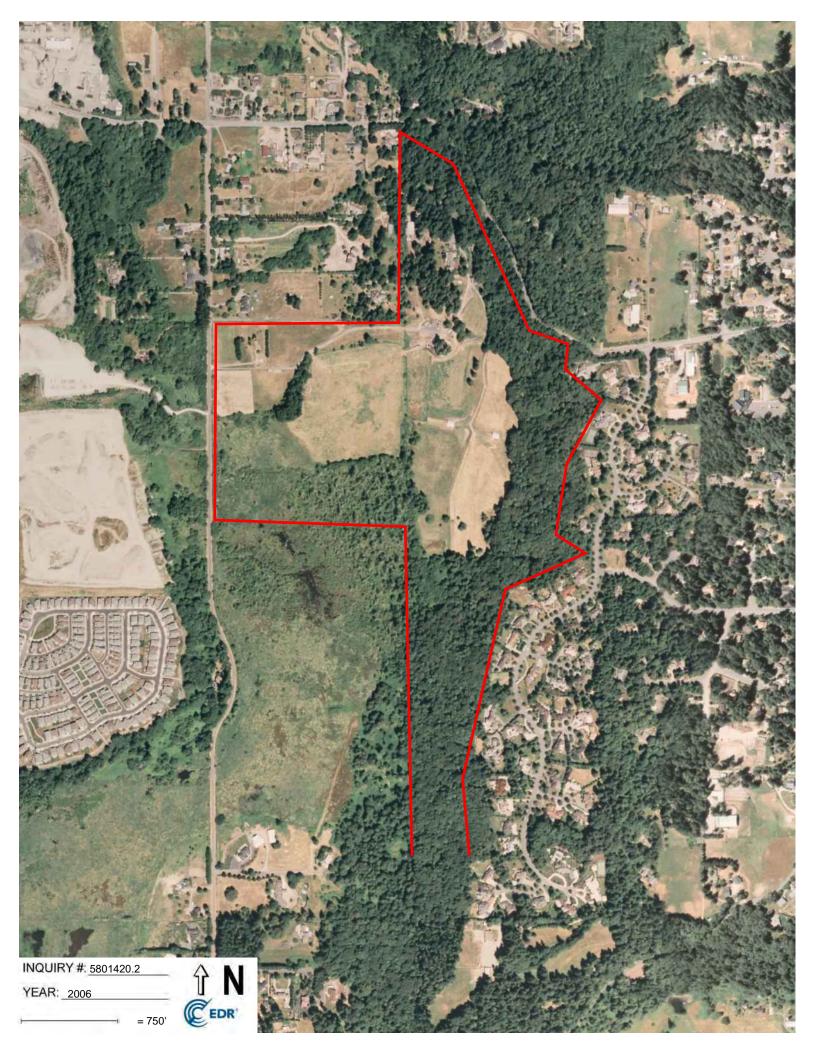


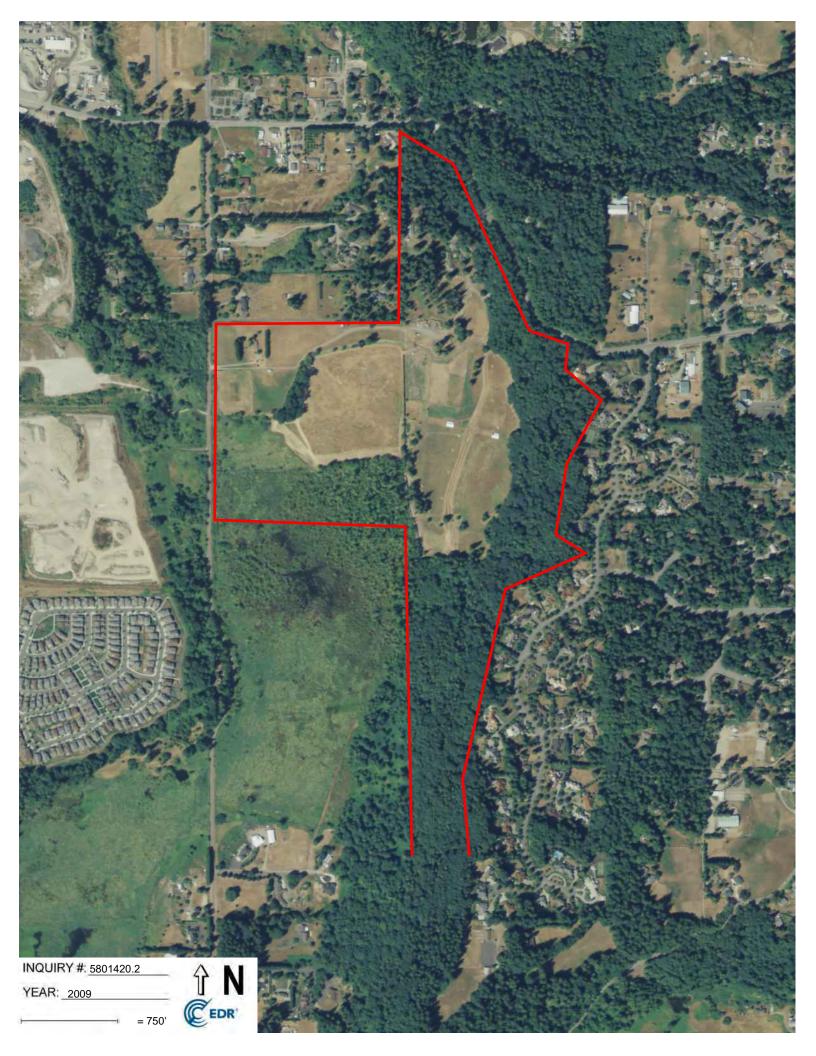




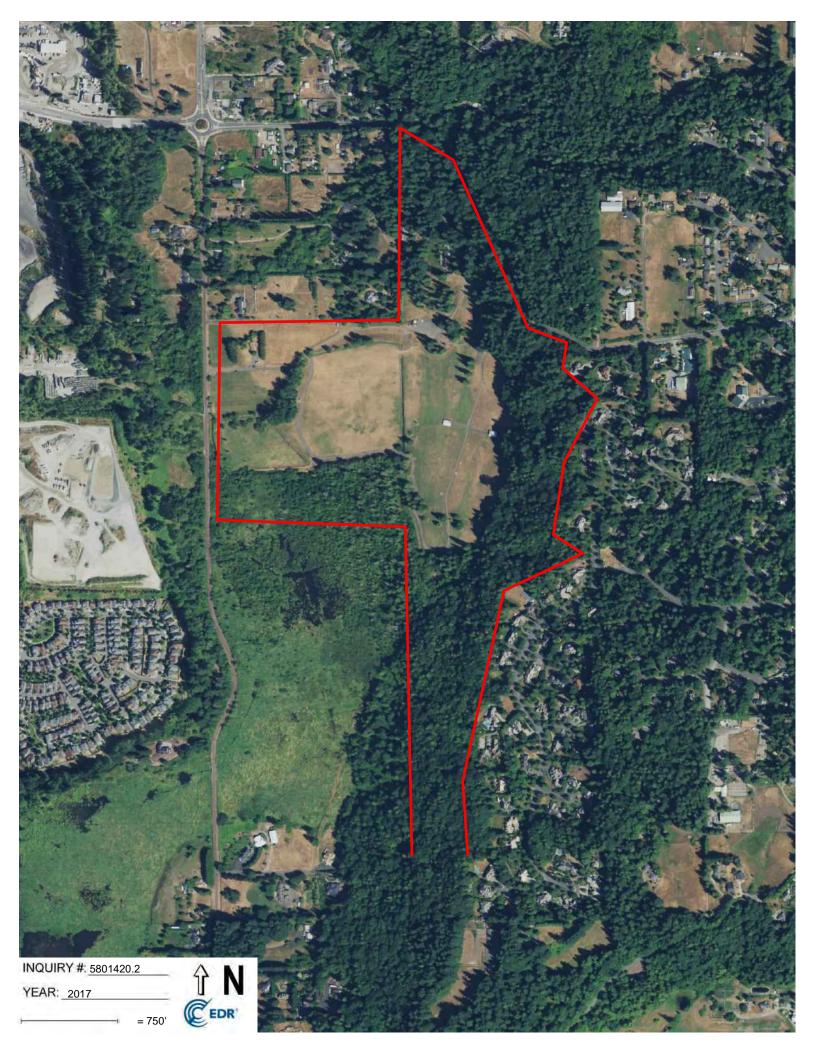












APPENDIX B BORING LOGS

REMEDIAL INVESTGATION REPORT Thompson Field Site Portion of King County Parcel No. 0825069104 Redmond, WA

Farallon PN: 650-031

		FARALLON		Lo	bg	of I	Borir	ng:	BKGRSI	301		e 1 of 1
	ject:	Estate of Barbara J. Nelson Gunshy Farm n: Redmond, WA	Date/Time Star Date/Time Com Equipment: Drilling Compa	npleted	10/2 GH6	3/19 @ 60 Geo		ent	Sampler Type: 4' Drive Hammer (II Depth of Water A Total Boring Dep	bs.): ATD (f	<i>A</i> t bgs): 1	
Fa	rallo	n PN: 650-031	Drilling Forema	an:	Allei	n Jens	en		Total Well Depth	(ft bg	js): 16.0	(Temp.)
Lo	gged	By: S.Brown	Drilling Methoo	1:	Dire	ct Pus	h					
Depth (feet bgs.)	Sample Interval	Lithologic Descriptio	n	nscs	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Consti	g/Well ruction tails
0 - - - 5	(r	0.0-0.5': No recovery. 05-1.5': Sandy SILT (60% silt, 40% sand), fine sand no odor, no sheen. 1.5-4.0': SILT (100% silt), gray, wet, no odor, no she	een.	ML ML ML		88		0.2	BKGRSB01-01	x	V	z Vater Level
-		8.0-12.0': SILT (100% silt), brown, gray at 10.0' bgs sheen.	, wet, no odor, no	ML		100		1.4	BKGRSB01-02		В	entonite

		Well Construction	on Inform	ation							
Monument Type: NA		Filter Pack:	NA		Groun	d Surfac	e Elev	ation (ft):	: NA	٠	
Casing Diameter (inches):	3/4 (Temp.)	Surface Seal:	NA		Top of	f Casing	Elevat	ion (ft):	NA	٠	
Screen Slot Size (inches):	0.010 (Temp.)	Annular Seal:	NA		Surve	yed Loca	ation:	X: NA		Y: NA	
Screened Interval (ft bgs):	11-16 (Temp.)	Boring Abandonment:	Bentonite		Uniqu	e Well ID	: NA				

ML

BKGRSB01-03

BKGRSB01-GW -102319

Х

1.1

100

100

10 -

15 -

12.0-16.0': SILT (100% silt), gray, wet, no odor, no sheen.

		FARALLON CONSULTING		Lo	bg	of I	Borir	ng:	FB-01		Ра	ge 1 of 1
Pro Loc		on: Redmond, WA	Date/Time Sta Date/Time Cor Equipment: Drilling Compa	npleted: any:	7/30 Geo Holt	Probe Drillin	1055 7822DT g		Sampler Type: 5 Drive Hammer (Depth of Water Total Boring De	lbs.): ATD pth (1	(ft bgs) ft bgs):	15.0
		lon PN: 650-031	Drilling Forem Drilling Metho			e Denn ct Pus	-		Total Well Dept	n (ft b	igs): NA	A
LO	gge	ed By: S.Brown							1			
Depth (feet bgs.)	Sample Interval	Lithologic Description	1	nscs	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Cons	ing/Well struction vetails
0		0.0-3.0': Sandy SILT (60% silt, 30% sand, 10% grave and gravel, brown, dry, no odor, no sheen, grass.	el), fine sand	ML		90		0.0	FB-01-0.5	x		
	_	3.0-4.5': SILT (90% silt, 10% sand), fine sand, gray t no odor, no sheen.	o black, moist,	ML								Bentonite
5-		4.5-5.0': No recovery. 5.0-6.0': SILT (90% silt, 10% sand), fine sand, gray t no odor, no sheen.	o black, moist,	ML		60						
	_	6.0-8.0': Sandy SILT (60% silt, 30% sand, 10% grave and gravel, dark brown, moist, no odor, no sheen, w fibers.	el), fine sand ood and plant	ML				0.2	FB-01-7.0	x		
	_	8.0-10.0': No recovery.										
10 -	-	10.0-15.0': Silty GRAVEL (80% gravel, 20% silt), coa brown, wet, no odor, no sheen.	arse gravel,	GM								¥ Water Level
15 -								0.2	FB-01-15.0			

Well Construction Information											
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA						
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA						
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA						
Screened Interval (ft bgs):	NA	Boring Abandonment:	Bentonite	Unique Well ID: NA							

		FARALLON CONSULTING		Lo	bg	of E	Borir	ng:	FB-02		Рас	ge 1 of 1
Pro Loc			Date/Time Star Date/Time Com Equipment: Drilling Compa Drilling Forema	npleted:	: 7/30, Geol Holt	-	1055 7822DT g		Sampler Type: 5 Drive Hammer (I Depth of Water / Total Boring Dep Total Well Depth	bs.): ATD (i oth (ft	ft bgs): t bgs):	15.0
	-	ed By: S.Brown	Drilling Method			ct Pus	0					
Depth (feet bgs.)	Sample Interval	Lithologic Description	n	nscs	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Cons	ng/Well truction etails
0	-	0.0-3.0': Sandy SILT (60% silt, 30% sand, 10% grav gravel, brown, dry, no odor, no sheen, grass.	el), fine and and	ML		80						
	-	3.0-4.0': SILT (90% silt, 10% sand, 10% gravel), fine coarse gravel, gray, moist, no odor, no sheen. 4.0-5.0': No recovery.	e to coarse sand,	ML				0.2	FB-02-4.0	x		Bentonite
5-	-	5.0-8.0': Sandy SILT (60% silt, 30% sand, 10% grav and gravel, brown, moist, no odor, no sheen, wood a	el), fine sand and plant fibers.	 ML		60		0.2	FB-02-5.5	x		
	-	8.0-10.0': No recovery.			1 +1 +1							
10 -	-	10.0-12.0': Well-graded GRAVEL with sand and silt 20% sand, 10% silt), fine and coarse gravel, coarse no odor, no sheen.	sand, gray, wet,	GW- GM		40						≖ Water Level
15 -		12.0-15.0': No recovery.						0.1	Soil Screen at 11.0'			

Well Construction Information												
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA							
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA							
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA							
Screened Interval (ft bgs):	NA	Boring Abandonment:	Bentonite	Unique Well ID: NA								

ara	ect atic	 child of Darbard of Holeon child of Holeon c	Date/Time Completed: 7/30/20 @ 1			deoProbe 7822DTDepth of Water Aolt DrillingTotal Boring Deplike DenningTotal Well Depth				lbs.): ATD pth (os.): Auto NTD (ft bgs): 10.0 hth (ft bgs): 15.0		
	Sample Interval	Lithologic Description	LISCS LISCS		USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Con	ing/Well structior Details	
0		0.0-3.5': Sandy SILT (60% silt, 30% sand, 10% gravel coarse gravel, brown, dry, no odor, no sheen, grass an 3.5-4.0': SILT (90% silt, 10% sand), fine sand, gray, m no sheen, wood and plant fibers.	nd plant fibers.			80		0.0	FB-03-1.0	x		Bentonite	
5		 4.0-5.0': No recovery. 5.0-6.0': SILT (90% silt, 10% sand), fine sand, gray, m no sheen, wood and plant fibers. 6.0-8.5': Sandy SILT (60% silt, 40% sand), fine sand, h no odor, no sheen, plant fibers. 8.5-9.0': Poorly graded GRAVEL (60% gravel, 30% sat corase gravel and sand, dry, no odor, no sheen. 	brown, moist, MI	-		80		0.2	FB-03-6.0	×			
		9.0-10.0': Well-graded GRAVEL with silt and sand (7/20% sand, 10% silt), fine to coarse gravel, coarse san no odor, no sheen.				100		0.2	FB-03-13.0			₩ Water Le	

		Well Construction	on Information		
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	NA	Boring Abandonment:	Bentonite	Unique Well ID: NA	

		FARALLON		Lo	bg	of E	Borir	ıg:	FB-04		Page 1 of 1
Fa	ojec catio rall	Estate of Bandard of Holoon	Date/Time Star Date/Time Con Equipment: Drilling Compa Drilling Forem Drilling Method	npleted: any: an:	eted: 7/30/20 @ 1325 GeoProbe 7822DT				(lbs.): Auto r ATD (ft bgs): 10.0 repth (ft bgs): 15.0		
Depth (feet bgs.)	Sample Interval	Lithologic Description	n	nscs	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-2.5': Sandy SILT (60% silt, 30% sand, 10% grav and gravel, brown, dry, no odor, no sheen, grass an		ML		80		0.1	FB-04-1.0	x	
-	-	2.5-4.0': SILT with sand (80% silt, 10% sand, 10% g and gravel, gray, dry, no odor, no sheen. 4.0-5.0': No recovery.	ravel), fine sand	ML				0.0	FB-04-4.0		
5-	-	5.0-6.5': SILT (100% silt), brown-red, moist, no odor grass and plant fibers. 6.5-10.0': No recovery.	, no sheen,	ML		30		0.2	FB-04-6.0		
- 10	-	10.0-12.0': Well-graded GRAVEL with silt and sand	(70% gravel,	GW-		40					▼ Water Level
-		20% sand, 10% silt), fine to coarse gravel, coarse sa no odor, no sheen. 12.0-15.0': No recovery.		GM				0.0	FB-04-12.0		water Lever
15 -											

		Well Construction	on Information		
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	NA	Boring Abandonment:	Bentonite	Unique Well ID: NA	

		FARALLON CONSULTING		L	bg	of I	Borir	ng:	FB-05		Page 1 of 1
Pro	ent: ojec cati	Estato of Barbara 9. Holoon	Date/Time Star Date/Time Con Equipment: Drilling Compa	pleted	7/30 Geo	-	1343 7822DT		Sampler Type: 5 Drive Hammer (Depth of Water J Total Boring De	lbs.): ATD	Auto (ft bgs): 11
Fa	ral	lon PN: 650-031	Drilling Forema Drilling Method			e Denn ct Pus	0		Total Well Depth	n (ft k	ogs): NA
Lo	gge	ed By: S.Brown		.			 	1		T T	
Depth (feet bgs.)	Sample Interval	Lithologic Description	n	nscs	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0	-	0.0-2.0': Sandy SILT (60% silt, 30% sand, 10% grav coarse sand, fine and coarse gravel, brown, dry, no grass and plant fibers on ground surface.		ML		80					
	-	2.0-4.0': SILT with sand (80% silt, 10% sand, 10% g and gravel, gray, dry, no odor, no sheen.	ravel), fine sand	ML				0.1	FB-05-3.0	×	
	-	4.0-5.0': No recovery.			╶┛┶╹┷╹						
5-	-	5.0-5.5': SILT with sand (80% silt, 10% sand, 10% g and gravel, gray, dry, no odor, no sheen. 5.5-9.0': SILT (100% silt), brown-red, moist, no odor wood, grass and plant fibers.	/	ML		80					Bentonite
	-	9.0-10.0': No recovery.						0.2	FB-05-8.0		
10 -		10.0-11.0': SILT (100% silt), gray, moist, no odor, no	sheen.	ML		60					×
	-	11.0-13.0': Well-graded GRAVEL with silt and and s 20% sand, 10% silt), fine and coarse gravel, coarse no odor, no sheen.	sand, gray, wet,	GW- GM				0.2	FB-05-11.0	×	Water Level
	-	13.0-15.0': No recovery.									
15 -											····

		Well Construction	on Information		
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	NA	Boring Abandonment:	Bentonite	Unique Well ID: NA	

	FARALLON		L	og	of I	Borir	ng:	FB-06		Page 1 of 1
Location	Estate of Barbara J. Nelson Gunshy Farm E Redmond, WA PN: 650-031	Date/Time Star Date/Time Com Equipment: Drilling Compa Drilling Forema Drilling Methoo	ny: an:	: 7/30 Geo Holt Mike	-	1420 7822DT g ning		Sampler Type: 5 Drive Hammer (I Depth of Water A Total Boring Dep Total Well Depth	bs.) ATD oth (: Auto (ft bgs): 11.5 ft bgs): 15.0
Depth (feet bgs.)	By: S.Brown Lithologic Description		nscs	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details

0	0.0-1.0': Sandy SILT (60% silt, 30% sand, 10% gravel), fine sand and gravel, brown, dry, no odor, no sheen, grass and plant fibers.	ML		60	0.1	FB-06-0.5		
	1.0-2.5': SILT with sand (80% silt, 10% sand, 10% gravel), fine sand and gravel, gray, dry, no odor, no sheen.	ML						
	2.5-3.0': Wood fibers, cedar-like odor.	WD						
-	3.0-5.0': No recovery.							
5	5.0-5.5': Wood fibers, cedar-like odor.	wd	<u> </u>	40				
_	5.5-7.0': SILT (100% silt), brown-red, moist, no odor, no sheen, wood, grass and plant fibers.	ML			0.1	FB-06-6.0	x	
-	7.0-10.0': No recovery.							Bentonite
10	10.0-11.5': SILT (100% silt), gray, moist, no odor.	 ML		60				¥
_	11.5-13.0': Well-graded GRAVEL with silt and and sand (70% gravel, 20% sand, 10% silt), fine and coarse gravel, coarse sand, gray, wet.	GW- GM			0.0	FB-06-12.0		Water Level
	13.0-15.0': No recovery.							

		Well Construction	on Information		
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	NA	Boring Abandonment:	Bentonite	Unique Well ID: NA	

		FARALLON		L	og	of I	3oriı	ng:	FB-07			Pag	e 1 of 1
Fa	ojec cati rall	Estate of Barbara 6. Holeon	Date/Time Star Date/Time Com Equipment: Drilling Compa Drilling Forema Drilling Methoo	npleted iny: an:	: 7/31 Geo Holt Mike	Ŭ	1000 7822DT g iing		Sampler Type: 5 Drive Hammer (I Depth of Water A Total Boring Dep Total Well Depth	bs.): ATD oth ((ft b ft bg	igs): gs):	
Depth (feet bgs.)	Sample Interval	Lithologic Description	n	nscs	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed		onsi	ng/Well truction etails
0	-	0.0-2.0': Sandy SILT (60% silt, 30% sand, 10% grav and gravel, brown, dry, no odor, no sheen, grass fibe 2.0-5.0': SILT with sand (80% silt, 10% sand, 10% g and gravel, gray, dry, no odor, no sheen.	ers.	ML		100		0.1	FB-07-1.0				

ML

ML

ML

ML

ML

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50

50

5

10 -

15

grass fibers.

7.5-10.0': No recovery.

12.5-15.0': No recovery.

5.0-6.0': SILT with sand (80% silt, 10% sand, 10% gravel), fine sand

and gravel, gray graded to red, dry to moist, no odor, no sheen. 6.0-7.5': SILT (100% silt), brown-red, moist, no odor,, no sheen,

10.0-11.0': SILT (100% silt), brown-red, moist, no odor, no sheen.

11.0-12.0': SILT (100% silt), brown, moist to wet, no odor, no sheen.

12.0-12.5': SILT (100% silt), gray, moist to wet, no odor, no sheen.

		Well Construction	on Information	1	
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	NA	Boring Abandonment:	Bentonite	Unique Well ID: NA	

							Water Level
				0.0	FB-07-15.0		
uction	Inform	ation	<u> </u>				

0.0

FB-07-5.0

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Bentonite

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		FARALLON		L	og	of I	Boriı	ng:	FB-08		P	age 1 of 1
	ojec cati	Estate of Barbara e. Helsen	Date/Time Star Date/Time Con Equipment: Drilling Compa Drilling Forem:	npleted any: an:	: 7/31 Geo Holt Mike		1010 7822DT g ning		Sampler Type: 5 Drive Hammer (I Depth of Water / Total Boring Dep Total Well Depth	lbs.): ATD pth (1	(ft bgs ft bgs):	Auto): 5.0 : 15.0
		ed By: S.Brown	Drilling Method							yzed		
Depth (feet bgs.)	Sample Interval	Lithologic Descriptio	n	nscs	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Con	ring/Well struction Details
0		0.0-1.5': Sandy SILT (60% silt, 30% sand, 10% grav and gravel, brown, dry, no odor, no sheen, grass fib 1.5-3.0': SILT with sand (80% silt, 10% sand, 10% g	ers. ravel), fine sand	ML		60		0.2	FB-08-1.0			

T with sand (80% silt, 10% sand, 10% gravel), fine sand gray graded to red, dry graded to moist, no odor, no fibers at 3.0' bgs.	ML								
recovery.		_] <u>_</u>] <u>_</u>] <u>_</u>]							
T (100% silt), brown-red, moist, wet from 5.0-5.5' bgs, sheen, plant fibers.	ML		40	0.2	: F	B-08-5.5	x		≭ Water Level
ecovery.									Bentonite
SILT (100% silt), brown-red, moist, no odor, no sheen,	ML		80						
	ML			0.1	FE	3-08-13.0			
	sheen, plant fibers. recovery. SILT (100% silt), brown-red, moist, no odor, no sheen, SILT (100% silt), gray, moist to wet, no odor, no sheen,	sheen, plant fibers. recovery. SILT (100% silt), brown-red, moist, no odor, no sheen, ML	sheen, plant fibers. recovery. SILT (100% silt), brown-red, moist, no odor, no sheen, ML SILT (100% silt), gray, moist to wet, no odor, no sheen, ML	sheen, plant fibers. recovery. SILT (100% silt), brown-red, moist, no odor, no sheen, ML 80 SILT (100% silt), gray, moist to wet, no odor, no sheen, ML	sheen, plant fibers. 0.2 recovery. 0.1 SILT (100% silt), brown-red, moist, no odor, no sheen, ML SILT (100% silt), gray, moist to wet, no odor, no sheen, ML OLU 0.1	sheen, plant fibers. 0.2 F recovery. 0.1 F SILT (100% silt), brown-red, moist, no odor, no sheen, ML 80 SILT (100% silt), gray, moist to wet, no odor, no sheen, ML 0.1	sheen, plant fibers. recovery. SILT (100% silt), brown-red, moist, no odor, no sheen, ML M 80 SILT (100% silt), gray, moist to wet, no odor, no sheen, ML 0.1 FB-08-13.0	sheen, plant fibers. recovery. SILT (100% silt), brown-red, moist, no odor, no sheen, SILT (100% silt), gray, moist to wet, no odor, no sheen, ML 0.2 FB-08-5.5 X 0.2 FB-08-5.5 X 0.2 FB-08-5.5 FB-08-5.5 0.2 FB-08-5.5 FB-08	sheen, plant fibers. recovery. SILT (100% silt), brown-red, moist, no odor, no sheen, ML SILT (100% silt), gray, moist to wet, no odor, no sheen, ML O.2 FB-08-5.5 X 80 0.2 FB-08-5.5 X 0.2 FB-08-5.5 X 0.2 FB-08-5.5 X 0.1 FB-08-13.0

		Well Construction	on Information		
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	NA	Boring Abandonment:	Bentonite	Unique Well ID: NA	

		FARALLON CONSULTING		L	bg	of E	Boriı	ng:	FB-09		P	age 1 of 1
Clie Pro Loc	jec		Date/Time Star Date/Time Con Equipment: Drilling Compa	npleted	: 7/31 Geol	-	1050 7822DT		Sampler Type: { Drive Hammer (Depth of Water Total Boring De	lbs.): ATD (ft bgs	Auto): 4.5 & 14.8
Fai	rall	on PN: 650-031	Drilling Forem	an:	Mike	Denn	ing		Total Well Dept	h (ft b	gs): N	A
Loę	gge	ed By: S.Brown	Drilling Metho	d:	Dire	ct Pusl	n					
Depth (feet bgs.)	Sample Interval	Lithologic Description	1	uscs	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Con	ring/Well struction Details
0	-	0.0-2.0': Sandy SILT (60% silt, 30% sand, 10% grave and gravel, brown, dry, no odor, no sheen, grass fibe 2.0-4.5': SILT with sand (80% silt, 10% sand, 10% g and gravel, dry graded to wet, no odor, no sheen.	ers.	ML		90		0.2	FB-09-1.0			
	-	 4.5-5.0': No recovery. 5.0-6.0': SILT with sand (80% silt, 10% sand, 10% g and gravel, wet, no odor, no sheen. 6.0-9.0': SILT (100% silt), brown-red, moist, no odor, grass and plant fibers. 9.0-10.0': No recovery. 		ML		80		0.2	FB-08-5.0	x		▼ Water Level Bentonite
10 —	-	9.0-10.0': No recovery. 10.0-13.0': SILT (100% silt), brown-red, moist, no od grass and plant fibers.	or, no sheen,	ML		100						

		Well Construction	on Information		
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	NA	Boring Abandonment:	Bentonite	Unique Well ID: NA	

ML

ML

Water Level

FB-08-15.0

0.1

13.0-14.8': SILT (100% silt), brown, moist to wet, no odor, no sheen.

14.8-15.0': SILT (100% silt), gray, wet.

15 -

lient rojec ocati		Date/Time Star Date/Time Con Equipment: Drilling Compa	mpleted: 9/30/2020 0935 GeoProbe 7822DT pany: Holt Drilling			Sampler Type: 5' Macrocore Drive Hammer (Ibs.): Auto Depth of Water ATD (ft bgs): NE Total Boring Depth (ft bgs): 10.0'						
60.5 9.5 5	lon PN: 650-031 ed By: S. Brown	Drilling Forem Drilling Method		Mike Denning Direct Push			Total Well Depth (ft bgs): NA					
Sample Interval	Lithologic Description	n	uscs	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/We Constructio Details		
0	0.0-2.0': Sandy SILT (60% silt, 30% sand, 10% grave gravel, brown, no odor, no sheen, grass and root debr 2.0-3.0': SILT (90% silt, 10% sand), fine sand, brown, no sheen. 3.0-5.0': No Recovery	is.	ML		60		0.0	FB-10-1.0 FB-10-3.0	x			
	5.0-6.0': SILT (90% silt, 10% sand), fine sand, brown, no sheen. 6.0-8.5': SILT (100% silt), blueish white, moist. 8.5-10.0': No Recovery	, moist, no odor,	ML		70		0.0	FB-10-8.5	×	Bentonit		
5												

		Well Constructi	on Informatio	on	
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	NA	Boring Abandonment:	NA	Unique Well ID: NA	

		Date/Time Sta Date/Time Cor Equipment: Drilling Comp Drilling Forem	mpleted: any:	9/30 Geol Holt)950 7822DT) 	Sampler Type: Drive Hammer (Depth of Water Total Boring De Total Well Dept	lbs.): ATD pth (1	Auto (ft bgs): ~8.0' it bgs): 10.0'
1.1	d By: S. Brown	Drilling Metho			t Push					
Deptin (reet bgs.) Sample Interval	Lithologic Description	1	uscs	USCS Graphic	% Recovery	pH in Soil	(mqq) CII	Sample ID	Sample Analyzed	Boring/Well Construction Details
0	0.0-1.0': Sandy SILT (60% silt, 30% sand, 10% gravel gravel, brown, dry, no odor, no sheen, some grass and 1.0-10.0': Silty SAND (70% sand, 30% silt), coarse san yellow, dry, wet at ~8.0' bgs, no odor, no sheen.	root debris.	ML		100		0.0	FB-11-1.0		
5					100		0.1	FB-11-5.0	x	
o							0.1	FB-11-8.0		Bentonite
1 1 1										
5 -										

		Well Constructi	on Information		
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	NA	Boring Abandonment:	NA	Unique Well ID: NA	

	et: Estate of Barbara J. Nelson ect: Gunshy Farm ation: Redmond, WA	Date/Time Star Date/Time Cor Equipment: Drilling Compa	npleted:	9/30/ Geof		1003 7822DT	j j	Sampler Type: Drive Hammer (Depth of Water Total Boring De	lbs.): ATD	Auto (ft bgs): NE		
	ged By: S. Brown	Drilling Forem Drilling Metho		an: Mike Denning				Total Well Depth (ft bgs): NA				
Samula Interval			uscs	USCS Graphic	% Recovery	pH in Soil	(mqq) CIA	Sample ID	Sample Analyzed	Boring/Well Construction Details		
	0.0-1.0': Sandy SILT (60% silt, 30% sand, 10% gravel) gravel, brown, dry, no odor, no sheen, some grass and 1.0-2.0': Silty SAND (70% sand, 30% silt), fine to coars whiteish yellow, dry, no odor, no sheen. 2.0-5.0': No Recovery	root debris.	ML SM		40		0.0	FB-12-1.0	x			
5	5.0-9.0': Silty SAND (70% sand, 30% silt), fine to coars whiteish yellow, moist, no odor, no sheen.	se sand,	SM		80		0.0	FB-12-5.0	x	Bentonite		
- - - -	9.0-10.0': No Recovery						0.0	FB-12-9.0				
I I I I I I												

		Well Constructi	on Informati	on	
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	NA	Boring Abandonment:	NA	Unique Well ID: NA	

Far	ec ati all	et: Gunshy Farm on: Redmond, WA Ion PN: 650-031	Date/Time Star Date/Time Com Equipment: Drilling Compa Drilling Forema Drilling Method	npleted ny: nn:	9/30 Geo Holt Mike		1029 7822DT 9 ing	1	Sampler Type: Drive Hammer (Depth of Water Total Boring De Total Well Dept	lbs.): ATD (pth (f	Auto (ft bgs): NE it bgs): 10.0'
	Sample Interval	ed By: S. Brown Lithologic Description		uscs	USCS Graphic	% Recovery	pH in Soil	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
		 0.0-1.5: Sandy SILT (60% silt, 30% sand, 10% gravel), gravel, brown, dry, no odor, no sheen, some root and gr some flakes of charcoal debris. 1.5-3.0: Silty SAND (70% sand, 20% silt, 10% gravel), sand, coarse gravel, whiteish yellow, dry, no odor, no sh 3.0-5.0: No Recovery 5.0-6.5: (70% sand, 30% silt), fine to coarse sand, whit dry, no odor, no sheen. 6.5-10.0: No Recovery 	ass debris, fine to coarse teen.	ML SM SM		60		0.0	FB-13-1.0 FB-13-3.0 FB-13-6.0	x	Bentonite

		Well Constructi	on Information	1	
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	NA	Boring Abandonment:	NA	Unique Well ID: NA	

clie Proj	jec		Date/Time Star Date/Time Corr Equipment: Drilling Compa	npleted:	9/30/ Geol		1037 7822DT		Sampler Type: Drive Hammer (Depth of Water Total Boring De	lbs.): ATD	Auto (ft bgs): NE
-		on PN: 650-031 ed By: S. Brown	Drilling Forema Drilling Method			Denn ct Pus			Total Well Dept	h (ft b	gs): NA
	Sample Interval	Lithologic Description		USCS	USCS Graphic	% Recovery	pH in Soil	(mdd) CId	Sample ID	Sample Analyzed	Boring/Well Construction Details
0	V	0.0-1.5': Sandy SILT (60% silt, 30% sand, 10% gravel), sand, fine and coarse gravel, brown, dry, no odor, no sh root debris. 1.5-5.0': No Recovery		ML		30		0.0	FB-15-1.0	x	
5		5.0-6.0': Silty SAND (70% sand, 20% silt, 10% gravel), sand, coarse gravel, whiteish yellow, dry, no odor, no sh 6.0-10.0': No Recovery	fine to coarse neen,	SM		20		0.8	FB-14-5.0		Bentonite
- -				1							
1 1 1											

		Well Constructi	on Information	on	
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	NA	Boring Abandonment:	NA	Unique Well ID: NA	

aral	ct: Gunshy Farm ion: Redmond, WA Ion PN: 650-031	Date/Time Started:9/30/2020 1120Date/Time Completed:9/30/2020 1128Equipment:GeoProbe 7822DTDrilling Company:Holt DrillingDrilling Foreman:Mike DenningDrilling Method:Direct Push			Sampler Type: 5' Macrocore Drive Hammer (Ibs.): Auto Depth of Water ATD (ft bgs): NE Total Boring Depth (ft bgs): 10.0' Total Well Depth (ft bgs): NA					
ogg	ed By: S. Brown	brining method							11	_
Sample Interval	Lithologic Description		uscs	USCS Graphic	% Recovery	pH in Soil	(mqq) Olq	Sample ID	Sample Analyzed	Boring/Well Construction Details
0	0.0-1.0': Sandy SILT (60% silt, 30% sand, 10% gravel) sand, fine and coarse gravel, brown, moist, no odor, no		ML		100	-		6 A 14	Π	1
	and root debris. 1.0-3.0': Silty SAND with gravel (50% sand, 30% grave coarse sand, coarse gravel, gray, dry, no odor, no shee ~2.0' bgs. 	el, 20% silt), en, brick shard at	SM				0.0	FB-15-1.0		
1/	3.0-4.0': Sandy SILT (80% silt, 20% sand), fine sand, I some wood and plant debris.	brown, moist,	ML							
1	4.0-5.0': Sandy SILT (80% silt, 20% sand), fine sand, I	brown, moist.	ML				0.0	FB-15-4.0	Ш	
5	5.0-6.5': Sandy SILT (80% silt, 20% sand), fine sand, g	gray, moist.	ML		60					
$\left \right\rangle$	6.5-8.0': SILT (100% silt), brownish red, moist, no odor some plant fiber debris	r, no sheen,	ML							Bentonite
1/	8.0-10.0': No Recovery						0.0	FB-15-8.0		
0										
1 1										
-										
5-										

		Well Constructi	on Informatic	n	
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	NA	Boring Abandonment:	NA	Unique Well ID: NA	

	ct: Gunshy Farm ion: Redmond, WA	Date/Time Sta Date/Time Cor Equipment: Drilling Compa Drilling Forem	npleted: any:	9/30/ Geol Holt	Probe 7 Drilling	145 7822DT) 	Sampler Type: Drive Hammer (Depth of Water Total Boring De Total Well Dept	lbs.): ATD (pth (f	Auto (ft bgs): 5.0' it bgs): 10.0'	
 Call 5 (20) 	lon PN: 650-031 ed By: S. Brown	Drilling Metho	and a second					Total Well Depth (ft bgs): NA			
Depth (feet bgs.) Sample Interval	Lithologic Descriptior	1	uscs	USCS Graphic	% Recovery	pH in Soil	(mqq) CIA	Sample ID	Sample Analyzed	Boring/Well Construction Details	
	0.0-0.5": Sandy SILT (60% silt, 30% sand, 10% gravel) sand, fine and coarse gravel, brown, moist, no odor, no grass and root debris. 0.5-1.5": Sandy SILT (60% silt, 30% sand, 10% gravel) sand, fine and coarse gravel, brown, dry, no odor, no s grass and root debris. 1.5-1.8": Concrete. 1.8-2.2": Wood Debris. 2.2-3.0": Poorly graded SAND with silt and gravel (70% gravel, 10% silt), fine sand, fine gravel, gray, dry, no oc 3.0-5.0": No Recovery 5.0-7.5": Sandy SILT (80% silt, 15% sand, 5% gravel), gravel, brown wet, no odor, no sheen, some grass and 7.5-10.0": No Recovery	o sheen, some), fine to coarse heen, some o sand, 20% dor, no sheen. fine sand, fine	ML CO WD SP- SM ML		60		0.1	FB-16-1.0 FB-16-3.0 FB-16-7.5	x	Water Leve Bentonite	

		Well Constructi	on Informatio	on	
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	NA	Boring Abandonment:	NA	Unique Well ID: NA	

	jec ati	t: Gunshy Farm on: Redmond, WA	Date/Time Star Date/Time Con Equipment: Drilling Compa	npleted: nny:	9/30 Geo Holt	Probe Drilling	1200 7822DT 1	1	Sampler Type: Drive Hammer (Depth of Water Total Boring De	lbs.): ATD pth (1	Auto (ft bgs): ~6.0' it bgs): 10.0'
			Drilling Forema Drilling Method			Denni Ct Pusi			Total Well Dept	h (ft b	gs): NA
neptn (reet bgs.)	Sample Interval	Lithologic Description		uscs	USCS Graphic	% Recovery	pH in Soil	(mqq) CIA	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-1.0': Sandy SILT (60% silt, 30% sand, 10% gravel), sand, fine and coarse gravel, brown, moist, no odor, no		ML		80				Π	T
1	V	grass and root debris. 1.0-2.5': Sandy SILT (60% silt, 30% sand, 10% gravel), sand, fine and coarse gravel, brown, dry, no odor, no sh	fine to coarse	ML				0.0	FB-17-1.0	x	
1 1	Å	2.5-4.0'; Sandy SILT (80% silt, 15% sand, 5% gravel), f gravel, brownish gray, moist, no odor, no sheen, some v	ine sand, fine	ML							
5-		4.0-5.0': No Recovery 5.0-7.0': Sandy SILT (80% silt, 15% sand, 5% gravel), f gravel, brownish gray, wet, no odor, no sheen, some wo	îne sand, fine od debris.	ML		80		0.0	FB-17-5.0	x	Bentonite ቛ Water Leve
1 1		7.0-9.0': SILT (100% silt), brownish red, moist to wet, no sheen, some plant and root debris.	o odor, no	ML							Water Levi
0-	$\langle \rangle$	9.0-10.0': No Recovery						0.1	FB-17-9.0	x	
1 1 1											
5-											
1 1											

		Well Constructi	on Information	n	
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	NA	Boring Abandonment:	NA	Unique Well ID: NA	

	ct: Gunshy Farm tion: Redmond, WA	Date/Time Star Date/Time Con Equipment: Drilling Compa	npleted: any:	9/30/ Geol		1320 7822DT		Sampler Type: Drive Hammer (Depth of Water Total Boring De	lbs.): ATD (epth (f	Auto (ft bgs): NE t bgs): 10.0'	
Carrie 1947	Ilon PN: 650-031 ed By: S. Brown	Drilling Forem Drilling Metho			Denni t Pusi			Total Well Depth (ft bgs): NA			
Sample Interval	Lithologic Description	n	USCS	USCS Graphic	% Recovery	pH in Soil	(mqq) OIA	Sample ID	Sample Analyzed	Boring/Well Construction Details	
	 0.0-1.0': Sandy SILT (60% silt, 30% sand, 10% gravel gravel, brown, dry, no odor, no sheen, some grass and 1.5-1.8': Well-graded SAND with silt (90% sand, 10% coarse sand, black. 1.8-2.0': Sandy SILT (80% silt, 20% sand), fine to coar moist, no odor, no sheen, some plant debris. 2.0-5.0': No Recovery 	t root debris. silt), fine to	ML SW- SM ML		40			FB-18-1.0			
5	5.0-6.0': Silty SAND with gravel (60% sand, 20% silt, 5 sand, coarse gravel, gray, moist, no odor, no sheen, so some wood debris. 6.0-8.0': (100% silt), brownish red, moist to wet, no od some plant debris. 8.0-10.0': No Recovery	ome cobble,	SM / ML		60			FB-18-5.0 FB-18-8.0	x x	Bentonite	

		Well Constructi	on Informatio	n	
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	NA	Boring Abandonment:	NA	Unique Well ID: NA	

	et: Gunshy Farm ion: Redmond, WA	Date/Time Star Date/Time Com Equipment: Drilling Compa	pleted	9/30 Geo		1338 7822DT		Sampler Type: Drive Hammer (Depth of Water Total Boring De	lbs.): ATD (pth (f	Auto (ft bgs): ~8.0' it bgs): 10.0'
G40 5 940 5	Ion PN: 650-031 ed By: S. Brown	Drilling Foreman: Mike Denning Drilling Method: Direct Push						Total Well Dept	h (ft b	gs): NA
Sample Interval	Lithologic Description		USCS	USCS Graphic	% Recovery	pH in Soil	(mdd) CId	Sample ID	Sample Analyzed	Boring/Well Construction Details
0	0.0-1.0': Sandy SILT (60% silt, 30% sand, 10% gravel) sand, fine and coarse gravel, brown, dry, no odor, no si grass and root debris.		ML		100	-				1
-1	0.1-2.5': Sandy SILT (60% silt, 30% sand, 10% gravel) sand, fine and coarse gravel, tan, dry, no odor, no shee), fine to coarse en.	ML					FB-19-1.0	×	
5	2.5-6.0': Silty SAND with gravel (60% sand, 20% silt, 2 sand, coarse gravel, gray, moist, no odor, no sheen, so debris, some wood debris. 6.0-8.0': SILT (100% silt), brownish red, moist to wet, r	me brick	SM		80			FB-19-4.0	x	Bentonite
	sheen, some plant and wood debris.							1.1		
1/\	8.0-9.0': Well-graded GRAVEL with silt and sand (70% sand, 10% silt), fine and coarse gravel, coarse sand, g odor, no sheen.		GW- GM	0.0				FB-19-8.5		¥ Water Lev
o —	9.0-10.0" No Recovery			_				1.000		
5 1 1 1										

		Well Constructi	on Information	1	
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	NA	Boring Abandonment:	NA	Unique Well ID: NA	

lient rojec ocat		Date/Time Star Date/Time Con Equipment: Drilling Compa	npleted:	9/30 Geol		1355 7822DT		Sampler Type: Drive Hammer (Depth of Water Total Boring De	lbs.): ATD	Auto (ft bgs): ~7.5'
0000000	lon PN: 650-031	Drilling Foreman: Mike Denning Total Well Depth (ft bgs): NA Drilling Method: Direct Push							gs): NA	
ogge	ed By: S. Brown								11	_
Sample Interval	Lithologic Description		USCS	USCS Graphic	% Recovery	pH in Soil	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0	0.0-1.0': Sandy SILT (60% silt, 30% sand, 10% gravel) gravel, brown, dry, no odor, no sheen, some grass and		ML		40	_			Π	1
-	1.0-2.0': Sandy SILT (60% silt, 30% sand, 10% gravel) gravel, tan, dry, no odor, no sheen. 2.0-5.0': No Recovery	Front Providence	ML					FB-20-1.0	×	
5	5.0-6.0': Silty SAND with Gravel (60% sand, 20% silt, 2 fine sand, coarse gravel, gray, moist, no odor, no sheet	20% gravel), h, some cobble.	SM		60			FB-20-5.0	×	
	6.0-7.5': SILT (100% silt), brownish red, moist to wet, r sheen, some plant debris.	no odor, no	ML							Bentonite
	7.5-8.0': Poorly graded GRAVEL with silt and sand (70 sand, 10% silt), fine and coarse gravel, coarse sand, g odor, no sheen.		GW- GM	0				FB-20-8.0	x	Water Lev
o	8.0-10.0': No Recovery									•
5-										

		Well Constructi	on Informatio	on	
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	NA	Boring Abandonment:	NA	Unique Well ID: NA	

lient roje ocat		Date/Time Star Date/Time Con Equipment: Drilling Compa	npleted:	9/30 Geol		1415 7822DT		Sampler Type: Drive Hammer (Depth of Water Total Boring De	lbs.): ATD	Auto (ft bgs): ~9.0'
000.000	lon PN: 650-031 ed By: S. Brown	Drilling Forema Drilling Method			Denni ct Push			Total Well Dept	h (ft b	ogs): NA
Sample Interval			USCS	USCS Graphic	% Recovery	pH in Soil	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0	0.0-1.3': Sandy SILT (60% silt, 30% sand, 10% gravel) gravel, brown, dry, no odor, no sheen, some grass and	, fine sand, fine root debris.	ML		100	-			Π	1
	1.3-1.6': Poorly graded SAND with silt (90% sand, 10% coarse sand, dry, black, no odor, no sheen.	6 silt), fine to	SP- SM					FB-21-1.0 FB-21-1.5	x	
5	1.6-6.0': Silty SAND with gravel (60% sand, 20% silt, 2 sand, coarse gravel, gray, dry, no odor or sheen, some brick debris.	0% gravel), fine cobbles, some	SM		90			FB-21-5.0	×	
	6.0-9.0': SILT (100% silt), redish brown, wet to moist, r sheen, some plant debris.	no odor, no	ML							Bentonite
o -	9.0-10.0': No Recovery							FB-21-9.0		► Water Levi
1 1										
5-										
4										

		Well Constructi	on Informatio	on	
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	NA	Boring Abandonment:	NA	Unique Well ID: NA	

Clie Pro	jec		Date/Time Star Date/Time Con Equipment: Drilling Compa	npleted:	9/30 Geol		1435 7822DT		Sampler Type: 5' Macrocore Drive Hammer (Ibs.): Auto Depth of Water ATD (ft bgs): ~6.0' Total Boring Depth (ft bgs): ~10.0'			
	2.2.5	lon PN: 650-031 ed By: S. Brown	Drilling Foreman: Mike Denning Drilling Method: Direct Push						Total Well Dept	h (ft b	ogs): NA	
Depth (feet bgs.)	Sample Interval	Lithologic Descriptio	n	USCS	USCS Graphic	% Recovery	pH in Soil	(mdd) (III	Sample ID	Sample Analyzed	Boring/Well Construction Details	
0	V	0.0-2.0': Sandy SILT (60% silt, 30% sand, 10% grave gravel, brown, dry, no odor, no sheen, some grass and	d root debris.	ML		80			FB-22-1.0	×		
5-	<u> </u>	 2.0-3.5': Silty SAND with gravel (60% sand, 20% silt, sand, coarse gravel, gray, dry, no odor, no sheen. 3.5-4.0': Sandy SILT (80% silt, 20% sand), fine sand, odor, no sheen. 4.0-5.0': No Recovery 5.0-6.0': Sandy SILT (80% silt, 20% sand), fine sand, odor, no sheen. 6.0-8.0': SILT (100% silt), redish brown, moist to wet, no odor, no sheen, some plant fiber debris. 	gray, dry, no gray, dry, no	SM ML ML ML		60			FB-22-4.0		Bentonite ≖ Water Leve	
-	$\left \right $	8.0-10.0': No Recovery							FB-22-8.0			
5-												

		Well Constructi	on Informatio	on	
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	NA	Boring Abandonment:	NA	Unique Well ID: NA	

lient rojeo ocat		Date/Time Star Date/Time Con Equipment: Drilling Compa	npleted	10/0 Geol		0915 7822DT	1	Sampler Type: Drive Hammer (Depth of Water Total Boring De	lbs.): ATD pth (1	Auto (ft bgs): ft bgs):	10.0'	
GD 5 9.0 5	lon PN: 650-031 ed By: S. Brown	Drilling Forem Drilling Metho			Denni ct Push	-		Total Well Depth (ft bgs): NA				
Sample Interval		'n	uscs	USCS Graphic	% Recovery	pH in Soil	PID (ppm)	Sample ID	Sample Analyzed	Cons	ing/Well struction etails	
0	0.0-2.5': Sandy SILT (60% silt, 30% sand, 10% grave gravel, brown, dry no odor, no sheen, some grass and	el), fine sand, fine d root debris,	ML		90		6.0	FB-23-1.0	×			
5	2.5-3.5': Sandy SILT (75% silt, 25% sand), fine sand odor, no sheen. 3.5-3.8': Wood Debris 3.8-4.5': SILT (100% silt), redish brown, moist, some 4.5-5.0': No Recovery 5.0-6.5': SILT (100% silt), redish brown, moist, some	plant fiber debris.	ML WD ML ML		50		0.5	FB-23-4.0	x		Bentonite	
	6.5-7.5': Well-graded GRAVEL with silt and sand (70 sand, 10% silt), fine and coarse gravel, fine to coarse wet, no odor, no sheen. 7.5-10.0': No Recovery	9% gravel, 20% e sand, brown,	GW- GM	0.0			0,5	FB-23-7.5	×			
-											¥ Water Leve	
5-												

		Well Constructi	on Informatio	n	
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	NA	Boring Abandonment:	NA	Unique Well ID: NA	

Client Proje .ocat		Date/Time Star Date/Time Com Equipment: Drilling Compa	npleted:	10/0 Geof	/2020	7822DT	Sampler Type Drive Hammer Depth of Wate Total Boring D	(lbs.): r ATD	Auto (ft bgs): ~7.0'
640.5 940	llon PN: 650-031 ed By: S. Brown	Drilling Forema Drilling Method			Denni t Pusl	•	Total Well Dep	oth (ft b	ogs): NA
Ueptn (reet bgs.) Sample Interval		1	uscs	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0	0.0-2.0': sandy SILT (60% silt, 30% sand, 10% gravel) gravel, brown, dry, no odor, no sheen, some grass and		ML		60	0.5	FB-24-1.0	Î	
	2.0-2.1': Wood Debris 2.1-3.0': Sandy SILT (75% silt, 25% sand), fine sand, odor, no sheen. 3.0-5.0': No Recovery	gray, moist, no	ML			1.4	FB-24-3.0	x	
5	5.0-7.0': SILT (100% silt), redish brown, moist, no odo	r, no sheen.	ML	רדר	80	0.7	FB-24-6.0	×	Bentonite
	7.0-8.0": Well-graded GRAVEL with silt and sand (70% sand, 10% silt), fine to coarse gravel, fine to coarse sa odor, no sheen. 8.0-10.0": No Recovery	6 gravel, 20% nd, gray, wet, no	GW- GM	00					Water Leve
0	10.0-14.0": Well-graded GRAVEL with silt and sand (7 sand, 10% silt), fine to coarse gravel, fine to coarse sa no odor, no sheen.	70% gravel, 20% nd, gray, wet,	GW- GM	0000000	90				
5	14.0-15.0': No Recovery			0.		0.5	FB-24-14.0		

		Well Constructi	on Informati	on	
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	NA	Boring Abandonment:	NA	Unique Well ID: NA	

(1.F.)	nt: Estate of Barbara J. N ect: Gunshy Farm ation: Redmond, WA	Date Equ	e/Time Stari e/Time Com ipment: ling Compa	pleted:	10/0 Geof	/2020	7822DT	Sampler Type Drive Hammer Depth of Wate Total Boring D	(lbs.): r ATD (Auto (ft bgs): ~7.0'
Ca. 1 4	allon PN: 650-031 ged By: S. Brown		ling Forema			Denni t Pusi		Total Well Dep	oth (ft b	gs): NA
		Description		uscs	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0	0.0-2.0': Sandy SILT (60% Silt, 30% sa gravel, brown, dry, no odor, no sheen, s	and, 10% gravel), fine some grass and root o	sand, fine debris.	ML		60	0.9	FB-25-1.0	×	
	2.0-3.0': Sandy SILT with gravel (60% s to coarse sand, fine and coarse gravel, 3.0-5.0': No Recovery	silt, 20% sand, 20% g gray, moist, no odor,	gravel), fine no sheen.	ML			1.3	FB-25-3.0	x	
5-	5.0-7.0': SILT (100% silt), redish brown sheen, some plant fiber debris.	n, moist to wet, no odd	or, no	ML	חזר	60				Bentonite
	7.0-8.0": Well-graded GRAVEL with sill sand, 10% silt), fine and coarse gravel, wet, no odor, no sheen. 8.0-10.0": No Recovery			GW- GM	00		6.4	FB-25-7.5	×	¥ Water Lev
	10.0-12.5": Well-graded GRAVEL with sand, 10% silt), fine and coarse gravel, wet, no odor, no sheen.	silt and sand (70% gi fine to coarse sand,	ravel, 20% brown,	GW- GM	0000	50				
	12.5-15.0': No Recovery				0.2		1.4	FB-25-12.5		
5										

		Well Constructi	on Informatio	n	
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	NA	Boring Abandonment:	NA	Unique Well ID: NA	

-	ec ati	et: Gunshy Farm on: Redmond, WA	Date/Time Starl Date/Time Com Equipment: Drilling Compa	npleted: ny:	10/0 Geol Holt	1/2020 Probe Drilling	7822DT 1	Sampler Type Drive Hamme Depth of Wate Total Boring I	r (Ibs.): er ATD (Depth (f	Auto (ft bgs): ~8.0' ît bgs): 10.0'	
-	1.1	on PN: 650-031 d By: S. Brown	Drilling Forema Drilling Method			Denni t Pusi	-	Total Well Depth (ft bgs): NA			
	Sample Interval	Lithologic Description	'n	uscs	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details	
0		0.0-1.0': Sandy SILT (60% silt, 30% sand, 10% gravel gravel, brown, dry, no odor, no sheen. 1.0-2.5': Sandy SILT with gravel (60% silt, 20% sand, sand, fine to coarse gravel, tan, no odor, no sheen, wo 2.5-4.0': Sandy SILT with gravel (60% silt, 20% sand, sand, fine to coarse gravel, gray, no odor, no sheen.	20% gravel), fine od at 2.5' bgs.	ML ML ML		80	1.3	FB-26-1.0			
5		4.0-5.0": No Recovery 5.0-7.0": SILT (100% silt), redish brown, moist, some p odor, no sheen.		ML		60	1.5	FB-26-5.0	×	Bentonite	
		7.0-8.0': Well-graded GRAVEL with silt and sand (70 sand, 10% silt), fine and coarse gravel, fine to coarse no odor, no sheen. 8.0-10.0': No Recovery		GW- GM			0.7	FB-26-8.0		₩ Water Lev	

		Well Constructi	on Informatio	n	
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	NA	Boring Abandonment:	NA	Unique Well ID: NA	

oc a	ral	et: Gunshy Farm ion: Redmond, WA Ion PN: 650-031	Date/Time Star Date/Time Con Equipment: Drilling Compa Drilling Forem Drilling Methor	npleted: any: an:	10/0 Geof Holt Mike	1/2020	7822DT] ing	Sampler Type Drive Hammer Depth of Wate Total Boring D Total Well Dep	;): ~5.5' : 15.0'		
of the share of the second second	Sample Interval	Lithologic Description		uscs	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Cor	ring/Well nstruction Details
0	V	0.0-1.5': Sandy SILT (60% silt, 30% sand, 10% gravel), sand, fine gravel, brown, dry, no odor, no sheen, some p debris at top ~6". 1.5-5.0': No Recovery		ML		30	0.0	FB-27-1.0	x		
5		5.0-6.0': Well-graded GRAVEL with silt and sand (70% g sand, 10% silt), fine and coarse gravel, fine to coarse sa no odor, no sheen. 6.0-10.0': No Recovery		GW- GM	00	20	0.4	FB-27-5.0	x		Bentonite
		10,0-11.5": Well-graded GRAVEL with silt and sand (70 sand, 10% silt), fine and coarse gravel, fine to coarse sa no odor, no sheen. 11,5-15.0": No Recovery	% gravel, 20% nd, gray, wet,	GW- GM	000	30	0.7	FB-27-11.0			

		Well Constructi	on Informati	on	
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	NA	Boring Abandonment:	NA	Unique Well ID: NA	

lient rojec ocat		Date/Time Started:1/8/2021 1140Date/Time Completed:1/8/2021 1240Equipment:GeoProbe 7822DTDrilling Company:Holt DrillingDrilling Foreman:Mike Denning						C. T. W. C. M. S. M. S.	r (Ibs.): Auto er ATD (ft bgs): 4.0' Depth (ft bgs): 14.0'				
005 005	lon PN: 650-031 ed By: E. Bugge	Drilling Forema Drilling Method			Dennii t Push			Total Well Depth	n (ft b	gs): N	4		
Sample Interval			uscs	USCS Graphic	% Recovery	pH in Soil	PID (ppm)	Sample ID	Sample Analyzed	Con	ing/Well struction)etails		
0	0.0-4.0': Silty SAND (60% silt, 35% sand, 5% gravel), f brown, moist, organic odor, some grass fiber debris.	fine sand, dark	SM		100								
5	4.0-5.0': Silty SAND (70% sand, 20% silt, 10% gravel), brown, wet, organic odor, large wood debris at ~5.0'.	fine sand,	SM		_		0.7				■ Water Leve		
	5.0-6.0': Silty SAND (90% silt, 10% sand), fine sand, g wet, no odor.		SM		40		6.0	FB-29-5.0	Ш		1		
	6.0-7.0': Silty SAND (80% sand, 20% silt), fine sand, g moist, no odor. 7.0-10.0': No Recovery	rayish brown,	SM					1-1-1-			Bentonite		
0	10.0-14.0': Well-graded GRAVEL with silt and sand (70 sand, 10% silt), fine and coarse gravel, coarse sand, gr odor.	0% gravel, 20% ray, wet, no	GW- GM	00000000	80		0.1	FB-29-10.0					
5-				0			0.0	FB-29-14.0	x				

		Well Constructi	on Informati	on	
Monument Type: NA		Filter Pack:	NA	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	NA	Surface Seal:	NA	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	NA	Annular Seal:	NA	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	NA	Boring Abandonment:	NA	Unique Well ID: NA	

	FARALLON		Lo	bg	of E	Borin	g:	FMW-01		age 1 of 1	
		Date/Time Completed: 7/30/20 @ 935 935 Equipment: GeoProbe 7822 Drilling Company: Holt Drilling			935 7822DT 9	Sampler Type: 5' Macrocore Drive Hammer (Ibs.): A					
	Jed By: S.Brown	Drilling Foren Drilling Metho		Mike Denning Direct Push				· · · · · · · · · · · · · · · · · · ·			
Depth (feet bgs.) Sample Interval	Lithologic Descriptio	n	nscs	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Con	ring/Well struction Details	
0 _	0.0-1.8': Sandy SILT (60% silt, 30% sand, 10% grav and gravel, brown, dry, no odor, no sheen, grass fib	vel), fine sand ers.	ML		78		0.0	FMW-01-1.0		Concrete	
- - 5-	1.8-2.0': Wood fibers.2.0-3.0': Sandy SILT (60% silt, 30% sand, 10% gravand gravel, brown, moist, no odor, no sheen, wood3.0-3.9': Sandy SILT (70% silt, 30% sand), fine to m brown, moist, no odor, no sheen, wood and plant fit3.9-5.0': No recovery.5.0-10.0': SILT (90% silt, 10% sand), fine sand, brown odor, no sheen.	and plant fibers. ledium sand, bers.	WD ML ML ML		100		0.0	FMW-01-4.0		Bentonite	
-							0.0	Soil Screen at 7.5'		Sand Pack	
0 - -	10.0-14.8': SILT (100% silt), gray, moist to wet, no o sheen.	odor, no odor, no	ML		100					Screen	
- - 15	14.8-15.0': Silty GRAVEL (80% gravel, 20% silt), cc	rase gravel grav	, GM				0.1	FMW-01-14.5		¥	
-	14.8-15.0': Silty GRAVEL (80% gravel, 20% silt), cc wet, no odor, no sheen. 15.0-20.0': Silty GRAVEL (80% gravel, 20% silt), cc wet, no odor, no sheen.		GM		100		0.0	Soil Screen at 17.5'		Water Leve	
0											

	Well Construction Information											
Monument Type: Flush Mou	unt	Filter Pack:	Pre-pack & Sand Pack	Ground Surface Elevation (ft):	NA							
Casing Diameter (inches):	2	Surface Seal:	Concrete	Top of Casing Elevation (ft):	NA							
Screen Slot Size (inches):	0.010	Annular Seal:	Bentonite	Surveyed Location: X: NA	Y: NA							
Screened Interval (ft bgs):	6-16	Boring Abandonment:	NA	Unique Well ID: BMP-187								

		FARALLON CONSULTING		L	bg	of E	Borir	ıg:	FMW-02)	Pa	ge 1 of 1
Clic Pro Loc	ojec		Date/Time Star Date/Time Com Equipment: Drilling Compa	pleted	7/30 Geo	-	1220 7822DT		Sampler Type: 5 Drive Hammer (II Depth of Water A Total Boring Dep	bs.): ATD	(ft bgs)	
		lon PN: 650-031	Drilling Forema Drilling Method			e Denn ct Pusl	-		Total Well Depth	(ft l	ogs): 13	.5
Lo	gge	ed By: S.Brown	g									
Depth (feet bgs.)	Sample Interval	Lithologic Description	n	nscs	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Cons	ing/Well struction etails
0		0.0-3.0': Sandy SILT (60% silt, 30% sand, 10% grav and gravel, brown, dry, no odor, no sheen, grass fib	el), fine sand ers.	ML		80						Concrete
	-	3.0-4.0': SILT (90% silt, 10% sand), fine sand, brown no sheen. 4.0-5.0': No recovery.		ML				0.1	FMW-02-3.0	×		Bentonite
5-	-	5.0-6.5': SILT with sand (75% silt, 25% sand), fine sand odor, no sheen.	and, gray, moist,	ML		100		0.2	FMW-02-6.0	x		
	-	6.5-10.0': Silty GRAVEL (80% gravel, 20% silt), coar sand, gray, wet, no odor, no sheen.	rse gravel and	GM	8: 8: 8: 8: 8: 8: 8 8 8 8 8 8 8 8 8 8 8						H.	Sand Pack
10 -	-	10.0-14.5': Well-graded GRAVEL with silt and sand 20% sand, 10% silt), fine to coarse gravel, coarse sa no odor, no sheen.		GW- GM		90						Water Level
15 -	-	14.5-15.0': No recovery.						0.2	FMW-02-14.0	x		Bentonite

		Well Construction	on Information		
Monument Type: Flush Mou	unt	Filter Pack:	Pre-pack & Sand Pack	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	2	Surface Seal:	Concrete	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	0.010	Annular Seal:	Bentonite	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	3.5-13.5	Boring Abandonment:	NA	Unique Well ID: BMP-188	

		FARALLON		L	og	of I	Borin	ıg:	FMW-03	3	Р	age 1 of 1
Client:Estate of Barbara J. NelsonProject:Gunshy FarmLocation:Redmond, WAFarallon PN: 650-031			Date/Time Completed:7/30/20 @ 0827Equipment:GeoProbe 7822DTDrilling Company:Holt DrillingDrilling Foreman:Mike Denning				Sampler Type: 5 Drive Hammer (Depth of Water / Total Boring De Total Well Depth	Auto a): 10.0 : 15.0				
Lo	gge	ed By: S.Brown	Drilling Method	d:	Dire	ct Pus	.h					
Depth (feet bgs.)	Sample Interval	Lithologic Descriptio	n	nscs	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Con	ring/Well astruction Details
0	-	0.0-1.5': Sandy SILT (60% silt, 30% sand, 10% grav and gravel, brown, dry, no odor, no sheen, grass fib 1.5-4.0': SILT with sand (80% silt, 10% sand, 10% g and gravel, gray, dry, no odor, no sheen.	ers.	ML		80						Concrete Bentonite

1111

80

60

ML

ML

ML

GW-

GM

0.

 Σ

GW- 0.7 100

4.5-5.0': No recovery.

grass and plant fibers.

9.0-10.0': No recovery.

no odor, no sheen.

13.0-15.0': No recovery.

fibers.

and gravel, gray, dry, no odor, no sheen.

5.0-5.5': SILT with sand (80% silt, 10% sand, 10% gravel), fine sand

5.5-9.0': SILT (100% silt), brown-red, moist, no odor, no sheen,

10.0-11.0': SILT (100% silt), gray, wet, no odor, no sheen, plant

11.0-13.0': Well-graded GRAVEL with silt and sand (70% gravel,

15.0-19.5': Well-graded GRAVEL with silt and sand (70% gravel,

20% sand, 10% silt), fine to coarse gravel, coarse sand, gray, wet,

5-

10 -

15

0.1

0.1

0.0

Soil Screen at 2.5'

FMW-03-5.0

FMW-03-10.0

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Sand Pack

Water Level

Screen

20% sand, 10% silt) no odor, no sheen.	, fine to coarse gravel, coars	se sand, gray, wet,	GM C				
20 – <u>19.5-20.0': SILT (10</u>	0% silt), gray, moist, no odo	r.	ML	0.1 FN	1W-03-20.0	x	Bentonite
		Vell Construction	Information				
Monument Type: Flush Mou	nt Filter I	Pack: F	Pre-pack & Sand Pa	ack Ground Surface	Elevation (ft)): NA	
Casing Diameter (inches):	2 Surfac	e Seal: C	Concrete	Top of Casing El	evation (ft):	NA	
	0.010 Annul	ar Seal: E	Bentonite	Surveyed Location	on: X: NA	۱	': NA
Screen Slot Size (inches):							

		FARALLON		Lo	bg	of E	Borir	ng:	FMW-04	ŀ	Pag	e 1 of 1
Pro	ent: oject catio		Date/Time Star Date/Time Com Equipment: Drilling Compa	pleted	7/30 Geo	-	1116 7822DT		Sampler Type: 5 Drive Hammer (I Depth of Water / Total Boring Dep	bs.) ATD	: (ft bgs):	
Fa	rall	on PN: 650-031	Drilling Forema			e Denn	-		Total Well Depth	ı (ft l	bgs): 20.0)
Lo	gge	d By: S.Brown	Drilling Method	1:	Dire	ct Pusl	n		-1			
Depth (feet bgs.)	Sample Interval	Lithologic Description	n	nscs	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Const	ng/Well truction tails
0	-	0.0-5.0': No recovery.				0						Concrete
5-		5.0-7.0': SILT with sand (80% silt, 10% sand, 10% g and gravel, brown, moist, no odor, no sheen, organi 7.0-9.0': SILT (100% silt), brown-red, moist, no odor grass and plant fibers.	c fibers.	ML		80		0.1	FMW-04-6.0	x	E	Bentonite
10 -		9.0-10.0': No recovery. 10.0-12.0': SILT (100% silt), brown-red, moist, no oc grass and plant fibers.		 ML		80						
		12.0-14.0': SILT (100% silt), brown, moist to wet, no		ML				0.2	FMW-04-12.0	x		Screen
15 -	-	14.0-15.0': No recovery. 15.0-17.0': SILT (100% silt), gray, wet.		 ML		60						Nater Level Sand Pack
·		17.0-18.0': Well-graded GRAVEL with silt and sand 20% sand, 10% silt), fine to coarse gravel, coarse sa 18.0-20.0': No recovery.	(70% gravel, and, gray, wet.	GW- GM	0:-			0.2	FMW-04-17.0			
20 -												

	Well Construction Information												
Monument Type: Flush Mount	Filter Pack:	Pre-pack & Sand Pack	Ground Surface Elevation (ft):	NA									
Casing Diameter (inches): 2	Surface Seal:	Concrete	Top of Casing Elevation (ft):	NA									
Screen Slot Size (inches): 0.010	Annular Seal:	Bentonite	Surveyed Location: X: NA	Y: NA									
Screened Interval (ft bgs): 10-20	Boring Abandonment:	NA	Unique Well ID: BMP-190										

4.4.365	ect: Gunshy Farm ation: Redmond, WA	Date/Time Star Date/Time Con Equipment: Drilling Compa	npleted: iny:	10/01 GeoF Holt I	Probe Drilling	1200 7822DT	Sampler Type: Drive Hammer Depth of Water Total Boring D	(lbs.): ATD (epth (f	Auto (ft bgs) it bgs):	: 10.0' 15.0'
·	ged By: S. Brown	Drilling Forema Drilling Method			Denni t Pusi		Total Well Dep	tn (π D	igs): 1.	3.0
Depth (feet bgs.)	Lithologic Description		USCS	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Con	ring/Well struction Details
0	0.0-1.5': Sandy SILT (60% silt, 30% sand, 10% gravel) gravel, brown, dry, no odor, no sheen.), fine sand, fine	ML		40		1.5.6.5.5	1		Concrete
-	1.5-2.0': Sandy SILT (80% silt, 20% sand), fine sand, s odor, no sheen. 2.0-5.0': No Recovery	gray, dry, no	ML			1.2	FMW-05-0.1	×		Bentonite
5-	5.0-6.0': Sandy SILT (80% silt, 20% sand), fine sand, sodor, no sheen. 6.0-8.5': SILT (100% silt), redish brown, moist, no odor		ML	nn In	80	1.7	FMW-05-6.0	x		Sand Pack
	8.5-9.0": Well-graded GRAVEL with silt and sand (70%		GW-	0.5						Screen
•	sand, 10% silt), fine and coarse gravel, fine to coarse s no odor, no sheen.	sand, gray, wet,	GM							
-	9.0-10.0': No Recovery 10.0-13.0': Well-graded GRAVEL with silt and sand (7 sand, 10% silt), fine and coarse gravel, fine to coarse s no odor, no sheen.	0% gravel, 20% sand, gray, wet,	GW- GM	000000	60					Water Leve
1 1	13.0'-15.0': No Recovery			20		1.9	FMW-05-13.0			Bentonite
5									nnut	

		Well Constructi	on Information		
Monument Type: Flush Mo	unt	Filter Pack:	Pre-pack & Sand Pack	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	3.0"	Surface Seal:	Concrete	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	0.010	Annular Seal:	Bentonite	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	3.0-10.0'	Boring Abandonment:	NA	Unique Well ID: NA	

		Date/Time Star Date/Time Con Equipment: Drilling Compa Drilling Forema	npleted: any:	10/0 Geol Holt	1/2020	7822DT	Sampler Type: Drive Hammer Depth of Water Total Boring D Total Well Dep	(lbs.): ATD (epth (f	Auto ft bgs): t bgs):	15.0'
000000	ed By: S. Brown	Drilling Method			t Pusi	1.2	i sin rich sep		907. 10	
Sample Interval	Lithologic Description		uscs	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Cons	ng/Well struction etails
0	0.0-1.0': Sandy SILT (60% silt, 30% sand, 10% gravel), gravel, brown, dry, no odor, no sheen, some grass and some brick debris at 1.0' bgs.		ML ML		60	1.2	FMW-06-1.0	x		Concrete
-	1.0-2.0: Sandy SILT (60% silt, 30% sand, 10% gravel), gravel, tan, dry, no odor, no sheen. 2.0-3.0': Sandy SILT (70% silt, 30% sand), fine sand, b		ML		24	1.2	FMVV-00-1.0	Î		Bentonite
1	wet, some wood debris. 3.0-5.0': No Recovery									■ Water Lev
5	5.0-7.0': SILT (100% silt), brownish red, moist to wet, n plant fiber debris.	o odor, some	ML		40	1.7	FMW-06-5.0	×		Sand Pack
	7.0-10.0': No Recovery								H	Screen
	10.0-12.0': SILT (100% silt), brownish red, moist to wet plant fiber debris.	, no odor, some	ML	111	80					
	12.0-14.0': SILT (100% silt), grayish white, moist to we sheen.	t, no odor, no	ML		s e e e					
5	14.0-15.0': No Recovery					2.2	FMW-06-14.0			Bentonite

		Well Constructi	on Information		
Monument Type: Flush Mo	unt	Filter Pack:	Pre-pack & Sand Pack	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	3.0"	Surface Seal:	Concrete	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	0.010	Annular Seal:	Bentonite	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	3.0-10.0'	Boring Abandonment:	NA	Unique Well ID: NA	

Projec .ocati	: Estate of Barbara J. Nelson et: Gunshy Farm ion: Redmond, WA	Date/Time Sta Date/Time Co Equipment: Drilling Comp	mpleted:	10/0 Geof	1/2020	7822DT	Sampler Type: Drive Hammer Depth of Wate Total Boring D	(lbs.): ATD	Auto (ft bgs)	: ~3.0'	
Case and a	lon PN: 650-031 ed By: S. Brown	Drilling Foren Drilling Metho		Mike Denning Direct Push			Total Well Depth (ft bgs): 13			13.0'	
Sample Interval	ed By: S. Brown Lithologic Description	1	uscs	USCS Graphic	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Con	ring/Well struction Details	
0]//	0.0-2.5': Sandy SILT (60% silt, 30% sand, 10% gravel gravel, brown, dry, no odor, no sheen, some grass and		ML		60		FMW-07-1.0	x		Concrete	
5	2.5-2.7': Wood Debris 2.5-3.0': SILT (100% silt), redish brown, wet to moist, sheen, some plant fiber debris. 3.0-5.0': No Recovery 5.5-8.8': SILT (100% silt), redish brown, wet to moist, sheen, some plant fiber debris.		ML	TID	90		FMW-07-5.0	×		Bentonite	
	8.8-9.0': SILT (100% silt), gray, wet to moist, no odor,		<u>ML</u>		90					Screen	
5	14.0-15.0': No Recovery						FMW-07-14.0			Bentonite	

		Well Constructi	on Information		
Monument Type: Flush Mo	unt	Filter Pack:	Pre-pack & Sand Pack	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	3.0"	Surface Seal:	Concrete	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	0.010	Annular Seal:	Bentonite	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	3.0-10.0'	Boring Abandonment:	NA	Unique Well ID: NA	

Client Project. Ocati	ion: Redmond, WA	Date/Time Star Date/Time Corr Equipment: Drilling Compa	pleted:	1/8/2 Geof		040 7822DT		Sampler Type: 5 Drive Hammer (I Depth of Water / Total Boring Dej	bs.): ATD (1	Auto ft bgs)	
CD 5 9.0 5		Drilling Forema Drilling Method			Denni t Push			Total Well Depth	ı (ft bç	gs): 13	3.0'
Sample Interval	ed By: E. Bugge		USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	(mqq) CIA	Sample ID	Sample Analyzed	Con	ing/Well struction Details
0	0.0-2.0': Silty SAND with gravel (70% sand, 20% silt, 10 sand, brown, dry to moist, organic odor. 2.0-5.0': No Recovery)% gravel), fine	SM		40		0.1	FMW-08-1.0			Concrete Bentonite s Water level after stabilization
5	5.0-7.5': Well-graded GRAVEL with silt and sand (70% sand, 10% silt), fine and coarse gravel, fine and coarse wet, no odor. 7.5-10.0': No Recovery	gravel, 20% sand, gray,	GW- GM	00000	50		0.1	FMW-08-5.0			Water Leve Sand Pack
	10.0-13.0': Well-graded GRAVEL with silt and sand (70 sand, 10% silt), fine and coarse gravel, fine and coarse wet, no odor.		GW- GM	000000	60		0.1	FMW-08-13.0			PVC Scree
5											

		Well Constructi	on Information		
Monument Type: Flush Mo	unt	Filter Pack:	Pre-pack & Sand Pack	Ground Surface Elevation (ft):	NA
Casing Diameter (inches):	2"	Surface Seal:	Concrete	Top of Casing Elevation (ft):	NA
Screen Slot Size (inches):	0.010	Annular Seal:	Bentonite	Surveyed Location: X: NA	Y: NA
Screened Interval (ft bgs):	3.0-13.0'	Boring Abandonment:	NA	Unique Well ID: BMP-089	

APPENDIX C LABORATORY ANALYTICAL REPORTS

REMEDIAL INVESTGATION REPORT Thompson Field Site Portion of King County Parcel No. 0825069104 Redmond, WA

Farallon PN: 650-031



November 1, 2019

Cliff Schmitt Farallon Consulting, LLC 975 5th Avenue NW Issaquah, WA 98027

Re: Analytical Data for Project 650-031 Laboratory Reference No. 1910-339

Dear Cliff:

Enclosed are the analytical results and associated quality control data for samples submitted on October 24, 2019.

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,

David Baumeister Project Manager

Enclosures



Date of Report: November 1, 2019 Samples Submitted: October 24, 2019 Laboratory Reference: 1910-339 Project: 650-031

Case Narrative

Samples were collected on October 23, 2019 and received by the laboratory on October 24, 2019. 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.



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

DIESEL AND HEAVY OIL RANGE ORGANICS NWTPH-Dx

Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	BH01-02			-		
Laboratory ID:	10-339-02					
Diesel Range Organics	40	30	NWTPH-Dx	10-28-19	10-28-19	Ν
ube Oil Range Organics	180	60	NWTPH-Dx	10-28-19	10-28-19	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	86	50-150				
Client ID:	BH01-02					
_aboratory ID:	10-339-02					
Diesel Range Organics	40	30	NWTPH-Dx	10-28-19	10-28-19	X1,N
ube Oil Range Organics	130	60	NWTPH-Dx	10-28-19	10-28-19	X1
Surrogate:	Percent Recovery	Control Limits				
p-Terphenyl	91	50-150				
Client ID:	BH02-02					
_aboratory ID:	10-339-05					
Diesel Range Organics	190	46	NWTPH-Dx	10-28-19	10-28-19	Ν
ube Oil Range Organics	1000	92	NWTPH-Dx	10-28-19	10-28-19	
Surrogate:	Percent Recovery	Control Limits				
p-Terphenyl	87	50-150				
Client ID:	BH02-02					
Laboratory ID:	10-339-05					
Diesel Range Organics	46	46	NWTPH-Dx	10-28-19	10-28-19	X1,N
ube Oil Range Organics	200	92	NWTPH-Dx	10-28-19	10-28-19	X1,1
Surrogate:	Percent Recovery	Control Limits				,,,,
p-Terphenyl	94	50-150				
Client ID:	BH03-02					
aboratory ID:	10-339-08					
Diesel Range Organics	200	48	NWTPH-Dx	10-28-19	10-28-19	N
ube Oil Range Organics	710	48 96	NWTPH-Dx	10-28-19	10-28-19	IN
Surrogate:	Percent Recovery	Control Limits		10-20-13	10-20-13	
o-Terphenyl	91	50-150				
-reprienyr	51	30-130				
	BH03-02					
aboratory ID:	10-339-08					
aboratory ID: Diesel Range Organics	10-339-08 60	48	NWTPH-Dx	10-28-19	10-28-19	X1,N
aboratory ID: Diesel Range Organics .ube Oil Range Organics	10-339-08 60 100	96	NWTPH-Dx NWTPH-Dx	10-28-19 10-28-19	10-28-19 10-28-19	X1,N X1
Client ID: Laboratory ID: Diesel Range Organics Lube Oil Range Organics Surrogate: D-Terphenyl	10-339-08 60					



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3

DIESEL AND HEAVY OIL RANGE ORGANICS NWTPH-Dx QUALITY CONTROL

Matrix: Soil Units: mg/Kg (ppm)

Analyte		Result	PQL	Me	ethod	Date Prepared	Date Analyz		Flags
METHOD BLANK		nooun				Toparoa	/ lifuly_		. lage
Laboratory ID:		MB1028S2							
Diesel Range Organics		ND	25	NW	FPH-Dx	10-28-19	10-28-	19	
Lube Oil Range Organics	6	ND	50	NW	ГPH-Dx	10-28-19	10-28-	19	
Surrogate:	Per	cent Recovery	Control Limi	ts					
o-Terphenyl		107	50-150						
METHOD BLANK									
Laboratory ID:	I	MB1028S2							
Diesel Range Organics		ND	25	NW	ГPH-Dx	10-28-19	10-28-	19	X1
Lube Oil Range Organics	6	ND	50	NW	FPH-Dx	10-28-19	10-28-	19	X1
Surrogate:	Per	cent Recovery	Control Limi	ts					
o-Terphenyl		114	50-150						
				Source	Percent	Recovery		RPD	
Analyte	Res	ult	Spike Level	Result	Recovery	-	RPD	Limit	Flags
DUPLICATE									
Laboratory ID:	10-32	9-03							
(DRIG	DUP							
Diesel Range	ND	ND	NA NA		NA	NA	NA	NA	
Lube Oil Range	ND	ND	NA NA		NA	NA	NA	NA	

Surrogate:

o-Terphenyl

72 84 50-150



DIESEL AND HEAVY OIL RANGE ORGANICS NWTPH-Dx

Matrix: Water Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	BH01-GW-102319					
Laboratory ID:	10-339-12					
Diesel Range Organics	ND	0.29	NWTPH-Dx	10-28-19	10-29-19	
Lube Oil Range Organics	ND	0.47	NWTPH-Dx	10-28-19	10-29-19	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	111	50-150				
Client ID:	BH01-GW-102319					
Laboratory ID:	10-339-12					
Diesel Range Organics	ND	0.29	NWTPH-Dx	10-28-19	10-29-19	X1
Lube Oil Range Organics	ND	0.47	NWTPH-Dx	10-28-19	10-29-19	X1
Surrogate:	Percent Recovery	Control Limits		10 20 10	10 20 10	
o-Terphenyl	115	50-150				
o-reiphenyi	115	50-750				
Client ID:	BH02-GW-102319					
Laboratory ID:	10-339-13					
Diesel Range Organics	ND	0.28	NWTPH-Dx	10-28-19	10-29-19	
Lube Oil Range Organics	ND	0.46	NWTPH-Dx	10-28-19	10-29-19	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	110	50-150				
Client ID:	BH02-GW-102319					
Laboratory ID:	10-339-13					
Diesel Range Organics	ND	0.28	NWTPH-Dx	10-28-19	10-29-19	X1
Lube Oil Range Organics	ND	0.28	NWTPH-Dx NWTPH-Dx	10-28-19	10-29-19	X1
			NVIFIEDX	10-20-19	10-29-19	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	94	50-150				
Client ID: B	KGRSB01-GW-10231	9				
Laboratory ID:	10-339-14					
Diesel Range Organics	ND	0.29	NWTPH-Dx	10-28-19	10-29-19	
Lube Oil Range Organics	ND	0.47	NWTPH-Dx	10-28-19	10-29-19	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	112	50-150				
Client ID: B	KGRSB01-GW-10231	q				
Laboratory ID:	10-339-14					
		0.00		10.00.10	10.20.40	V4
Diesel Range Organics	ND	0.29	NWTPH-Dx	10-28-19	10-30-19	X1
Lube Oil Range Organics	ND	0.47	NWTPH-Dx	10-28-19	10-30-19	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	124	50-150				



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5

DIESEL AND HEAVY OIL RANGE ORGANICS NWTPH-Dx QUALITY CONTROL

Matrix: Water Units: mg/L (ppm)

					Date	Date		
Analyte	Result	PQL	Met	hod	Prepared	Analyze	ed	Flags
METHOD BLANK								
Laboratory ID:	MB1028W1							
Diesel Range Organics	ND	0.25	NWTF	PH-Dx	10-28-19	10-29-1	9	X1
Lube Oil Range Organics	ND	0.40	NWT	PH-Dx	10-28-19	10-29-1	9	X1
Surrogate:	Percent Recovery	Control Limits	S					
o-Terphenyl	112	50-150						
Laboratory ID:	MB1028W1							
Diesel Range Organics	ND	0.25	NWT	PH-Dx	10-28-19	10-29-1	9	
Lube Oil Range Organics	ND	0.40	NWTF	PH-Dx	10-28-19	10-29-1	9	
Surrogate:	Percent Recovery	Control Limits	s					
o-Terphenyl	112	50-150						
			Source	Percent	Recovery		RPD	
Analyte	Result	Spike Level	Result	Recovery	Limits	RPD	Limit	Flags
DUPLICATE								
Laboratory ID:	SB1028W1							
C	RIG DUP							
Diesel Fuel #2 0	.895 0.908	NA NA		NA	NA	1	NA	
Lube Oil Range	ND ND	NA NA		NA	NA	NA	NA	
Surrogate:								
o-Terphenyl				105 98	3 50-150			



6

Date of Report: November 1, 2019 Samples Submitted: October 24, 2019 Laboratory Reference: 1910-339 Project: 650-031

% MOISTURE

			Date
Client ID	Lab ID	% Moisture	Analyzed
BH01-02	10-339-02	17	10-28-19
BH02-02	10-339-05	46	10-28-19
BH03-02	10-339-08	48	10-28-19



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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 methods 8260 & 8270, 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.

Ζ-

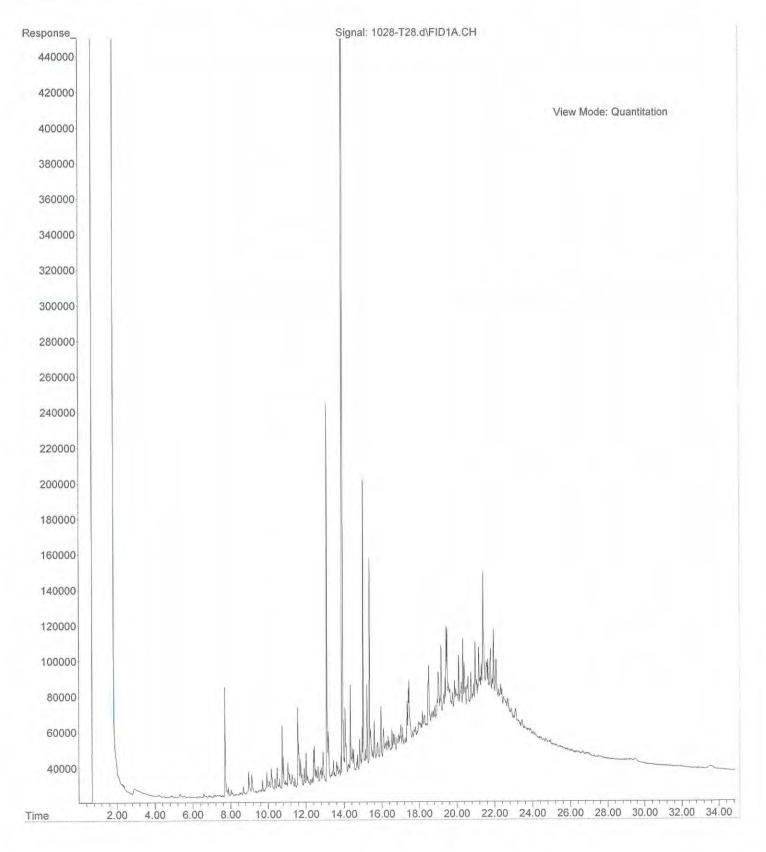
ND - Not Detected at PQL PQL - Practical Quantitation Limit RPD - Relative Percent Difference



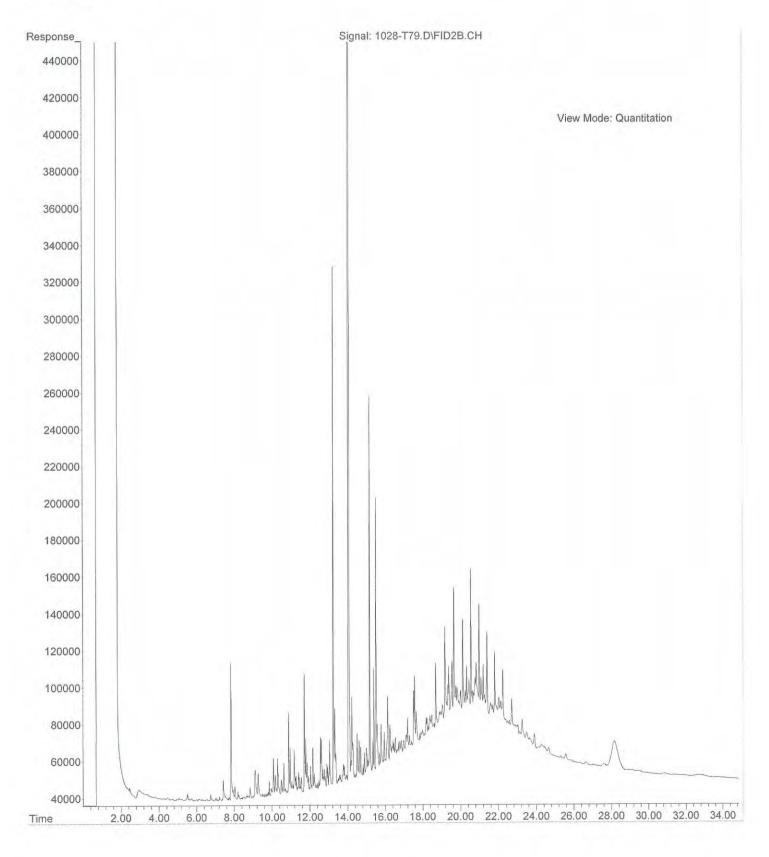
	Reviewed/Date	Received	Relinquished	Received	Relinquished	Received MA	Relinquished	Signature		NS BH03-02	67 BH03-01	7 BHO2-01 Swa	6 BH02-03	5 BH02-02	4 BH02-01	3 BH01-03	2 BHO1-02	1 BH01-01	Lab ID Sample Identification	SMB	Schmitt	Project Manager WAShy	b50-031	Taralle	Company:	Analytical Laboratory Testing Services 14648 USE 95th Street - Redmond, WA 98052	Environmental Inc.
						they (rearing	a la la		Carre		10/2	S						100				X			www.onsite-env.com	Redmond, WA 98052	ital Inc.
	Reviewed/Date					320	Forda	Company		× 1420 ¥	10/23/19 1358 Soil		N 1305 V	1250	1230	1120 4	1105	1040 soil	Date Time Sampled Sampled Matrix	(other)		X Standard (7 Days)	2 Days 3 Days	Same Day 1 Day	(Check One)	(in working days)	Chain o
					-	10/24/14 1200	10/24/07 4200	Date Time					5	5			<u>S</u>	5	NWTP NWTP NWTP NWTP Volatil Haloge	H-HC H-Gx/ H-Gx H-Dx es 826	BTEX Acid OC Volatil	1 / SG C	C	p)		Laboratory Number:	Chain of Custody
	Chromatograms with final report 🔲 Electronic Da	Data Package: Standard 🛛 Level III 🗌 Lev				and without	- Run selected Dx s	Comments/Special Instructions											Semiv (with li PAHs PCBs Organ Organ Chlorin Total F Total N TCLP	olatile ow-lev 3270D 8082A ochlor ochlor ophos nated ICRA I ITCA Metals	s 8270[el PAH /SIM (la ine Pes phorus Acid He Metals		3081B les 827 \$ 8151,	70D/SIN	<u>л</u>	10-339	Page
and the second se	Electronic Data Deliverables (EDDs)	Level IV				Set cleanup	2× sampler	A DESCRIPTION OF THE OWNER OWNER OF THE OWNER OWNER OF THE OWNER OWNE		X				X			X		% Moi	sture							of R

Reviewed/Date	Received	Relinquished	Received	Relinquished	Received MAUM LIGNEN	Relinquished	Signature	for the	1001		514BKGRSB01-GW-102319	ALTBHO2-6U-102319	1317BH01-61-102319	ADWBKGRSBOI-03	10 BKGRSBOI-02	10 BKGRSB01-01	Lab ID Sample Identification	SMR	C. Schmitt	Project Name: Cwnshy	Project Number: $650-031$	Company:	Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052 Phone: (425) 883-3881 • www.onsite-env.com	Environmental Inc.
Reviewed/Date		-			05/2	Tarla	Company				V 1900 V 9	1640 1 9	1530 GU 9	V 1645 V 5	1 1627 5	10/23/4 1610 505/ 5	Date Time Sampled Sampled Matrix	(other)		X Standard (7 Days)	2 Days	ck One)	Turnaround Request (in working days)	Chain of
					10/24/19/1200	10/24/19 1200	Date Time			V							NWTP NWTP NWTP NWTP Volatil	PH-HCI PH-Gx/I PH-Gx PH-Dx (es 826 enated	BTEX Acid DC Volatile	/ SG Cl s 82600)		Laboratory Number:	Custody
Chromatograms with final report Electronic Data Deliverables (EDDs)	Data Package: Standard Level III Level IV				and without sitin gel deen up	Run selected, De sampley with	Comments/Special Instructions										Semiv (with li PAHs PCBs Organ Organ Chlorii Total F Total N TCLP	olatiles ow-leve 8270D/ 8082A ochlori ophosp nated A RCRA N ATCA N Metals	8270D el PAHs SIM (lor ne Pest bhorus F Acid Her Acid Her Acid Her	/SIM) w-level) icides 8	081B es 8270D/	SIM	n 10-339	Page 2 of 2

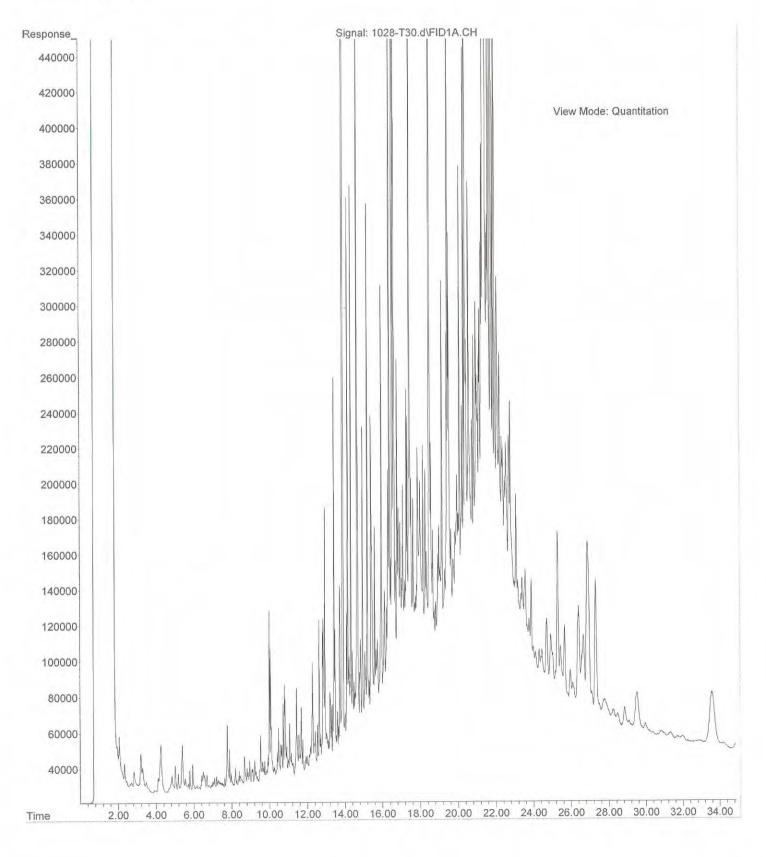




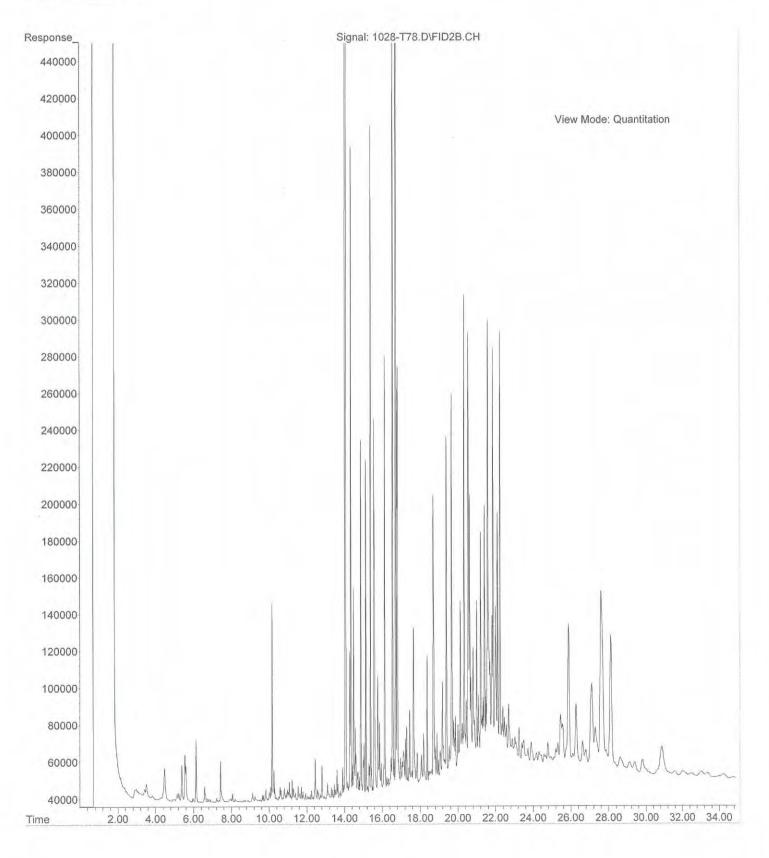
File :X:\DIESELS\TERI\DATA\T191028.SEC\1028-T79.D Operator : JT Acquired : 29 Oct 2019 3:47 using AcqMethod T190827F.M Instrument : Teri Sample Name: 10-339-02 ACU Misc Info : Vial Number: 79



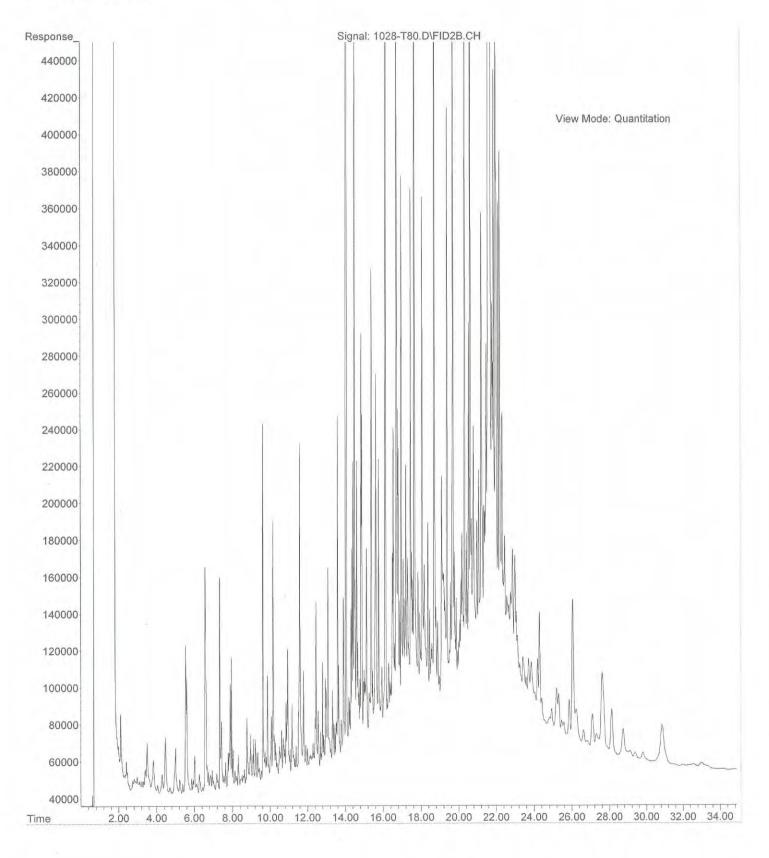
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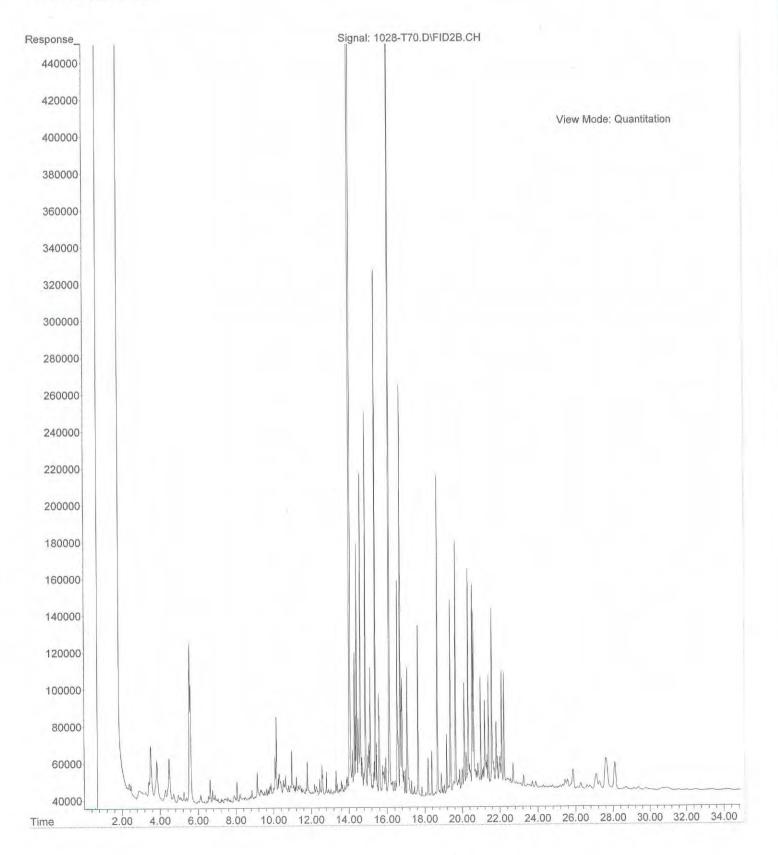
File :X:\DIESELS\TERI\DATA\T191028.SEC\1028-T78.D Operator : JT Acquired : 29 Oct 2019 3:05 using AcqMethod T190827F.M Instrument : Teri Sample Name: 10-339-05 ACU Misc Info : Vial Number: 78



File :X:\DIESELS\TERI\DATA\T191028.SEC\1028-T80.D Operator : JT Acquired : 29 Oct 2019 4:29 using AcqMethod T190827F.M Instrument : Teri Sample Name: 10-339-08 Misc Info : Vial Number: 80



File :X:\DIESELS\TERI\DATA\T191028.SEC\1028-T70.D Operator : JT Acquired : 28 Oct 2019 21:29 using AcqMethod T190827F.M Instrument : Teri Sample Name: 10-339-08 ACU Misc Info : Vial Number: 70





November 13, 2019

Cliff Schmitt Farallon Consulting, LLC 975 5th Avenue NW Issaquah, WA 98027

Re: Analytical Data for Project 650-031 Laboratory Reference No. 1910-339B

Dear Cliff:

Enclosed are the analytical results and associated quality control data for samples submitted on October 24, 2019.

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,

David Baumeister Project Manager

Enclosures



Date of Report: November 13, 2019 Samples Submitted: October 24, 2019 Laboratory Reference: 1910-339B Project: 650-031

Case Narrative

Samples were collected on October 23, 2019 and received by the laboratory on October 24, 2019. 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.



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

DIESEL AND HEAVY OIL RANGE ORGANICS NWTPH-Dx

Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	BH01-01			•		
Laboratory ID:	10-339-01					
Diesel Range Organics	ND	29	NWTPH-Dx	11-5-19	11-5-19	
_ube Oil	64	58	NWTPH-Dx	11-5-19	11-5-19	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	83	50-150				
Client ID:	BH01-01					
_aboratory ID:	10-339-01					
Diesel Range Organics	ND	29	NWTPH-Dx	11-5-19	11-11-19	X1
ube Oil Range Organics	ND	58	NWTPH-Dx	11-5-19	11-11-19	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	100	50-150				
Client ID:	BH01-03					
Laboratory ID:	10-339-03					
Diesel Range Organics	ND	29	NWTPH-Dx	11-5-19	11-5-19	
ube Oil Range Organics	ND	59	NWTPH-Dx	11-5-19	11-5-19	
Surrogate:	Percent Recovery	Control Limits				
p-Terphenyl	77	50-150				
Client ID:	DU04 02					
• • • • • • • • •	BH01-03					
Laboratory ID:	10-339-03	20		14 5 40	11 11 10	VA
Diesel Range Organics	ND ND	29	NWTPH-Dx	11-5-19	11-11-19	X1
Lube Oil Range Organics		59	NWTPH-Dx	11-5-19	11-11-19	X1
Surrogate:	Percent Recovery 90	Control Limits 50-150				
o-Terphenyl	90	50-150				
Client ID:	BH02-01					
_aboratory ID:	10-339-04					
Diesel Range Organics	ND	45	NWTPH-Dx	11-5-19	11-5-19	U1
_ube Oil	490	57	NWTPH-Dx	11-5-19	11-5-19	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	67	50-150				
Client ID:	BH02-01					
_aboratory ID:	10-339-04					
Diesel Range Organics	ND	55	NWTPH-Dx	11-5-19	11-13-19	U1,X1
Lube Oil	340	57	NWTPH-Dx	11-5-19	11-13-19	X1
Surrogate:	Percent Recovery	Control Limits				
Sunoyale.	I CICCIIL I COOVCIY	Control Ennito				



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3

DIESEL AND HEAVY OIL RANGE ORGANICS NWTPH-Dx

Matrix: Soil Units: mg/Kg (ppm)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	BH02-03					
Laboratory ID:	10-339-06					
Diesel Range Organics	ND	120	NWTPH-Dx	11-5-19	11-5-19	
Lube Oil Range Organics	740	230	NWTPH-Dx	11-5-19	11-5-19	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	84	50-150				
Client ID:	BH02-03					
• · · • · · • · · · · · · · · · · · · ·	10-339-06					
Laboratory ID:		400		14 5 40	11 11 10	VA
Diesel Range Organics	ND	120	NWTPH-Dx	11-5-19	11-11-19	X1
Lube Oil Range Organics	ND	230	NWTPH-Dx	11-5-19	11-11-19	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	99	50-150				
Client ID:	BH03-01					
Laboratory ID:	10-339-07					
Diesel Range Organics	ND	28	NWTPH-Dx	11-5-19	11-5-19	
Lube Oil	110	55	NWTPH-Dx	11-5-19	11-5-19	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	84	50-150				
Client ID:	BH03-01					
Laboratory ID:	10-339-07					
Diesel Range Organics	ND	28	NWTPH-Dx	11-5-19	11-11-19	X1
Lube Oil	77	55	NWTPH-Dx	11-5-19	11-11-19	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	100	50-150				



DIESEL AND HEAVY OIL RANGE ORGANICS NWTPH-Dx QUALITY CONTROL

Matrix: Soil Units: mg/Kg (ppm)

						Date	Date		
Analyte		Result	PQL	Me	ethod	Prepared	Analyz	ed	Flags
METHOD BLANK									
Laboratory ID:		MB1105S2							
Diesel Range Organics		ND	25	NW	FPH-Dx	11-5-19	11-5-1	9	
Lube Oil Range Organic	S	ND	50	NW	FPH-Dx	11-5-19	11-5-1	9	
Surrogate:	Per	rcent Recovery	Control Lim	nits					
o-Terphenyl		87	50-150						
Laboratory ID:		MB1105S2							
Diesel Range Organics		ND	25	NW	FPH-Dx	11-5-19	11-11-1	19	X1
Lube Oil Range Organic	s	ND	50	NW	FPH-Dx	11-5-19	11-11-1	19	X1
Surrogate:	Per	cent Recovery	Control Lin	nits					
o-Terphenyl		102	50-150						
				Source	Percent	Recovery		RPD	
Analyte	Res	sult	Spike Level	Result	Recovery	Limits	RPD	Limit	Flags
DUPLICATE									
Laboratory ID:	11-02	20-17							
	ORIG	DUP							
Diesel Range	ND	ND	NA NA		NA	NA	NA	NA	
Lube Oil Range	ND	ND	NA NA		NA	NA	NA	NA	
Surrogate:									
o-Terphenyl					82 84	50-150			

Date of Report: November 13, 2019 Samples Submitted: October 24, 2019 Laboratory Reference: 1910-339B Project: 650-031

% MOISTURE

			Date
Client ID	Lab ID	% Moisture	Analyzed
BH01-01	10-339-01	13	11-5-19
BH01-03	10-339-03	15	11-5-19
BH02-01	10-339-04	11	11-5-19
BH02-03	10-339-06	79	11-5-19
BH03-01	10-339-07	10	11-5-19



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



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 methods 8260 & 8270, 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.

Ζ-

ND - Not Detected at PQL PQL - Practical Quantitation Limit RPD - Relative Percent Difference



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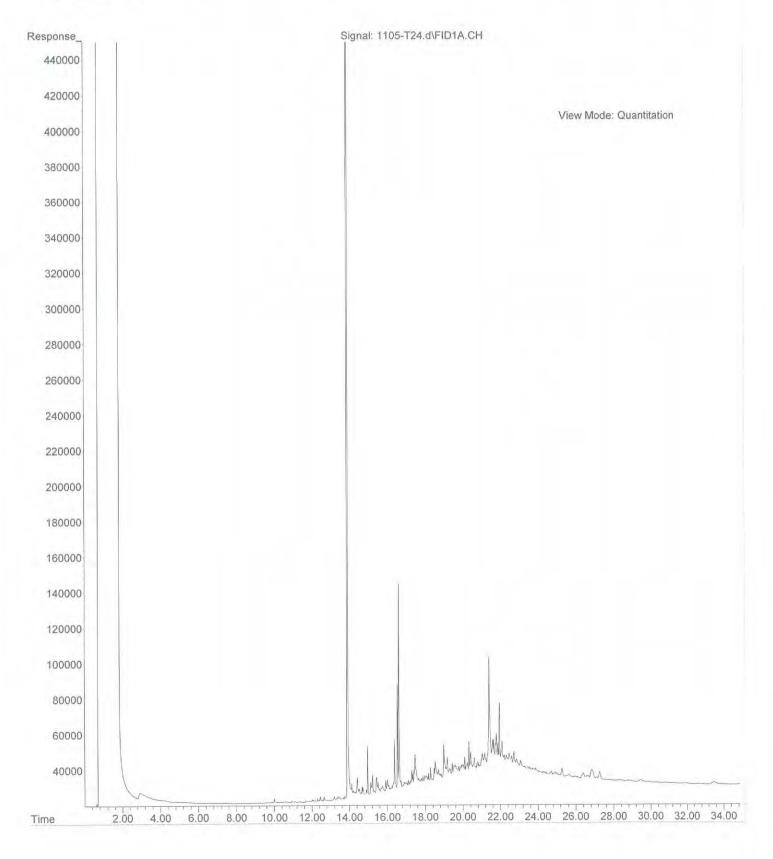
Reviewed/Date		Received	Relinquished	Received	Relinquished	Received Marun Lac	Relinquished	Signature	Carre	15 BH03-02	67 BH03-01	7 - BHO2 - C1 Swa	6 BH02-03	5 BH02-02	4 BH02-01	3 BH01-03	2 BHO1-02	1 BHO1-01	Lab ID Sample Identification	Sampled by:	Schmitt	GWISHY	Project Number:	Eningt Number		Analytical Laboratory Testing Services
Reviewed/Date						New OSE	Farles	Company		1420 4	10/23/19 1358 Soil		W 1305 V	1250	1230	1120 4	1 1105	10/23/19 1040 Soil	Date Time Sampled Sampled Matrix	(other)	_	Standard (7 Days)	2 Days 3 Days	Same Day 1 Day	(in working days) (Check One)	Chain (
					-	0124141200	1424/07 4200	Date Time	+	S (X)	5 XXX		5	5	5		5	5 XXXXXXXX	NWTF NWTF NWTF NWTF Volatil Halog	PH-HCI PH-Gx/P PH-Gx PH-Dx PH-Dx PH-Dx PH-Dx PH-Dx PH-Dx PH-Dx PH-Dx PH-Dx PH-HCI PH-HCI PH-HCI PH-HCI PH-HCI PH-Gx/F	Acid DC Volatile	- he 3 "	lean-up)		Laboratory Number:	of Custody
Chromatograms with final report Electronic Data Deliverables (EDDs)	Data Package: Standard D Level III D Level IV D				(X) Added 11/2/19. DB (STR)	with and without silica get cleanly	ided Dx sample	Comments/Special Instructions											Semiv (with I PAHs PCBs Organ Organ Chlori Total F Total N TCLP	olatiles ow-leve 8270D/ 8082A ochlori ophosp nated / RCRA M MTCA N Metals oil and	8270D al PAHs SIM (lo ne Pest bhorus I Acid He Acid He Acid He	/SIM) w-level) icides 8 Pesticid	3081B les 8270 s 8151A	D/SIM	10-339	Page of

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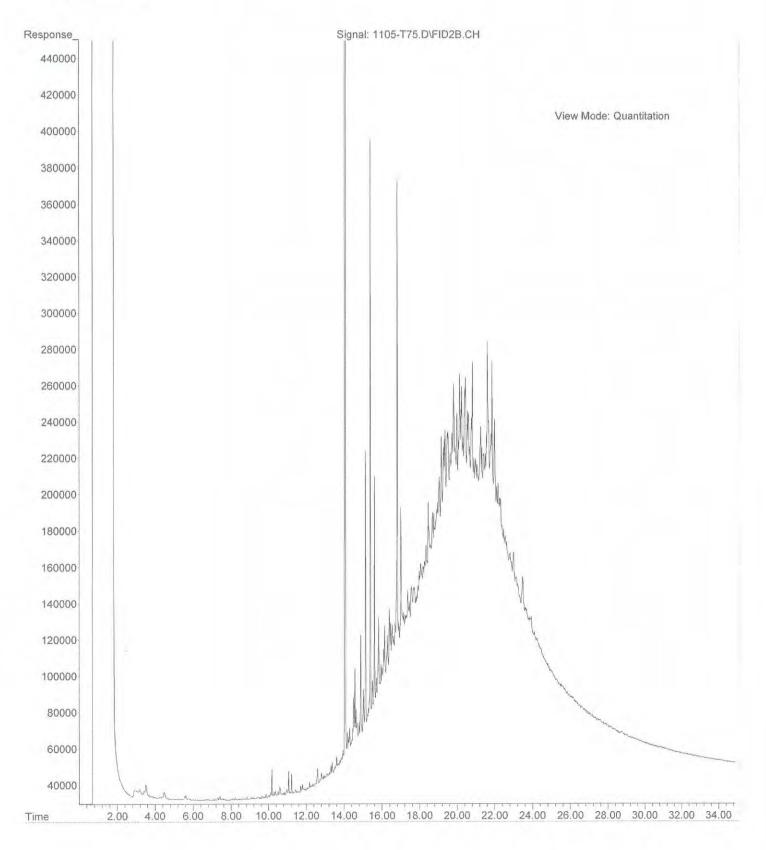
Reviewed/Date	Received	Relinquished	Received	Relinquished	Received Manuel Alexed	Relinquished	Signature	barth	and and and	1514BKGRSB01-GW-102319	X413BH02-6U-102319	1318HOI-61-102319	ADMBKGRSBOI-03	10 BKGRSBOI-02	Da BKGRSBOI-CI	Lab ID Sample Identification	SAND STANDARD DATE	C. Schmitt	Project Nancer Cunsky	650-031	Project Number	Phone: (425) 883-3881 • www.onsite-env.com Company:	Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052	Environmental Inc.
Reviewed/Date					OSE.	Tarler	Company			V 1900 V	1, 1640 1	1530 64 9	V 1645 V 5	1627 , 5	10/23/4 1610 505/ 5	Date Time Sampled Sampled Matrix	(other)		X Standard (7 Days)	2 Days 3 Days	Same Day 1 Day	(Check One)	Turnaround Request (in working days)	Chain of
					0061 19/14/1200	10001 6/26/01	Date Time			C	9 (0)					NWTF NWTF NWTF NWTF Volatil	PH-HCI PH-Gx/ PH-Gx PH-Dx les 826 enated	BTEX Acic OC Volatile	// SG C es 82600 ers Only	2)		Laboratory Number:	Chain of Custody
Chromatograms with final report	Data Package: Standard Level III Level IV				and without silica gel checin u	sampley u	Comments/Special Instructions									Semix (with 1 PAHs PCBs Organ Organ Chlori Total 1 Total 1 Total 1	volatiles low-lev 8270D 8082A nochlor nophos inated RCRA I MTCA Metals	s 8270E el PAHs /SIM (lo ine Pes phorus Acid He Metals	/SIM	3081B les 827(8151A		Λ	rr 10-339	Page 2 of 2
iverables (EDDs)					New wy	with				K	R	X				% Mo	isture							

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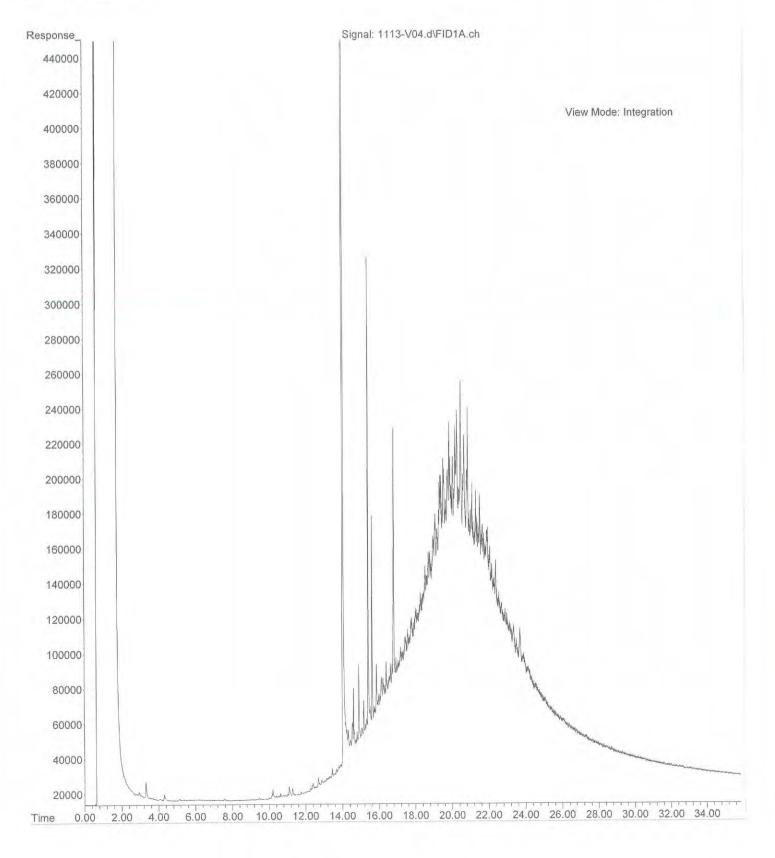
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Operator : JT
Acquired : 06 Nov 2019 0:50 using AcqMethod T190827F.M
Instrument : Teri
Sample Name: 10-339-01
Misc Info :
Vial Number: 24



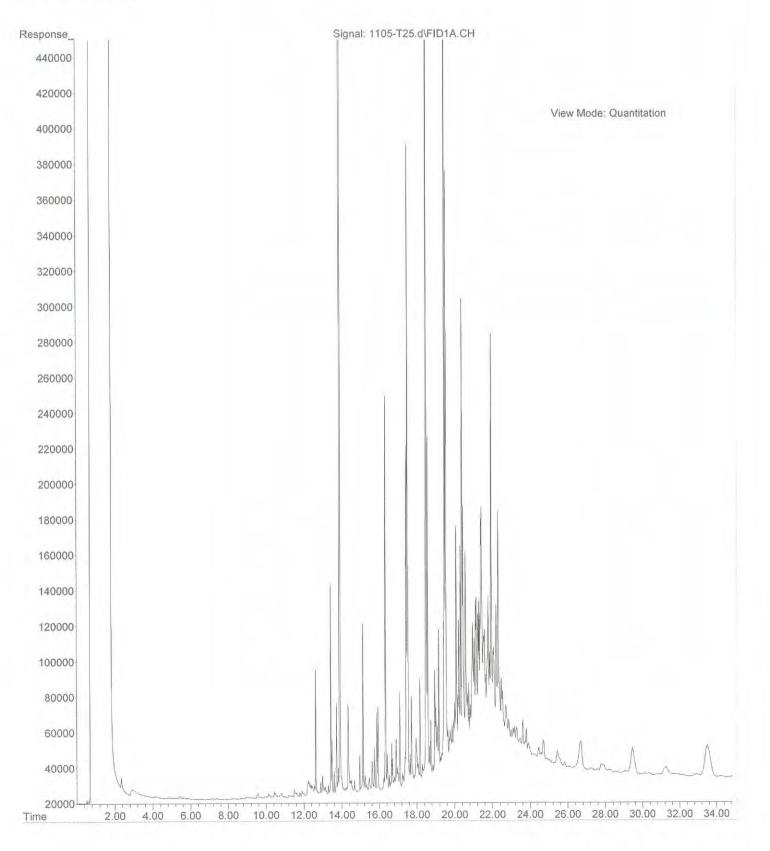
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Operator : JT
Acquired : 06 Nov 2019 1:32 using AcqMethod T190827F.M
Instrument : Teri
Sample Name: 10-339-04
Misc Info :
Vial Number: 75



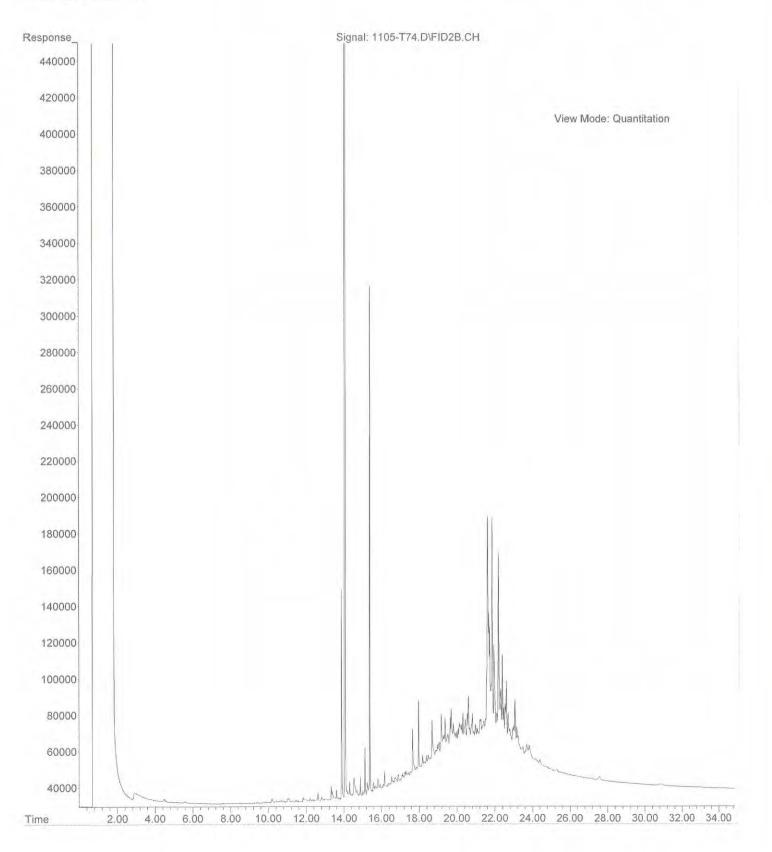
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Operator : JT
Acquired : 13 Nov 2019 13:21 using AcqMethod V180601F.M
Instrument : Vigo
Sample Name: 10-339-04 RECON ACU
Misc Info :
Vial Number: 4



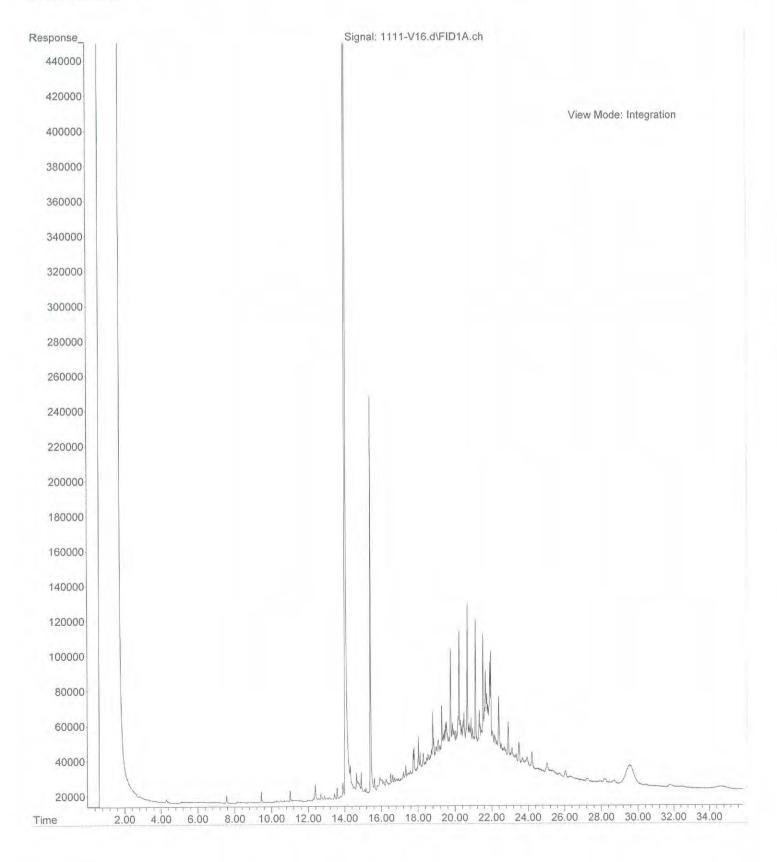
File :X:\DIESELS\TERI\DATA\T191105\1105-T25.d
Operator : JT
Acquired : 06 Nov 2019 1:32 using AcqMethod T190827F.M
Instrument : Teri
Sample Name: 10-339-06
Misc Info :
Vial Number: 25



File :X:\DIESELS\TERI\DATA\T191105.SEC\1105-T74.D Operator : JT Acquired : 06 Nov 2019 0:50 using AcqMethod T190827F.M Instrument : Teri Sample Name: 10-339-07 Misc Info : Vial Number: 74



File :X:\DIESELS\VIGO\DATA\V191111\1111-V16.d
Operator : JT
Acquired : 11 Nov 2019 18:23 using AcqMethod V180601F.M
Instrument : Vigo
Sample Name: 10-339-07 ACU
Misc Info :
Vial Number: 16





November 14, 2019

Cliff Schmitt Farallon Consulting, LLC 975 5th Avenue NW Issaquah, WA 98027

Re: Analytical Data for Project 650-031 Laboratory Reference No. 1911-073

Dear Cliff:

Enclosed are the analytical results and associated quality control data for samples submitted on November 7, 2019.

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,

David Baumeister Project Manager

Enclosures



Date of Report: November 14, 2019 Samples Submitted: November 7, 2019 Laboratory Reference: 1911-073 Project: 650-031

Case Narrative

Samples were collected on November 6, 2019 and received by the laboratory on November 7, 2019. 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.



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

DIESEL AND HEAVY OIL RANGE ORGANICS NWTPH-Dx

Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	BH04-02			•	-	
_aboratory ID:	11-073-02					
Diesel Range Organics	ND	29	NWTPH-Dx	11-11-19	11-12-19	
_ube Oil	450	58	NWTPH-Dx	11-11-19	11-12-19	
Surrogate:	Percent Recovery	Control Limits				
p-Terphenyl	101	50-150				
Client ID:	BH04-02					
aboratory ID:	11-073-02					
Diesel Range Organics	ND	29	NWTPH-Dx	11-11-19	11-12-19	X1
ube Oil	270	58	NWTPH-Dx	11-11-19	11-12-19	X1
Surrogate:	Percent Recovery	Control Limits				
p-Terphenyl	113	50-150				
Client ID:	BH05-02					
_aboratory ID:	11-073-04					
Diesel Range Organics	ND	29	NWTPH-Dx	11-11-19	11-12-19	
ube Oil	170	59	NWTPH-Dx	11-11-19	11-12-19	
Surrogate:	Percent Recovery	Control Limits		11 11 10	11 12 10	
p-Terphenyl	116	50-150				
, ,						
Client ID:	BH05-02					
aboratory ID:	11-073-04					
Diesel Range Organics		29	NWTPH-Dx	11-11-19	11-12-19	X1
	ND					
ube Oil	110	59	NWTPH-Dx	11-11-19	11-12-19	X1 X1
Lube Oil Surrogate:	110 Percent Recovery	59 Control Limits				
ube Oil Surrogate:	110	59				
ube Oil Surrogate: p-Terphenyl	110 Percent Recovery	59 Control Limits				
ube Oil Surrogate: o-Terphenyl	110 Percent Recovery 121	59 Control Limits				
ube Oil Surrogate: D-Terphenyl Client ID: .aboratory ID:	110 Percent Recovery 121 BH06-02	59 Control Limits				
Lube Oil Surrogate: D-Terphenyl Client ID: Laboratory ID: Diesel Range Organics	110 Percent Recovery 121 BH06-02 11-073-06	59 Control Limits 50-150	NWTPH-Dx	11-11-19	11-12-19	
ube Oil Surrogate: o-Terphenyl Client ID: Laboratory ID: Diesel Range Organics Lube Oil Range Organics	110 Percent Recovery 121 BH06-02 11-073-06 ND	59 Control Limits 50-150 32	NWTPH-Dx	11-11-19	<u>11-12-19</u> 11-12-19	
Lube Oil Surrogate: D-Terphenyl Client ID: Laboratory ID: Diesel Range Organics Lube Oil Range Organics Surrogate:	110 Percent Recovery 121 BH06-02 11-073-06 ND ND	59 Control Limits 50-150 32 63	NWTPH-Dx	11-11-19	<u>11-12-19</u> 11-12-19	
Lube Oil Surrogate: D-Terphenyl Client ID: Laboratory ID: Diesel Range Organics Lube Oil Range Organics Surrogate: D-Terphenyl	110 Percent Recovery 121 BH06-02 11-073-06 ND ND Percent Recovery 83	59 Control Limits 50-150 32 63 Control Limits	NWTPH-Dx	11-11-19	<u>11-12-19</u> 11-12-19	
Lube Oil Surrogate: D-Terphenyl Client ID: Laboratory ID: Diesel Range Organics Lube Oil Range Organics Surrogate: D-Terphenyl Client ID:	110 Percent Recovery 121 BH06-02 11-073-06 ND ND Percent Recovery 83 BH06-02	59 Control Limits 50-150 32 63 Control Limits	NWTPH-Dx	11-11-19	<u>11-12-19</u> 11-12-19	
Lube Oil Surrogate: D-Terphenyl Client ID: Laboratory ID: Diesel Range Organics Lube Oil Range Organics Surrogate: D-Terphenyl Client ID: Laboratory ID:	110 Percent Recovery 121 BH06-02 11-073-06 ND ND Percent Recovery 83 BH06-02 11-073-06	59 Control Limits 50-150 32 63 Control Limits 50-150	NWTPH-Dx NWTPH-Dx NWTPH-Dx	11-11-19 11-11-19 11-11-19	11-12-19 11-12-19 11-12-19	X1
Lube Oil Surrogate: D-Terphenyl Client ID: Laboratory ID: Diesel Range Organics Lube Oil Range Organics Surrogate: D-Terphenyl Client ID: Laboratory ID: Diesel Range Organics	110 Percent Recovery 121 BH06-02 11-073-06 ND Percent Recovery 83 BH06-02 11-073-06 ND	59 Control Limits 50-150 32 63 Control Limits 50-150 32	NWTPH-Dx NWTPH-Dx NWTPH-Dx	<u>11-11-19</u> <u>11-11-19</u> <u>11-11-19</u> <u>11-11-19</u>	11-12-19 11-12-19 11-12-19 11-12-19	
Lube Oil Surrogate: D-Terphenyl Client ID: Laboratory ID: Diesel Range Organics Lube Oil Range Organics Surrogate:	110 Percent Recovery 121 BH06-02 11-073-06 ND ND Percent Recovery 83 BH06-02 11-073-06	59 Control Limits 50-150 32 63 Control Limits 50-150	NWTPH-Dx NWTPH-Dx NWTPH-Dx	11-11-19 11-11-19 11-11-19	11-12-19 11-12-19 11-12-19	X1



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

DIESEL AND HEAVY OIL RANGE ORGANICS NWTPH-Dx

Matrix: Soil Units: mg/Kg (ppm)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	Farallon Background					
Laboratory ID:	11-073-08					
Diesel Range Organics	ND	54	NWTPH-Dx	11-11-19	11-12-19	
Lube Oil Range Organics	320	110	NWTPH-Dx	11-11-19	11-12-19	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	108	50-150				

Client ID:	Farallon Background					
Laboratory ID:	11-073-08					
Diesel Range Organics	ND	54	NWTPH-Dx	11-11-19	11-12-19	X1
Lube Oil Range Organics	ND	110	NWTPH-Dx	11-11-19	11-12-19	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	131	50-150				



Date of Report: November 14, 2019 Samples Submitted: November 7, 2019 Laboratory Reference: 1911-073 Project: 650-031

DIESEL AND HEAVY OIL RANGE ORGANICS NWTPH-Dx QUALITY CONTROL

Matrix: Soil Units: mg/Kg (ppm)

onits. mg/ng (ppm)						Date	Date		
Analyte		Result	PQL	Me	ethod	Prepared	Analyz	ed	Flags
METHOD BLANK									
Laboratory ID:		MB1111S2							
Diesel Range Organics		ND	25	NW	FPH-Dx	11-11-19	11-12-	19	
Lube Oil Range Organics	6	ND	50	NW	FPH-Dx	11-11-19	11-12-	19	
Surrogate:	Per	cent Recovery	Control Limit	s					
o-Terphenyl		98	50-150						
Laboratory ID:		MB1111S2							
Diesel Range Organics		ND	25	NW	「PH-Dx	11-11-19	11-12-	19	X1
Lube Oil Range Organics	3	ND	50	NW	FPH-Dx	11-11-19	11-12-	19	X1
Surrogate:	Per	cent Recovery	Control Limit	s					
o-Terphenyl		116	50-150						
				Source	Percent	Recovery		RPD	
Analyte	Res	ult	Spike Level	Result	Recovery		RPD	Limit	Flags
DUPLICATE									
Laboratory ID:	11-08	9-01							
(ORIG	DUP							
Diesel Range	ND	ND	NA NA		NA	NA	NA	NA	
Lube Oil Range	ND	ND	NA NA		NA	NA	NA	NA	
Surrogate:									
o-Terphenyl					103 104	50-150			



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

Date of Report: November 14, 2019 Samples Submitted: November 7, 2019 Laboratory Reference: 1911-073 Project: 650-031

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
BH04-02	11-073-02	14	11-11-19
BH05-02	11-073-04	14	11-11-19
BH06-02	11-073-06	21	11-11-19
Farallon Background	11-073-08	54	11-11-19



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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 methods 8260 & 8270, 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.

Ζ-

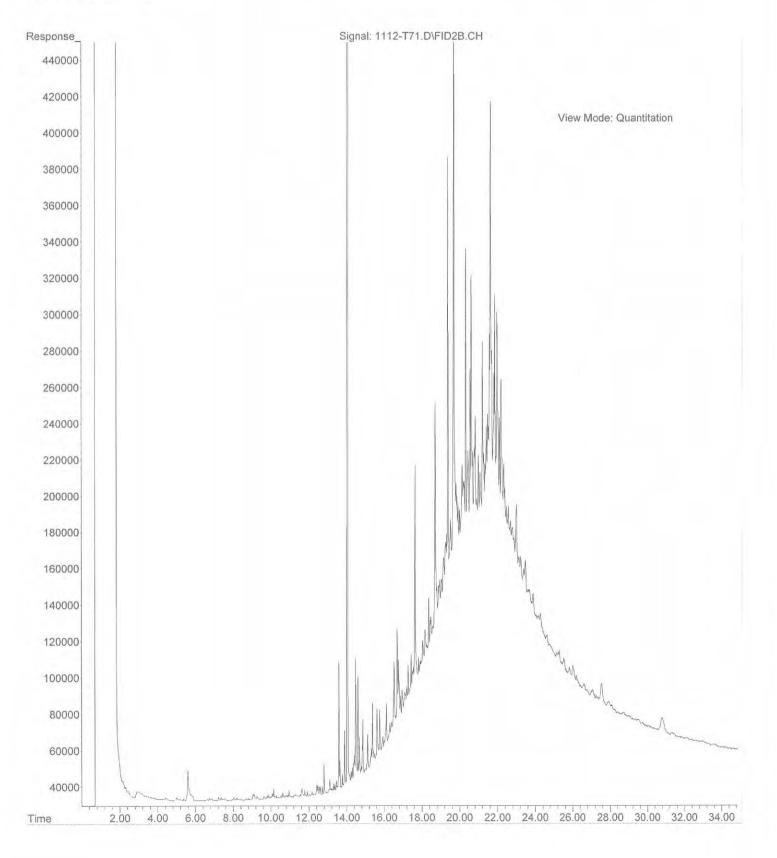
ND - Not Detected at PQL PQL - Practical Quantitation Limit RPD - Relative Percent Difference



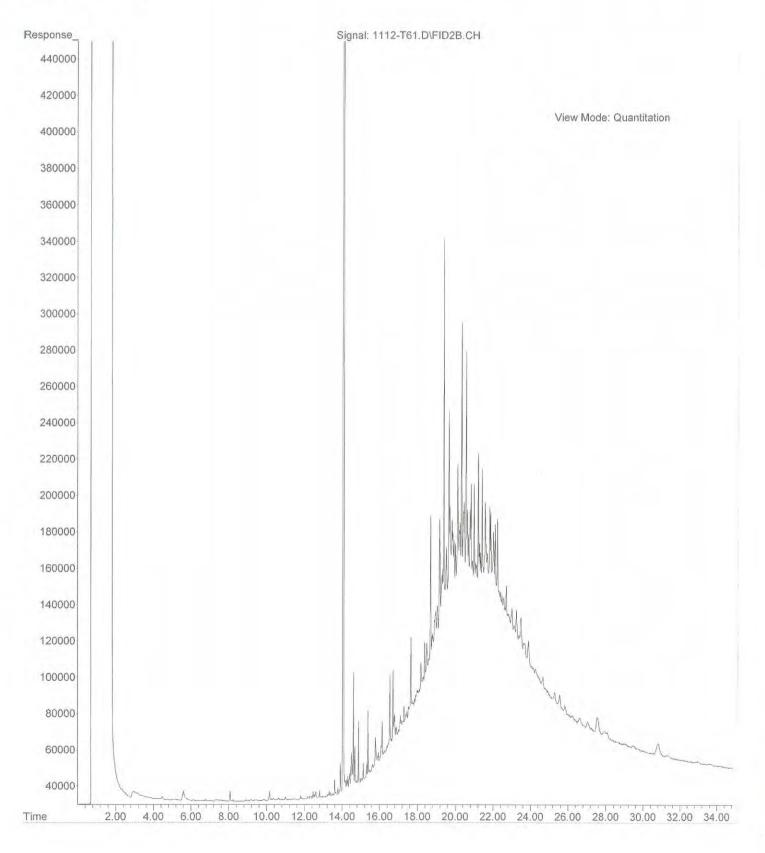
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Reviewed/Date	Received	Relinquished	Received	Relinquished	Received	Relinquished	Signature			& Farallon Backa	7 BHO4 - Grass	6 BHO6 - 02	S BH06-01	4 BHOS-02	3 BHOS-01	2 BH04-02	1 BH04 -01	Lab ID Sample I	SMB	C. Schmith	Project Manager Masky	650-031	Project Number:	Phone: (425) 883-3	Analytical Laboratory Testing Services	Environm
				12	NEW Useal	and the	ture		C	karound								Sample Identification		-				Phone: (425) 883-3881 • www.onsite-env.com	Analytical Laboratory Testing Services 14648 NE 95th Street Bedmond WA 98052	Environmental Inc.
										4	-			-	-	-	11/6/19	Date Sampled			HS X	2	S			
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Obvious with final month	Data P				-	X	Comm											Semiv (with I	olatiles ow-lev	8270E el PAHs)/SIM					
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•	Standard					111	nstruct	-				-									Pesticid		OD/SIM		7	
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						23												TCLP								Page
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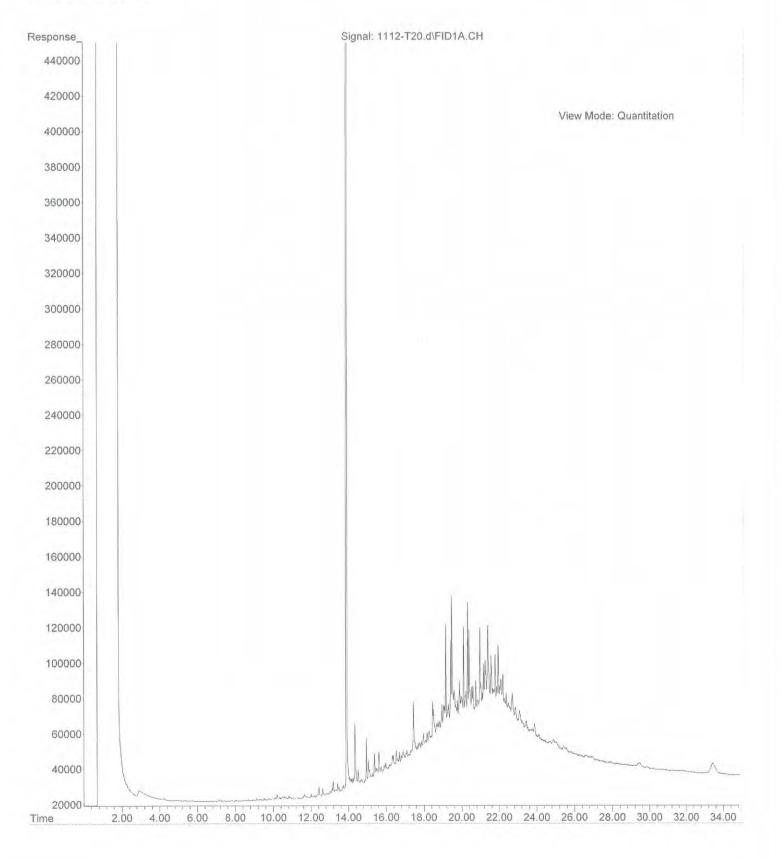
File :X:\DIESELS\TERI\DATA\T191112.SEC\1112-T71.D Operator : JT Acquired : 12 Nov 2019 22:12 using AcqMethod T190827F.M Instrument : Teri Sample Name: 11-073-02 Misc Info : Vial Number: 71



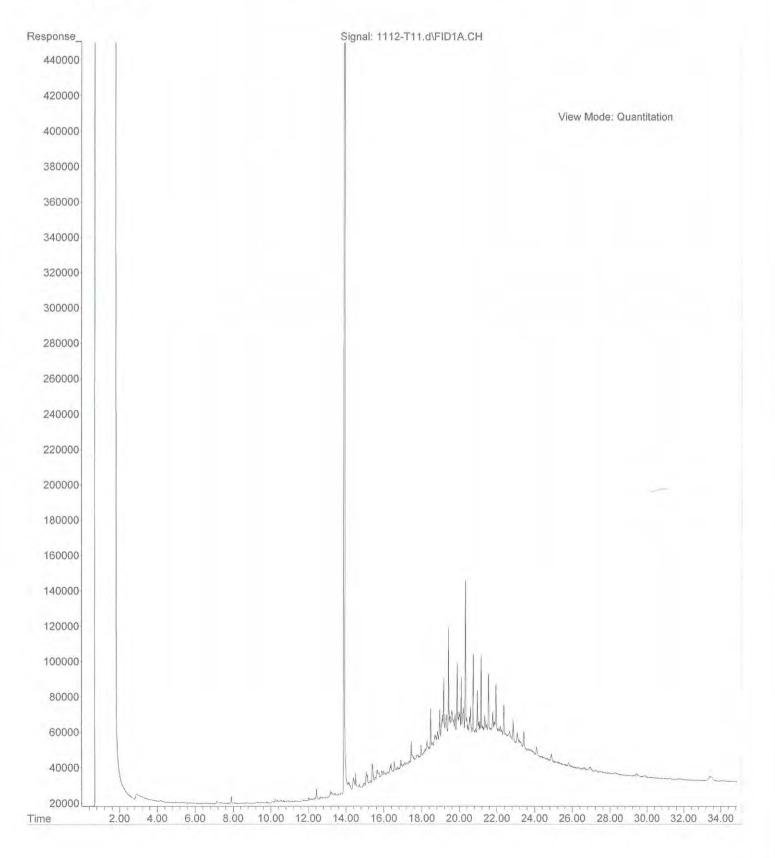
File :X:\DIESELS\TERI\DATA\T191112.SEC\1112-T61.D Operator : JT Acquired : 12 Nov 2019 14:59 using AcqMethod T190827F.M Instrument : Teri Sample Name: 11-073-02 ACU Misc Info : Vial Number: 61



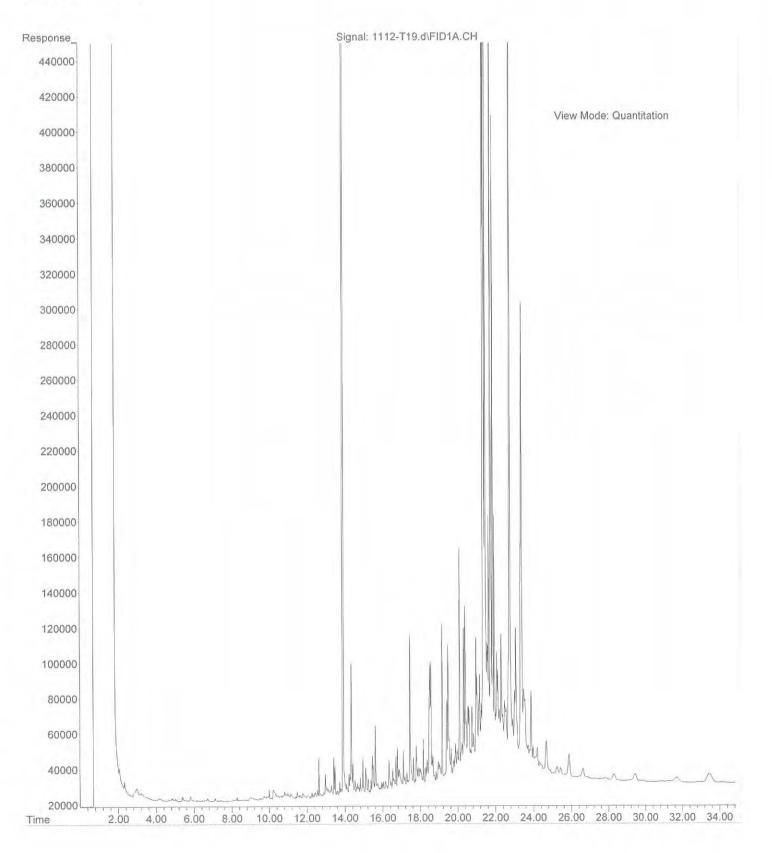
File :X:\DIESELS\TERI\DATA\T191112\1112-T20.d
Operator : JT
Acquired : 12 Nov 2019 21:29 using AcqMethod T190827F.M
Instrument : Teri
Sample Name: 11-073-04
Misc Info :
Vial Number: 20



File :X:\DIESELS\TERI\DATA\T191112\1112-T11.d
Operator : JT
Acquired : 12 Nov 2019 14:59 using AcqMethod T190827F.M
Instrument : Teri
Sample Name: 11-073-04 ACU
Misc Info :
Vial Number: 11



File :X:\DIESELS\TERI\DATA\T191112\1112-T19.d
Operator : JT
Acquired : 12 Nov 2019 20:47 using AcqMethod T190827F.M
Instrument : Teri
Sample Name: 11-073-08
Misc Info :
Vial Number: 19





August 12, 2020

Cliff Schmitt Farallon Consulting, LLC 975 5th Avenue NW Issaquah, WA 98027

Re: Analytical Data for Project 650-031 Laboratory Reference No. 2007-331

Dear Cliff:

Enclosed are the analytical results and associated quality control data for samples submitted on July 31, 2020.

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,

David Baumeister Project Manager

Enclosures



Date of Report: August 12, 2020 Samples Submitted: July 31, 2020 Laboratory Reference: 2007-331 Project: 650-031

Case Narrative

Samples were collected on July 30 and 31, 2020 and received by the laboratory on July 31, 2020. 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.

Volatiles EPA 8260D Analysis

The value reported for Acetone in sample FB-08-5.5 exceeds the calibration range and is therefore an estimate. The sample was re-analyzed at the lowest possible dilution allowed by Method 5035A with non-detect results for Acetone.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.



DIESEL AND HEAVY OIL RANGE ORGANICS NWTPH-Dx

Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-01-7.0			•	•	
Laboratory ID:	07-331-05					
Diesel Range Organics	ND	59	NWTPH-Dx	8-6-20	8-6-20	X1
_ube Oil Range Organics	ND	120	NWTPH-Dx	8-6-20	8-6-20	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	95	50-150				
Client ID:	FB-02-5.5					
_aboratory ID:	07-331-08					
Diesel Range Organics	ND	32	NWTPH-Dx	8-6-20	8-11-20	X1
ube Oil Range Organics	80	63	NWTPH-Dx	8-6-20	8-11-20	X1
Surrogate:	Percent Recovery	Control Limits				
p-Terphenyl	82	50-150				
Client ID:	FB-03-6.0					
_aboratory ID:	07-331-10					
Diesel Range Organics	ND	72	NWTPH-Dx	8-6-20	8-11-20	X1
ube Oil Range Organics	230	140	NWTPH-Dx	8-6-20	8-11-20	X1
Surrogate:	Percent Recovery	Control Limits				
	•					
o-Terphenyl	100	50-150				
p-Terphenyl	100	50-150				
		50-150				
Client ID:	FMW-02-3.0	50-150				
Client ID: Laboratory ID:	FMW-02-3.0 07-331-12			8-6-20	8-12-20	N X1
Client ID: aboratory ID: Diesel Range Organics	FMW-02-3.0 07-331-12 60	28	NWTPH-Dx NWTPH-Dx	8-6-20 8-6-20	8-12-20 8-12-20	N,X1 X1
Client ID: aboratory ID: Diesel Range Organics ube Oil Range Organics	FMW-02-3.0 07-331-12 60 260	28 57	NWTPH-Dx NWTPH-Dx	8-6-20 8-6-20	8-12-20 8-12-20	N,X1 X1
Client ID: Laboratory ID: Diesel Range Organics Lube Oil Range Organics Surrogate:	FMW-02-3.0 07-331-12 60 260 Percent Recovery	28 57 Control Limits				
Client ID: Laboratory ID: Diesel Range Organics Lube Oil Range Organics Surrogate:	FMW-02-3.0 07-331-12 60 260	28 57				
Client ID: Laboratory ID: Diesel Range Organics Lube Oil Range Organics Surrogate: D-Terphenyl	FMW-02-3.0 07-331-12 60 260 Percent Recovery 104	28 57 Control Limits				
Client ID: aboratory ID: Diesel Range Organics ube Oil Range Organics Surrogate: D-Terphenyl Client ID:	FMW-02-3.0 07-331-12 60 260 Percent Recovery	28 57 Control Limits				
Client ID: aboratory ID: Diesel Range Organics ube Oil Range Organics Surrogate: D-Terphenyl Client ID: aboratory ID:	FMW-02-3.0 07-331-12 60 260 Percent Recovery 104 FB-04-1.0	28 57 Control Limits				
Client ID: _aboratory ID: Diesel Range Organics _ube Oil Range Organics Surrogate: p-Terphenyl Client ID: _aboratory ID: Diesel Range Organics	FMW-02-3.0 07-331-12 60 260 Percent Recovery 104 FB-04-1.0 07-331-15	28 57 Control Limits 50-150	NWTPH-Dx	8-6-20	8-12-20	X1
Client ID: .aboratory ID: Diesel Range Organics .ube Oil Range Organics Surrogate: D-Terphenyl Client ID: .aboratory ID: Diesel Range Organics .ube Oil Range Organics	FMW-02-3.0 07-331-12 60 260 Percent Recovery 104 FB-04-1.0 07-331-15 ND	28 57 Control Limits 50-150 29	NWTPH-Dx	8-6-20	8-12-20	X1 X1
Client ID: .aboratory ID: Diesel Range Organics .ube Oil Range Organics Surrogate: D-Terphenyl Client ID: .aboratory ID: Diesel Range Organics .ube Oil Range Organics Surrogate:	FMW-02-3.0 07-331-12 60 260 Percent Recovery 104 FB-04-1.0 07-331-15 ND 65	28 57 Control Limits 50-150 29 58	NWTPH-Dx	8-6-20	8-12-20	X1 X1
Client ID: .aboratory ID: Diesel Range Organics .ube Oil Range Organics Surrogate: D-Terphenyl Client ID: .aboratory ID: Diesel Range Organics .ube Oil Range Organics Surrogate:	FMW-02-3.0 07-331-12 60 260 Percent Recovery 104 FB-04-1.0 07-331-15 ND 65 Percent Recovery	28 57 Control Limits 50-150 29 58 Control Limits	NWTPH-Dx	8-6-20	8-12-20	X1 X1
Client ID: Laboratory ID: Diesel Range Organics Lube Oil Range Organics Surrogate: D-Terphenyl Client ID: Laboratory ID: Diesel Range Organics Lube Oil Range Organics Surrogate: D-Terphenyl	FMW-02-3.0 07-331-12 60 260 Percent Recovery 104 FB-04-1.0 07-331-15 ND 65 Percent Recovery	28 57 Control Limits 50-150 29 58 Control Limits	NWTPH-Dx	8-6-20	8-12-20	X1 X1
Client ID: aboratory ID: Diesel Range Organics Surogate: D-Terphenyl Client ID: aboratory ID: Diesel Range Organics Surrogate: D-Terphenyl Client ID: Client ID: Client ID: Client ID: Client ID: Client ID:	FMW-02-3.0 07-331-12 60 260 Percent Recovery 104 FB-04-1.0 07-331-15 ND 65 Percent Recovery 111	28 57 Control Limits 50-150 29 58 Control Limits	NWTPH-Dx	8-6-20	8-12-20	X1 X1
Client ID: .aboratory ID: Diesel Range Organics .ube Oil Range Organics Surrogate: D-Terphenyl Client ID: .aboratory ID: Diesel Range Organics .ube Oil Range Organics .ube Oil Range Organics .ube Oil Range Organics Surrogate: D-Terphenyl Client ID: .aboratory ID:	FMW-02-3.0 07-331-12 60 260 Percent Recovery 104 FB-04-1.0 07-331-15 ND 65 Percent Recovery 111 FB-05-3.0	28 57 Control Limits 50-150 29 58 Control Limits	NWTPH-Dx	8-6-20	8-12-20	X1 X1
Client ID: .aboratory ID: Diesel Range Organics .ube Oil Range Organics Surrogate: D-Terphenyl Client ID: .aboratory ID: Diesel Range Organics .ube Oil Range Organics Surrogate: D-Terphenyl Client ID: .aboratory ID: Diesel Range Organics	FMW-02-3.0 07-331-12 60 260 Percent Recovery 104 FB-04-1.0 07-331-15 ND 65 Percent Recovery 111 FB-05-3.0 07-331-19	28 57 Control Limits 50-150 29 58 Control Limits 50-150	NWTPH-Dx NWTPH-Dx NWTPH-Dx	8-6-20 8-6-20 8-6-20	8-12-20 8-12-20 8-12-20	X1 X1 X1 X1
Client ID: Laboratory ID: Diesel Range Organics Lube Oil Range Organics Surrogate: D-Terphenyl Client ID: Laboratory ID: Diesel Range Organics Surrogate: D-Terphenyl Client ID: Laboratory ID: Diesel Range Organics Surrogate: D-Terphenyl Client ID: Laboratory ID: Diesel Range Organics Lube Oil Range Organics Lube Oil Range Organics Lube Oil Range Organics Surrogate:	FMW-02-3.0 07-331-12 60 260 Percent Recovery 104 FB-04-1.0 07-331-15 ND 65 Percent Recovery 111 FB-05-3.0 07-331-19 ND	28 57 Control Limits 50-150 29 58 Control Limits 50-150 28	NWTPH-Dx NWTPH-Dx NWTPH-Dx	8-6-20 8-6-20 8-6-20 8-6-20	8-12-20 8-12-20 8-12-20 8-12-20	X1 X1 X1 X1



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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.

3

DIESEL AND HEAVY OIL RANGE ORGANICS NWTPH-Dx

Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-06-6.0				_	
aboratory ID:	07-331-23					
Diesel Range Organics	ND	120	NWTPH-Dx	8-6-20	8-11-20	X1
ube Oil Range Organics	340	230	NWTPH-Dx	8-6-20	8-11-20	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	96	50-150				
Client ID:	FMW-03-5.0					
aboratory ID:	07-331-25					
Diesel Range Organics	ND	100	NWTPH-Dx	8-6-20	8-11-20	X1
ube Oil Range Organics	210	210	NWTPH-Dx	8-6-20	8-11-20	X1
Surrogate:	Percent Recovery	Control Limits				
p-Terphenyl	110	50-150				
Client ID:	FB-07-5.0 07-331-29					
aboratory ID:	<u> </u>	22	NWTPH-Dx	0.0.00	0.44.00	
Diesel Range Organics	41 160	32 65	NWTPH-Dx NWTPH-Dx	8-6-20 8-6-20	8-11-20 8-11-20	N,X1 X1
Surrogate:	Percent Recovery	Control Limits		0-0-20	0-11-20	<u></u>
o-Terphenyl	105	50-150				
Client ID:	FB-08-5.5					
aboratory ID:	07-331-32					
Diesel Range Organics	ND	99	NWTPH-Dx	8-6-20	8-11-20	X1
ube Oil Range Organics	260	200	NWTPH-Dx	8-6-20	8-11-20	X1
Surrogate:	Percent Recovery	Control Limits				
p-Terphenyl	96	50-150				
Client ID:	FB-09-5.0					
aboratory ID:	07-331-35					
Diesel Range Organics	34	30	NWTPH-Dx	8-6-20	8-11-20	N,X1
ube Oil Range Organics	88	59	NWTPH-Dx	8-6-20	8-11-20	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	105	50-150				
Client ID:	FMW-04-6.0					
aboratory ID:	07-331-37					
		34	NWTPH-Dx	8-6-20	8-11-20	N,X1
Jiesel Range Organics	<u>4</u> 1	+		0-0-20	0-11-20	1 1, 1
Diesel Range Organics	41 120					
ube Oil Range Organics	120	67	NWTPH-Dx	8-6-20	8-11-20	X1



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4

DIESEL AND HEAVY OIL RANGE ORGANICS NWTPH-Dx QUALITY CONTROL

Matrix: Soil Units: mg/Kg (ppm)

			Date	Date	
Result	PQL	Method	Prepared	Analyzed	Flags
MB0806S1					
ND	25	NWTPH-Dx	8-6-20	8-6-20	X1
ND	50	NWTPH-Dx	8-6-20	8-6-20	X1
Percent Recovery	Control Limits				
111	50-150				
	MB0806S1 ND ND Percent Recovery	MB0806S1 ND 25 ND 50 Percent Recovery Control Limits	MB0806S1ND25ND50NWTPH-DxPercent RecoveryControl Limits	Result PQL Method Prepared MB0806S1 -<	Result PQL Method Prepared Analyzed MB0806S1 -

					Source	Percent	Recovery		RPD		
Analyte	Result		Spike Level		Result	Recovery	Limits	RPD	Limit	Flags	
DUPLICATE											
Laboratory ID:	08-02	28-02									
	ORIG	DUP									
Diesel Range	ND	ND	NA	NA		NA	NA	NA	NA	X1	
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	X1	
Surrogate:											
o-Terphenyl						95 105	50-150				
Laboratory ID:	SB08	06S1									
	ORIG	DUP									
Diesel Fuel #2	121	108	NA	NA		NA	NA	11	NA	X1	
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	X1	
Surrogate:											
o-Terphenyl						111 105	50-150				



VOLATILE ORGANICS EPA 8260D page 1 of 2

Matrix: Soil Units: mg/kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-07-5.0					
Laboratory ID:	07-331-29					
Dichlorodifluoromethane	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
Chloromethane	ND	0.010	EPA 8260D	8-5-20	8-5-20	
Vinyl Chloride	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
Bromomethane	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
Chloroethane	ND	0.010	EPA 8260D	8-5-20	8-5-20	
Trichlorofluoromethane	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
1,1-Dichloroethene	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
Acetone	1.0	0.021	EPA 8260D	8-5-20	8-5-20	Y
Iodomethane	ND	0.010	EPA 8260D	8-5-20	8-5-20	
Carbon Disulfide	0.024	0.0021	EPA 8260D	8-5-20	8-5-20	
Methylene Chloride	ND	0.010	EPA 8260D	8-5-20	8-5-20	
(trans) 1,2-Dichloroethene	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
Methyl t-Butyl Ether	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
1,1-Dichloroethane	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
Vinyl Acetate	ND	0.010	EPA 8260D	8-5-20	8-5-20	
2,2-Dichloropropane	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
(cis) 1,2-Dichloroethene	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
2-Butanone	0.23	0.010	EPA 8260D	8-5-20	8-5-20	
Bromochloromethane	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
Chloroform	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
1,1,1-Trichloroethane	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
Carbon Tetrachloride	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
1,1-Dichloropropene	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
Benzene	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
1,2-Dichloroethane	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
Trichloroethene	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
1,2-Dichloropropane	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
Dibromomethane	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
Bromodichloromethane	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
2-Chloroethyl Vinyl Ether	ND	0.010	EPA 8260D	8-5-20	8-5-20	
(cis) 1,3-Dichloropropene	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
Methyl Isobutyl Ketone	ND	0.010	EPA 8260D	8-5-20	8-5-20	
Toluene	ND	0.010	EPA 8260D	8-5-20	8-5-20	
(trans) 1,3-Dichloropropene	ND	0.0021	EPA 8260D	8-5-20	8-5-20	



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VOLATILE ORGANICS EPA 8260D page 2 of 2

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-07-5.0					
Laboratory ID:	07-331-29					
1,1,2-Trichloroethane	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
Tetrachloroethene	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
1,3-Dichloropropane	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
2-Hexanone	ND	0.010	EPA 8260D	8-5-20	8-5-20	
Dibromochloromethane	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
1,2-Dibromoethane	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
Chlorobenzene	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
1,1,1,2-Tetrachloroethane	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
Ethylbenzene	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
m,p-Xylene	ND	0.0041	EPA 8260D	8-5-20	8-5-20	
o-Xylene	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
Styrene	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
Bromoform	ND	0.010	EPA 8260D	8-5-20	8-5-20	
Isopropylbenzene	ND	0.0021	EPA 8260D	8-5-20	8-5-20	
Bromobenzene	ND	0.074	EPA 8260D	8-6-20	8-6-20	
1,1,2,2-Tetrachloroethane	ND	0.074	EPA 8260D	8-6-20	8-6-20	
1,2,3-Trichloropropane	ND	0.097	EPA 8260D	8-6-20	8-6-20	
n-Propylbenzene	ND	0.074	EPA 8260D	8-6-20	8-6-20	
2-Chlorotoluene	ND	0.074	EPA 8260D	8-6-20	8-6-20	
4-Chlorotoluene	ND	0.074	EPA 8260D	8-6-20	8-6-20	
1,3,5-Trimethylbenzene	ND	0.074	EPA 8260D	8-6-20	8-6-20	
tert-Butylbenzene	ND	0.074	EPA 8260D	8-6-20	8-6-20	
1,2,4-Trimethylbenzene	ND	0.074	EPA 8260D	8-6-20	8-6-20	
sec-Butylbenzene	ND	0.074	EPA 8260D	8-6-20	8-6-20	
1,3-Dichlorobenzene	ND	0.074	EPA 8260D	8-6-20	8-6-20	
p-Isopropyltoluene	ND	0.074	EPA 8260D	8-6-20	8-6-20	
1,4-Dichlorobenzene	ND	0.074	EPA 8260D	8-6-20	8-6-20	
1,2-Dichlorobenzene	ND	0.074	EPA 8260D	8-6-20	8-6-20	
n-Butylbenzene	ND	0.074	EPA 8260D	8-6-20	8-6-20	
1,2-Dibromo-3-chloropropane	ND	0.37	EPA 8260D	8-6-20	8-6-20	
1.2.4-Trichlorobenzene	ND	0.074	EPA 8260D	8-6-20	8-6-20	
Hexachlorobutadiene	ND	0.37	EPA 8260D	8-6-20	8-6-20	
Naphthalene	ND	0.37	EPA 8260D	8-6-20	8-6-20	
1,2,3-Trichlorobenzene	ND	0.074	EPA 8260D	8-6-20	8-6-20	
Surrogate:	Percent Recovery	Control Limits		0.0-20	0.0-20	
Dibromofluoromethane	109	74-131				
Toluene-d8	97	74-131 78-128				
4-Bromofluorobenzene	77	71-130				



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Matrix: Soil Units: mg/kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-08-5.5					
Laboratory ID:	07-331-32					
Dichlorodifluoromethane	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
Chloromethane	ND	0.034	EPA 8260D	8-5-20	8-5-20	
Vinyl Chloride	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
Bromomethane	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
Chloroethane	ND	0.034	EPA 8260D	8-5-20	8-5-20	
Trichlorofluoromethane	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
1,1-Dichloroethene	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
Acetone	4.5	0.068	EPA 8260D	8-5-20	8-5-20	Y,E
Iodomethane	ND	0.034	EPA 8260D	8-5-20	8-5-20	
Carbon Disulfide	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
Methylene Chloride	ND	0.034	EPA 8260D	8-5-20	8-5-20	
(trans) 1,2-Dichloroethene	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
Methyl t-Butyl Ether	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
1,1-Dichloroethane	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
Vinyl Acetate	ND	0.034	EPA 8260D	8-5-20	8-5-20	
2,2-Dichloropropane	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
(cis) 1,2-Dichloroethene	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
2-Butanone	0.94	0.034	EPA 8260D	8-5-20	8-5-20	
Bromochloromethane	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
Chloroform	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
1,1,1-Trichloroethane	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
Carbon Tetrachloride	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
1,1-Dichloropropene	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
Benzene	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
1,2-Dichloroethane	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
Trichloroethene	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
1,2-Dichloropropane	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
Dibromomethane	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
Bromodichloromethane	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
2-Chloroethyl Vinyl Ether	ND	0.034	EPA 8260D	8-5-20	8-5-20	
(cis) 1,3-Dichloropropene	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
Methyl Isobutyl Ketone	ND	0.034	EPA 8260D	8-5-20	8-5-20	
Toluene	ND	0.034	EPA 8260D	8-5-20	8-5-20	
(trans) 1,3-Dichloropropene	ND	0.0068	EPA 8260D	8-5-20	8-5-20	



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and is intended only for the use of the individual or company to whom it is addressed.

This report pertains to the samples analyzed in accordance with the chain of custody,

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	_			Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-08-5.5					
Laboratory ID:	07-331-32					
1,1,2-Trichloroethane	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
Tetrachloroethene	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
1,3-Dichloropropane	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
2-Hexanone	ND	0.034	EPA 8260D	8-5-20	8-5-20	
Dibromochloromethane	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
1,2-Dibromoethane	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
Chlorobenzene	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
1,1,1,2-Tetrachloroethane	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
Ethylbenzene	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
m,p-Xylene	ND	0.014	EPA 8260D	8-5-20	8-5-20	
o-Xylene	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
Styrene	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
Bromoform	ND	0.034	EPA 8260D	8-5-20	8-5-20	
Isopropylbenzene	ND	0.0068	EPA 8260D	8-5-20	8-5-20	
Bromobenzene	ND	0.34	EPA 8260D	8-6-20	8-6-20	
1,1,2,2-Tetrachloroethane	ND	0.34	EPA 8260D	8-6-20	8-6-20	
1,2,3-Trichloropropane	ND	0.45	EPA 8260D	8-6-20	8-6-20	
n-Propylbenzene	ND	0.34	EPA 8260D	8-6-20	8-6-20	
2-Chlorotoluene	ND	0.34	EPA 8260D	8-6-20	8-6-20	
4-Chlorotoluene	ND	0.34	EPA 8260D	8-6-20	8-6-20	
1,3,5-Trimethylbenzene	ND	0.34	EPA 8260D	8-6-20	8-6-20	
tert-Butylbenzene	ND	0.34	EPA 8260D	8-6-20	8-6-20	
1,2,4-Trimethylbenzene	ND	0.34	EPA 8260D	8-6-20	8-6-20	
sec-Butylbenzene	ND	0.34	EPA 8260D	8-6-20	8-6-20	
1,3-Dichlorobenzene	ND	0.34	EPA 8260D	8-6-20	8-6-20	
p-Isopropyltoluene	ND	0.34	EPA 8260D	8-6-20	8-6-20	
1,4-Dichlorobenzene	ND	0.34	EPA 8260D	8-6-20	8-6-20	
1,2-Dichlorobenzene	ND	0.34	EPA 8260D	8-6-20	8-6-20	
n-Butylbenzene	ND	0.34	EPA 8260D	8-6-20	8-6-20	
1,2-Dibromo-3-chloropropane	ND	1.7	EPA 8260D	8-6-20	8-6-20	
1.2.4-Trichlorobenzene	ND	0.34	EPA 8260D	8-6-20	8-6-20	
Hexachlorobutadiene	ND	1.7	EPA 8260D	8-6-20	8-6-20	
Naphthalene	ND	1.7	EPA 8260D	8-6-20	8-6-20	
1,2,3-Trichlorobenzene	ND	0.34	EPA 8260D	8-6-20	8-6-20	
Surrogate:	Percent Recovery	Control Limits	217102000	0020	0020	
Dibromofluoromethane	113	74-131				
Toluene-d8	89	74-131 78-128				
4-Bromofluorobenzene	100	71-130				



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Matrix: Soil Units: mg/kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-09-5.0					
Laboratory ID:	07-331-35					
Dichlorodifluoromethane	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
Chloromethane	ND	0.0061	EPA 8260D	8-5-20	8-5-20	
Vinyl Chloride	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
Bromomethane	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
Chloroethane	ND	0.0061	EPA 8260D	8-5-20	8-5-20	
Trichlorofluoromethane	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
1,1-Dichloroethene	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
Acetone	0.22	0.012	EPA 8260D	8-5-20	8-5-20	Y
lodomethane	ND	0.0061	EPA 8260D	8-5-20	8-5-20	
Carbon Disulfide	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
Methylene Chloride	ND	0.0061	EPA 8260D	8-5-20	8-5-20	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
Methyl t-Butyl Ether	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
1,1-Dichloroethane	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
Vinyl Acetate	ND	0.0061	EPA 8260D	8-5-20	8-5-20	
2,2-Dichloropropane	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
(cis) 1,2-Dichloroethene	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
2-Butanone	0.031	0.0061	EPA 8260D	8-5-20	8-5-20	
Bromochloromethane	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
Chloroform	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
Carbon Tetrachloride	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
1,1-Dichloropropene	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
Benzene	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
1,2-Dichloroethane	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
Trichloroethene	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
1,2-Dichloropropane	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
Dibromomethane	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
Bromodichloromethane	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
2-Chloroethyl Vinyl Ether	ND	0.0061	EPA 8260D	8-5-20	8-5-20	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
Methyl Isobutyl Ketone	ND	0.0061	EPA 8260D	8-5-20	8-5-20	
Toluene	ND	0.0061	EPA 8260D	8-5-20	8-5-20	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260D	8-5-20	8-5-20	



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

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	_			Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-09-5.0					
Laboratory ID:	07-331-35					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
Tetrachloroethene	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
1,3-Dichloropropane	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
2-Hexanone	ND	0.0061	EPA 8260D	8-5-20	8-5-20	
Dibromochloromethane	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
1,2-Dibromoethane	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
Chlorobenzene	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
Ethylbenzene	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
m,p-Xylene	ND	0.0024	EPA 8260D	8-5-20	8-5-20	
o-Xylene	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
Styrene	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
Bromoform	ND	0.0061	EPA 8260D	8-5-20	8-5-20	
Isopropylbenzene	ND	0.0012	EPA 8260D	8-5-20	8-5-20	
Bromobenzene	ND	0.062	EPA 8260D	8-6-20	8-6-20	
1,1,2,2-Tetrachloroethane	ND	0.062	EPA 8260D	8-6-20	8-6-20	
1,2,3-Trichloropropane	ND	0.081	EPA 8260D	8-6-20	8-6-20	
n-Propylbenzene	ND	0.062	EPA 8260D	8-6-20	8-6-20	
2-Chlorotoluene	ND	0.062	EPA 8260D	8-6-20	8-6-20	
4-Chlorotoluene	ND	0.062	EPA 8260D	8-6-20	8-6-20	
1,3,5-Trimethylbenzene	ND	0.062	EPA 8260D	8-6-20	8-6-20	
tert-Butylbenzene	ND	0.062	EPA 8260D	8-6-20	8-6-20	
1,2,4-Trimethylbenzene	ND	0.062	EPA 8260D	8-6-20	8-6-20	
sec-Butylbenzene	ND	0.062	EPA 8260D	8-6-20	8-6-20	
1,3-Dichlorobenzene	ND	0.062	EPA 8260D	8-6-20	8-6-20	
p-Isopropyltoluene	ND	0.062	EPA 8260D	8-6-20	8-6-20	
1,4-Dichlorobenzene	ND	0.062	EPA 8260D	8-6-20	8-6-20	
1,2-Dichlorobenzene	ND	0.062	EPA 8260D	8-6-20	8-6-20	
n-Butylbenzene	ND	0.062	EPA 8260D	8-6-20	8-6-20	
1,2-Dibromo-3-chloropropane	ND	0.31	EPA 8260D	8-6-20	8-6-20	
1.2.4-Trichlorobenzene	ND	0.062	EPA 8260D	8-6-20	8-6-20	
Hexachlorobutadiene	ND	0.31	EPA 8260D	8-6-20	8-6-20	
	ND	0.31	EPA 8260D EPA 8260D	8-6-20 8-6-20	8-6-20 8-6-20	
Naphthalene			EPA 8260D EPA 8260D			
1,2,3-Trichlorobenzene	ND Rereard Recovery	0.062	EPA 02000	8-6-20	8-6-20	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	110	74-131				
Toluene-d8	100	78-128				
4-Bromofluorobenzene	81	71-130				



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

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Matrix: Soil Units: mg/kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-04-6.0					
Laboratory ID:	07-331-37					
Dichlorodifluoromethane	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
Chloromethane	ND	0.0084	EPA 8260D	8-5-20	8-5-20	
Vinyl Chloride	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
Bromomethane	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
Chloroethane	ND	0.0084	EPA 8260D	8-5-20	8-5-20	
Trichlorofluoromethane	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
1,1-Dichloroethene	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
Acetone	0.50	0.017	EPA 8260D	8-5-20	8-5-20	Y
lodomethane	ND	0.0084	EPA 8260D	8-5-20	8-5-20	
Carbon Disulfide	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
Methylene Chloride	ND	0.0084	EPA 8260D	8-5-20	8-5-20	
(trans) 1,2-Dichloroethene	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
Methyl t-Butyl Ether	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
1,1-Dichloroethane	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
Vinyl Acetate	ND	0.0084	EPA 8260D	8-5-20	8-5-20	
2,2-Dichloropropane	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
(cis) 1,2-Dichloroethene	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
2-Butanone	0.049	0.0084	EPA 8260D	8-5-20	8-5-20	
Bromochloromethane	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
Chloroform	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
1,1,1-Trichloroethane	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
Carbon Tetrachloride	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
1,1-Dichloropropene	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
Benzene	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
1,2-Dichloroethane	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
Trichloroethene	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
1,2-Dichloropropane	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
Dibromomethane	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
Bromodichloromethane	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
2-Chloroethyl Vinyl Ether	ND	0.0084	EPA 8260D	8-5-20	8-5-20	
(cis) 1,3-Dichloropropene	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
Methyl Isobutyl Ketone	ND	0.0084	EPA 8260D	8-5-20	8-5-20	
Toluene	ND	0.0084	EPA 8260D	8-5-20	8-5-20	
(trans) 1,3-Dichloropropene	ND	0.0017	EPA 8260D	8-5-20	8-5-20	



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

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				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-04-6.0					
Laboratory ID:	07-331-37					
1,1,2-Trichloroethane	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
Tetrachloroethene	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
1,3-Dichloropropane	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
2-Hexanone	ND	0.0084	EPA 8260D	8-5-20	8-5-20	
Dibromochloromethane	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
1,2-Dibromoethane	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
Chlorobenzene	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
1,1,1,2-Tetrachloroethane	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
Ethylbenzene	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
m,p-Xylene	ND	0.0033	EPA 8260D	8-5-20	8-5-20	
o-Xylene	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
Styrene	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
Bromoform	ND	0.0084	EPA 8260D	8-5-20	8-5-20	
Isopropylbenzene	ND	0.0017	EPA 8260D	8-5-20	8-5-20	
Bromobenzene	ND	0.081	EPA 8260D	8-6-20	8-6-20	
1,1,2,2-Tetrachloroethane	ND	0.081	EPA 8260D	8-6-20	8-6-20	
1,2,3-Trichloropropane	ND	0.11	EPA 8260D	8-6-20	8-6-20	
n-Propylbenzene	ND	0.081	EPA 8260D	8-6-20	8-6-20	
2-Chlorotoluene	ND	0.081	EPA 8260D	8-6-20	8-6-20	
4-Chlorotoluene	ND	0.081	EPA 8260D	8-6-20	8-6-20	
1,3,5-Trimethylbenzene	ND	0.081	EPA 8260D	8-6-20	8-6-20	
tert-Butylbenzene	ND	0.081	EPA 8260D	8-6-20	8-6-20	
1,2,4-Trimethylbenzene	ND	0.081	EPA 8260D	8-6-20	8-6-20	
sec-Butylbenzene	ND	0.081	EPA 8260D	8-6-20	8-6-20	
1,3-Dichlorobenzene	ND	0.081	EPA 8260D	8-6-20	8-6-20	
p-Isopropyltoluene	ND	0.081	EPA 8260D	8-6-20	8-6-20	
1,4-Dichlorobenzene	ND	0.081	EPA 8260D	8-6-20	8-6-20	
1,2-Dichlorobenzene	ND	0.081	EPA 8260D	8-6-20	8-6-20	
n-Butylbenzene	ND	0.081	EPA 8260D	8-6-20	8-6-20	
1,2-Dibromo-3-chloropropane	ND	0.41	EPA 8260D	8-6-20	8-6-20	
1.2.4-Trichlorobenzene	ND	0.081	EPA 8260D	8-6-20	8-6-20	
Hexachlorobutadiene	ND	0.41	EPA 8260D	8-6-20	8-6-20	
Naphthalene	ND	0.41	EPA 8260D	8-6-20	8-6-20	
1,2,3-Trichlorobenzene	ND	0.081	EPA 8260D	8-6-20	8-6-20	
Surrogate:	Percent Recovery	Control Limits		0-0-20	0-0-20	
Dibromofluoromethane	111	74-131				
Toluene-d8 4 Bramafluarahanzana	101	78-128				
4-Bromofluorobenzene	85	71-130				



VOLATILE ORGANICS EPA 8260D QUALITY CONTROL page 1 of 2

Matrix: Soil Units: mg/kg

• • •	-			Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0805S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
Chloromethane	ND	0.0050	EPA 8260D	8-5-20	8-5-20	
Vinyl Chloride	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
Bromomethane	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
Chloroethane	ND	0.0050	EPA 8260D	8-5-20	8-5-20	
Trichlorofluoromethane	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
1,1-Dichloroethene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
Acetone	ND	0.010	EPA 8260D	8-5-20	8-5-20	
lodomethane	ND	0.0050	EPA 8260D	8-5-20	8-5-20	
Carbon Disulfide	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
Methylene Chloride	ND	0.0050	EPA 8260D	8-5-20	8-5-20	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
1,1-Dichloroethane	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
Vinyl Acetate	ND	0.0050	EPA 8260D	8-5-20	8-5-20	
2,2-Dichloropropane	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
2-Butanone	ND	0.0050	EPA 8260D	8-5-20	8-5-20	
Bromochloromethane	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
Chloroform	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
Carbon Tetrachloride	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
1,1-Dichloropropene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
Benzene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
1,2-Dichloroethane	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
Trichloroethene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
1,2-Dichloropropane	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
Dibromomethane	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
Bromodichloromethane	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260D	8-5-20	8-5-20	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
Methyl Isobutyl Ketone	ND	0.0050	EPA 8260D	8-5-20	8-5-20	
Toluene	ND	0.0050	EPA 8260D	8-5-20	8-5-20	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	



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VOLATILE ORGANICS EPA 8260D QUALITY CONTROL page 2 of 2

	_			Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0805S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
Tetrachloroethene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
1,3-Dichloropropane	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
2-Hexanone	ND	0.0050	EPA 8260D	8-5-20	8-5-20	
Dibromochloromethane	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
1,2-Dibromoethane	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
Chlorobenzene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
Ethylbenzene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
n,p-Xylene	ND	0.0020	EPA 8260D	8-5-20	8-5-20	
o-Xylene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
Styrene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
Bromoform	ND	0.0050	EPA 8260D	8-5-20	8-5-20	
sopropylbenzene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
Bromobenzene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
n-Propylbenzene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
2-Chlorotoluene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
4-Chlorotoluene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
ert-Butylbenzene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
sec-Butylbenzene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
o-Isopropyltoluene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
n-Butylbenzene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260D	8-5-20	8-5-20	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
Hexachlorobutadiene	ND	0.0050	EPA 8260D	8-5-20	8-5-20	
Naphthalene	ND	0.0050	EPA 8260D	8-5-20	8-5-20	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260D	8-5-20	8-5-20	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	112	74-131				
Toluene-d8	103	78-128				
4-Bromofluorobenzene	103	71-130				
	103	11-130				



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

VOLATILE ORGANICS EPA 8260D QUALITY CONTROL page 1 of 2

Matrix: Soil Units: mg/kg

A I		501		Date	Date	-
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
	MBAAAAAA					
Laboratory ID:	MB0806S3					
Dichlorodifluoromethane	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
Chloromethane	ND	0.0050	EPA 8260D	8-6-20	8-6-20	
Vinyl Chloride	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
Bromomethane	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
Chloroethane	ND	0.0050	EPA 8260D	8-6-20	8-6-20	
Trichlorofluoromethane	ND	0.0016	EPA 8260D	8-6-20	8-6-20	
1,1-Dichloroethene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
Acetone	ND	0.010	EPA 8260D	8-6-20	8-6-20	
lodomethane	ND	0.0050	EPA 8260D	8-6-20	8-6-20	
Carbon Disulfide	ND	0.0013	EPA 8260D	8-6-20	8-6-20	
Methylene Chloride	ND	0.0050	EPA 8260D	8-6-20	8-6-20	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
1,1-Dichloroethane	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
Vinyl Acetate	ND	0.0050	EPA 8260D	8-6-20	8-6-20	
2,2-Dichloropropane	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
2-Butanone	ND	0.0050	EPA 8260D	8-6-20	8-6-20	
Bromochloromethane	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
Chloroform	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
Carbon Tetrachloride	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
1,1-Dichloropropene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
Benzene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
1,2-Dichloroethane	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
Trichloroethene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
1,2-Dichloropropane	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
Dibromomethane	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
Bromodichloromethane	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260D	8-6-20	8-6-20	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
Methyl Isobutyl Ketone	ND	0.0050	EPA 8260D	8-6-20	8-6-20	
Toluene	ND	0.0050	EPA 8260D	8-6-20	8-6-20	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	



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VOLATILE ORGANICS EPA 8260D QUALITY CONTROL page 2 of 2

	_			Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0806S3					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
Tetrachloroethene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
1,3-Dichloropropane	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
2-Hexanone	ND	0.0050	EPA 8260D	8-6-20	8-6-20	
Dibromochloromethane	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
1,2-Dibromoethane	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
Chlorobenzene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
Ethylbenzene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
m,p-Xylene	ND	0.0020	EPA 8260D	8-6-20	8-6-20	
o-Xylene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
Styrene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
Bromoform	ND	0.0050	EPA 8260D	8-6-20	8-6-20	
lsopropylbenzene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
Bromobenzene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
1,2,3-Trichloropropane	ND	0.0013	EPA 8260D	8-6-20	8-6-20	
n-Propylbenzene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
2-Chlorotoluene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
4-Chlorotoluene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
tert-Butylbenzene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
sec-Butylbenzene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
o-Isopropyltoluene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
n-Butylbenzene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260D	8-6-20	8-6-20	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
Hexachlorobutadiene	ND	0.0050	EPA 8260D	8-6-20	8-6-20	
Naphthalene	ND	0.0050	EPA 8260D	8-6-20	8-6-20	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260D	8-6-20	8-6-20	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	116	74-131				
Toluene-d8	101	78-128				
4-Bromofluorobenzene	101	71-130				
	101	11-130				



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VOLATILE ORGANICS EPA 8260D QUALITY CONTROL

Matrix: Soil Units: mg/kg

					Pe	rcent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Rec	overy	Limits	RPD	Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB08	05S1								
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0621	0.0630	0.0500	0.0500	124	126	55-126	1	17	
Benzene	0.0531	0.0530	0.0500	0.0500	106	106	65-121	0	16	
Trichloroethene	0.0509	0.0516	0.0500	0.0500	102	103	74-126	1	16	
Toluene	0.0472	0.0481	0.0500	0.0500	94	96	71-121	2	16	
Chlorobenzene	0.0451	0.0452	0.0500	0.0500	90	90	72-123	0	15	
Surrogate:										
Dibromofluoromethane					108	112	74-131			
Toluene-d8					101	102	78-128			
4-Bromofluorobenzene					102	102	71-130			
Laboratory ID:	SB08	06S1								
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0445	0.0524	0.0500	0.0500	89	105	55-126	16	17	
Benzene	0.0471	0.0465	0.0500	0.0500	94	93	65-121	1	16	
Trichloroethene	0.0474	0.0435	0.0500	0.0500	95	87	74-126	9	16	
Toluene	0.0450	0.0405	0.0500	0.0500	90	81	71-121	11	16	
Chlorobenzene	0.0438	0.0434	0.0500	0.0500	88	87	72-123	1	15	
Surrogate:										
Dibromofluoromethane					107	107	74-131			
Toluene-d8					109	99	78-128			
4-Bromofluorobenzene					104	98	71-130			



Matrix: Soil Units: mg/Kg

5 5				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-01-7.0					
Laboratory ID:	07-331-05					
Naphthalene	ND	0.016	EPA 8270E/SIM	8-7-20	8-7-20	
2-Methylnaphthalene	ND	0.016	EPA 8270E/SIM	8-7-20	8-7-20	
1-Methylnaphthalene	ND	0.016	EPA 8270E/SIM	8-7-20	8-7-20	
Acenaphthylene	ND	0.016	EPA 8270E/SIM	8-7-20	8-7-20	
Acenaphthene	ND	0.016	EPA 8270E/SIM	8-7-20	8-7-20	
Fluorene	ND	0.016	EPA 8270E/SIM	8-7-20	8-7-20	
Phenanthrene	ND	0.016	EPA 8270E/SIM	8-7-20	8-7-20	
Anthracene	ND	0.016	EPA 8270E/SIM	8-7-20	8-7-20	
Fluoranthene	ND	0.016	EPA 8270E/SIM	8-7-20	8-7-20	
Pyrene	ND	0.016	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[a]anthracene	ND	0.016	EPA 8270E/SIM	8-7-20	8-7-20	
Chrysene	ND	0.016	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[b]fluoranthene	ND	0.016	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo(j,k)fluoranthene	ND	0.016	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[a]pyrene	ND	0.016	EPA 8270E/SIM	8-7-20	8-7-20	
Indeno(1,2,3-c,d)pyrene	ND	0.016	EPA 8270E/SIM	8-7-20	8-7-20	
Dibenz[a,h]anthracene	ND	0.016	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[g,h,i]perylene	ND	0.016	EPA 8270E/SIM	8-7-20	8-7-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	61	46 - 113				
Pyrene-d10	63	45 - 114				
Terphenyl-d14	64	49 - 121				



Matrix: Soil Units: mg/Kg

0 0				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-02-5.5					
Laboratory ID:	07-331-08					
Naphthalene	0.17	0.018	EPA 8270E/SIM	8-7-20	8-10-20	
2-Methylnaphthalene	ND	0.018	EPA 8270E/SIM	8-7-20	8-10-20	
1-Methylnaphthalene	ND	0.018	EPA 8270E/SIM	8-7-20	8-10-20	
Acenaphthylene	ND	0.018	EPA 8270E/SIM	8-7-20	8-10-20	
Acenaphthene	ND	0.018	EPA 8270E/SIM	8-7-20	8-10-20	
Fluorene	0.025	0.018	EPA 8270E/SIM	8-7-20	8-10-20	
Phenanthrene	0.044	0.018	EPA 8270E/SIM	8-7-20	8-10-20	
Anthracene	ND	0.018	EPA 8270E/SIM	8-7-20	8-10-20	
Fluoranthene	0.040	0.018	EPA 8270E/SIM	8-7-20	8-10-20	
Pyrene	0.033	0.018	EPA 8270E/SIM	8-7-20	8-10-20	
Benzo[a]anthracene	ND	0.018	EPA 8270E/SIM	8-7-20	8-10-20	
Chrysene	0.028	0.018	EPA 8270E/SIM	8-7-20	8-10-20	
Benzo[b]fluoranthene	0.037	0.018	EPA 8270E/SIM	8-7-20	8-10-20	
Benzo(j,k)fluoranthene	ND	0.018	EPA 8270E/SIM	8-7-20	8-10-20	
Benzo[a]pyrene	ND	0.018	EPA 8270E/SIM	8-7-20	8-10-20	
Indeno(1,2,3-c,d)pyrene	0.019	0.018	EPA 8270E/SIM	8-7-20	8-10-20	
Dibenz[a,h]anthracene	ND	0.018	EPA 8270E/SIM	8-7-20	8-10-20	
Benzo[g,h,i]perylene	0.019	0.018	EPA 8270E/SIM	8-7-20	8-10-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	58	46 - 113				
Pyrene-d10	72	45 - 114				
Terphenyl-d14	71	49 - 121				



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Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-03-6.0					
Laboratory ID:	07-331-10					
Naphthalene	2.1	0.019	EPA 8270E/SIM	8-7-20	8-7-20	
2-Methylnaphthalene	0.25	0.019	EPA 8270E/SIM	8-7-20	8-7-20	
1-Methylnaphthalene	0.18	0.019	EPA 8270E/SIM	8-7-20	8-7-20	
Acenaphthylene	ND	0.019	EPA 8270E/SIM	8-7-20	8-7-20	
Acenaphthene	0.12	0.019	EPA 8270E/SIM	8-7-20	8-7-20	
Fluorene	0.074	0.019	EPA 8270E/SIM	8-7-20	8-7-20	
Phenanthrene	0.17	0.019	EPA 8270E/SIM	8-7-20	8-7-20	
Anthracene	0.028	0.019	EPA 8270E/SIM	8-7-20	8-7-20	
Fluoranthene	0.12	0.019	EPA 8270E/SIM	8-7-20	8-7-20	
Pyrene	0.082	0.019	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[a]anthracene	0.037	0.019	EPA 8270E/SIM	8-7-20	8-7-20	
Chrysene	0.042	0.019	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[b]fluoranthene	0.044	0.019	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo(j,k)fluoranthene	ND	0.019	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[a]pyrene	0.022	0.019	EPA 8270E/SIM	8-7-20	8-7-20	
Indeno(1,2,3-c,d)pyrene	0.023	0.019	EPA 8270E/SIM	8-7-20	8-7-20	
Dibenz[a,h]anthracene	ND	0.019	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[g,h,i]perylene	0.023	0.019	EPA 8270E/SIM	8-7-20	8-7-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	49	46 - 113				
Pyrene-d10	63	45 - 114				
Terphenyl-d14	67	49 - 121				



Matrix: Soil Units: mg/Kg

5 5				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-02-3.0					
Laboratory ID:	07-331-12					
Naphthalene	1.1	0.076	EPA 8270E/SIM	8-7-20	8-12-20	
2-Methylnaphthalene	0.54	0.0076	EPA 8270E/SIM	8-7-20	8-10-20	
1-Methylnaphthalene	0.36	0.0076	EPA 8270E/SIM	8-7-20	8-10-20	
Acenaphthylene	0.012	0.0076	EPA 8270E/SIM	8-7-20	8-10-20	
Acenaphthene	0.70	0.0076	EPA 8270E/SIM	8-7-20	8-10-20	
Fluorene	1.1	0.076	EPA 8270E/SIM	8-7-20	8-12-20	
Phenanthrene	2.1	0.076	EPA 8270E/SIM	8-7-20	8-12-20	
Anthracene	0.28	0.0076	EPA 8270E/SIM	8-7-20	8-10-20	
Fluoranthene	0.94	0.076	EPA 8270E/SIM	8-7-20	8-12-20	
Pyrene	0.78	0.0076	EPA 8270E/SIM	8-7-20	8-10-20	
Benzo[a]anthracene	0.26	0.0076	EPA 8270E/SIM	8-7-20	8-10-20	
Chrysene	0.25	0.0076	EPA 8270E/SIM	8-7-20	8-10-20	
Benzo[b]fluoranthene	0.23	0.0076	EPA 8270E/SIM	8-7-20	8-10-20	
Benzo(j,k)fluoranthene	0.081	0.0076	EPA 8270E/SIM	8-7-20	8-10-20	
Benzo[a]pyrene	0.20	0.0076	EPA 8270E/SIM	8-7-20	8-10-20	
Indeno(1,2,3-c,d)pyrene	0.11	0.0076	EPA 8270E/SIM	8-7-20	8-10-20	
Dibenz[a,h]anthracene	0.025	0.0076	EPA 8270E/SIM	8-7-20	8-10-20	
Benzo[g,h,i]perylene	0.11	0.0076	EPA 8270E/SIM	8-7-20	8-10-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	75	46 - 113				
Pyrene-d10	81	45 - 114				
Terphenyl-d14	79	49 - 121				



Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-04-1.0					
Laboratory ID:	07-331-15					
Naphthalene	ND	0.0077	EPA 8270E/SIM	8-7-20	8-10-20	
2-Methylnaphthalene	ND	0.0077	EPA 8270E/SIM	8-7-20	8-10-20	
1-Methylnaphthalene	ND	0.0077	EPA 8270E/SIM	8-7-20	8-10-20	
Acenaphthylene	ND	0.0077	EPA 8270E/SIM	8-7-20	8-10-20	
Acenaphthene	ND	0.0077	EPA 8270E/SIM	8-7-20	8-10-20	
Fluorene	ND	0.0077	EPA 8270E/SIM	8-7-20	8-10-20	
Phenanthrene	ND	0.0077	EPA 8270E/SIM	8-7-20	8-10-20	
Anthracene	ND	0.0077	EPA 8270E/SIM	8-7-20	8-10-20	
Fluoranthene	0.0098	0.0077	EPA 8270E/SIM	8-7-20	8-10-20	
Pyrene	0.0097	0.0077	EPA 8270E/SIM	8-7-20	8-10-20	
Benzo[a]anthracene	ND	0.0077	EPA 8270E/SIM	8-7-20	8-10-20	
Chrysene	ND	0.0077	EPA 8270E/SIM	8-7-20	8-10-20	
Benzo[b]fluoranthene	0.0079	0.0077	EPA 8270E/SIM	8-7-20	8-10-20	
Benzo(j,k)fluoranthene	ND	0.0077	EPA 8270E/SIM	8-7-20	8-10-20	
Benzo[a]pyrene	ND	0.0077	EPA 8270E/SIM	8-7-20	8-10-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0077	EPA 8270E/SIM	8-7-20	8-10-20	
Dibenz[a,h]anthracene	ND	0.0077	EPA 8270E/SIM	8-7-20	8-10-20	
Benzo[g,h,i]perylene	ND	0.0077	EPA 8270E/SIM	8-7-20	8-10-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	65	46 - 113				
Pyrene-d10	76	45 - 114				
Terphenyl-d14	74	49 - 121				



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Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-05-3.0					
Laboratory ID:	07-331-19					
Naphthalene	ND	0.0075	EPA 8270E/SIM	8-7-20	8-7-20	
2-Methylnaphthalene	ND	0.0075	EPA 8270E/SIM	8-7-20	8-7-20	
1-Methylnaphthalene	ND	0.0075	EPA 8270E/SIM	8-7-20	8-7-20	
Acenaphthylene	ND	0.0075	EPA 8270E/SIM	8-7-20	8-7-20	
Acenaphthene	ND	0.0075	EPA 8270E/SIM	8-7-20	8-7-20	
Fluorene	ND	0.0075	EPA 8270E/SIM	8-7-20	8-7-20	
Phenanthrene	0.0085	0.0075	EPA 8270E/SIM	8-7-20	8-7-20	
Anthracene	ND	0.0075	EPA 8270E/SIM	8-7-20	8-7-20	
Fluoranthene	0.012	0.0075	EPA 8270E/SIM	8-7-20	8-7-20	
Pyrene	0.012	0.0075	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[a]anthracene	ND	0.0075	EPA 8270E/SIM	8-7-20	8-7-20	
Chrysene	ND	0.0075	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[b]fluoranthene	0.0077	0.0075	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo(j,k)fluoranthene	ND	0.0075	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[a]pyrene	ND	0.0075	EPA 8270E/SIM	8-7-20	8-7-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0075	EPA 8270E/SIM	8-7-20	8-7-20	
Dibenz[a,h]anthracene	ND	0.0075	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[g,h,i]perylene	ND	0.0075	EPA 8270E/SIM	8-7-20	8-7-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	65	46 - 113				
Pyrene-d10	65	45 - 114				
Terphenyl-d14	68	49 - 121				



Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-06-6.0					
Laboratory ID:	07-331-23					
Naphthalene	ND	0.031	EPA 8270E/SIM	8-7-20	8-7-20	
2-Methylnaphthalene	ND	0.031	EPA 8270E/SIM	8-7-20	8-7-20	
1-Methylnaphthalene	0.036	0.031	EPA 8270E/SIM	8-7-20	8-7-20	
Acenaphthylene	ND	0.031	EPA 8270E/SIM	8-7-20	8-7-20	
Acenaphthene	0.10	0.031	EPA 8270E/SIM	8-7-20	8-7-20	
Fluorene	0.15	0.031	EPA 8270E/SIM	8-7-20	8-7-20	
Phenanthrene	0.28	0.031	EPA 8270E/SIM	8-7-20	8-7-20	
Anthracene	0.037	0.031	EPA 8270E/SIM	8-7-20	8-7-20	
Fluoranthene	0.10	0.031	EPA 8270E/SIM	8-7-20	8-7-20	
Pyrene	0.055	0.031	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[a]anthracene	ND	0.031	EPA 8270E/SIM	8-7-20	8-7-20	
Chrysene	ND	0.031	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[b]fluoranthene	ND	0.031	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo(j,k)fluoranthene	ND	0.031	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[a]pyrene	ND	0.031	EPA 8270E/SIM	8-7-20	8-7-20	
Indeno(1,2,3-c,d)pyrene	ND	0.031	EPA 8270E/SIM	8-7-20	8-7-20	
Dibenz[a,h]anthracene	ND	0.031	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[g,h,i]perylene	ND	0.031	EPA 8270E/SIM	8-7-20	8-7-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	60	46 - 113				
Pyrene-d10	58	45 - 114				
Terphenyl-d14	63	49 - 121				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-03-5.0					
Laboratory ID:	07-331-25					
Naphthalene	ND	0.027	EPA 8270E/SIM	8-7-20	8-7-20	
2-Methylnaphthalene	ND	0.027	EPA 8270E/SIM	8-7-20	8-7-20	
1-Methylnaphthalene	ND	0.027	EPA 8270E/SIM	8-7-20	8-7-20	
Acenaphthylene	ND	0.027	EPA 8270E/SIM	8-7-20	8-7-20	
Acenaphthene	ND	0.027	EPA 8270E/SIM	8-7-20	8-7-20	
Fluorene	ND	0.027	EPA 8270E/SIM	8-7-20	8-7-20	
Phenanthrene	ND	0.027	EPA 8270E/SIM	8-7-20	8-7-20	
Anthracene	ND	0.027	EPA 8270E/SIM	8-7-20	8-7-20	
Fluoranthene	ND	0.027	EPA 8270E/SIM	8-7-20	8-7-20	
Pyrene	ND	0.027	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[a]anthracene	ND	0.027	EPA 8270E/SIM	8-7-20	8-7-20	
Chrysene	ND	0.027	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[b]fluoranthene	ND	0.027	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo(j,k)fluoranthene	ND	0.027	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[a]pyrene	ND	0.027	EPA 8270E/SIM	8-7-20	8-7-20	
Indeno(1,2,3-c,d)pyrene	ND	0.027	EPA 8270E/SIM	8-7-20	8-7-20	
Dibenz[a,h]anthracene	ND	0.027	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[g,h,i]perylene	ND	0.027	EPA 8270E/SIM	8-7-20	8-7-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	62	46 - 113				
Pyrene-d10	61	45 - 114				
Terphenyl-d14	65	49 - 121				



Matrix: Soil Units: mg/Kg

5.5				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-07-5.0					
Laboratory ID:	07-331-29					
Naphthalene	0.041	0.0086	EPA 8270E/SIM	8-7-20	8-7-20	
2-Methylnaphthalene	0.031	0.0086	EPA 8270E/SIM	8-7-20	8-7-20	
1-Methylnaphthalene	0.028	0.0086	EPA 8270E/SIM	8-7-20	8-7-20	
Acenaphthylene	ND	0.0086	EPA 8270E/SIM	8-7-20	8-7-20	
Acenaphthene	ND	0.0086	EPA 8270E/SIM	8-7-20	8-7-20	
Fluorene	ND	0.0086	EPA 8270E/SIM	8-7-20	8-7-20	
Phenanthrene	0.016	0.0086	EPA 8270E/SIM	8-7-20	8-7-20	
Anthracene	ND	0.0086	EPA 8270E/SIM	8-7-20	8-7-20	
Fluoranthene	ND	0.0086	EPA 8270E/SIM	8-7-20	8-7-20	
Pyrene	ND	0.0086	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[a]anthracene	ND	0.0086	EPA 8270E/SIM	8-7-20	8-7-20	
Chrysene	ND	0.0086	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[b]fluoranthene	ND	0.0086	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo(j,k)fluoranthene	ND	0.0086	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[a]pyrene	ND	0.0086	EPA 8270E/SIM	8-7-20	8-7-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0086	EPA 8270E/SIM	8-7-20	8-7-20	
Dibenz[a,h]anthracene	ND	0.0086	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[g,h,i]perylene	ND	0.0086	EPA 8270E/SIM	8-7-20	8-7-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	62	46 - 113				
Pyrene-d10	61	45 - 114				
Terphenyl-d14	65	49 - 121				



and is intended only for the use of the individual or company to whom it is addressed.

This report pertains to the samples analyzed in accordance with the chain of custody,

Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-08-5.5					
Laboratory ID:	07-331-32					
Naphthalene	ND	0.026	EPA 8270E/SIM	8-7-20	8-10-20	
2-Methylnaphthalene	ND	0.026	EPA 8270E/SIM	8-7-20	8-10-20	
1-Methylnaphthalene	ND	0.026	EPA 8270E/SIM	8-7-20	8-10-20	
Acenaphthylene	ND	0.026	EPA 8270E/SIM	8-7-20	8-10-20	
Acenaphthene	ND	0.026	EPA 8270E/SIM	8-7-20	8-10-20	
Fluorene	ND	0.040	EPA 8270E/SIM	8-7-20	8-10-20	U1
Phenanthrene	ND	0.026	EPA 8270E/SIM	8-7-20	8-10-20	
Anthracene	ND	0.026	EPA 8270E/SIM	8-7-20	8-10-20	
Fluoranthene	ND	0.026	EPA 8270E/SIM	8-7-20	8-10-20	
Pyrene	ND	0.026	EPA 8270E/SIM	8-7-20	8-10-20	
Benzo[a]anthracene	ND	0.026	EPA 8270E/SIM	8-7-20	8-10-20	
Chrysene	ND	0.026	EPA 8270E/SIM	8-7-20	8-10-20	
Benzo[b]fluoranthene	ND	0.026	EPA 8270E/SIM	8-7-20	8-10-20	
Benzo(j,k)fluoranthene	ND	0.026	EPA 8270E/SIM	8-7-20	8-10-20	
Benzo[a]pyrene	ND	0.026	EPA 8270E/SIM	8-7-20	8-10-20	
Indeno(1,2,3-c,d)pyrene	ND	0.026	EPA 8270E/SIM	8-7-20	8-10-20	
Dibenz[a,h]anthracene	ND	0.026	EPA 8270E/SIM	8-7-20	8-10-20	
Benzo[g,h,i]perylene	ND	0.026	EPA 8270E/SIM	8-7-20	8-10-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	69	46 - 113				
Pyrene-d10	75	45 - 114				
Terphenyl-d14	72	49 - 121				



5 5				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-09-5.0					
Laboratory ID:	07-331-35					
Naphthalene	0.031	0.0079	EPA 8270E/SIM	8-7-20	8-7-20	
2-Methylnaphthalene	0.049	0.0079	EPA 8270E/SIM	8-7-20	8-7-20	
1-Methylnaphthalene	0.031	0.0079	EPA 8270E/SIM	8-7-20	8-7-20	
Acenaphthylene	ND	0.0079	EPA 8270E/SIM	8-7-20	8-7-20	
Acenaphthene	0.068	0.0079	EPA 8270E/SIM	8-7-20	8-7-20	
Fluorene	0.081	0.0079	EPA 8270E/SIM	8-7-20	8-7-20	
Phenanthrene	0.19	0.0079	EPA 8270E/SIM	8-7-20	8-7-20	
Anthracene	0.017	0.0079	EPA 8270E/SIM	8-7-20	8-7-20	
Fluoranthene	0.039	0.0079	EPA 8270E/SIM	8-7-20	8-7-20	
Pyrene	0.030	0.0079	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[a]anthracene	ND	0.0079	EPA 8270E/SIM	8-7-20	8-7-20	
Chrysene	0.0079	0.0079	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[b]fluoranthene	ND	0.0079	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo(j,k)fluoranthene	ND	0.0079	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[a]pyrene	ND	0.0079	EPA 8270E/SIM	8-7-20	8-7-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0079	EPA 8270E/SIM	8-7-20	8-7-20	
Dibenz[a,h]anthracene	ND	0.0079	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[g,h,i]perylene	ND	0.0079	EPA 8270E/SIM	8-7-20	8-7-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	67	46 - 113				
Pyrene-d10	65	45 - 114				
Terphenyl-d14	67	49 - 121				



Matrix: Soil Units: mg/Kg

5.5				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-04-6.0					
Laboratory ID:	07-331-37					
Naphthalene	0.051	0.0089	EPA 8270E/SIM	8-7-20	8-7-20	
2-Methylnaphthalene	0.092	0.0089	EPA 8270E/SIM	8-7-20	8-7-20	
1-Methylnaphthalene	0.059	0.0089	EPA 8270E/SIM	8-7-20	8-7-20	
Acenaphthylene	ND	0.0089	EPA 8270E/SIM	8-7-20	8-7-20	
Acenaphthene	ND	0.0089	EPA 8270E/SIM	8-7-20	8-7-20	
Fluorene	0.013	0.0089	EPA 8270E/SIM	8-7-20	8-7-20	
Phenanthrene	0.023	0.0089	EPA 8270E/SIM	8-7-20	8-7-20	
Anthracene	ND	0.0089	EPA 8270E/SIM	8-7-20	8-7-20	
Fluoranthene	ND	0.0089	EPA 8270E/SIM	8-7-20	8-7-20	
Pyrene	ND	0.0089	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[a]anthracene	ND	0.0089	EPA 8270E/SIM	8-7-20	8-7-20	
Chrysene	ND	0.0089	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[b]fluoranthene	ND	0.0089	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo(j,k)fluoranthene	ND	0.0089	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[a]pyrene	ND	0.0089	EPA 8270E/SIM	8-7-20	8-7-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0089	EPA 8270E/SIM	8-7-20	8-7-20	
Dibenz[a,h]anthracene	ND	0.0089	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[g,h,i]perylene	ND	0.0089	EPA 8270E/SIM	8-7-20	8-7-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	65	46 - 113				
Pyrene-d10	63	45 - 114				
Terphenyl-d14	64	49 - 121				



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				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0807S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	8-7-20	8-7-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	8-7-20	8-7-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	8-7-20	8-7-20	
Acenaphthylene	ND	0.0067	EPA 8270E/SIM	8-7-20	8-7-20	
Acenaphthene	ND	0.0067	EPA 8270E/SIM	8-7-20	8-7-20	
Fluorene	ND	0.0067	EPA 8270E/SIM	8-7-20	8-7-20	
Phenanthrene	ND	0.0067	EPA 8270E/SIM	8-7-20	8-7-20	
Anthracene	ND	0.0067	EPA 8270E/SIM	8-7-20	8-7-20	
Fluoranthene	ND	0.0067	EPA 8270E/SIM	8-7-20	8-7-20	
Pyrene	ND	0.0067	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	8-7-20	8-7-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	8-7-20	8-7-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	8-7-20	8-7-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	8-7-20	8-7-20	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270E/SIM	8-7-20	8-7-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	76	46 - 113				
Pyrene-d10	77	45 - 114				
Terphenyl-d14	77	49 - 121				



					P	ercent	Recovery		RPD	
Analyte	Re	sult	Spike	Level	Re	covery	Limits	RPD	Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB08	807S1								
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	0.0699	0.0730	0.0833	0.0833	84	88	60 - 116	4	16	
Acenaphthylene	0.0662	0.0694	0.0833	0.0833	79	83	60 - 125	5	15	
Acenaphthene	0.0693	0.0726	0.0833	0.0833	83	87	60 - 121	5	15	
Fluorene	0.0671	0.0703	0.0833	0.0833	81	84	65 - 126	5	15	
Phenanthrene	0.0652	0.0681	0.0833	0.0833	78	82	65 - 120	4	15	
Anthracene	0.0707	0.0748	0.0833	0.0833	85	90	67 - 125	6	15	
Fluoranthene	0.0687	0.0721	0.0833	0.0833	82	87	66 - 125	5	15	
Pyrene	0.0647	0.0673	0.0833	0.0833	78	81	62 - 125	4	15	
Benzo[a]anthracene	0.0741	0.0768	0.0833	0.0833	89	92	72 - 129	4	15	
Chrysene	0.0768	0.0808	0.0833	0.0833	92	97	66 - 123	5	15	
Benzo[b]fluoranthene	0.0694	0.0724	0.0833	0.0833	83	87	68 - 128	4	15	
Benzo(j,k)fluoranthene	0.0693	0.0730	0.0833	0.0833	83	88	63 - 128	5	16	
Benzo[a]pyrene	0.0735	0.0768	0.0833	0.0833	88	92	66 - 130	4	15	
Indeno(1,2,3-c,d)pyrene	0.0677	0.0692	0.0833	0.0833	81	83	63 - 135	2	15	
Dibenz[a,h]anthracene	0.0710	0.0735	0.0833	0.0833	85	88	65 - 130	3	15	
Benzo[g,h,i]perylene	0.0728	0.0772	0.0833	0.0833	87	93	66 - 127	6	15	
Surrogate:										
2-Fluorobiphenyl					73	76	46 - 113			
Pyrene-d10					71	74	45 - 114			
Terphenyl-d14					76	79	49 - 121			

TOTAL ARSENIC EPA 6010D

Matrix: Soil Units: mg/Kg (ppm)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-01-7.0					
Laboratory ID:	07-331-05					
Arsenic	ND	12	EPA 6010D	8-5-20	8-5-20	
Client ID:	FMW-02-3.0					
Laboratory ID:	07-331-12					
Arsenic	ND	11	EPA 6010D	8-5-20	8-5-20	
Client ID:	FB-04-1.0					
Laboratory ID:	07-331-15					
Arsenic	ND	12	EPA 6010D	8-5-20	8-5-20	
Client ID:	FB-05-3.0					
Laboratory ID:	07-331-19					
Arsenic	ND	11	EPA 6010D	8-5-20	8-5-20	
Client ID:	FB-05-11.0					
Laboratory ID:	07-331-21					
Arsenic	ND	18	EPA 6010D	8-5-20	8-5-20	
Client ID:	FMW-03-10.0					
Laboratory ID:	07-331-26					
Arsenic	23	17	EPA 6010D	8-5-20	8-5-20	
Client ID:	FB-07-1.0					
Laboratory ID:	рв-07-1.0 07-331-28					
	ND	11	EPA 6010D	8-5-20	8-5-20	
Arsenic		11	EFA OUTUD	0-0-20	0-0-20	
Client ID:	FMW-04-12.0					
Laboratory ID:	07-331-38					
Arsenic	ND	16	EPA 6010D	8-5-20	8-5-20	

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

89.2

88.2

100

100

TOTAL ARSENIC EPA 6010D QUALITY CONTROL

Matrix: Soil Units: mg/Kg (ppm)

Arsenic

							Date	Date)	
Analyte	Result			PQL	Method		Prepared	Analyz	ed	Flags
METHOD BLANK										
Laboratory ID:	Ν	/IB0805SM1								
Arsenic		ND		5.0	EPA	6010D	8-5-20	8-5-2	0	
					Source	Percent	Recovery		RPD	
Analyte	Res	sult	Spike	e Level	Result	Recovery	/ Limits	RPD	Limit	Flags
DUPLICATE										
Laboratory ID:	07-33	31-38								
	ORIG	DUP								
Arsenic	ND	ND	NA	NA		NA	NA	NA	20	
MATRIX SPIKES										
Laboratory ID:	07-33	31-38								
	MS	MSD	MS	MSD		MS MS)			

ND

89

88

75-125

20

1



Date of Report: August 12, 2020 Samples Submitted: July 31, 2020 Laboratory Reference: 2007-331 Project: 650-031

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
FB-01-7.0	07-331-05	58	8-5-20
FB-02-5.5	07-331-08	63	8-6-20
FB-03-6.0	07-331-10	65	8-6-20
FMW-02-3.0	07-331-12	12	8-5-20
FB-04-1.0	07-331-15	14	8-5-20
FB-05-3.0	07-331-19	11	8-5-20
FB-05-11.0	07-331-21	45	8-5-20
FB-06-6.0	07-331-23	79	8-6-20
FMW-03-5.0	07-331-25	76	8-6-20
FMW-03-10.0	07-331-26	42	8-5-20
FB-07-1.0	07-331-28	11	8-5-20
FB-07-5.0	07-331-29	23	8-6-20
FB-07-15.0	07-331-30	69	8-7-20
FB-08-5.5	07-331-32	75	8-6-20
FB-08-13.0	07-331-33	68	8-7-20
FB-09-5.0	07-331-35	16	8-6-20
FB-09-15.0	07-331-36	68	8-7-20
FMW-04-6.0	07-331-37	25	8-6-20
FMW-04-12.0	07-331-38	68	8-5-20



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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 methods 8260 & 8270, 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.

Ζ-

ND - Not Detected at PQL PQL - Practical Quantitation Limit RPD - Relative Percent Difference



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

Reviewed/Date	Received	Relinquished	Received	Relinquished	Received INCHAN LA	Relinquished	Signature	10 FB-03-8-0-6.0	9 FB-03-1.0	8 FB-02-5,5	7 F-13-02-4.0	4 FB-01-15.0	5 FB-01-7.0	4 FB-01-0.5	3 FAW-01-14,5	2 FMW-01-4.0	1 FMW-01-1.0	Lab ID Sample Identification	Sampled by: S. Brown	Project Namager: Project Manager: C. Schmitt	Project Number: $650 - 031$	Company:	Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052 Phone: (425) 883-3881 • www.onsite-env.com	Environmental Inc.
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					20 HI 20 121	7/31/20 1426	Date Time	×		×			×				4	NWTF NWTF NWTF NWTF Volatil Halog	PH-HCID PH-Gx/B PH-Gx PH-Dx () es 8260 enated \	Acid / SG Cli C Volatiles 8260C			Laboratory Number:	Chain of Custody
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August 19, 2020

Cliff Schmitt Farallon Consulting, LLC 975 5th Avenue NW Issaquah, WA 98027

Re: Analytical Data for Project 650-031 Laboratory Reference No. 2007-331B

Dear Cliff:

Enclosed are the analytical results and associated quality control data for samples submitted on July 31, 2020.

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,

David Baumeister Project Manager

Enclosures



Date of Report: August 19, 2020 Samples Submitted: July 31, 2020 Laboratory Reference: 2007-331B Project: 650-031

Case Narrative

Samples were collected on July 30 and 31, 2020 and received by the laboratory on July 31, 2020. 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.



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

Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-01-0.5					
Laboratory ID:	07-331-04					
Naphthalene	0.0079	0.0074	EPA 8270E/SIM	8-13-20	8-15-20	
2-Methylnaphthalene	ND	0.0074	EPA 8270E/SIM	8-13-20	8-15-20	
1-Methylnaphthalene	ND	0.0074	EPA 8270E/SIM	8-13-20	8-15-20	
Acenaphthylene	ND	0.0074	EPA 8270E/SIM	8-13-20	8-15-20	
Acenaphthene	ND	0.0074	EPA 8270E/SIM	8-13-20	8-15-20	
Fluorene	ND	0.0074	EPA 8270E/SIM	8-13-20	8-15-20	
Phenanthrene	0.028	0.0074	EPA 8270E/SIM	8-13-20	8-15-20	
Anthracene	ND	0.0074	EPA 8270E/SIM	8-13-20	8-15-20	
Fluoranthene	0.034	0.0074	EPA 8270E/SIM	8-13-20	8-15-20	
Pyrene	0.033	0.0074	EPA 8270E/SIM	8-13-20	8-15-20	
Benzo[a]anthracene	0.017	0.0074	EPA 8270E/SIM	8-13-20	8-15-20	
Chrysene	0.019	0.0074	EPA 8270E/SIM	8-13-20	8-15-20	
Benzo[b]fluoranthene	0.022	0.0074	EPA 8270E/SIM	8-13-20	8-15-20	
Benzo(j,k)fluoranthene	ND	0.0074	EPA 8270E/SIM	8-13-20	8-15-20	
Benzo[a]pyrene	0.020	0.0074	EPA 8270E/SIM	8-13-20	8-15-20	
Indeno(1,2,3-c,d)pyrene	0.013	0.0074	EPA 8270E/SIM	8-13-20	8-15-20	
Dibenz[a,h]anthracene	ND	0.0074	EPA 8270E/SIM	8-13-20	8-15-20	
Benzo[g,h,i]perylene	0.013	0.0074	EPA 8270E/SIM	8-13-20	8-15-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	85	46 - 113				
Pyrene-d10	98	45 - 114				
Terphenyl-d14	98	49 - 121				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-02-4.0					
Laboratory ID:	07-331-07					
Naphthalene	4.6	0.15	EPA 8270E/SIM	8-13-20	8-19-20	
2-Methylnaphthalene	2.0	0.15	EPA 8270E/SIM	8-13-20	8-19-20	
1-Methylnaphthalene	1.4	0.15	EPA 8270E/SIM	8-13-20	8-19-20	
Acenaphthylene	0.045	0.0075	EPA 8270E/SIM	8-13-20	8-18-20	
Acenaphthene	3.0	0.15	EPA 8270E/SIM	8-13-20	8-19-20	
Fluorene	3.2	0.15	EPA 8270E/SIM	8-13-20	8-19-20	
Phenanthrene	9.5	0.15	EPA 8270E/SIM	8-13-20	8-19-20	
Anthracene	1.4	0.15	EPA 8270E/SIM	8-13-20	8-19-20	
Fluoranthene	5.7	0.15	EPA 8270E/SIM	8-13-20	8-19-20	
Pyrene	4.3	0.15	EPA 8270E/SIM	8-13-20	8-19-20	
Benzo[a]anthracene	1.6	0.15	EPA 8270E/SIM	8-13-20	8-19-20	
Chrysene	1.5	0.15	EPA 8270E/SIM	8-13-20	8-19-20	
Benzo[b]fluoranthene	1.2	0.15	EPA 8270E/SIM	8-13-20	8-19-20	
Benzo(j,k)fluoranthene	0.49	0.15	EPA 8270E/SIM	8-13-20	8-19-20	
Benzo[a]pyrene	1.2	0.15	EPA 8270E/SIM	8-13-20	8-19-20	
Indeno(1,2,3-c,d)pyrene	0.60	0.15	EPA 8270E/SIM	8-13-20	8-19-20	
Dibenz[a,h]anthracene	0.13	0.0075	EPA 8270E/SIM	8-13-20	8-18-20	
Benzo[g,h,i]perylene	0.59	0.15	EPA 8270E/SIM	8-13-20	8-19-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	76	46 - 113				
Pyrene-d10	85	45 - 114				
Terphenyl-d14	82	49 - 121				



Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-03-1.0					
Laboratory ID:	07-331-09					
Naphthalene	0.025	0.0073	EPA 8270E/SIM	8-13-20	8-15-20	
2-Methylnaphthalene	0.018	0.0073	EPA 8270E/SIM	8-13-20	8-15-20	
1-Methylnaphthalene	0.0084	0.0073	EPA 8270E/SIM	8-13-20	8-15-20	
Acenaphthylene	0.010	0.0073	EPA 8270E/SIM	8-13-20	8-15-20	
Acenaphthene	0.034	0.0073	EPA 8270E/SIM	8-13-20	8-15-20	
Fluorene	0.029	0.0073	EPA 8270E/SIM	8-13-20	8-15-20	
Phenanthrene	0.29	0.0073	EPA 8270E/SIM	8-13-20	8-15-20	
Anthracene	0.069	0.0073	EPA 8270E/SIM	8-13-20	8-15-20	
Fluoranthene	0.40	0.0073	EPA 8270E/SIM	8-13-20	8-15-20	
Pyrene	0.40	0.0073	EPA 8270E/SIM	8-13-20	8-15-20	
Benzo[a]anthracene	0.20	0.0073	EPA 8270E/SIM	8-13-20	8-15-20	
Chrysene	0.20	0.0073	EPA 8270E/SIM	8-13-20	8-15-20	
Benzo[b]fluoranthene	0.21	0.0073	EPA 8270E/SIM	8-13-20	8-15-20	
Benzo(j,k)fluoranthene	0.077	0.0073	EPA 8270E/SIM	8-13-20	8-15-20	
Benzo[a]pyrene	0.21	0.0073	EPA 8270E/SIM	8-13-20	8-15-20	
Indeno(1,2,3-c,d)pyrene	0.13	0.0073	EPA 8270E/SIM	8-13-20	8-15-20	
Dibenz[a,h]anthracene	0.025	0.0073	EPA 8270E/SIM	8-13-20	8-15-20	
Benzo[g,h,i]perylene	0.12	0.0073	EPA 8270E/SIM	8-13-20	8-15-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	92	46 - 113				
Pyrene-d10	98	45 - 114				
Terphenyl-d14	97	49 - 121				



5

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-02-6.0					
Laboratory ID:	07-331-13					
Naphthalene	2.5	0.16	EPA 8270E/SIM	8-13-20	8-19-20	
2-Methylnaphthalene	1.7	0.16	EPA 8270E/SIM	8-13-20	8-19-20	
1-Methylnaphthalene	1.2	0.16	EPA 8270E/SIM	8-13-20	8-19-20	
Acenaphthylene	0.055	0.0082	EPA 8270E/SIM	8-13-20	8-18-20	
Acenaphthene	3.3	0.16	EPA 8270E/SIM	8-13-20	8-19-20	
Fluorene	4.9	0.16	EPA 8270E/SIM	8-13-20	8-19-20	
Phenanthrene	13	0.16	EPA 8270E/SIM	8-13-20	8-19-20	
Anthracene	1.7	0.16	EPA 8270E/SIM	8-13-20	8-19-20	
Fluoranthene	5.5	0.16	EPA 8270E/SIM	8-13-20	8-19-20	
Pyrene	4.2	0.16	EPA 8270E/SIM	8-13-20	8-19-20	
Benzo[a]anthracene	1.5	0.16	EPA 8270E/SIM	8-13-20	8-19-20	
Chrysene	1.5	0.16	EPA 8270E/SIM	8-13-20	8-19-20	
Benzo[b]fluoranthene	1.3	0.16	EPA 8270E/SIM	8-13-20	8-19-20	
Benzo(j,k)fluoranthene	0.48	0.16	EPA 8270E/SIM	8-13-20	8-19-20	
Benzo[a]pyrene	1.2	0.16	EPA 8270E/SIM	8-13-20	8-19-20	
Indeno(1,2,3-c,d)pyrene	0.63	0.16	EPA 8270E/SIM	8-13-20	8-19-20	
Dibenz[a,h]anthracene	0.15	0.0082	EPA 8270E/SIM	8-13-20	8-18-20	
Benzo[g,h,i]perylene	0.64	0.16	EPA 8270E/SIM	8-13-20	8-19-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	68	46 - 113				
Pyrene-d10	80	45 - 114				
Terphenyl-d14	79	49 - 121				



				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0813S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	8-13-20	8-13-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	8-13-20	8-13-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	8-13-20	8-13-20	
Acenaphthylene	ND	0.0067	EPA 8270E/SIM	8-13-20	8-13-20	
Acenaphthene	ND	0.0067	EPA 8270E/SIM	8-13-20	8-13-20	
Fluorene	ND	0.0067	EPA 8270E/SIM	8-13-20	8-13-20	
Phenanthrene	ND	0.0067	EPA 8270E/SIM	8-13-20	8-13-20	
Anthracene	ND	0.0067	EPA 8270E/SIM	8-13-20	8-13-20	
Fluoranthene	ND	0.0067	EPA 8270E/SIM	8-13-20	8-13-20	
Pyrene	ND	0.0067	EPA 8270E/SIM	8-13-20	8-13-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	8-13-20	8-13-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	8-13-20	8-13-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	8-13-20	8-13-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	8-13-20	8-13-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	8-13-20	8-13-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	8-13-20	8-13-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	8-13-20	8-13-20	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270E/SIM	8-13-20	8-13-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	69	46 - 113				
Pyrene-d10	75	45 - 114				
Terphenyl-d14	73	49 - 121				

Matrix: Soil Units: mg/Kg

	_	•	• •			cent	Recovery		RPD	
Analyte	Re	sult	Spike	Level	Reco	overy	Limits	RPD	Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB08	13S1								
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	0.0611	0.0625	0.0833	0.0833	73	75	60 - 116	2	16	
Acenaphthylene	0.0686	0.0681	0.0833	0.0833	82	82	60 - 125	1	15	
Acenaphthene	0.0659	0.0677	0.0833	0.0833	79	81	60 - 121	3	15	
Fluorene	0.0630	0.0662	0.0833	0.0833	76	79	65 - 126	5	15	
Phenanthrene	0.0608	0.0633	0.0833	0.0833	73	76	65 - 120	4	15	
Anthracene	0.0653	0.0678	0.0833	0.0833	78	81	67 - 125	4	15	
Fluoranthene	0.0659	0.0680	0.0833	0.0833	79	82	66 - 125	3	15	
Pyrene	0.0665	0.0690	0.0833	0.0833	80	83	62 - 125	4	15	
Benzo[a]anthracene	0.0646	0.0660	0.0833	0.0833	78	79	72 - 129	2	15	
Chrysene	0.0613	0.0617	0.0833	0.0833	74	74	66 - 123	1	15	
Benzo[b]fluoranthene	0.0619	0.0660	0.0833	0.0833	74	79	68 - 128	6	15	
Benzo(j,k)fluoranthene	0.0647	0.0641	0.0833	0.0833	78	77	63 - 128	1	16	
Benzo[a]pyrene	0.0649	0.0662	0.0833	0.0833	78	79	66 - 130	2	15	
Indeno(1,2,3-c,d)pyrene	0.0616	0.0623	0.0833	0.0833	74	75	63 - 135	1	15	
Dibenz[a,h]anthracene	0.0611	0.0625	0.0833	0.0833	73	75	65 - 130	2	15	
Benzo[g,h,i]perylene	0.0603	0.0614	0.0833	0.0833	72	74	66 - 127	2	15	
Surrogate:										
2-Fluorobiphenyl					70	72	46 - 113			
Pyrene-d10					74	77	45 - 114			
Terphenyl-d14					73	74	49 - 121			



Date of Report: August 19, 2020 Samples Submitted: July 31, 2020 Laboratory Reference: 2007-331B Project: 650-031

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
FB-01-0.5	07-331-04	10	8-13-20
FB-02-4.0	07-331-07	11	8-13-20
FB-03-1.0	07-331-09	9	8-13-20
FMW-02-6.0	07-331-13	19	8-13-20



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



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 methods 8260 & 8270, 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.

Ζ-

ND - Not Detected at PQL PQL - Practical Quantitation Limit RPD - Relative Percent Difference



Reviewed/Date	Received	Relinquished	Received	Relinquished	Received Michey Low	Relinquished	Signature	10 FB-03-8-0-6.0	9 FB-03-1.0	8 FB-02-5,5	7 FB-02-4.0	4 FB-01-15.0	5 FB-01-7.0	4 FB-01-0.5	3 FMW-01-14.5	2 FMU-01-40	1 FMW-01-1.0	Lab ID Sample Identification	Sampled by: S. Brown	Project Name: Thompson Field	Project Number: 650 - 031	Company:	Analytical Laboratory Testing Services 14648 NE 95th Street - Redmond WA 98052	Environmental Inc
Reviewed/Date					W OSE	Findlon	Company	W 1150 W W	, 114S	8011	1103	1055	1050	1045	0935	0923	7/30/20 0920 50:1 4	Date Time Sampled Sampled Matrix	(other)	rd (7 Days)	Same Day 1 Day .		Turnaround Request (in working days)	Chain of Custody
				-	26 HI 26 15/1	2/31/20 1426	Date Time	*		×			×					NWTF NWTF NWTF Volatil Halog	PH-HCID PH-Gx/BTEX PH-Gx PH-Dx (XAcid es 8260C enated Volatile	I / SG Cle es 8260C	an-up)		Laboratory Number:	Custody
s with final report 🗌 Electronic Data Deliverables	Data Package: Standard Level III Level IV	020.08	0/10	1 colored and real with	6 Hald all samples with constant	FB-03-6.0 containers mistabelal as FB-C	Comments/Special Instructions	X		×			×					Semiv (with I PAHs PCBs Organ Organ Chlori Total I Total I Total I TCLP	PA 8011 (Wat olatiles 8270D ow-level PAHs 8270D/SIM (lo 8082A ochlorine Pest ophosphorus I nated Acid He RCRA Metals MTCA Metals Metals foil and grease)/SIM)) w-level) ticides 80 Pesticides 8 rbicides 8 rbicides 8	s 8270D/SIN 3151A		er: 07-331	Page 1 of 4
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	Received	Relinquished	Received	Relinquished	lived	Relinquished	60	FB-05	FB-05	FB-04	FB=04-	FB-04-	FB-04-1.0	FMW-02-14.0	FALL-02-6.0	FMW-02-3.0	FB-03-13.0	- 	S.		Thomp	Project Name: 650-02	Facellon		Analytical Labora 14648 NE 95th	Enviro
					Mathen Lizaun	All I	Signature	-8.0	- 3.0	-10,0	- 6.0	4.0	1.0	2-14.0	-6-0	-3.0	0.0	Sample Identification	Brown	chm;#	ren Fild	3/		Phone: (425) 883-3881 • www.onsite-env.com	Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052	Environmental Inc.
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	Standard				A la	F	Comments/Special Instructions											Organ	nophos	phorus	Pesticio	des 8270	D/SIM	1	ω	
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	Lev	1		1		lu	SI											Total	RCRA	Vletals						
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Reviewed/Date					W OSF	Farellos	Company	N IGCC V	, 0955 (,	0947	7280	0714	7/31/20 0816	V 1420	1415	1408	7/30/20 13+3 50:1	Date Time Sampled Sampled Matrix	(other)		Standard (7 Days)	2 Days 3 Days	Same Day 1 Day	(in working days) (Check One)	Turnaround Request	Chain of
				Image: Number of Containers Image: Numer of Containers Image: Numer o								Laboratory Number:		Chain of Custody												
Chromatograms with final report Electronic Data Deliverables (EDDs)	Data Package: Standard Devel III Devel IV				- Asdeeted waters	Hold all samples, will	1000		×	×		×	×		× 		×	Semiv (with la PAHs i PCBs Organ Organ Chlorin Total F Total N TCLP HEM (olatiles ww-leve 3270D/ 8082A ochlorin pphosp pated A MCRA N MTCA N Metals	8270D II PAHs SIM (Ior horus F horus F cid Hen letals fletals	/SIM) w-level) icides 8 Pesticid bicides 1664A	081B es 8270 8151A		01-00	Page_	N
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				1.1	7/3/20 1446	7/3/20 1446	Date Time		Mumber of Containers Number of Containers NWTPH-HCID NWTPH-Gx/BTEX NWTPH-Gx X X X <t< td=""><td></td><td>Laboratory Number:</td><td>of Custody</td></t<>								Laboratory Number:	of Custody							
Chromatograms with final report Electronic Data Deliverables (EDDs)	Data Package: Standard Level III Level IV			man and and	2 1 testated and set ps	5 Hold all scorples, will contain	Comments/Special Instructions			X	×		×			×		Semiv (with la PAHs i PCBs Organ Organ Chlorin Total F Total N TCLP HEM (olatiles ow-level 8270D/S 8082A ochlorin ophospl nated Ad RCRA M ATCA M Metals oil and g	SIM (Iow-le e Pesticide horus Pest cid Herbici etals	A evel) es 8081 icides 8 ides 815	270D/S	M	er: 07-331	Page A of A



September 3, 2020

Cliff Schmitt Farallon Consulting, LLC 975 5th Avenue NW Issaquah, WA 98027

Re: Analytical Data for Project 650-031 Laboratory Reference No. 2007-331C

Dear Cliff:

Enclosed are the analytical results and associated quality control data for samples submitted on July 31, 2020.

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,

David Baumeister Project Manager

Enclosures



Date of Report: September 3, 2020 Samples Submitted: July 31, 2020 Laboratory Reference: 2007-331C Project: 650-031

Case Narrative

Samples were collected on July 30 and 31, 2020 and received by the laboratory on July 31, 2020. 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.

PAHs EPA 8270E/SIM Analysis

The client requested the analysis of sample FMW-02-14.0 after the holding time had expired.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.



Matrix: Soil Units: mg/Kg

0.0				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-02-14.0					
Laboratory ID:	07-331-14					
Naphthalene	0.86	0.0082	EPA 8270E/SIM	8-28-20	8-28-20	
2-Methylnaphthalene	0.56	0.0082	EPA 8270E/SIM	8-28-20	8-28-20	
1-Methylnaphthalene	0.44	0.0082	EPA 8270E/SIM	8-28-20	8-28-20	
Acenaphthylene	0.031	0.0082	EPA 8270E/SIM	8-28-20	8-28-20	
Acenaphthene	1.2	0.16	EPA 8270E/SIM	8-28-20	8-28-20	
Fluorene	1.5	0.16	EPA 8270E/SIM	8-28-20	8-28-20	
Phenanthrene	4.6	0.16	EPA 8270E/SIM	8-28-20	8-28-20	
Anthracene	0.53	0.16	EPA 8270E/SIM	8-28-20	8-28-20	
Fluoranthene	2.6	0.16	EPA 8270E/SIM	8-28-20	8-28-20	
Pyrene	2.1	0.16	EPA 8270E/SIM	8-28-20	8-28-20	
Benzo[a]anthracene	0.57	0.0082	EPA 8270E/SIM	8-28-20	8-28-20	
Chrysene	0.48	0.0082	EPA 8270E/SIM	8-28-20	8-28-20	
Benzo[b]fluoranthene	0.38	0.0082	EPA 8270E/SIM	8-28-20	8-28-20	
Benzo(j,k)fluoranthene	0.11	0.0082	EPA 8270E/SIM	8-28-20	8-28-20	
Benzo[a]pyrene	0.30	0.0082	EPA 8270E/SIM	8-28-20	8-28-20	
Indeno(1,2,3-c,d)pyrene	0.19	0.0082	EPA 8270E/SIM	8-28-20	8-28-20	
Dibenz[a,h]anthracene	0.036	0.0082	EPA 8270E/SIM	8-28-20	8-28-20	
Benzo[g,h,i]perylene	0.16	0.0082	EPA 8270E/SIM	8-28-20	8-28-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	68	46 - 113				
Pyrene-d10	80	45 - 114				
Terphenyl-d14	73	49 - 121				



3

Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0828S1					
Naphthalene	ND	0.0033	EPA 8270E/SIM	8-28-20	8-28-20	
2-Methylnaphthalene	ND	0.0033	EPA 8270E/SIM	8-28-20	8-28-20	
1-Methylnaphthalene	ND	0.0033	EPA 8270E/SIM	8-28-20	8-28-20	
Acenaphthylene	ND	0.0033	EPA 8270E/SIM	8-28-20	8-28-20	
Acenaphthene	ND	0.0033	EPA 8270E/SIM	8-28-20	8-28-20	
Fluorene	ND	0.0033	EPA 8270E/SIM	8-28-20	8-28-20	
Phenanthrene	ND	0.0033	EPA 8270E/SIM	8-28-20	8-28-20	
Anthracene	ND	0.0033	EPA 8270E/SIM	8-28-20	8-28-20	
Fluoranthene	ND	0.0033	EPA 8270E/SIM	8-28-20	8-28-20	
Pyrene	ND	0.0033	EPA 8270E/SIM	8-28-20	8-28-20	
Benzo[a]anthracene	ND	0.0033	EPA 8270E/SIM	8-28-20	8-28-20	
Chrysene	ND	0.0033	EPA 8270E/SIM	8-28-20	8-28-20	
Benzo[b]fluoranthene	ND	0.0033	EPA 8270E/SIM	8-28-20	8-28-20	
Benzo(j,k)fluoranthene	ND	0.0033	EPA 8270E/SIM	8-28-20	8-28-20	
Benzo[a]pyrene	ND	0.0033	EPA 8270E/SIM	8-28-20	8-28-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0033	EPA 8270E/SIM	8-28-20	8-28-20	
Dibenz[a,h]anthracene	ND	0.0033	EPA 8270E/SIM	8-28-20	8-28-20	
Benzo[g,h,i]perylene	ND	0.0033	EPA 8270E/SIM	8-28-20	8-28-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	74	46 - 113				
Pyrene-d10	84	45 - 114				
Terphenyl-d14	78	49 - 121				



4

Matrix: Soil Units: mg/Kg

					Per	cent	Recovery		RPD	
Analyte	Re	sult	Spike	Level	Rec	overy	Limits	RPD	Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB08	28S1								
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	0.0728	0.0770	0.0833	0.0833	87	92	60 - 116	6	16	
Acenaphthylene	0.0756	0.0784	0.0833	0.0833	91	94	60 - 125	4	15	
Acenaphthene	0.0720	0.0744	0.0833	0.0833	86	89	60 - 121	3	15	
Fluorene	0.0791	0.0787	0.0833	0.0833	95	94	65 - 126	1	15	
Phenanthrene	0.0803	0.0799	0.0833	0.0833	96	96	65 - 120	0	15	
Anthracene	0.0805	0.0807	0.0833	0.0833	97	97	67 - 125	0	15	
Fluoranthene	0.0748	0.0752	0.0833	0.0833	90	90	66 - 125	1	15	
Pyrene	0.0861	0.0846	0.0833	0.0833	103	102	62 - 125	2	15	
Benzo[a]anthracene	0.0815	0.0813	0.0833	0.0833	98	98	72 - 129	0	15	
Chrysene	0.0751	0.0791	0.0833	0.0833	90	95	66 - 123	5	15	
Benzo[b]fluoranthene	0.0837	0.0823	0.0833	0.0833	100	99	68 - 128	2	15	
Benzo(j,k)fluoranthene	0.0723	0.0738	0.0833	0.0833	87	89	63 - 128	2	16	
Benzo[a]pyrene	0.0805	0.0817	0.0833	0.0833	97	98	66 - 130	1	15	
Indeno(1,2,3-c,d)pyrene	0.0900	0.0909	0.0833	0.0833	108	109	63 - 135	1	15	
Dibenz[a,h]anthracene	0.0855	0.0854	0.0833	0.0833	103	103	65 - 130	0	15	
Benzo[g,h,i]perylene	0.0793	0.0801	0.0833	0.0833	95	96	66 - 127	1	15	
Surrogate:										
2-Fluorobiphenyl					78	81	46 - 113			
Pyrene-d10					87	84	45 - 114			
Terphenyl-d14					86	85	49 - 121			

5

TOTAL ARSENIC EPA 6010D

Matrix: Soil Units: mg/Kg (ppm)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-03-5.0					
Laboratory ID:	07-331-25					
Arsenic	ND	21	EPA 6010D	8-31-20	8-31-20	
Client ID:	FMW-03-20.0					
Laboratory ID:	07-331-27					
Arsenic	ND	13	EPA 6010D	8-31-20	8-31-20	



6

TOTAL ARSENIC EPA 6010D QUALITY CONTROL

Matrix: Soil Units: mg/Kg (ppm)

							Date	Date	•	
Analyte		Result	P	QL	Me	ethod	Prepared	Analyz	ed	Flags
METHOD BLANK										
Laboratory ID:	ſ	MB0831SM	2							
Arsenic		ND	Į	5.0	EPA	6010D	8-31-20	8-31-2	20	
					Source	Percent	Recovery		RPD	
Analyte	Res	sult	Spike L	evel	Result	Recovery	Limits	RPD	Limit	Flags
DUPLICATE										
Laboratory ID:	08-25	57-01								
	ORIG	DUP								
Arsenic	ND	ND	NA	NA		NA	NA	NA	20	
MATRIX SPIKES										
	00 21	57.01								

	MS	MSD	MS	MSD		MS	MSD	75 405			
Arsenic	90.6	90.5	100	100	ND	91	91	75-125	0	20	

Date of Report: September 3, 2020 Samples Submitted: July 31, 2020 Laboratory Reference: 2007-331C Project: 650-031

% MOISTURE

			Date
Client ID	Lab ID	% Moisture	Analyzed
FMW-02-14.0	07-331-14	19	8-28-20
FMW-03-20.0	07-331-27	21	8-28-20



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



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 methods 8260 & 8270, 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.

Ζ-

ND - Not Detected at PQL PQL - Practical Quantitation Limit RPD - Relative Percent Difference



Reviewed/Date	Received	Relinquished	Received	Relinquished	Received INGHEN LAUW	Relinquished	Signature	10 FB-03-8-0-6.0	9 FB-03-1.0	8 FB-02-5,5	7 FB-02-40	6 FB-01-15.0	5 FB-01-7.0	4 FB-01-0.5	3 FMW-01-14,5	2 FAL-01-4.0	1 FMW-01-1.0	Lab ID Sample Identification	Sampled by: S. Brown	Thomps	650 - 03/	Project Number:	Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052 Phone: (425) 883-3881 • www.onsite-env.com	Environmental Inc.
Reviewed/Date					OSE	Fouldon	Company	W 1150 W W	, 1145	8011	1103	1055	1050	1045	0935	0923	7/30/26 0920 Soil 4	Date Time Sampled Sampled Matrix	(other)	Standard (7 Days)	2 Days 3 Days	Same Day 1 Day	(in working days)	Chain of Custody
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August 17, 2020

Cliff Schmitt Farallon Consulting, LLC 975 5th Avenue NW Issaquah, WA 98027

Re: Analytical Data for Project 650-031 Laboratory Reference No. 2008-068

Dear Cliff:

Enclosed are the analytical results and associated quality control data for samples submitted on August 7, 2020.

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,

David Baumeister Project Manager

Enclosures



Date of Report: August 17, 2020 Samples Submitted: August 7, 2020 Laboratory Reference: 2008-068 Project: 650-031

Case Narrative

Samples were collected on August 6, 2020 and received by the laboratory on August 7, 2020. 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.



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

DIESEL AND HEAVY OIL RANGE ORGANICS NWTPH-Dx

Matrix: Water Units: mg/L (ppm)

onits. http:// (ppin)				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-04-080620					
Laboratory ID:	08-068-01					
Diesel Range Organics	ND	0.22	NWTPH-Dx	8-11-20	8-11-20	X1
Lube Oil Range Organics	ND	0.22	NWTPH-Dx	8-11-20	8-11-20	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	133	50-150				
Client ID:	FMW-03-080620					
Laboratory ID:	08-068-02					
Diesel Range Organics	ND	0.22	NWTPH-Dx	8-11-20	8-11-20	X1
Lube Oil Range Organics	ND	0.22	NWTPH-Dx	8-11-20	8-11-20	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	117	50-150				
Client ID:	FMW-02-080620					
Laboratory ID:	08-068-03					
Diesel Range Organics	ND	0.23	NWTPH-Dx	8-11-20	8-11-20	X1
Lube Oil Range Organics	ND	0.23	NWTPH-Dx	8-11-20	8-11-20	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	120	50-150				
Client ID:	FMW-01-080620					
Laboratory ID:	08-068-04					
Diesel Range Organics	<u>ND</u>	0.23	NWTPH-Dx	8-11-20	8-11-20	X1
Lube Oil Range Organics	ND	0.23	NWTPH-Dx	8-11-20	8-11-20	X1
Surrogate:	Percent Recovery	Control Limits		0 11 20	01120	
o-Terphenyl	122	50-150				
o-reiphenyi	122	50-750				



DIESEL AND HEAVY OIL RANGE ORGANICS NWTPH-Dx QUALITY CONTROL

Matrix: Water Units: mg/L (ppm)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0811W1					
Diesel Range Organics	ND	0.20	NWTPH-Dx	8-11-20	8-11-20	X1
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	8-11-20	8-11-20	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	125	50-150				
e reipileliyi	120	00 100				

					Source	Percent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Result	Recovery	Limits	RPD	Limit	Flags
DUPLICATE										
Laboratory ID:	08-06	68-01								
	ORIG	DUP								
Diesel Range	ND	ND	NA	NA		NA	NA	NA	NA	X1
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	X1
Surrogate:										
o-Terphenyl						133 126	50-150			



VOLATILE ORGANICS EPA 8260D page 1 of 2

Matrix: Water Units: ug/L

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-04-080620					
Laboratory ID:	08-068-01					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Chloromethane	ND	1.0	EPA 8260D	8-10-20	8-10-20	
Vinyl Chloride	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Bromomethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Chloroethane	ND	1.0	EPA 8260D	8-10-20	8-10-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Acetone	ND	5.0	EPA 8260D	8-10-20	8-10-20	
lodomethane	ND	1.3	EPA 8260D	8-10-20	8-10-20	
Carbon Disulfide	ND	0.26	EPA 8260D	8-10-20	8-10-20	
Methylene Chloride	ND	1.0	EPA 8260D	8-10-20	8-10-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Vinyl Acetate	ND	1.0	EPA 8260D	8-10-20	8-10-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
2-Butanone	ND	5.0	EPA 8260D	8-10-20	8-10-20	
Bromochloromethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Chloroform	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Benzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Trichloroethene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Dibromomethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Bromodichloromethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	8-10-20	8-10-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	8-10-20	8-10-20	
Toluene	ND	1.0	EPA 8260D	8-10-20	8-10-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-10-20	8-10-20	



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				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-04-080620					
Laboratory ID:	08-068-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Tetrachloroethene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
2-Hexanone	ND	2.0	EPA 8260D	8-10-20	8-10-20	
Dibromochloromethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Chlorobenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Ethylbenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
m,p-Xylene	0.69	0.40	EPA 8260D	8-10-20	8-10-20	
o-Xylene	0.22	0.20	EPA 8260D	8-10-20	8-10-20	
Styrene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Bromoform	ND	1.0	EPA 8260D	8-10-20	8-10-20	
Isopropylbenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Bromobenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,2,3-Trichloropropane	ND	0.28	EPA 8260D	8-10-20	8-10-20	
n-Propylbenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
tert-Butylbenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
sec-Butylbenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
p-Isopropyltoluene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
n-Butylbenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,2-Dibromo-3-chloropropane	e ND	1.0	EPA 8260D	8-10-20	8-10-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	8-10-20	8-10-20	
Naphthalene	ND	1.0	EPA 8260D	8-10-20	8-10-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	102	75-127				
Toluene-d8	100	80-127				
4-Bromofluorobenzene	96	78-125				
	00	10 120				



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

VOLATILE ORGANICS EPA 8260D QUALITY CONTROL page 1 of 2

Matrix: Water Units: ug/L

A 1		501		Date	Date	_
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Laboratory ID:	MB0810W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Chloromethane	ND	1.0	EPA 8260D	8-10-20	8-10-20	
Vinyl Chloride	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Bromomethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Chloroethane	ND	1.0	EPA 8260D	8-10-20	8-10-20	
Trichlorofluoromethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,1-Dichloroethene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Acetone	ND	5.0	EPA 8260D	8-10-20	8-10-20	
Iodomethane	ND	1.3	EPA 8260D	8-10-20	8-10-20	
Carbon Disulfide	ND	0.26	EPA 8260D	8-10-20	8-10-20	
Methylene Chloride	ND	1.0	EPA 8260D	8-10-20	8-10-20	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,1-Dichloroethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Vinyl Acetate	ND	1.0	EPA 8260D	8-10-20	8-10-20	
2,2-Dichloropropane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
2-Butanone	ND	5.0	EPA 8260D	8-10-20	8-10-20	
Bromochloromethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Chloroform	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Carbon Tetrachloride	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,1-Dichloropropene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Benzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,2-Dichloroethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Trichloroethene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,2-Dichloropropane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Dibromomethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Bromodichloromethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	8-10-20	8-10-20	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	8-10-20	8-10-20	
Toluene	ND	1.0	EPA 8260D	8-10-20	8-10-20	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	8-10-20	8-10-20	



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VOLATILE ORGANICS EPA 8260D QUALITY CONTROL page 2 of 2

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0810W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Tetrachloroethene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,3-Dichloropropane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
2-Hexanone	ND	2.0	EPA 8260D	8-10-20	8-10-20	
Dibromochloromethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,2-Dibromoethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Chlorobenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Ethylbenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
m,p-Xylene	ND	0.40	EPA 8260D	8-10-20	8-10-20	
o-Xylene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Styrene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Bromoform	ND	1.0	EPA 8260D	8-10-20	8-10-20	
lsopropylbenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Bromobenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,2,3-Trichloropropane	ND	0.28	EPA 8260D	8-10-20	8-10-20	
n-Propylbenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
2-Chlorotoluene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
4-Chlorotoluene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
tert-Butylbenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
sec-Butylbenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
p-Isopropyltoluene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
n-Butylbenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	8-10-20	8-10-20	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Hexachlorobutadiene	ND	1.0	EPA 8260D	8-10-20	8-10-20	
Naphthalene	ND	1.0	EPA 8260D	8-10-20	8-10-20	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	8-10-20	8-10-20	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	100	75-127				
Toluene-d8	99	80-127				
4-Bromofluorobenzene	97	78-125				



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VOLATILE ORGANICS EPA 8260D QUALITY CONTROL

Matrix: Water Units: ug/L

					Per	cent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Reco	overy	Limits	RPD	Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB08	10W1								
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	9.81	9.76	10.0	10.0	98	98	65-126	1	19	
Benzene	9.51	9.48	10.0	10.0	95	95	71-119	0	16	
Trichloroethene	9.47	9.46	10.0	10.0	95	95	82-123	0	18	
Toluene	9.07	9.09	10.0	10.0	91	91	77-119	0	18	
Chlorobenzene	9.66	9.57	10.0	10.0	97	96	80-120	1	17	
Surrogate:										
Dibromofluoromethane					101	99	75-127			
Toluene-d8					100	100	80-127			
4-Bromofluorobenzene					101	99	78-125			



Matrix: Water Units: ug/L

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-04-080620					
Laboratory ID:	08-068-01					
Naphthalene	ND	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
2-Methylnaphthalene	ND	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
1-Methylnaphthalene	ND	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
Acenaphthylene	ND	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
Acenaphthene	ND	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
Fluorene	ND	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
Phenanthrene	ND	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
Anthracene	ND	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
Fluoranthene	ND	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
Pyrene	ND	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
Benzo[a]anthracene	ND	0.010	EPA 8270E/SIM	8-10-20	8-10-20	
Chrysene	ND	0.010	EPA 8270E/SIM	8-10-20	8-10-20	
Benzo[b]fluoranthene	ND	0.010	EPA 8270E/SIM	8-10-20	8-10-20	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270E/SIM	8-10-20	8-10-20	
Benzo[a]pyrene	ND	0.010	EPA 8270E/SIM	8-10-20	8-10-20	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270E/SIM	8-10-20	8-10-20	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270E/SIM	8-10-20	8-10-20	
Benzo[g,h,i]perylene	ND	0.010	EPA 8270E/SIM	8-10-20	8-10-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	82	20 - 106				
Pyrene-d10	82	26 - 104				
Terphenyl-d14	95	44 - 127				



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Matrix: Water Units: ug/L

C C				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-03-080620					
Laboratory ID:	08-068-02					
Naphthalene	ND	0.11	EPA 8270E/SIM	8-10-20	8-10-20	
2-Methylnaphthalene	ND	0.11	EPA 8270E/SIM	8-10-20	8-10-20	
1-Methylnaphthalene	ND	0.11	EPA 8270E/SIM	8-10-20	8-10-20	
Acenaphthylene	ND	0.11	EPA 8270E/SIM	8-10-20	8-10-20	
Acenaphthene	ND	0.11	EPA 8270E/SIM	8-10-20	8-10-20	
Fluorene	ND	0.17	EPA 8270E/SIM	8-10-20	8-10-20	U1
Phenanthrene	ND	0.11	EPA 8270E/SIM	8-10-20	8-10-20	
Anthracene	ND	0.11	EPA 8270E/SIM	8-10-20	8-10-20	
Fluoranthene	ND	0.11	EPA 8270E/SIM	8-10-20	8-10-20	
Pyrene	ND	0.11	EPA 8270E/SIM	8-10-20	8-10-20	
Benzo[a]anthracene	ND	0.011	EPA 8270E/SIM	8-10-20	8-10-20	
Chrysene	ND	0.011	EPA 8270E/SIM	8-10-20	8-10-20	
Benzo[b]fluoranthene	ND	0.011	EPA 8270E/SIM	8-10-20	8-10-20	
Benzo(j,k)fluoranthene	ND	0.011	EPA 8270E/SIM	8-10-20	8-10-20	
Benzo[a]pyrene	ND	0.011	EPA 8270E/SIM	8-10-20	8-10-20	
Indeno(1,2,3-c,d)pyrene	ND	0.011	EPA 8270E/SIM	8-10-20	8-10-20	
Dibenz[a,h]anthracene	ND	0.011	EPA 8270E/SIM	8-10-20	8-10-20	
Benzo[g,h,i]perylene	ND	0.011	EPA 8270E/SIM	8-10-20	8-10-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	70	20 - 106				
Pyrene-d10	82	26 - 104				
Terphenyl-d14	87	44 - 127				



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Matrix: Water Units: ug/L

-				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-02-080620					
Laboratory ID:	08-068-03					
Naphthalene	5.4	0.52	EPA 8270E/SIM	8-10-20	8-10-20	
2-Methylnaphthalene	1.7	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
1-Methylnaphthalene	1.3	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
Acenaphthylene	ND	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
Acenaphthene	2.4	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
Fluorene	2.1	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
Phenanthrene	2.0	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
Anthracene	0.17	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
Fluoranthene	0.19	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
Pyrene	0.15	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
Benzo[a]anthracene	ND	0.010	EPA 8270E/SIM	8-10-20	8-10-20	
Chrysene	ND	0.010	EPA 8270E/SIM	8-10-20	8-10-20	
Benzo[b]fluoranthene	ND	0.010	EPA 8270E/SIM	8-10-20	8-10-20	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270E/SIM	8-10-20	8-10-20	
Benzo[a]pyrene	ND	0.010	EPA 8270E/SIM	8-10-20	8-10-20	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270E/SIM	8-10-20	8-10-20	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270E/SIM	8-10-20	8-10-20	
Benzo[g,h,i]perylene	ND	0.010	EPA 8270E/SIM	8-10-20	8-10-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	59	20 - 106				
Pyrene-d10	76	26 - 104				
Terphenyl-d14	80	44 - 127				



Matrix: Water Units: ug/L

C C				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-01-080620					
Laboratory ID:	08-068-04					
Naphthalene	ND	0.11	EPA 8270E/SIM	8-10-20	8-10-20	
2-Methylnaphthalene	ND	0.11	EPA 8270E/SIM	8-10-20	8-10-20	
1-Methylnaphthalene	ND	0.11	EPA 8270E/SIM	8-10-20	8-10-20	
Acenaphthylene	ND	0.11	EPA 8270E/SIM	8-10-20	8-10-20	
Acenaphthene	ND	0.11	EPA 8270E/SIM	8-10-20	8-10-20	
Fluorene	ND	0.11	EPA 8270E/SIM	8-10-20	8-10-20	
Phenanthrene	ND	0.11	EPA 8270E/SIM	8-10-20	8-10-20	
Anthracene	ND	0.11	EPA 8270E/SIM	8-10-20	8-10-20	
Fluoranthene	ND	0.11	EPA 8270E/SIM	8-10-20	8-10-20	
Pyrene	ND	0.11	EPA 8270E/SIM	8-10-20	8-10-20	
Benzo[a]anthracene	ND	0.011	EPA 8270E/SIM	8-10-20	8-10-20	
Chrysene	ND	0.011	EPA 8270E/SIM	8-10-20	8-10-20	
Benzo[b]fluoranthene	ND	0.011	EPA 8270E/SIM	8-10-20	8-10-20	
Benzo(j,k)fluoranthene	ND	0.011	EPA 8270E/SIM	8-10-20	8-10-20	
Benzo[a]pyrene	ND	0.011	EPA 8270E/SIM	8-10-20	8-10-20	
Indeno(1,2,3-c,d)pyrene	ND	0.011	EPA 8270E/SIM	8-10-20	8-10-20	
Dibenz[a,h]anthracene	ND	0.011	EPA 8270E/SIM	8-10-20	8-10-20	
Benzo[g,h,i]perylene	ND	0.011	EPA 8270E/SIM	8-10-20	8-10-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	64	20 - 106				
Pyrene-d10	76	26 - 104				
Terphenyl-d14	89	44 - 127				



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PAHs EPA 8270E/SIM QUALITY CONTROL

Matrix: Water Units: ug/L

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0810W1					
Naphthalene	ND	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
2-Methylnaphthalene	ND	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
1-Methylnaphthalene	ND	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
Acenaphthylene	ND	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
Acenaphthene	ND	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
Fluorene	ND	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
Phenanthrene	ND	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
Anthracene	ND	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
Fluoranthene	ND	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
Pyrene	ND	0.10	EPA 8270E/SIM	8-10-20	8-10-20	
Benzo[a]anthracene	ND	0.010	EPA 8270E/SIM	8-10-20	8-10-20	
Chrysene	ND	0.010	EPA 8270E/SIM	8-10-20	8-10-20	
Benzo[b]fluoranthene	ND	0.010	EPA 8270E/SIM	8-10-20	8-10-20	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270E/SIM	8-10-20	8-10-20	
Benzo[a]pyrene	ND	0.010	EPA 8270E/SIM	8-10-20	8-10-20	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270E/SIM	8-10-20	8-10-20	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270E/SIM	8-10-20	8-10-20	
Benzo[g,h,i]perylene	ND	0.010	EPA 8270E/SIM	8-10-20	8-10-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	61	20 - 106				
Pyrene-d10	86	26 - 104				
Terphenyl-d14	83	44 - 127				



14

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PAHs EPA 8270E/SIM QUALITY CONTROL

Matrix: Water Units: ug/L

					Per	cent	Recovery		RPD	
Analyte	Re	sult	Spike	Level	Reco	overy	Limits	RPD	Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB08	10W1								
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	0.262	0.288	0.500	0.500	52	58	30 - 98	9	40	
Acenaphthylene	0.271	0.284	0.500	0.500	54	57	39 - 106	5	32	
Acenaphthene	0.303	0.315	0.500	0.500	61	63	36 - 114	4	33	
Fluorene	0.320	0.332	0.500	0.500	64	66	45 - 112	4	30	
Phenanthrene	0.352	0.353	0.500	0.500	70	71	51 - 109	0	24	
Anthracene	0.367	0.371	0.500	0.500	73	74	49 - 109	1	25	
Fluoranthene	0.407	0.404	0.500	0.500	81	81	53 - 115	1	22	
Pyrene	0.414	0.409	0.500	0.500	83	82	49 - 129	1	32	
Benzo[a]anthracene	0.427	0.403	0.500	0.500	85	81	61 - 123	6	24	
Chrysene	0.418	0.399	0.500	0.500	84	80	59 - 114	5	24	
Benzo[b]fluoranthene	0.430	0.419	0.500	0.500	86	84	60 - 125	3	26	
Benzo(j,k)fluoranthene	0.440	0.429	0.500	0.500	88	86	58 - 121	3	22	
Benzo[a]pyrene	0.429	0.407	0.500	0.500	86	81	58 - 118	5	24	
Indeno(1,2,3-c,d)pyrene	0.412	0.399	0.500	0.500	82	80	59 - 124	3	26	
Dibenz[a,h]anthracene	0.415	0.401	0.500	0.500	83	80	59 - 123	3	25	
Benzo[g,h,i]perylene	0.408	0.392	0.500	0.500	82	78	58 - 120	4	25	
Surrogate:										
2-Fluorobiphenyl					54	57	20 - 106			
Pyrene-d10					83	82	26 - 104			
Terphenyl-d14					82	79	44 - 127			

TOTAL ARSENIC EPA 200.8

Matrix: Water Units: ug/L (ppb)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-04-080620					
Laboratory ID:	08-068-01					
Arsenic	ND	3.3	EPA 200.8	8-14-20	8-14-20	
Client ID:	FMW-03-080620					
Laboratory ID:	08-068-02					
Arsenic	5.7	3.3	EPA 200.8	8-14-20	8-14-20	
Client ID:	FMW-02-080620					
Laboratory ID:	08-068-03					
Arsenic	ND	3.3	EPA 200.8	8-14-20	8-14-20	
Client ID:	FMW-01-080620					
Laboratory ID:	08-068-04					
Arsenic	ND	3.3	EPA 200.8	8-14-20	8-14-20	



TOTAL ARSENIC EPA 200.8 QUALITY CONTROL

Matrix: Water Units: ug/L (ppb)

								Date	Date)	
Analyte	Result			PQL	M	ethod		Prepared	Analyz	ed	Flags
METHOD BLANK											
Laboratory ID:	Ν	/IB0814WM1									
Arsenic		ND		3.3	EP	4 200.8	3	8-14-20	8-14-2	20	
					Source	_	cent	Recovery		RPD	
Analyte	Res	sult	Spike	e Level	Result	Reco	overy	Limits	RPD	Limit	Flags
DUPLICATE											
Laboratory ID:	07-32	26-03									
	ORIG	DUP									
Arsenic	ND	ND	NA	NA		Ν	JA	NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	07-32	26-03									
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	114	126	111	111	ND	103	113	75-125	10	20	





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 methods 8260 & 8270, 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.

Ζ-

ND - Not Detected at PQL PQL - Practical Quantitation Limit RPD - Relative Percent Difference



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

Reviewed/Date	Received	Relinquished	Received	Relinquished	Received Market Wally	Relinquished	Signature	Jan P	allalle	I I	4 FMW-01-080620	3 FMW-02-080620	2 FMW-03-080620	1 FMW-04-080626	Lab ID Sample Identification	sampled by: S. Bown	C, Schmitt	Thompson Field	Project Number: 650-031	Company: F. M.	Analytical Laboratory Testing Services 14648 NE 95th Street - Redmond, WA 98052 Phone: (425, 883-3881 - www.orste-env.com	Environmental Inc.
Reviewed/Date					OSE	Tacellon	Company				W HAO V V	1340	1 1150	86/2C 1015 GC 8	Date Time Sampled Sampled Matrix	(other)		Standard (7 Days)	Same Day	ck One)	Turnaround Request (in working days)	Chain of
				-	2560 2113	dt/20 0930	Date , Time								NWTF NWTF NWTF NWTF Volatil	PH-HCI PH-Gx/ PH-Gx PH-DX es 826 enated	BTEX Acid OC Volatile		1		Laboratory Number:	Chain of Custody
Chromatograms with final report	Data Package: Standard 🛛 Level III 🖾 Level IV 🗆				<u>Y</u>	2 run Total As, it detection run disen	Comments/Special Instructions								Semiv (with I PAHs PCBs Organ Organ Chlori Total f Total f Total f	olatile: ow-leve 8270D 8082A ochlor ophosi nated / RCRA I Metals foil and	s 8270D el PAHs /SIM (lo ine Pest phorus i Acid He Metals Metals	/SIM) w-level) icides 8 Pesticid	3081B les 8270D/3 s 8151A	SIM	r: 08-068	Page of



August 21, 2020

Cliff Schmitt Farallon Consulting, LLC 975 5th Avenue NW Issaquah, WA 98027

Re: Analytical Data for Project 650-031 Laboratory Reference No. 2008-068B

Dear Cliff:

Enclosed are the analytical results and associated quality control data for samples submitted on August 7, 2020.

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,

David Baumeister Project Manager

Enclosures



Date of Report: August 21, 2020 Samples Submitted: August 7, 2020 Laboratory Reference: 2008-068B Project: 650-031

Case Narrative

Samples were collected on August 6, 2020 and received by the laboratory on August 7, 2020. 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.



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

DISSOLVED ARSENIC EPA 200.8

Matrix:	Water						
Units:	ug/L (ppb)						
					Date	Date	
Analyte		Result	PQL	Method	Prepared	Analyzed	Flags
Client I	D:	FMW-03-080620					
Laborato	ory ID:	08-068-02					
Arsenic		4.7	3.0	EPA 200.8		8-21-20	



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.

3

DISSOLVED ARSENIC EPA 200.8 QUALITY CONTROL

Matrix: Water Units: ug/L (ppb)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0821D1					
Arsenic	ND	3.0	EPA 200.8		8-21-20	
			Source Percen	t Recovery	RPD)

					oource	10		Recovery			
Analyte	Res	sult	Spike	e Level	Result	Rec	covery	Limits	RPD	Limit	Flags
DUPLICATE											
Laboratory ID:	08-06	68-02									
	ORIG	DUP									
Arsenic	4.72	4.80	NA	NA			NA	NA	2	20	
MATRIX SPIKES											
Laboratory ID:	08-06	68-02									
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	84.2	81.4	80.0	80.0	4.72	99	96	75-125	3	20	





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 methods 8260 & 8270, 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.

Ζ-

ND - Not Detected at PQL PQL - Practical Quantitation Limit RPD - Relative Percent Difference



Reviewed/Date	Received	Relinquished	Received	Relinquished	Received May Usu	Relinquished	Signature	M	All Color		4 FMW-01-080620	3 FMW-02-080620	2 FMW-03-080626	1 FMW-04-080626	Lab ID Sample Identification	sampled by: S. Bown	C, Schmitt	Thompson Field	650-031	Company: Forallan		Analytical Laboratory Testing Services 14648 NE 95th Street - Redmond, WA 98052	Environmental Inc.
Reviewed/Date					OSE	Tacallen	Company				W HAO V V	1340	1150	36/20 1015 GW	Date Time Sampled Sampled Matrix	(other)		Standard (7 Days)	2 Days 3 Days	Same Day 1 Day	(Check One)	Turnaround Request (in working days)	Chain of
				-	2260 2113	At 20 0930	Date Time							8	NWTF NWTF NWTF NWTF Volatil	PH-HC PH-Gx/ PH-GX PH-DX H-DX les 826 enated	BTEX	ers 1 / SG C es 82600 ers Only	с))		Laboratory Number:	Chain of Custody
Chromatograms with final report 🔲 Electronic Data Deliverables (EDDs)	Data Package: Standard Level III Level IV			1 10	NALLY 8/20/200. DR (ST.	2 run Total As, it detection run disen	Comments/Special Instructions								Semiv (with 1 PAHs PCBs Orgar Orgar Chlor Total 1 Total 1 Total 1 Total 1 TCLP HEM	volatile ow-lev 8270D 8082/ nochlor nophos nated RCRA MTCA (oil and	s 8270D rel PAH: //SIM (Id a ine Pes aphorus Acid He Metals s d grease	o/SIM s) ow-level ticides & Pesticic erbicides) 8081B des 827 s 8151A	<u> </u>		890-80	Page of



October 19, 2020

Cliff Schmitt Farallon Consulting, LLC 975 5th Avenue NW Issaquah, WA 98027

Re: Analytical Data for Project 650-031 Laboratory Reference No. 2009-328

Dear Cliff:

Enclosed are the analytical results and associated quality control data for samples submitted on September 30, 2020.

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,

David Baumeister Project Manager

Enclosures



Date of Report: October 19, 2020 Samples Submitted: September 30, 2020 Laboratory Reference: 2009-328 Project: 650-031

Case Narrative

Samples were collected on September 30, 2020 and received by the laboratory on September 30, 2020. 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.



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

DIESEL AND HEAVY OIL RANGE ORGANICS NWTPH-Dx

Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-10-1.0			•	•	•
_aboratory ID:	09-328-01					
Diesel Range Organics	ND	29	NWTPH-Dx	10-7-20	10-7-20	
ube Oil Range Organics	73	59	NWTPH-Dx	10-7-20	10-7-20	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	103	50-150				
Client ID:	FB-10-1.0					
_aboratory ID:	09-328-01					
Diesel Range Organics	ND	29	NWTPH-Dx	10-7-20	10-7-20	X1
ube Oil Range Organics	ND	59	NWTPH-Dx	10-7-20	10-7-20	X1
Surrogate:	Percent Recovery	Control Limits				
p-Terphenyl	114	50-150				
Client ID:						
Client ID:	FB-12-1.0					
_aboratory ID:	09-328-07			10 7 00	40.7.00	
Diesel Range Organics	ND	29	NWTPH-Dx	10-7-20	10-7-20	
ube Oil Range Organics	ND	58	NWTPH-Dx	10-7-20	10-7-20	
Surrogate: p-Terphenyl	Percent Recovery 98	Control Limits 50-150				
Client ID:	FB-12-1.0					
_aboratory ID:	09-328-07					
Diesel Range Organics	ND	29	NWTPH-Dx	10-7-20	10-7-20	X1
Lube Oil Range Organics	ND	58	NWTPH-Dx	10-7-20	10-7-20	X1
Surrogate:		50		10120	10120	
Junoyale.	Parcant Racovary	Control Limits				
	Percent Recovery	Control Limits				
	Percent Recovery 108	Control Limits 50-150				
o-Terphenyl	108 FB-13-3.0					
D- <i>Terphenyl</i> Client ID: Laboratory ID:	108 FB-13-3.0 09-328-11	50-150				
D-Terphenyl Client ID: Laboratory ID: Diesel Range Organics	108 FB-13-3.0 09-328-11 ND	28	NWTPH-Dx	10-7-20	10-7-20	
D- <i>Terphenyl</i> Client ID: Laboratory ID: Diesel Range Organics Lube Oil Range Organics	108 FB-13-3.0 09-328-11 ND ND	50-150 28 55	NWTPH-Dx NWTPH-Dx	10-7-20 10-7-20	10-7-20 10-7-20	
D-Terphenyl Client ID: Laboratory ID: Diesel Range Organics Lube Oil Range Organics Surrogate:	108 FB-13-3.0 09-328-11 ND ND Percent Recovery	50-150 28 55 Control Limits				
D-Terphenyl Client ID: Laboratory ID: Diesel Range Organics Lube Oil Range Organics Surrogate:	108 FB-13-3.0 09-328-11 ND ND	50-150 28 55				
D-Terphenyl Client ID: _aboratory ID: Diesel Range Organics _ube Oil Range Organics Surrogate: D-Terphenyl	108 FB-13-3.0 09-328-11 ND ND Percent Recovery	50-150 28 55 Control Limits				
D-Terphenyl Client ID: Laboratory ID: Diesel Range Organics Lube Oil Range Organics Surrogate: D-Terphenyl Client ID:	108 FB-13-3.0 09-328-11 ND ND Percent Recovery 95	50-150 28 55 Control Limits				
D-Terphenyl Client ID: Laboratory ID: Diesel Range Organics Lube Oil Range Organics Surrogate: D-Terphenyl Client ID: Laboratory ID:	108 FB-13-3.0 09-328-11 ND ND Percent Recovery 95 FB-13-3.0	50-150 28 55 Control Limits				 X1
Client ID: aboratory ID: iesel Range Organics ube Oil Range Organics Surrogate: p-Terphenyl Client ID: aboratory ID: Diesel Range Organics ube Oil Range Organics	108 FB-13-3.0 09-328-11 ND ND Percent Recovery 95 FB-13-3.0 09-328-11	28 55 Control Limits 50-150	NWTPH-Dx	10-7-20	10-7-20	
D-Terphenyl Client ID: _aboratory ID: Diesel Range Organics _ube Oil Range Organics Surrogate: D-Terphenyl Client ID: _aboratory ID: Diesel Range Organics	108 FB-13-3.0 09-328-11 ND ND Percent Recovery 95 FB-13-3.0 09-328-11 ND	50-150 28 55 Control Limits 50-150 28	NWTPH-Dx NWTPH-Dx	10-7-20	10-7-20	 X1



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.

3

Date of Report: October 19, 2020 Samples Submitted: September 30, 2020 Laboratory Reference: 2009-328 Project: 650-031

DIESEL AND HEAVY OIL RANGE ORGANICS NWTPH-Dx QUALITY CONTROL

Matrix: Soil Units: mg/Kg (ppm)

Analyte		Result		PQL	Ме	thod	Date Prepared	Date Analyz		Flags
METHOD BLANK							•			
Laboratory ID:		MB1007S1								
Diesel Range Organics		ND		25	NWT	PH-Dx	10-7-20	10-7-2	<u>20</u>	
Lube Oil Range Organic	s	ND		50	NWT	PH-Dx	10-7-20	10-7-2	20	
Surrogate:	Per	rcent Recovery	Con	trol Limit	s					
o-Terphenyl		101	5	50-150						
Laboratory ID:		MB1007S1								
Diesel Range Organics		ND		25	NWT	PH-Dx	10-7-20	10-7-2	20	X1
Lube Oil Range Organic	s	ND		50	NWT	PH-Dx	10-7-20	10-7-2	20	X1
Surrogate:	Per	rcent Recovery	Con	trol Limit	S					
o-Terphenyl		111	5	50-150						
					Source	Percent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Result	Recover		RPD	Limit	Flags
DUPLICATE							•			<u> </u>
Laboratory ID:	SB10	07S1								
-	ORIG	DUP								
Diesel Fuel #2	102	90.0	NA	NA		NA	NA	13	NA	
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	
Surrogate:										
o-Terphenyl						108 10	50-150			
Laboratory ID:	SB10	07S1								
	ORIG	DUP								
Diesel Fuel #2	130	122	NA	NA		NA	NA	6	NA	X1
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	X1
Surrogate:										

131 125 50-150

4

o-Terphenyl

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

Matrix: Soil Units: mg/Kg

Analyte Result PQL Method Prepared Analyzed Client ID: FB-10-3.0 Laboratory ID: 09-328-02 Naphthalene 0.048 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 2-Methylnaphthalene 0.020 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 1-Methylnaphthalene 0.011 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthylene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthylene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthene 0.033 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Fluorene 0.024 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Phenanthrene 0.016 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Piuoranthene 0.012 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Fluoranthene 0.012 0.0083 EPA 8270E/SIM <t< th=""><th></th><th>Date</th><th>Date</th><th></th><th></th><th></th><th>J - J - J</th></t<>		Date	Date				J - J - J
Laboratory ID: 09-328-02 Naphthalene 0.048 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 2-Methylnaphthalene 0.020 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 1-Methylnaphthalene 0.011 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthylene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthene 0.033 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthene 0.033 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Fluorene 0.024 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Phenanthrene 0.045 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Anthracene 0.012 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Fluoranthene 0.012 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Pyrene 0.0083 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 <	Flags	Analyzed	Prepared	Method	PQL	Result	Analyte
Naphthalene 0.048 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 2-Methylnaphthalene 0.020 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 1-Methylnaphthalene 0.011 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthylene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthylene 0.033 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthene 0.033 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Fluorene 0.024 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Phenanthrene 0.045 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Anthracene 0.016 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Fluoranthene 0.012 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Pyrene 0.0083 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]anthracene ND 0.0083						FB-10-3.0	Client ID:
2-Methylnaphthalene0.0200.0083EPA 8270E/SIM10-7-2010-7-201-Methylnaphthalene0.0110.0083EPA 8270E/SIM10-7-2010-7-20AcenaphthyleneND0.0083EPA 8270E/SIM10-7-2010-7-20Acenaphthene0.0330.0083EPA 8270E/SIM10-7-2010-7-20Fluorene0.0240.0083EPA 8270E/SIM10-7-2010-7-20Phenanthrene0.0450.0083EPA 8270E/SIM10-7-2010-7-20Anthracene0.0160.0083EPA 8270E/SIM10-7-2010-7-20Fluoranthene0.0120.0083EPA 8270E/SIM10-7-2010-7-20Pyrene0.00830.0083EPA 8270E/SIM10-7-2010-7-20Pyrene0.00830.0083EPA 8270E/SIM10-7-2010-7-20Benzo[a]anthraceneND0.0083EPA 8270E/SIM10-7-2010-7-20ChryseneND0.0083EPA 8270E/SIM10-7-2010-7-20Benzo[b]fluorantheneND0.0083EPA 8270E/SIM10-7-2010-7-20Benzo[j,k)fluorantheneND0.0083EPA 8270E/SIM10-7-2010-7-20Benzo[a]pyreneND0.0083EPA 8270E/SIM10-7-2010-7-20Indeno(1,2,3-c,d)pyreneND0.0083EPA 8270E/SIM10-7-2010-7-20Dibenz[a,h]anthraceneND0.0083EPA 8270E/SIM10-7-2010-7-20Dibenz[a,h]anthraceneND0.0083EPA 8270E/SIM10-7-20<						09-328-02	Laboratory ID:
1-Methylnaphthalene 0.011 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthylene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthene 0.033 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthene 0.033 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Fluorene 0.024 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Phenanthrene 0.045 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Anthracene 0.016 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Fluoranthene 0.012 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Fluoranthene 0.012 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Pyrene 0.0083 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]anthracene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Chrysene ND 0.0083 EPA 8270		10-7-20	10-7-20	EPA 8270E/SIM	0.0083	0.048	Naphthalene
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Acenaphthene0.0330.0083EPA 8270E/SIM10-7-2010-7-20Fluorene0.0240.0083EPA 8270E/SIM10-7-2010-7-20Phenanthrene0.0450.0083EPA 8270E/SIM10-7-2010-7-20Anthracene0.0160.0083EPA 8270E/SIM10-7-2010-7-20Fluoranthene0.0120.0083EPA 8270E/SIM10-7-2010-7-20Pyrene0.00830.0083EPA 8270E/SIM10-7-2010-7-20Benzo[a]anthraceneND0.0083EPA 8270E/SIM10-7-2010-7-20ChryseneND0.0083EPA 8270E/SIM10-7-2010-7-20Benzo[b]fluorantheneND0.0083EPA 8270E/SIM10-7-2010-7-20Benzo(j,k)fluorantheneND0.0083EPA 8270E/SIM10-7-2010-7-20Benzo[a]pyreneND0.0083EPA 8270E/SIM10-7-2010-7-20Indeno(1,2,3-c,d)pyreneND0.0083EPA 8270E/SIM10-7-2010-7-20Dibenz[a,h]anthraceneND0.0083EPA 8270E/SIM10-7-2010-7-20Dibenz[a,h]anthraceneND0.0083EPA 8270E/SIM10-7-2010-7-20		10-7-20	10-7-20	EPA 8270E/SIM	0.0083	0.011	1-Methylnaphthalene
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Phenanthrene 0.045 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Anthracene 0.016 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Fluoranthene 0.012 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Pyrene 0.0083 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]anthracene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Chrysene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]anthracene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Chrysene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[b]fluoranthene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[i,k)fluoranthene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]pyrene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Indeno(1,2,3-c,d)pyrene ND 0.0083		10-7-20	10-7-20	EPA 8270E/SIM	0.0083	0.033	Acenaphthene
Anthracene 0.016 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Fluoranthene 0.012 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Pyrene 0.0083 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]anthracene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Chrysene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]anthracene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Chrysene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[b]fluoranthene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[j,k)fluoranthene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]pyrene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Indeno(1,2,3-c,d)pyrene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Dibenz[a,h]anthracene ND 0.0083		10-7-20	10-7-20	EPA 8270E/SIM	0.0083	0.024	Fluorene
Fluoranthene0.0120.0083EPA 8270E/SIM10-7-2010-7-20Pyrene0.00830.0083EPA 8270E/SIM10-7-2010-7-20Benzo[a]anthraceneND0.0083EPA 8270E/SIM10-7-2010-7-20ChryseneND0.0083EPA 8270E/SIM10-7-2010-7-20Benzo[b]fluorantheneND0.0083EPA 8270E/SIM10-7-2010-7-20Benzo[j,k)fluorantheneND0.0083EPA 8270E/SIM10-7-2010-7-20Benzo[a]pyreneND0.0083EPA 8270E/SIM10-7-2010-7-20Indeno(1,2,3-c,d)pyreneND0.0083EPA 8270E/SIM10-7-2010-7-20Dibenz[a,h]anthraceneND0.0083EPA 8270E/SIM10-7-2010-7-20		10-7-20	10-7-20	EPA 8270E/SIM	0.0083	0.045	Phenanthrene
Pyrene 0.0083 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]anthracene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Chrysene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[b]fluoranthene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[b]fluoranthene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[j,k)fluoranthene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]pyrene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Indeno(1,2,3-c,d)pyrene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Dibenz[a,h]anthracene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20		10-7-20	10-7-20	EPA 8270E/SIM	0.0083	0.016	Anthracene
Benzo[a]anthracene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Chrysene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[b]fluoranthene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[b]fluoranthene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[j,k)fluoranthene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]pyrene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Indeno(1,2,3-c,d)pyrene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Dibenz[a,h]anthracene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20		10-7-20	10-7-20	EPA 8270E/SIM	0.0083	0.012	Fluoranthene
Chrysene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[b]fluoranthene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[j,k)fluoranthene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]pyrene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Indeno(1,2,3-c,d)pyrene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Dibenz[a,h]anthracene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20		10-7-20	10-7-20	EPA 8270E/SIM	0.0083	0.0083	Pyrene
Benzo[b]fluoranthene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo(j,k)fluoranthene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]pyrene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Indeno(1,2,3-c,d)pyrene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Dibenz[a,h]anthracene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20		10-7-20	10-7-20	EPA 8270E/SIM	0.0083	ND	Benzo[a]anthracene
Benzo(j,k)fluoranthene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]pyrene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Indeno(1,2,3-c,d)pyrene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Dibenz[a,h]anthracene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20		10-7-20	10-7-20	EPA 8270E/SIM	0.0083	ND	Chrysene
Benzo[a]pyrene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Indeno(1,2,3-c,d)pyrene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Dibenz[a,h]anthracene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20		10-7-20	10-7-20	EPA 8270E/SIM	0.0083	ND	Benzo[b]fluoranthene
Indeno(1,2,3-c,d)pyrene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20 Dibenz[a,h]anthracene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20		10-7-20	10-7-20	EPA 8270E/SIM	0.0083	ND	Benzo(j,k)fluoranthene
Dibenz[a,h]anthracene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20		10-7-20	10-7-20	EPA 8270E/SIM	0.0083	ND	Benzo[a]pyrene
		10-7-20	10-7-20	EPA 8270E/SIM	0.0083	ND	Indeno(1,2,3-c,d)pyrene
Benzo[g,h,i]perylene ND 0.0083 EPA 8270E/SIM 10-7-20 10-7-20		10-7-20	10-7-20	EPA 8270E/SIM	0.0083	ND	Dibenz[a,h]anthracene
		10-7-20	10-7-20	EPA 8270E/SIM	0.0083	ND	Benzo[g,h,i]perylene
Surrogate: Percent Recovery Control Limits					Control Limits	Percent Recovery	Surrogate:
2-Fluorobiphenyl 54 46 - 113					46 - 113	54	2-Fluorobiphenyl
Pyrene-d10 64 45 - 114					45 - 114	64	Pyrene-d10
Terphenyl-d14 69 49 - 121					49 - 121	69	Terphenyl-d14





Matrix: Soil Units: mg/Kg

5.5				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-11-5.0					
Laboratory ID:	09-328-05					
Naphthalene	ND	0.0080	EPA 8270E/SIM	10-7-20	10-7-20	
2-Methylnaphthalene	ND	0.0080	EPA 8270E/SIM	10-7-20	10-7-20	
1-Methylnaphthalene	ND	0.0080	EPA 8270E/SIM	10-7-20	10-7-20	
Acenaphthylene	ND	0.0080	EPA 8270E/SIM	10-7-20	10-7-20	
Acenaphthene	ND	0.0080	EPA 8270E/SIM	10-7-20	10-7-20	
Fluorene	ND	0.0080	EPA 8270E/SIM	10-7-20	10-7-20	
Phenanthrene	ND	0.0080	EPA 8270E/SIM	10-7-20	10-7-20	
Anthracene	ND	0.0080	EPA 8270E/SIM	10-7-20	10-7-20	
Fluoranthene	ND	0.0080	EPA 8270E/SIM	10-7-20	10-7-20	
Pyrene	ND	0.0080	EPA 8270E/SIM	10-7-20	10-7-20	
Benzo[a]anthracene	ND	0.0080	EPA 8270E/SIM	10-7-20	10-7-20	
Chrysene	ND	0.0080	EPA 8270E/SIM	10-7-20	10-7-20	
Benzo[b]fluoranthene	ND	0.0080	EPA 8270E/SIM	10-7-20	10-7-20	
Benzo(j,k)fluoranthene	ND	0.0080	EPA 8270E/SIM	10-7-20	10-7-20	
Benzo[a]pyrene	ND	0.0080	EPA 8270E/SIM	10-7-20	10-7-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0080	EPA 8270E/SIM	10-7-20	10-7-20	
Dibenz[a,h]anthracene	ND	0.0080	EPA 8270E/SIM	10-7-20	10-7-20	
Benzo[g,h,i]perylene	ND	0.0080	EPA 8270E/SIM	10-7-20	10-7-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	52	46 - 113				
Pyrene-d10	68	45 - 114				
Terphenyl-d14	62	49 - 121				



Matrix: Soil Units: mg/Kg

Analyte Result PQL Method Prepared Analyzed Client ID: FB-12-5.0 Laboratory ID: 09-328-08 10-7-20 10-7-20 10-7-20 Naphthalene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 2-Methylnaphthalene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 1-Methylnaphthalene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthylene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthylene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Pluorene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Phenanthrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Phenanthrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Phenanthrene ND 0.0080 <	Date Date	Date				5 5
Laboratory ID: 09-328-08 Naphthalene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 2-Methylnaphthalene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 1-Methylnaphthalene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthylene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Fluorene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Phenanthrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Phenanthrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Phenanthrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Fluoranthene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Pyrene	epared Analyzed Flags	Prepared	Method	PQL	Result	Analyte
Naphthalene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 2-Methylnaphthalene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 1-Methylnaphthalene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthylene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Fluorene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Phenanthrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Fluoranthene ND 0.0080 EPA 8270E/SIM					FB-12-5.0	Client ID:
2-Methylnaphthalene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 1-Methylnaphthalene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthylene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthylene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Fluorene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Phenanthrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Fluoranthene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Pyrene ND 0.0080 EPA 8270E/SIM					09-328-08	Laboratory ID:
1-Methylnaphthalene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthylene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Fluorene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Fluorene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Phenanthrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Anthracene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Fluoranthene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Pyrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Pyrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]anthracene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Chrysene ND 0.0080 EPA 8270E/SIM 10-7-20)-7-20 10-7-20	10-7-20	EPA 8270E/SIM	0.0080	ND	Naphthalene
AcenaphthyleneND0.0080EPA 8270E/SIM10-7-2010-7-20AcenaphtheneND0.0080EPA 8270E/SIM10-7-2010-7-20FluoreneND0.0080EPA 8270E/SIM10-7-2010-7-20PhenanthreneND0.0080EPA 8270E/SIM10-7-2010-7-20AnthraceneND0.0080EPA 8270E/SIM10-7-2010-7-20FluorantheneND0.0080EPA 8270E/SIM10-7-2010-7-20FluorantheneND0.0080EPA 8270E/SIM10-7-2010-7-20PyreneND0.0080EPA 8270E/SIM10-7-2010-7-20Benzo[a]anthraceneND0.0080EPA 8270E/SIM10-7-2010-7-20ChryseneND0.0080EPA 8270E/SIM10-7-2010-7-20Benzo[b]fluorantheneND0.0080EPA 8270E/SIM10-7-2010-7-20Benzo[j,k)fluorantheneND0.0080EPA 8270E/SIM10-7-2010-7-20Benzo[a]pyreneND0.0080EPA 8270E/SIM10-7-2010-7-20Benzo[a]pyreneND0.0080EPA 8270E/SIM10-7-2010-7-20Indeno(1,2,3-c,d)pyreneND0.0080EPA 8270E/SIM10-7-2010-7-20Dibenz[a,h]anthraceneND0.0080EPA 8270E/SIM10-7-2010-7-20Dibenz[a,h]anthraceneND0.0080EPA 8270E/SIM10-7-2010-7-20Dibenz[a,h]anthraceneND0.0080EPA 8270E/SIM10-7-2010-7-20 <td>)-7-20 10-7-20</td> <td>10-7-20</td> <td>EPA 8270E/SIM</td> <td>0.0080</td> <td>ND</td> <td>2-Methylnaphthalene</td>)-7-20 10-7-20	10-7-20	EPA 8270E/SIM	0.0080	ND	2-Methylnaphthalene
AcenaphtheneND0.0080EPA 8270E/SIM10-7-2010-7-20FluoreneND0.0080EPA 8270E/SIM10-7-2010-7-20PhenanthreneND0.0080EPA 8270E/SIM10-7-2010-7-20AnthraceneND0.0080EPA 8270E/SIM10-7-2010-7-20FluorantheneND0.0080EPA 8270E/SIM10-7-2010-7-20PyreneND0.0080EPA 8270E/SIM10-7-2010-7-20Benzo[a]anthraceneND0.0080EPA 8270E/SIM10-7-2010-7-20ChryseneND0.0080EPA 8270E/SIM10-7-2010-7-20Benzo[b]fluorantheneND0.0080EPA 8270E/SIM10-7-2010-7-20Benzo[j,k)fluorantheneND0.0080EPA 8270E/SIM10-7-2010-7-20Benzo[a]pyreneND0.0080EPA 8270E/SIM10-7-2010-7-20Benzo[a]pyreneND0.0080EPA 8270E/SIM10-7-2010-7-20Benzo[a]pyreneND0.0080EPA 8270E/SIM10-7-2010-7-20Benzo[a]pyreneND0.0080EPA 8270E/SIM10-7-2010-7-20Indeno(1,2,3-c,d)pyreneND0.0080EPA 8270E/SIM10-7-2010-7-20Dibenz[a,h]anthraceneND0.0080EPA 8270E/SIM10-7-2010-7-20Dibenz[a,h]anthraceneND0.0080EPA 8270E/SIM10-7-2010-7-20)-7-20 10-7-20	10-7-20	EPA 8270E/SIM	0.0080	ND	1-Methylnaphthalene
FluoreneND0.0080EPA 8270E/SIM10-7-2010-7-20PhenanthreneND0.0080EPA 8270E/SIM10-7-2010-7-20AnthraceneND0.0080EPA 8270E/SIM10-7-2010-7-20FluorantheneND0.0080EPA 8270E/SIM10-7-2010-7-20PyreneND0.0080EPA 8270E/SIM10-7-2010-7-20Benzo[a]anthraceneND0.0080EPA 8270E/SIM10-7-2010-7-20ChryseneND0.0080EPA 8270E/SIM10-7-2010-7-20Benzo[b]fluorantheneND0.0080EPA 8270E/SIM10-7-2010-7-20Benzo[j,k)fluorantheneND0.0080EPA 8270E/SIM10-7-2010-7-20Benzo[a]pyreneND0.0080EPA 8270E/SIM10-7-2010-7-20Indeno(1,2,3-c,d)pyreneND0.0080EPA 8270E/SIM10-7-2010-7-20Dibenz[a,h]anthraceneND0.0080EPA 8270E/SIM10-7-2010-7-20Indeno(1,2,3-c,d)pyreneND0.0080EPA 8270E/SIM10-7-2010-7-20Dibenz[a,h]anthraceneND0.0080EPA 8270E/SIM10-7-2010-7-20)-7-20 10-7-20	10-7-20	EPA 8270E/SIM	0.0080	ND	Acenaphthylene
Phenanthrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Anthracene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Fluoranthene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Pyrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]anthracene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Chrysene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]anthracene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Chrysene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[b]fluoranthene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[j,k)fluoranthene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]pyrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Indeno(1,2,3-c,d)pyrene ND 0.0080 EPA 8270)-7-20 10-7-20	10-7-20	EPA 8270E/SIM	0.0080	ND	Acenaphthene
Anthracene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Fluoranthene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Pyrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]anthracene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Chrysene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]anthracene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Chrysene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[b]fluoranthene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[j,k)fluoranthene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]pyrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Indeno(1,2,3-c,d)pyrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Dibenz[a,h]anthracene ND 0.0080 <td< td=""><td>)-7-20 10-7-20</td><td>10-7-20</td><td>EPA 8270E/SIM</td><td>0.0080</td><td>ND</td><td>Fluorene</td></td<>)-7-20 10-7-20	10-7-20	EPA 8270E/SIM	0.0080	ND	Fluorene
FluorantheneND0.0080EPA 8270E/SIM10-7-2010-7-20PyreneND0.0080EPA 8270E/SIM10-7-2010-7-20Benzo[a]anthraceneND0.0080EPA 8270E/SIM10-7-2010-7-20ChryseneND0.0080EPA 8270E/SIM10-7-2010-7-20Benzo[b]fluorantheneND0.0080EPA 8270E/SIM10-7-2010-7-20Benzo[j,k)fluorantheneND0.0080EPA 8270E/SIM10-7-2010-7-20Benzo[a]pyreneND0.0080EPA 8270E/SIM10-7-2010-7-20Indeno(1,2,3-c,d)pyreneND0.0080EPA 8270E/SIM10-7-2010-7-20Dibenz[a,h]anthraceneND0.0080EPA 8270E/SIM10-7-2010-7-20)-7-20 10-7-20	10-7-20	EPA 8270E/SIM	0.0080	ND	Phenanthrene
PyreneND0.0080EPA 8270E/SIM10-7-2010-7-20Benzo[a]anthraceneND0.0080EPA 8270E/SIM10-7-2010-7-20ChryseneND0.0080EPA 8270E/SIM10-7-2010-7-20Benzo[b]fluorantheneND0.0080EPA 8270E/SIM10-7-2010-7-20Benzo[j,k)fluorantheneND0.0080EPA 8270E/SIM10-7-2010-7-20Benzo[a]pyreneND0.0080EPA 8270E/SIM10-7-2010-7-20Indeno(1,2,3-c,d)pyreneND0.0080EPA 8270E/SIM10-7-2010-7-20Dibenz[a,h]anthraceneND0.0080EPA 8270E/SIM10-7-2010-7-20)-7-20 10-7-20	10-7-20	EPA 8270E/SIM	0.0080	ND	Anthracene
Benzo[a]anthracene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Chrysene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[b]fluoranthene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[jk)fluoranthene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[jk)fluoranthene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]pyrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Indeno(1,2,3-c,d)pyrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Dibenz[a,h]anthracene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20)-7-20 10-7-20	10-7-20	EPA 8270E/SIM	0.0080	ND	Fluoranthene
ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[b]fluoranthene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[j,k)fluoranthene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]pyrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Indeno(1,2,3-c,d)pyrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Dibenz[a,h]anthracene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20)-7-20 10-7-20	10-7-20	EPA 8270E/SIM	0.0080	ND	Pyrene
Benzo[b]fluoranthene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Benzo(j,k)fluoranthene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]pyrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Indeno(1,2,3-c,d)pyrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Dibenz[a,h]anthracene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20)-7-20 10-7-20	10-7-20	EPA 8270E/SIM	0.0080	ND	Benzo[a]anthracene
Benzo(j,k)fluoranthene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]pyrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Indeno(1,2,3-c,d)pyrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Dibenz[a,h]anthracene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20)-7-20 10-7-20	10-7-20	EPA 8270E/SIM	0.0080	ND	Chrysene
Benzo[a]pyrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Indeno(1,2,3-c,d)pyrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Dibenz[a,h]anthracene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20)-7-20 10-7-20	10-7-20	EPA 8270E/SIM	0.0080	ND	Benzo[b]fluoranthene
Indeno(1,2,3-c,d)pyrene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20 Dibenz[a,h]anthracene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20)-7-20 10-7-20	10-7-20	EPA 8270E/SIM	0.0080	ND	Benzo(j,k)fluoranthene
Dibenz[a,h]anthracene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20)-7-20 10-7-20	10-7-20	EPA 8270E/SIM	0.0080	ND	Benzo[a]pyrene
)-7-20 10-7-20	10-7-20	EPA 8270E/SIM	0.0080	ND	Indeno(1,2,3-c,d)pyrene
Benzo[g,h,i]perylene ND 0.0080 EPA 8270E/SIM 10-7-20 10-7-20)-7-20 10-7-20	10-7-20	EPA 8270E/SIM	0.0080	ND	Dibenz[a,h]anthracene
)-7-20 10-7-20	10-7-20	EPA 8270E/SIM	0.0080	ND	Benzo[g,h,i]perylene
Surrogate: Percent Recovery Control Limits				Control Limits	Percent Recovery	Surrogate:
2-Fluorobiphenyl 50 46 - 113				46 - 113	50	2-Fluorobiphenyl
Pyrene-d10 62 45 - 114				45 - 114	62	Pyrene-d10
Terphenyl-d14 63 49 - 121				49 - 121	63	Terphenyl-d14



Matrix: Soil Units: mg/Kg

			Date	Date	
Result	PQL	Method	Prepared	Analyzed	Flags
FB-13-1.0					
09-328-10					
0.0087	0.0082	EPA 8270E/SIM	10-7-20	10-7-20	
ND	0.0082	EPA 8270E/SIM	10-7-20	10-7-20	
ND	0.0082	EPA 8270E/SIM	10-7-20	10-7-20	
ND	0.0082	EPA 8270E/SIM	10-7-20	10-7-20	
ND	0.0082	EPA 8270E/SIM	10-7-20	10-7-20	
ND	0.0082	EPA 8270E/SIM	10-7-20	10-7-20	
ND	0.0082	EPA 8270E/SIM	10-7-20	10-7-20	
ND	0.0082	EPA 8270E/SIM	10-7-20	10-7-20	
0.031	0.0082	EPA 8270E/SIM	10-7-20	10-7-20	
0.010	0.0082	EPA 8270E/SIM	10-7-20	10-7-20	
ND	0.0082	EPA 8270E/SIM	10-7-20	10-7-20	
ND	0.0082	EPA 8270E/SIM	10-7-20	10-7-20	
ND	0.0082	EPA 8270E/SIM	10-7-20	10-7-20	
ND	0.0082	EPA 8270E/SIM	10-7-20	10-7-20	
ND	0.0082	EPA 8270E/SIM	10-7-20	10-7-20	
ND	0.0082	EPA 8270E/SIM	10-7-20	10-7-20	
ND	0.0082	EPA 8270E/SIM	10-7-20	10-7-20	
ND	0.0082	EPA 8270E/SIM	10-7-20	10-7-20	
Percent Recovery	Control Limits				
60	46 - 113				
63	45 - 114				
67	49 - 121				
	FB-13-1.0 09-328-10 0.0087 ND AD AD AD AD <td< td=""><td>FB-13-1.0 09-328-10 0.0087 0.0082 ND 0.0082 <</td><td>FB-13-1.0 09-328-10 0.0087 0.0082 EPA 8270E/SIM ND 0.0082 EPA 8270E/SIM 0.031 0.0082 EPA 8270E/SIM ND 0.0082</td><td>Result PQL Method Prepared FB-13-1.0 09-328-10 09-328-10 10-7-20 0.0087 0.0082 EPA 8270E/SIM 10-7-20 ND 0.0082 EPA 8270E/SIM 10-7-20</td><td>Result PQL Method Prepared Analyzed BFB-13-1.0 09-328-10 09-328-10 100-720 100-720 0.0087 0.0082 EPA 8270E/SIM 100-720 100-720 ND 0.0082 EPA 8270E/SIM 10-720 10-720 ND 0.0082 EPA 8270E/SIM 10-720 10-720 ND 0.0082 EPA 8270E/SIM 10-720 10-720 ND 0.0</td></td<>	FB-13-1.0 09-328-10 0.0087 0.0082 ND 0.0082 <	FB-13-1.0 09-328-10 0.0087 0.0082 EPA 8270E/SIM ND 0.0082 EPA 8270E/SIM 0.031 0.0082 EPA 8270E/SIM ND 0.0082	Result PQL Method Prepared FB-13-1.0 09-328-10 09-328-10 10-7-20 0.0087 0.0082 EPA 8270E/SIM 10-7-20 ND 0.0082 EPA 8270E/SIM 10-7-20	Result PQL Method Prepared Analyzed BFB-13-1.0 09-328-10 09-328-10 100-720 100-720 0.0087 0.0082 EPA 8270E/SIM 100-720 100-720 ND 0.0082 EPA 8270E/SIM 10-720 10-720 ND 0.0082 EPA 8270E/SIM 10-720 10-720 ND 0.0082 EPA 8270E/SIM 10-720 10-720 ND 0.0



Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-14-1.0					
Laboratory ID:	09-328-13					
Naphthalene	ND	0.0078	EPA 8270E/SIM	10-7-20	10-7-20	
2-Methylnaphthalene	ND	0.0078	EPA 8270E/SIM	10-7-20	10-7-20	
1-Methylnaphthalene	ND	0.0078	EPA 8270E/SIM	10-7-20	10-7-20	
Acenaphthylene	ND	0.0078	EPA 8270E/SIM	10-7-20	10-7-20	
Acenaphthene	ND	0.0078	EPA 8270E/SIM	10-7-20	10-7-20	
Fluorene	ND	0.0078	EPA 8270E/SIM	10-7-20	10-7-20	
Phenanthrene	ND	0.0078	EPA 8270E/SIM	10-7-20	10-7-20	
Anthracene	ND	0.0078	EPA 8270E/SIM	10-7-20	10-7-20	
Fluoranthene	ND	0.0078	EPA 8270E/SIM	10-7-20	10-7-20	
Pyrene	ND	0.0078	EPA 8270E/SIM	10-7-20	10-7-20	
Benzo[a]anthracene	ND	0.0078	EPA 8270E/SIM	10-7-20	10-7-20	
Chrysene	ND	0.0078	EPA 8270E/SIM	10-7-20	10-7-20	
Benzo[b]fluoranthene	ND	0.0078	EPA 8270E/SIM	10-7-20	10-7-20	
Benzo(j,k)fluoranthene	ND	0.0078	EPA 8270E/SIM	10-7-20	10-7-20	
Benzo[a]pyrene	ND	0.0078	EPA 8270E/SIM	10-7-20	10-7-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0078	EPA 8270E/SIM	10-7-20	10-7-20	
Dibenz[a,h]anthracene	ND	0.0078	EPA 8270E/SIM	10-7-20	10-7-20	
Benzo[g,h,i]perylene	ND	0.0078	EPA 8270E/SIM	10-7-20	10-7-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	59	46 - 113				
Pyrene-d10	66	45 - 114				
Terphenyl-d14	61	49 - 121				



Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1007S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Acenaphthylene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Acenaphthene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Fluorene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Phenanthrene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Anthracene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Fluoranthene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Pyrene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	57	46 - 113				
Pyrene-d10	72	45 - 114				
Terphenyl-d14	70	49 - 121				

Matrix: Soil Units: mg/Kg

					Source	Per	cent	Recovery		RPD	
Analyte	Re	sult	Spike	Level	Result	Rec	overy	Limits	RPD	Limit	Flags
MATRIX SPIKES											
Laboratory ID:	09-32	28-05									
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	0.0676	0.0562	0.0833	0.0833	ND	81	67	51 - 115	18	26	
Acenaphthylene	0.0589	0.0577	0.0833	0.0833	ND	71	69	53 - 121	2	24	
Acenaphthene	0.0687	0.0599	0.0833	0.0833	ND	82	72	52 - 121	14	25	
Fluorene	0.0600	0.0610	0.0833	0.0833	ND	72	73	58 - 127	2	23	
Phenanthrene	0.0551	0.0546	0.0833	0.0833	ND	66	66	46 - 129	1	28	
Anthracene	0.0596	0.0598	0.0833	0.0833	ND	72	72	57 - 124	0	21	
Fluoranthene	0.0597	0.0620	0.0833	0.0833	ND	72	74	46 - 136	4	29	
Pyrene	0.0625	0.0618	0.0833	0.0833	ND	75	74	41 - 136	1	32	
Benzo[a]anthracene	0.0607	0.0589	0.0833	0.0833	ND	73	71	56 - 136	3	25	
Chrysene	0.0568	0.0610	0.0833	0.0833	ND	68	73	49 - 130	7	22	
Benzo[b]fluoranthene	0.0574	0.0594	0.0833	0.0833	ND	69	71	51 - 135	3	26	
Benzo(j,k)fluoranthene	0.0577	0.0618	0.0833	0.0833	ND	69	74	56 - 124	7	23	
Benzo[a]pyrene	0.0591	0.0645	0.0833	0.0833	ND	71	77	54 - 133	9	26	
Indeno(1,2,3-c,d)pyrene	0.0543	0.0519	0.0833	0.0833	ND	65	62	52 - 134	5	20	
Dibenz[a,h]anthracene	0.0570	0.0570	0.0833	0.0833	ND	68	68	58 - 127	0	17	
Benzo[g,h,i]perylene	0.0570	0.0580	0.0833	0.0833	ND	68	70	54 - 129	2	21	
Surrogate:											
2-Fluorobiphenyl						58	57	46 - 113			
Pyrene-d10						68	70	45 - 114			
Terphenyl-d14						66	65	49 - 121			

Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-20-1.0					
Laboratory ID:	09-328-30					
Naphthalene	0.11	0.036	EPA 8270E/SIM	10-5-20	10-7-20	
2-Methylnaphthalene	ND	0.036	EPA 8270E/SIM	10-5-20	10-7-20	
1-Methylnaphthalene	ND	0.036	EPA 8270E/SIM	10-5-20	10-7-20	
Acenaphthylene	0.042	0.036	EPA 8270E/SIM	10-5-20	10-7-20	
Acenaphthene	0.052	0.036	EPA 8270E/SIM	10-5-20	10-7-20	
Fluorene	0.058	0.036	EPA 8270E/SIM	10-5-20	10-7-20	
Phenanthrene	0.58	0.036	EPA 8270E/SIM	10-5-20	10-7-20	
Anthracene	0.19	0.036	EPA 8270E/SIM	10-5-20	10-7-20	
Fluoranthene	1.3	0.036	EPA 8270E/SIM	10-5-20	10-7-20	
Pyrene	1.1	0.036	EPA 8270E/SIM	10-5-20	10-7-20	
Benzo[a]anthracene	0.61	0.036	EPA 8270E/SIM	10-5-20	10-7-20	
Chrysene	0.56	0.036	EPA 8270E/SIM	10-5-20	10-7-20	
Benzo[b]fluoranthene	0.52	0.036	EPA 8270E/SIM	10-5-20	10-7-20	
Benzo(j,k)fluoranthene	0.18	0.036	EPA 8270E/SIM	10-5-20	10-7-20	
Benzo[a]pyrene	0.46	0.036	EPA 8270E/SIM	10-5-20	10-7-20	
Indeno(1,2,3-c,d)pyrene	0.24	0.036	EPA 8270E/SIM	10-5-20	10-7-20	
Dibenz[a,h]anthracene	0.050	0.036	EPA 8270E/SIM	10-5-20	10-7-20	
Benzo[g,h,i]perylene	0.23	0.036	EPA 8270E/SIM	10-5-20	10-7-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	62	46 - 113				
Pyrene-d10	70	45 - 114				
Terphenyl-d14	66	49 - 121				



Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-20-5.0					
Laboratory ID:	09-328-31					
Naphthalene	91	2.0	EPA 8270E/SIM	10-5-20	10-7-20	
2-Methylnaphthalene	39	2.0	EPA 8270E/SIM	10-5-20	10-7-20	
1-Methylnaphthalene	23	2.0	EPA 8270E/SIM	10-5-20	10-7-20	
Acenaphthylene	3.2	2.0	EPA 8270E/SIM	10-5-20	10-7-20	
Acenaphthene	110	2.0	EPA 8270E/SIM	10-5-20	10-7-20	
Fluorene	86	2.0	EPA 8270E/SIM	10-5-20	10-7-20	
Phenanthrene	250	2.0	EPA 8270E/SIM	10-5-20	10-7-20	
Anthracene	64	2.0	EPA 8270E/SIM	10-5-20	10-7-20	
Fluoranthene	110	2.0	EPA 8270E/SIM	10-5-20	10-7-20	
Pyrene	84	2.0	EPA 8270E/SIM	10-5-20	10-7-20	
Benzo[a]anthracene	27	2.0	EPA 8270E/SIM	10-5-20	10-7-20	
Chrysene	21	2.0	EPA 8270E/SIM	10-5-20	10-7-20	
Benzo[b]fluoranthene	19	2.0	EPA 8270E/SIM	10-5-20	10-7-20	
Benzo(j,k)fluoranthene	6.1	2.0	EPA 8270E/SIM	10-5-20	10-7-20	
Benzo[a]pyrene	17	2.0	EPA 8270E/SIM	10-5-20	10-7-20	
Indeno(1,2,3-c,d)pyrene	7.3	2.0	EPA 8270E/SIM	10-5-20	10-7-20	
Dibenz[a,h]anthracene	ND	2.0	EPA 8270E/SIM	10-5-20	10-7-20	
Benzo[g,h,i]perylene	7.4	2.0	EPA 8270E/SIM	10-5-20	10-7-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl		46 - 113				S
Pyrene-d10		45 - 114				S
Terphenyl-d14		49 - 121				S



Matrix: Soil Units: mg/Kg

3.3				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-21-1.0					
Laboratory ID:	09-328-33					
Naphthalene	0.084	0.038	EPA 8270E/SIM	10-5-20	10-6-20	
2-Methylnaphthalene	ND	0.038	EPA 8270E/SIM	10-5-20	10-6-20	
1-Methylnaphthalene	ND	0.038	EPA 8270E/SIM	10-5-20	10-6-20	
Acenaphthylene	ND	0.038	EPA 8270E/SIM	10-5-20	10-6-20	
Acenaphthene	ND	0.038	EPA 8270E/SIM	10-5-20	10-6-20	
Fluorene	ND	0.038	EPA 8270E/SIM	10-5-20	10-6-20	
Phenanthrene	0.13	0.038	EPA 8270E/SIM	10-5-20	10-6-20	
Anthracene	0.046	0.038	EPA 8270E/SIM	10-5-20	10-6-20	
Fluoranthene	0.18	0.038	EPA 8270E/SIM	10-5-20	10-6-20	
Pyrene	0.16	0.038	EPA 8270E/SIM	10-5-20	10-6-20	
Benzo[a]anthracene	0.076	0.038	EPA 8270E/SIM	10-5-20	10-6-20	
Chrysene	0.11	0.038	EPA 8270E/SIM	10-5-20	10-6-20	
Benzo[b]fluoranthene	0.12	0.038	EPA 8270E/SIM	10-5-20	10-6-20	
Benzo(j,k)fluoranthene	ND	0.038	EPA 8270E/SIM	10-5-20	10-6-20	
Benzo[a]pyrene	0.094	0.038	EPA 8270E/SIM	10-5-20	10-6-20	
Indeno(1,2,3-c,d)pyrene	0.052	0.038	EPA 8270E/SIM	10-5-20	10-6-20	
Dibenz[a,h]anthracene	ND	0.038	EPA 8270E/SIM	10-5-20	10-6-20	
Benzo[g,h,i]perylene	0.063	0.038	EPA 8270E/SIM	10-5-20	10-6-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	61	46 - 113				
Pyrene-d10	72	45 - 114				
Terphenyl-d14	68	49 - 121				



Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-21-5.0					
Laboratory ID:	09-328-35					
Naphthalene	0.027	0.0076	EPA 8270E/SIM	10-5-20	10-6-20	
2-Methylnaphthalene	0.011	0.0076	EPA 8270E/SIM	10-5-20	10-6-20	
1-Methylnaphthalene	0.0087	0.0076	EPA 8270E/SIM	10-5-20	10-6-20	
Acenaphthylene	ND	0.0076	EPA 8270E/SIM	10-5-20	10-6-20	
Acenaphthene	0.016	0.0076	EPA 8270E/SIM	10-5-20	10-6-20	
Fluorene	0.016	0.0076	EPA 8270E/SIM	10-5-20	10-6-20	
Phenanthrene	0.13	0.0076	EPA 8270E/SIM	10-5-20	10-6-20	
Anthracene	0.031	0.0076	EPA 8270E/SIM	10-5-20	10-6-20	
Fluoranthene	0.17	0.0076	EPA 8270E/SIM	10-5-20	10-6-20	
Pyrene	0.18	0.0076	EPA 8270E/SIM	10-5-20	10-6-20	
Benzo[a]anthracene	0.073	0.0076	EPA 8270E/SIM	10-5-20	10-6-20	
Chrysene	0.075	0.0076	EPA 8270E/SIM	10-5-20	10-6-20	
Benzo[b]fluoranthene	0.078	0.0076	EPA 8270E/SIM	10-5-20	10-6-20	
Benzo(j,k)fluoranthene	0.029	0.0076	EPA 8270E/SIM	10-5-20	10-6-20	
Benzo[a]pyrene	0.079	0.0076	EPA 8270E/SIM	10-5-20	10-6-20	
Indeno(1,2,3-c,d)pyrene	0.047	0.0076	EPA 8270E/SIM	10-5-20	10-6-20	
Dibenz[a,h]anthracene	0.0096	0.0076	EPA 8270E/SIM	10-5-20	10-6-20	
Benzo[g,h,i]perylene	0.053	0.0076	EPA 8270E/SIM	10-5-20	10-6-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	63	46 - 113				
Pyrene-d10	75	45 - 114				
Terphenyl-d14	72	49 - 121				

Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1005S2					
Naphthalene	ND	0.0033	EPA 8270E/SIM	10-5-20	10-5-20	
2-Methylnaphthalene	ND	0.0033	EPA 8270E/SIM	10-5-20	10-5-20	
1-Methylnaphthalene	ND	0.0033	EPA 8270E/SIM	10-5-20	10-5-20	
Acenaphthylene	ND	0.0033	EPA 8270E/SIM	10-5-20	10-5-20	
Acenaphthene	ND	0.0033	EPA 8270E/SIM	10-5-20	10-5-20	
Fluorene	ND	0.0033	EPA 8270E/SIM	10-5-20	10-5-20	
Phenanthrene	ND	0.0033	EPA 8270E/SIM	10-5-20	10-5-20	
Anthracene	ND	0.0033	EPA 8270E/SIM	10-5-20	10-5-20	
Fluoranthene	ND	0.0033	EPA 8270E/SIM	10-5-20	10-5-20	
Pyrene	ND	0.0033	EPA 8270E/SIM	10-5-20	10-5-20	
Benzo[a]anthracene	ND	0.0033	EPA 8270E/SIM	10-5-20	10-5-20	
Chrysene	ND	0.0033	EPA 8270E/SIM	10-5-20	10-5-20	
Benzo[b]fluoranthene	ND	0.0033	EPA 8270E/SIM	10-5-20	10-5-20	
Benzo(j,k)fluoranthene	ND	0.0033	EPA 8270E/SIM	10-5-20	10-5-20	
Benzo[a]pyrene	ND	0.0033	EPA 8270E/SIM	10-5-20	10-5-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0033	EPA 8270E/SIM	10-5-20	10-5-20	
Dibenz[a,h]anthracene	ND	0.0033	EPA 8270E/SIM	10-5-20	10-5-20	
Benzo[g,h,i]perylene	ND	0.0033	EPA 8270E/SIM	10-5-20	10-5-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	73	46 - 113				
Pyrene-d10	74	45 - 114				
Terphenyl-d14	75	49 - 121				



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Matrix: Soil Units: mg/Kg

					Source	Per	cent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Result	Rec	overy	Limits	RPD	Limit	Flags
MATRIX SPIKES											
Laboratory ID:	10-02	25-22									
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	0.0617	0.0621	0.0833	0.0833	ND	74	75	51 - 115	1	26	
Acenaphthylene	0.0626	0.0647	0.0833	0.0833	ND	75	78	53 - 121	3	24	
Acenaphthene	0.0637	0.0636	0.0833	0.0833	ND	76	76	52 - 121	0	25	
Fluorene	0.0613	0.0639	0.0833	0.0833	ND	74	77	58 - 127	4	23	
Phenanthrene	0.0601	0.0610	0.0833	0.0833	ND	72	73	46 - 129	1	28	
Anthracene	0.0621	0.0630	0.0833	0.0833	ND	75	76	57 - 124	1	21	
Fluoranthene	0.0603	0.0588	0.0833	0.0833	ND	72	71	46 - 136	3	29	
Pyrene	0.0607	0.0624	0.0833	0.0833	ND	73	75	41 - 136	3	32	
Benzo[a]anthracene	0.0652	0.0652	0.0833	0.0833	ND	78	78	56 - 136	0	25	
Chrysene	0.0616	0.0631	0.0833	0.0833	ND	74	76	49 - 130	2	22	
Benzo[b]fluoranthene	0.0603	0.0680	0.0833	0.0833	ND	72	82	51 - 135	12	26	
Benzo(j,k)fluoranthene	0.0664	0.0585	0.0833	0.0833	ND	80	70	56 - 124	13	23	
Benzo[a]pyrene	0.0681	0.0679	0.0833	0.0833	ND	82	82	54 - 133	0	26	
Indeno(1,2,3-c,d)pyrene	0.0610	0.0601	0.0833	0.0833	ND	73	72	52 - 134	1	20	
Dibenz[a,h]anthracene	0.0639	0.0634	0.0833	0.0833	ND	77	76	58 - 127	1	17	
Benzo[g,h,i]perylene	0.0641	0.0636	0.0833	0.0833	ND	77	76	54 - 129	1	21	
Surrogate:											
2-Fluorobiphenyl						67	67	46 - 113			
Pyrene-d10						68	70	45 - 114			
Terphenyl-d14						73	72	49 - 121			



TOTAL ARSENIC EPA 6010D

Matrix: Soil Units: mg/Kg (ppm)

ee				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-10-1.0					
Laboratory ID:	09-328-01					
Arsenic	ND	12	EPA 6010D	10-12-20	10-12-20	
Client ID:	FB-12-1.0					
Laboratory ID:	09-328-07					
Arsenic	ND	12	EPA 6010D	10-12-20	10-12-20	
Client ID:	FB-13-3.0					
Laboratory ID:	09-328-11					
Arsenic	ND	11	EPA 6010D	10-12-20	10-12-20	

TOTAL ARSENIC EPA 6010D QUALITY CONTROL

Matrix: Soil Units: mg/Kg (ppm)

QL Method	Prepared	Analvzed	Flage
		7 anary=0 a	Flags
0 EPA 6010D	10-12-20	10-12-20	
-	.0 EPA 6010D	.0 EPA 6010D 10-12-20	.0 EPA 6010D 10-12-20 10-12-20

					Source	Pe	ercent	Recovery		RPD	
Analyte	Res	sult	Spike	e Level	Result	Red	covery	Limits	RPD	Limit	Flags
DUPLICATE											
Laboratory ID:	10-10	06-01									
	ORIG	DUP									
Arsenic	ND	ND	NA	NA			NA	NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	10-10	06-01									
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	93.2	96.3	100	100	ND	93	96	75-125	3	20	



Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-16-1.0					
Laboratory ID:	09-328-18					
Naphthalene	ND	0.0079	EPA 8270E/SIM	10-13-20	10-15-20	
2-Methylnaphthalene	ND	0.0079	EPA 8270E/SIM	10-13-20	10-15-20	
1-Methylnaphthalene	ND	0.0079	EPA 8270E/SIM	10-13-20	10-15-20	
Acenaphthylene	ND	0.0079	EPA 8270E/SIM	10-13-20	10-15-20	
Acenaphthene	ND	0.0079	EPA 8270E/SIM	10-13-20	10-15-20	
Fluorene	ND	0.0079	EPA 8270E/SIM	10-13-20	10-15-20	
Phenanthrene	0.041	0.0079	EPA 8270E/SIM	10-13-20	10-15-20	
Anthracene	0.0088	0.0079	EPA 8270E/SIM	10-13-20	10-15-20	
Fluoranthene	0.083	0.0079	EPA 8270E/SIM	10-13-20	10-15-20	
Pyrene	0.078	0.0079	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[a]anthracene	0.040	0.0079	EPA 8270E/SIM	10-13-20	10-15-20	
Chrysene	0.051	0.0079	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[b]fluoranthene	0.073	0.0079	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo(j,k)fluoranthene	0.017	0.0079	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[a]pyrene	0.052	0.0079	EPA 8270E/SIM	10-13-20	10-15-20	
Indeno(1,2,3-c,d)pyrene	0.042	0.0079	EPA 8270E/SIM	10-13-20	10-15-20	
Dibenz[a,h]anthracene	ND	0.0079	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[g,h,i]perylene	0.038	0.0079	EPA 8270E/SIM	10-13-20	10-15-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	66	46 - 113				
Pyrene-d10	72	45 - 114				
Terphenyl-d14	69	49 - 121				



Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-17-1.0					
Laboratory ID:	09-328-21					
Naphthalene	0.0094	0.0081	EPA 8270E/SIM	10-13-20	10-15-20	
2-Methylnaphthalene	ND	0.0081	EPA 8270E/SIM	10-13-20	10-15-20	
1-Methylnaphthalene	ND	0.0081	EPA 8270E/SIM	10-13-20	10-15-20	
Acenaphthylene	0.0087	0.0081	EPA 8270E/SIM	10-13-20	10-15-20	
Acenaphthene	ND	0.0081	EPA 8270E/SIM	10-13-20	10-15-20	
Fluorene	ND	0.0081	EPA 8270E/SIM	10-13-20	10-15-20	
Phenanthrene	0.024	0.0081	EPA 8270E/SIM	10-13-20	10-15-20	
Anthracene	0.023	0.0081	EPA 8270E/SIM	10-13-20	10-15-20	
Fluoranthene	0.13	0.0081	EPA 8270E/SIM	10-13-20	10-15-20	
Pyrene	0.12	0.0081	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[a]anthracene	0.093	0.0081	EPA 8270E/SIM	10-13-20	10-15-20	
Chrysene	0.079	0.0081	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[b]fluoranthene	0.13	0.0081	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo(j,k)fluoranthene	0.030	0.0081	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[a]pyrene	0.091	0.0081	EPA 8270E/SIM	10-13-20	10-15-20	
Indeno(1,2,3-c,d)pyrene	0.058	0.0081	EPA 8270E/SIM	10-13-20	10-15-20	
Dibenz[a,h]anthracene	0.010	0.0081	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[g,h,i]perylene	0.052	0.0081	EPA 8270E/SIM	10-13-20	10-15-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	69	46 - 113				
Pyrene-d10	71	45 - 114				
Terphenyl-d14	69	49 - 121				



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Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-17-5.0					
Laboratory ID:	09-328-22					
Naphthalene	0.21	0.0077	EPA 8270E/SIM	10-13-20	10-15-20	
2-Methylnaphthalene	0.14	0.0077	EPA 8270E/SIM	10-13-20	10-15-20	
1-Methylnaphthalene	0.12	0.0077	EPA 8270E/SIM	10-13-20	10-15-20	
Acenaphthylene	0.0083	0.0077	EPA 8270E/SIM	10-13-20	10-15-20	
Acenaphthene	0.26	0.0077	EPA 8270E/SIM	10-13-20	10-15-20	
Fluorene	0.32	0.0077	EPA 8270E/SIM	10-13-20	10-15-20	
Phenanthrene	0.96	0.039	EPA 8270E/SIM	10-13-20	10-16-20	
Anthracene	0.22	0.0077	EPA 8270E/SIM	10-13-20	10-15-20	
Fluoranthene	0.81	0.0077	EPA 8270E/SIM	10-13-20	10-15-20	
Pyrene	0.76	0.0077	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[a]anthracene	0.28	0.0077	EPA 8270E/SIM	10-13-20	10-15-20	
Chrysene	0.29	0.0077	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[b]fluoranthene	0.28	0.0077	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo(j,k)fluoranthene	0.073	0.0077	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[a]pyrene	0.26	0.0077	EPA 8270E/SIM	10-13-20	10-15-20	
Indeno(1,2,3-c,d)pyrene	0.14	0.0077	EPA 8270E/SIM	10-13-20	10-15-20	
Dibenz[a,h]anthracene	0.029	0.0077	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[g,h,i]perylene	0.13	0.0077	EPA 8270E/SIM	10-13-20	10-15-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	75	46 - 113				
Pyrene-d10	82	45 - 114				
Terphenyl-d14	77	49 - 121				



22

Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-19-1.0					
Laboratory ID:	09-328-27					
Naphthalene	0.024	0.0083	EPA 8270E/SIM	10-13-20	10-15-20	
2-Methylnaphthalene	ND	0.0083	EPA 8270E/SIM	10-13-20	10-15-20	
1-Methylnaphthalene	ND	0.0083	EPA 8270E/SIM	10-13-20	10-15-20	
Acenaphthylene	0.084	0.0083	EPA 8270E/SIM	10-13-20	10-15-20	
Acenaphthene	ND	0.0083	EPA 8270E/SIM	10-13-20	10-15-20	
Fluorene	0.020	0.0083	EPA 8270E/SIM	10-13-20	10-15-20	
Phenanthrene	0.086	0.0083	EPA 8270E/SIM	10-13-20	10-15-20	
Anthracene	0.24	0.0083	EPA 8270E/SIM	10-13-20	10-15-20	
Fluoranthene	0.92	0.041	EPA 8270E/SIM	10-13-20	10-16-20	
Pyrene	0.99	0.0083	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[a]anthracene	0.93	0.0083	EPA 8270E/SIM	10-13-20	10-15-20	
Chrysene	1.0	0.041	EPA 8270E/SIM	10-13-20	10-16-20	
Benzo[b]fluoranthene	0.92	0.041	EPA 8270E/SIM	10-13-20	10-16-20	
Benzo(j,k)fluoranthene	0.28	0.0083	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[a]pyrene	0.68	0.0083	EPA 8270E/SIM	10-13-20	10-15-20	
Indeno(1,2,3-c,d)pyrene	0.39	0.0083	EPA 8270E/SIM	10-13-20	10-15-20	
Dibenz[a,h]anthracene	0.076	0.0083	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[g,h,i]perylene	0.29	0.0083	EPA 8270E/SIM	10-13-20	10-15-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	55	46 - 113				
Pyrene-d10	58	45 - 114				
Terphenyl-d14	53	49 - 121				



Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-19-4.0					
Laboratory ID:	09-328-28					
Naphthalene	0.028	0.0075	EPA 8270E/SIM	10-13-20	10-15-20	
2-Methylnaphthalene	0.025	0.0075	EPA 8270E/SIM	10-13-20	10-15-20	
1-Methylnaphthalene	0.022	0.0075	EPA 8270E/SIM	10-13-20	10-15-20	
Acenaphthylene	ND	0.0075	EPA 8270E/SIM	10-13-20	10-15-20	
Acenaphthene	0.013	0.0075	EPA 8270E/SIM	10-13-20	10-15-20	
Fluorene	0.018	0.0075	EPA 8270E/SIM	10-13-20	10-15-20	
Phenanthrene	0.046	0.0075	EPA 8270E/SIM	10-13-20	10-15-20	
Anthracene	0.0080	0.0075	EPA 8270E/SIM	10-13-20	10-15-20	
Fluoranthene	0.029	0.0075	EPA 8270E/SIM	10-13-20	10-15-20	
Pyrene	0.035	0.0075	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[a]anthracene	0.014	0.0075	EPA 8270E/SIM	10-13-20	10-15-20	
Chrysene	0.015	0.0075	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[b]fluoranthene	0.015	0.0075	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo(j,k)fluoranthene	ND	0.0075	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[a]pyrene	0.014	0.0075	EPA 8270E/SIM	10-13-20	10-15-20	
Indeno(1,2,3-c,d)pyrene	0.0083	0.0075	EPA 8270E/SIM	10-13-20	10-15-20	
Dibenz[a,h]anthracene	ND	0.0075	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[g,h,i]perylene	0.0089	0.0075	EPA 8270E/SIM	10-13-20	10-15-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	72	46 - 113				
Pyrene-d10	73	45 - 114				
Terphenyl-d14	73	49 - 121				



Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-20-8.0					
Laboratory ID:	09-328-32					
Naphthalene	ND	0.0091	EPA 8270E/SIM	10-13-20	10-15-20	
2-Methylnaphthalene	ND	0.0091	EPA 8270E/SIM	10-13-20	10-15-20	
1-Methylnaphthalene	ND	0.0091	EPA 8270E/SIM	10-13-20	10-15-20	
Acenaphthylene	ND	0.0091	EPA 8270E/SIM	10-13-20	10-15-20	
Acenaphthene	ND	0.0091	EPA 8270E/SIM	10-13-20	10-15-20	
Fluorene	ND	0.0091	EPA 8270E/SIM	10-13-20	10-15-20	
Phenanthrene	ND	0.0091	EPA 8270E/SIM	10-13-20	10-15-20	
Anthracene	ND	0.0091	EPA 8270E/SIM	10-13-20	10-15-20	
Fluoranthene	ND	0.0091	EPA 8270E/SIM	10-13-20	10-15-20	
Pyrene	ND	0.0091	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[a]anthracene	ND	0.0091	EPA 8270E/SIM	10-13-20	10-15-20	
Chrysene	ND	0.0091	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[b]fluoranthene	ND	0.0091	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo(j,k)fluoranthene	ND	0.0091	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[a]pyrene	ND	0.0091	EPA 8270E/SIM	10-13-20	10-15-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0091	EPA 8270E/SIM	10-13-20	10-15-20	
Dibenz[a,h]anthracene	ND	0.0091	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[g,h,i]perylene	ND	0.0091	EPA 8270E/SIM	10-13-20	10-15-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	74	46 - 113				
Pyrene-d10	76	45 - 114				
Terphenyl-d14	73	49 - 121				



Matrix: Soil Units: mg/Kg

5 5				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-22-1.0					
Laboratory ID:	09-328-37					
Naphthalene	0.023	0.0074	EPA 8270E/SIM	10-13-20	10-15-20	
2-Methylnaphthalene	ND	0.0074	EPA 8270E/SIM	10-13-20	10-15-20	
1-Methylnaphthalene	ND	0.0074	EPA 8270E/SIM	10-13-20	10-15-20	
Acenaphthylene	ND	0.0074	EPA 8270E/SIM	10-13-20	10-15-20	
Acenaphthene	ND	0.0074	EPA 8270E/SIM	10-13-20	10-15-20	
Fluorene	ND	0.0074	EPA 8270E/SIM	10-13-20	10-15-20	
Phenanthrene	ND	0.0074	EPA 8270E/SIM	10-13-20	10-15-20	
Anthracene	ND	0.0074	EPA 8270E/SIM	10-13-20	10-15-20	
Fluoranthene	0.0076	0.0074	EPA 8270E/SIM	10-13-20	10-15-20	
Pyrene	0.0077	0.0074	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[a]anthracene	ND	0.0074	EPA 8270E/SIM	10-13-20	10-15-20	
Chrysene	ND	0.0074	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[b]fluoranthene	ND	0.0074	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo(j,k)fluoranthene	ND	0.0074	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[a]pyrene	ND	0.0074	EPA 8270E/SIM	10-13-20	10-15-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0074	EPA 8270E/SIM	10-13-20	10-15-20	
Dibenz[a,h]anthracene	ND	0.0074	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[g,h,i]perylene	ND	0.0074	EPA 8270E/SIM	10-13-20	10-15-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	76	46 - 113				
Pyrene-d10	76	45 - 114				
Terphenyl-d14	75	49 - 121				



Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1013S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Acenaphthylene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Acenaphthene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Fluorene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Phenanthrene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Anthracene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Fluoranthene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Pyrene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	74	46 - 113				
Pyrene-d10	82	45 - 114				
Terphenyl-d14	76	49 - 121				

Matrix: Soil Units: mg/Kg

			Date	Date	
Result	PQL	Method	Prepared	Analyzed	Flags
MB1013S2					
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Percent Recovery	Control Limits				
60	46 - 113				
72	45 - 114				
67	40 121				
	MB1013S2 ND ND ND ND ND ND ND ND ND ND ND ND ND	MB1013S2 ND 0.0033 ND 0.003	MB1013S2 ND 0.0033 EPA 8270E/SIM ND </td <td>Result PQL Method Prepared MB1013S2 </td> <td>Result PQL Method Prepared Analyzed MB1013S2 ND 0.0033 EPA 8270E/SIM 10-13-20 10-15-20 ND 0.0033 EPA 8270E/SIM 10-13-20</td>	Result PQL Method Prepared MB1013S2	Result PQL Method Prepared Analyzed MB1013S2 ND 0.0033 EPA 8270E/SIM 10-13-20 10-15-20 ND 0.0033 EPA 8270E/SIM 10-13-20

Matrix: Soil Units: mg/Kg

					Source	Per	cent	Recovery		RPD	
Analyte	Re	sult	Spike	Level	Result	Rec	overy	Limits	RPD	Limit	Flags
MATRIX SPIKES											
Laboratory ID:	10-1:	37-04									
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	0.0496	0.0547	0.0833	0.0833	ND	60	66	51 - 115	10	26	
Acenaphthylene	0.0507	0.0557	0.0833	0.0833	ND	61	67	53 - 121	9	24	
Acenaphthene	0.0527	0.0562	0.0833	0.0833	ND	63	67	52 - 121	6	25	
Fluorene	0.0511	0.0553	0.0833	0.0833	ND	61	66	58 - 127	8	23	
Phenanthrene	0.0559	0.0591	0.0833	0.0833	ND	67	71	46 - 129	6	28	
Anthracene	0.0545	0.0555	0.0833	0.0833	ND	65	67	57 - 124	2	21	
Fluoranthene	0.0533	0.0557	0.0833	0.0833	ND	64	67	46 - 136	4	29	
Pyrene	0.0547	0.0558	0.0833	0.0833	ND	66	67	41 - 136	2	32	
Benzo[a]anthracene	0.0664	0.0672	0.0833	0.0833	ND	80	81	56 - 136	1	25	
Chrysene	0.0589	0.0596	0.0833	0.0833	ND	71	72	49 - 130	1	22	
Benzo[b]fluoranthene	0.0627	0.0576	0.0833	0.0833	ND	75	69	51 - 135	8	26	
Benzo(j,k)fluoranthene	0.0547	0.0585	0.0833	0.0833	ND	66	70	56 - 124	7	23	
Benzo[a]pyrene	0.0600	0.0601	0.0833	0.0833	ND	72	72	54 - 133	0	26	
Indeno(1,2,3-c,d)pyrene	0.0584	0.0594	0.0833	0.0833	ND	70	71	52 - 134	2	20	
Dibenz[a,h]anthracene	0.0555	0.0544	0.0833	0.0833	ND	67	65	58 - 127	2	17	
Benzo[g,h,i]perylene	0.0553	0.0556	0.0833	0.0833	ND	66	67	54 - 129	1	21	
Surrogate:											
2-Fluorobiphenyl						52	57	46 - 113			
Pyrene-d10						61	60	45 - 114			
Terphenyl-d14						63	61	49 - 121			



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

Date of Report: October 19, 2020 Samples Submitted: September 30, 2020 Laboratory Reference: 2009-328 Project: 650-031

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
FB-10-1.0	09-328-01	15	10-7-20
FB-10-3.0	09-328-02	20	10-7-20
FB-11-5.0	09-328-05	17	10-7-20
FB-12-1.0	09-328-07	13	10-7-20
FB-12-5.0	09-328-08	16	10-7-20
FB-13-1.0	09-328-10	19	10-7-20
FB-13-3.0	09-328-11	9	10-7-20
FB-14-1.0	09-328-13	15	10-7-20
FB-15-1.0	09-328-15	15	10-13-20
FB-15-4.0	09-328-16	16	10-13-20
FB-16-1.0	09-328-18	15	10-13-20
FB-16-3.0	09-328-19	11	10-13-20
FB-16-7.5	09-328-20	65	10-13-20
FB-17-1.0	09-328-21	18	10-13-20
FB-17-5.0	09-328-22	14	10-13-20
FB-17-9.0	09-328-23	78	10-13-20
FB-18-5.0	09-328-25	12	10-13-20
FB-18-8.0	09-328-26	81	10-13-20
FB-19-1.0	09-328-27	19	10-13-20
FB-19-4.0	09-328-28	12	10-13-20
FB-19-8.5	09-328-29	34	10-13-20
FB-20-1.0	09-328-30	9	10-5-20
FB-20-5.0	09-328-31	17	10-5-20
FB-20-8.0	09-328-32	26	10-13-20
FB-21-1.0	09-328-33	12	10-5-20
FB-21-5.0	09-328-35	13	10-5-20
FB-22-1.0	09-328-37	10	10-13-20
FB-22-4.0	09-328-38	19	10-13-20

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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 methods 8260 & 8270, 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.

Ζ-

ND - Not Detected at PQL PQL - Practical Quantitation Limit RPD - Relative Percent Difference



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Reviewed/Date	Received	Relinquished	Received	Relinquished	Received	Relinquished	Signature	LO FB-13-1.0	9 FB-12 - 9.0	8 FB-12-5.0	7 FB-12-1,0	6 FB-11- 8.0	S FB-11-5.6	4 FB-11-1.0	3 FB-10-8,5	2 FB-10-3.0	1 FB-10-1.0	Lab ID Sample Identification	Environmental Inc. Analytical Laboratory Testing Services 1464 NE 95th Street \cdot Redmond, WA 98052 Phone: (425) 883-3881 \cdot www.onsite-env.com Company: Froject Number: Froject Name: Froject Name: C, Schmitt Sampled by: S.M.R
Reviewed/Date					A CORE	Tanaka	Company	M N 8101 M	, 1003 ,	1000	0953	0950	0945	0943	09 35	0930	9-30-20 0925 50; 1 1	Date Time Sampled Sampled Matrix	Invitational Request (in working days) Check One) Same Day Same Day 2 Days 3 Days Standard (7 Days) (other) Standard (7 Days) (TPH analysis 5 Days) (other) PH-HCID PH-HCID PH-Gx/BTEX PH-Dx (1 Acid / SG Clean-up) W, TH
					g/2d to 1553	8-20-20 1553	Date Time				× *						×	NWTF NWTF NWTF Volati Halog	PH-HCID PH-Gx/BTEX PH-Gx PH-Gx PH-Dx (12 Acid / SG Clean-up) W>TH AMP W THOU W>TH AMP W THOU Benated Volatiles 8260C EPA 8011 (Waters Only)
Observations with final sonost - Electronic Data Deliverables	Data Package: Standard Level III Level IV	Spaded 10/12/2020.03 (STA) O-EXTR	PAHS- 4 d	parties X-Audid 10	PAL will call use	Hold ell samples	Comments/Special Instructions	<u>х</u>		×			*			× 		Semin (with PAHs PCBs Orgar Orgar Chlor Total Total	volatiles 8270D/SIM low-level PAHs) 8270D/SIM (low-level) s 8082A nochlorine Pesticides 8081B nophosphorus Pesticides 8270D/SIM rinated Acid Herbicides 8151A RCRA Metals MTCA Metals P Metals (oil and grease) 1664A
; ; ; ;		ACTAND	ATA	15/2020	feeted			×		X	×		X			×	X X	70 4 % Mo	DAY TAT

Intravenuel Regent Intravenuel	Received Reviewed/Date	Relinquished	Received	Relinquished	Received	Relinquished	Signature	20 FB-16-7.5	19 FB-16-3.0	18 FB-16-1.0	[7] FB-15-8:0	16 FB-15-40	15 FB-15-1.0	14 FB - A - 5.0	13 FB-14-1,0	12 FB-13-6.0	11 FB-13-3.0	Lab 10 Sample Identification	Project Number; Project Name: Project Name: Project Manager; Sampled by: SJNR	Company:	Analytical Laboratory Testing Services 14A48 NE 95th Streat - Bedmond WA 98052
Image: Standard Comments/Special Instructions Chordard Chordarda Acid Herbicides 8151A	Reviewed/Date				J WE	Janles	Company	1	~	1135	8811	1125	1120	1037	1030	1 1024	1020	Time Sampled Matrix	ay 1 Day 3 Days (7 Days) alysis 5 Days) (other)	(Check One)	Turnaround Request
Chromator Data Package: Standard Level Vitth final report Vitth final report Note: Note: <td></td> <td></td> <td></td> <td></td> <td>9120120 1555</td> <td>2-20-20 15 23</td> <td>)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>×</td> <td>NWTF NWTF NWTF NWTF Volatil</td> <td>PH-HCID PH-Gx/BTEX PH-Gx PH-Dx (Acid / SG Clean-up) איזא אאט איז les 8260C enated Volatiles 8260C</td> <td><u></u></td> <td>Laboratory Number</td>					9120120 1555	2-20-20 15 23)										×	NWTF NWTF NWTF NWTF Volatil	PH-HCID PH-Gx/BTEX PH-Gx PH-Dx (Acid / SG Clean-up) איזא אאט איז les 8260C enated Volatiles 8260C	<u></u>	Laboratory Number
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Reviewed/Date	Received	Relinquished	Received	Relinquished	Received	Relinquished	Signature	30 FB-20-10	29 FB-19-75	28 FB-A-40	271 FB-19-1,0	26 FB-18-8.0	25 FB-18-50	JM FB-18-10	23 FB-17-5.0	22 FB-17-5.0	21 FB-17-1.0	Lab ID. Sample Identification	Sampled by: SJUB	Project Manager, Thompson Fick	briet Name: 650-031	Company: Taxallan		Environmental Inc.
Reviewed/Date					I COSE	Jaula	Company	V 1345 V V	, 1338 ,	1335	1330	1320	1315	1312	1200	1158	9-30-26 1155 Soil 1	Date Time Sampled Sampled Matrix	Cother)	(TPH analysis 5 Days)	2 Days 3 Days	Same Day 1 Day	(in working days) (Check One)	Chain of Custody
					9120/201553	8-30-20 1553	Date Time											NWTF NWTF NWTF Volati Halog	PH-HCID PH-Gx/BTEX	id / SG C les 82600	0)	Laboratory Number:	Custody
Chromatograms with final report Electronic Data Deliverables (EDDs)	Data Package: Standard Devel III Level IV					1	Comments/Special Instructions	×					0				8	(with I PAHs PCBs Orgar Orgar Chlori Total I Total I Total I	volatiles 8270 low-level PAH 8270D/SIM (8082A nochlorine Pe nophosphoru: inated Acid H RCRA Metals MTCA Metals Metals (oil and greas	Is) low-level) sticides & s Pesticid lerbicides	8081B des 8270 s 8151A		: 09 - 3 28	Page S
aliverables (EDDs)								X	0	R	R	0	0		0	\overline{X}	\propto	4 % Mo	DAY -	TA	T			of A

Reviewed/Date	Received	Relinquished	Received	Relinquished	Received	Relinquished	Signature	 39 FB-22-8,0	38 F3-22 - 40	37 FB-22-10	36 FB-21-9.0	35 FB-21-5.0	34 FB-21-1.3	33 FB-21-10	32 FB-20-80	31 FB-20-5.0	Lab ID Sample Identification	Project Number: Project Name: BSO - CISA Project Name: Project Manager: Sampled by: SJUB	14648 NE 95th Street • Redmond, WA 98052 Phone: (425) 883-3881 • www.onsite-env.com	Analytical Laboratory Testing Services
Reviewed/Date				(AN (WXE	toreller	Company	V 1435 W	1430	H-25	1415	ANO	1402	1400	1355	8-30-20 1350 Soil 1	Date Time Sampled Sampled Matrix a	Same Day 1 Day 2 Days 3 Days Standard (7 Days) 3 Days (TPH analysis 5 Days) (TPH analysis 5 Days) (TPH analysis 5 Days) (other)	(In working days) (Check One)	Turnaround Request
-					251 01/09/16	9-20-20 1553	Date Time										NWTF NWTF NWTF NWTF Volatil	PH-Dx (□ Acid / SG Clean-up) es 8260C enated Volatiles 8260C		and Request
s with final report	Data Package: Standard Level III Leve						Comments/Special Instructions		0	8		×		×	\otimes	×	Semiv (with I PAHs PCBs Organ Organ Chlori Total f Total f Total N	PA 8011 (Waters Only) olatiles 8270D/SIM ow-level PAHs) 8270D/SIM (low-level) 8082A ochlorine Pesticides 8081B ophosphorus Pesticides 8270D/SIN nated Acid Herbicides 8151A RCRA Metals VITCA Metals Metals ioil and grease) 1664A	00 02	Page
	Level IV								0			××		X		X	4 % Moi			of



October 23, 2020

Cliff Schmitt Farallon Consulting, LLC 975 5th Avenue NW Issaquah, WA 98027

Re: Analytical Data for Project 650-031 Laboratory Reference No. 2009-328B

Dear Cliff:

Enclosed are the analytical results and associated quality control data for samples submitted on September 30, 2020.

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,

David Baumeister Project Manager

Enclosures



Date of Report: October 23, 2020 Samples Submitted: September 30, 2020 Laboratory Reference: 2009-328B Project: 650-031

Case Narrative

Samples were collected on September 30, 2020 and received by the laboratory on September 30, 2020. 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.



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

Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-17-9.0					
Laboratory ID:	09-328-23					
Naphthalene	ND	0.030	EPA 8270E/SIM	10-13-20	10-21-20	
2-Methylnaphthalene	ND	0.030	EPA 8270E/SIM	10-13-20	10-21-20	
1-Methylnaphthalene	ND	0.030	EPA 8270E/SIM	10-13-20	10-21-20	
Acenaphthylene	ND	0.030	EPA 8270E/SIM	10-13-20	10-21-20	
Acenaphthene	ND	0.030	EPA 8270E/SIM	10-13-20	10-21-20	
Fluorene	ND	0.030	EPA 8270E/SIM	10-13-20	10-21-20	
Phenanthrene	ND	0.030	EPA 8270E/SIM	10-13-20	10-21-20	
Anthracene	ND	0.030	EPA 8270E/SIM	10-13-20	10-21-20	
Fluoranthene	ND	0.030	EPA 8270E/SIM	10-13-20	10-21-20	
Pyrene	ND	0.030	EPA 8270E/SIM	10-13-20	10-21-20	
Benzo[a]anthracene	ND	0.030	EPA 8270E/SIM	10-13-20	10-21-20	
Chrysene	ND	0.030	EPA 8270E/SIM	10-13-20	10-21-20	
Benzo[b]fluoranthene	ND	0.030	EPA 8270E/SIM	10-13-20	10-21-20	
Benzo(j,k)fluoranthene	ND	0.030	EPA 8270E/SIM	10-13-20	10-21-20	
Benzo[a]pyrene	ND	0.030	EPA 8270E/SIM	10-13-20	10-21-20	
Indeno(1,2,3-c,d)pyrene	ND	0.030	EPA 8270E/SIM	10-13-20	10-21-20	
Dibenz[a,h]anthracene	ND	0.030	EPA 8270E/SIM	10-13-20	10-21-20	
Benzo[g,h,i]perylene	ND	0.030	EPA 8270E/SIM	10-13-20	10-21-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	83	46 - 113				
Pyrene-d10	87	45 - 114				
Terphenyl-d14	106	49 - 121				



3

Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-18-5.0					
Laboratory ID:	09-328-25					
Naphthalene	0.013	0.0076	EPA 8270E/SIM	10-13-20	10-21-20	
2-Methylnaphthalene	0.011	0.0076	EPA 8270E/SIM	10-13-20	10-21-20	
1-Methylnaphthalene	0.0096	0.0076	EPA 8270E/SIM	10-13-20	10-21-20	
Acenaphthylene	ND	0.0076	EPA 8270E/SIM	10-13-20	10-21-20	
Acenaphthene	0.0077	0.0076	EPA 8270E/SIM	10-13-20	10-21-20	
Fluorene	ND	0.0076	EPA 8270E/SIM	10-13-20	10-21-20	
Phenanthrene	0.023	0.0076	EPA 8270E/SIM	10-13-20	10-21-20	
Anthracene	ND	0.0076	EPA 8270E/SIM	10-13-20	10-21-20	
Fluoranthene	0.031	0.0076	EPA 8270E/SIM	10-13-20	10-21-20	
Pyrene	0.035	0.0076	EPA 8270E/SIM	10-13-20	10-21-20	
Benzo[a]anthracene	0.020	0.0076	EPA 8270E/SIM	10-13-20	10-21-20	
Chrysene	0.021	0.0076	EPA 8270E/SIM	10-13-20	10-21-20	
Benzo[b]fluoranthene	0.020	0.0076	EPA 8270E/SIM	10-13-20	10-21-20	
Benzo(j,k)fluoranthene	ND	0.0076	EPA 8270E/SIM	10-13-20	10-21-20	
Benzo[a]pyrene	0.018	0.0076	EPA 8270E/SIM	10-13-20	10-21-20	
Indeno(1,2,3-c,d)pyrene	0.0095	0.0076	EPA 8270E/SIM	10-13-20	10-21-20	
Dibenz[a,h]anthracene	ND	0.0076	EPA 8270E/SIM	10-13-20	10-21-20	
Benzo[g,h,i]perylene	0.0082	0.0076	EPA 8270E/SIM	10-13-20	10-21-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	83	46 - 113				
Pyrene-d10	85	45 - 114				
Terphenyl-d14	100	49 - 121				



Matrix: Soil Units: mg/Kg

			Date	Date	
Result	PQL	Method	Prepared	Analyzed	Flags
FB-18-8.0					
09-328-26					
ND	0.035	EPA 8270E/SIM	10-13-20	10-23-20	
ND	0.035	EPA 8270E/SIM	10-13-20	10-23-20	
ND	0.035	EPA 8270E/SIM	10-13-20	10-23-20	
ND	0.035	EPA 8270E/SIM	10-13-20	10-23-20	
ND	0.035	EPA 8270E/SIM	10-13-20	10-23-20	
ND	0.035	EPA 8270E/SIM	10-13-20	10-23-20	
ND	0.035	EPA 8270E/SIM	10-13-20	10-23-20	
ND	0.035	EPA 8270E/SIM	10-13-20	10-23-20	
ND	0.035	EPA 8270E/SIM	10-13-20	10-23-20	
ND	0.035	EPA 8270E/SIM	10-13-20	10-23-20	
ND	0.035	EPA 8270E/SIM	10-13-20	10-23-20	
ND	0.035	EPA 8270E/SIM	10-13-20	10-23-20	
ND	0.035	EPA 8270E/SIM	10-13-20	10-23-20	
ND	0.035	EPA 8270E/SIM	10-13-20	10-23-20	
ND	0.035	EPA 8270E/SIM	10-13-20	10-23-20	
ND	0.035	EPA 8270E/SIM	10-13-20	10-23-20	
ND	0.035	EPA 8270E/SIM	10-13-20	10-23-20	
ND	0.035	EPA 8270E/SIM	10-13-20	10-23-20	
Percent Recovery	Control Limits				
78	46 - 113				
86	45 - 114				
99	49 - 121				
	FB-18-8.0 09-328-26 ND ND<	FB-18-8.0 09-328-26 ND 0.035 ND	FB-18-8.0 09-328-26 ND 0.035 EPA 8270E/SIM ND 0.035 EPA 8270E/SIM	Result PQL Method Prepared FB-18-8.0 09-328-26 09-328-26 10-13-20 ND 0.035 EPA 8270E/SIM 10-13-20 <t< td=""><td>Result PQL Method Prepared Analyzed FB-18-8.0 09-328-26 </td></t<>	Result PQL Method Prepared Analyzed FB-18-8.0 09-328-26



5

Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1013S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Acenaphthylene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Acenaphthene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Fluorene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Phenanthrene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Anthracene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Fluoranthene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Pyrene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270E/SIM	10-13-20	10-13-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	74	46 - 113				
Pyrene-d10	82	45 - 114				
Terphenyl-d14	76	49 - 121				



6

Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1013S2					
Naphthalene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
2-Methylnaphthalene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
1-Methylnaphthalene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Acenaphthylene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Acenaphthene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Fluorene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Phenanthrene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Anthracene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Fluoranthene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Pyrene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[a]anthracene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Chrysene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[b]fluoranthene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo(j,k)fluoranthene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[a]pyrene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Dibenz[a,h]anthracene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[g,h,i]perylene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	60	46 - 113				
Pyrene-d10	72	45 - 114				
Terphenyl-d14	67	49 - 121				



7

Matrix: Soil Units: mg/Kg

					Source	Per	cent	Recovery		RPD	
Analyte	Re	sult	Spike	Level	Result	Rec	overy	Limits	RPD	Limit	Flags
MATRIX SPIKES											
Laboratory ID:	10-13	37-04									
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	0.0496	0.0547	0.0833	0.0833	ND	60	66	51 - 115	10	26	
Acenaphthylene	0.0507	0.0557	0.0833	0.0833	ND	61	67	53 - 121	9	24	
Acenaphthene	0.0527	0.0562	0.0833	0.0833	ND	63	67	52 - 121	6	25	
Fluorene	0.0511	0.0553	0.0833	0.0833	ND	61	66	58 - 127	8	23	
Phenanthrene	0.0559	0.0591	0.0833	0.0833	ND	67	71	46 - 129	6	28	
Anthracene	0.0545	0.0555	0.0833	0.0833	ND	65	67	57 - 124	2	21	
Fluoranthene	0.0533	0.0557	0.0833	0.0833	ND	64	67	46 - 136	4	29	
Pyrene	0.0547	0.0558	0.0833	0.0833	ND	66	67	41 - 136	2	32	
Benzo[a]anthracene	0.0664	0.0672	0.0833	0.0833	ND	80	81	56 - 136	1	25	
Chrysene	0.0589	0.0596	0.0833	0.0833	ND	71	72	49 - 130	1	22	
Benzo[b]fluoranthene	0.0627	0.0576	0.0833	0.0833	ND	75	69	51 - 135	8	26	
Benzo(j,k)fluoranthene	0.0547	0.0585	0.0833	0.0833	ND	66	70	56 - 124	7	23	
Benzo[a]pyrene	0.0600	0.0601	0.0833	0.0833	ND	72	72	54 - 133	0	26	
Indeno(1,2,3-c,d)pyrene	0.0584	0.0594	0.0833	0.0833	ND	70	71	52 - 134	2	20	
Dibenz[a,h]anthracene	0.0555	0.0544	0.0833	0.0833	ND	67	65	58 - 127	2	17	
Benzo[g,h,i]perylene	0.0553	0.0556	0.0833	0.0833	ND	66	67	54 - 129	1	21	
Surrogate:											
2-Fluorobiphenyl						52	57	46 - 113			
Pyrene-d10						61	60	45 - 114			
Terphenyl-d14						63	61	49 - 121			



Date of Report: October 23, 2020 Samples Submitted: September 30, 2020 Laboratory Reference: 2009-328B Project: 650-031

% MOISTURE

			Date
Client ID	Lab ID	% Moisture	Analyzed
FB-17-9.0	09-328-23	78	10-13-20
FB-18-5.0	09-328-25	12	10-13-20
FB-18-8.0	09-328-26	81	10-13-20



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



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 methods 8260 & 8270, 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.

Ζ-

ND - Not Detected at PQL PQL - Practical Quantitation Limit RPD - Relative Percent Difference



Introduction of the second participation of the second partitipation of the second participation of the second participation of	Reviewed/Date	Received	Relinquished	Received	Relinquished	Received	Relinquished	Signature	10 FB-13-1.0	9 13-12-9.0	8 FB-12-5.0	7 18-12-1,0	6 FB-11- 8,0	5 FB-11-5.6	4 FB-11-1.0	3 FB-10-8,5	2 FB-10-3.0	1 18-10-1.0	Lab ID Sample Identification	Environmental Inc. Analytical Laboratory Testing Services 1464 NE 95th Street · Redmond, WA 88052 Phone: (425) 883-3881 · www.onsite-env.com Company: Foject Number: 650-03/ Project Name: 650-03/ Project Name: 650-03/ Project Name: 650-03/ Project Name: 650-03/ Project Name: 650-03/ Project Name: 650-03/ Project Name: 750-03/ Project Name: 750
Image: Standard Io Z1 Zo22 - P3 (S1) Image: Standard Io Z1 Zo22 - P3 (S1)	Reviewed/Date					A QR	Tanallas	Company	M N 8101 M	1, 1003 1,	1000	0953	0950	0945	0943	0935	0930	0925	Time Sampled Matrix	Iurnaro (in wo (Che Same Day 2 Days 2 Days 2 Days 2 TPH anali (TPH anali
On Semivolatiles 8270D/SIM (with low-level PAHs) 09 328 Data Package: Total Package: Standard PCBs 8082A 07ganophosphorus Pesticides 8081B 07ganophosphorus Pesticides 8081B 07ganophosphorus Pesticides 8270D/SIM Nith final report Image: Standard Image: Image: Standard Image: Image: Standard Image: Image: Standard						9/2d to 1553						-						×	NWT NWT NWT Volati	iles 8260C CLEANUP Z
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Reviewed/Date	Received	Relinquished	Received	Relinquished	Received	Relinquished		20 FB-16-7.5	19 FB-16-3.0	S FB-16-1.0	7 FB-15-8.0	6 FB-15-40	5 F13-15-1.0	4 FB - A - 5.0	3 FB-14-1,0	12 FB-13-6.0	FB-13-3.0	Lab ID Sample Identification	Phone: (425) 883-3881 * www.onsite-env.com Company: Project Number: 50-031 Project Name: 7 Rompson Field Project Manager: SJWR	Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052	Environmental Inc
Reviewed/Date					Jen , Car	Faraller	Company	W 1145 W W	, 1140	1135	8011	1125	1120	1037	1030	1 1024	9-30-20 1020 56:1 1	Date Time Sampled Sampled Matrix	(Check One) Same Day 1 Day 2 Days 3 Days (TPH analysis 5 Days) (TPH analysis 5 Days) (other)	Turnaround Request (In working days)	Chain of Custody
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Reviewed/Date	Received	Relinquished	Received	Relinquished	Received	Relinquished	Signature	30 FB-20-10	29 FB-19-7.5	28 FB-A-40	27 FB-19-1.0	26 FB-18-8.0	25 FB-18-50	JM FB-18-1.0	23 FB-17- 8.0	22 FB-17-5.0	21 FB-17-1.0	Lab ID Sample Identification	Company: Project Number: BSO - 031 Project Name: Thompson Field Project Manager: Smbled by: SMB	Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052 Phone: (425) 883-3881 • www.onsite-env.com	Environmental Inc.
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Reviewed/Date	Received	Relinquished	Received	Relinquished	Received	Relinquished	Signature	39 FB-22-8,0	38 FB-22 - 40	37 FB-22-10	36 FB-21-9.0	35 F13-21-5.0	34 FB-21-1.3	33 FB-21-1.0	32 FB-20-80	31 FB-20-5.0	Lab 10 Sample Identification	Company: Froject Number: Project Nume: 650 - 031 Project Name: Namp San Field Project Manager: Sampled by: Sampled	Analytical Laboratory Testing Services 14648 NE 95th Street - Redmond, WA 98052	Environmental Inc.
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October 19, 2020

Cliff Schmitt Farallon Consulting, LLC 975 5th Avenue NW Issaquah, WA 98027

Re: Analytical Data for Project 650-031 Laboratory Reference No. 2010-012

Dear Cliff:

Enclosed are the analytical results and associated quality control data for samples submitted on October 1, 2020.

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,

David Baumeister Project Manager

Enclosures



Date of Report: October 19, 2020 Samples Submitted: October 1, 2020 Laboratory Reference: 2010-012 Project: 650-031

Case Narrative

Samples were collected on October 1, 2020 and received by the laboratory on October 1, 2020. 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.



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

DIESEL AND HEAVY OIL RANGE ORGANICS NWTPH-Dx

Matrix: Soil Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-26-5.0			•		
Laboratory ID:	10-012-13					
Diesel Range Organics	ND	56	NWTPH-Dx	10-7-20	10-7-20	
Lube Oil Range Organics	310	110	NWTPH-Dx	10-7-20	10-7-20	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	86	50-150				
Client ID:	FB-26-5.0					
Laboratory ID:	10-012-13					
Diesel Range Organics	ND	56	NWTPH-Dx	10-7-20	10-7-20	X1
Lube Oil Range Organics	ND	110	NWTPH-Dx	10-7-20	10-7-20	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	90	50-150				
Client ID:	FMW-05-1.0					
Laboratory ID:	10-012-18					
Diesel Range Organics	ND	30	NWTPH-Dx	10-7-20	10-7-20	
Lube Oil	210	61	NWTPH-Dx	10-7-20	10-7-20	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	101	50-150				
Client ID:	FMW-05-1.0					
Laboratory ID:	10-012-18					
Diesel Range Organics	ND	30	NWTPH-Dx	10-7-20	10-7-20	X1
Lube Oil	120	61	NWTPH-Dx	10-7-20	10-7-20	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	110	50-150				
Client ID:	FMW-06-5.0					
Laboratory ID:	10-012-22					
Diesel Range Organics	ND	81	NWTPH-Dx	10-7-20	10-7-20	
Lube Oil Range Organics	300	160	NWTPH-Dx	10-7-20	10-7-20	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	80	50-150				
Client ID:	FMW-06-5.0					
Laboratory ID:	10-012-22					
Diesel Range Organics	ND	81	NWTPH-Dx	10-7-20	10-7-20	X1
Lube Oil Range Organics	ND	160	NWTPH-Dx	10-7-20	10-7-20	X1
Surrogate:	Percent Recovery	Control Limits		10120	10120	7.1
o-Terphenyl	87	50-150				



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

3

DIESEL AND HEAVY OIL RANGE ORGANICS NWTPH-Dx

Matrix: Soil Units: mg/Kg (ppm)

onito. ing/itg (ppin)				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-07-1.0					
Laboratory ID:	10-012-24					
Diesel Range Organics	ND	28	NWTPH-Dx	10-7-20	10-7-20	
Lube Oil Range Organics	ND	57	NWTPH-Dx	10-7-20	10-7-20	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	90	50-150				
Client ID:	FMW-07-1.0					
Laboratory ID:	10-012-24					
Diesel Range Organics	ND	28	NWTPH-Dx	10-7-20	10-7-20	X1

Diesel Range Organics	ND	28	NWTPH-Dx	10-7-20	10-7-20	X1
Lube Oil Range Organics	ND	57	NWTPH-Dx	10-7-20	10-7-20	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	111	50-150				



4

DIESEL AND HEAVY OIL RANGE ORGANICS NWTPH-Dx QUALITY CONTROL

Matrix: Soil Units: mg/Kg (ppm)

Analyte		Result		PQL	Me	ethod	Date Prepared	Date Analyz		Flags
METHOD BLANK							•			<u> </u>
Laboratory ID:		MB1007S1								
Diesel Range Organics		ND		25	NWT	PH-Dx	10-7-20	10-7-2	20	
Lube Oil Range Organic	cs	ND		50	NWT	PH-Dx	10-7-20	10-7-2	20	
Surrogate:	Per	rcent Recovery	Cor	ntrol Limit	S					
o-Terphenyl		101		50-150						
Laboratory ID:		MB1007S1								
Diesel Range Organics		ND		25	NWT	PH-Dx	10-7-20	10-7-2	20	X1
Lube Oil Range Organic	S	ND		50	NWT	PH-Dx	10-7-20	10-7-2	20	X1
Surrogate:	Per	rcent Recovery	Cor	ntrol Limit	s					
o-Terphenyl		111		50-150						
					Source	Percen	t Recovery		RPD	
Analyte	Res	sult	Spike	e Level	Result	Recove	· · · · · · · · · · · · · · · · · · ·	RPD	Limit	Flags
DUPLICATE			•				2			
Laboratory ID:	SB10	07S1								
	ORIG	DUP								
Diesel Fuel #2	102	90.0	NA	NA		NA	NA	13	NA	
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	
Surrogate:										
o-Terphenyl						108 1	02 50-150			
Laboratory ID:	SB10	07S1								
	ORIG	DUP								
Diesel Fuel #2	130	122	NA	NA		NA	NA	6	NA	X1
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	X1
Surrogate:										
– <i>[°], ,</i>										

o-Terphenyl

131 125 50-150



Matrix: Soil Units: mg/Kg

Analyte Result PQL Method Prepared Analyzed Client ID: FB-24-3.0 10-012-05 10-012-05 10-7-20 10-7-20 Naphthalene 0.16 0.038 EPA 8270E/SIM 10-7-20 10-7-20 2-Methylnaphthalene 0.12 0.038 EPA 8270E/SIM 10-7-20 10-7-20 1-Methylnaphthalene 0.078 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthene 0.13 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthene 0.13 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Fluorene 0.26 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Phenanthrene 0.78 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Phenanthrene 0.12 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Phenanthrene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Pyrene 0.37 0.038 EPA 8270E/SIM		Date	Date				0 0
Laboratory ID: 10-012-05 Naphthalene 0.16 0.038 EPA 8270E/SIM 10-7-20 10-7-20 2-Methylnaphthalene 0.12 0.038 EPA 8270E/SIM 10-7-20 10-7-20 1-Methylnaphthalene 0.078 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthylene ND 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthene 0.13 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Fluorene 0.26 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Phenanthrene 0.78 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Anthracene 0.12 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Pyrene 0.37 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Pyrene 0.37 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]anthracene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[b]fluoranthe	Flags	Analyzed	Prepared	Method	PQL	Result	Analyte
Naphthalene 0.16 0.038 EPA 8270E/SIM 10-7-20 10-7-20 2-Methylnaphthalene 0.12 0.038 EPA 8270E/SIM 10-7-20 10-7-20 1-Methylnaphthalene 0.078 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthylene ND 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthene 0.13 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthene 0.26 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Fluorene 0.26 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Phenanthrene 0.78 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Anthracene 0.12 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Fluoranthene 0.40 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Pyrene 0.37 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]anthracene 0.14 0.038 EPA 8270E/SIM </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>FB-24-3.0</td> <td>Client ID:</td>						FB-24-3.0	Client ID:
2-Methylnaphthalene 0.12 0.038 EPA 8270E/SIM 10-7-20 10-7-20 1-Methylnaphthalene 0.078 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthylene ND 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthene 0.13 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Fluorene 0.26 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Phenanthrene 0.78 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Anthracene 0.12 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Fluoranthene 0.40 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Pyrene 0.37 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]anthracene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Chrysene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[b]fluoranthene 0.048 0.038 EPA 8270E						10-012-05	Laboratory ID:
1-Methylnaphthalene 0.078 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthylene ND 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthene 0.13 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Fluorene 0.26 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Phenanthrene 0.78 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Anthracene 0.12 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Fluoranthene 0.40 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Pyrene 0.37 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]anthracene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Chrysene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[b]fluoranthene 0.15 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[b]fluoranthene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]pyrene 0.14		10-7-20	10-7-20	EPA 8270E/SIM	0.038	0.16	Naphthalene
Acenaphthylene ND 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Acenaphthene 0.13 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Fluorene 0.26 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Phenanthrene 0.78 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Anthracene 0.12 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Fluoranthene 0.40 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Fluoranthene 0.40 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Pyrene 0.37 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]anthracene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Chrysene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[b]fluoranthene 0.048 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]pyrene 0.14 0.038 EPA 8270E/SIM		10-7-20	10-7-20	EPA 8270E/SIM	0.038	0.12	2-Methylnaphthalene
Acenaphthene 0.13 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Fluorene 0.26 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Phenanthrene 0.78 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Anthracene 0.12 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Fluoranthene 0.40 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Fluoranthene 0.40 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Pyrene 0.37 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]anthracene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Chrysene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]anthracene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[j,k]fluoranthene 0.048 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]apyrene 0.14 0.038 EPA 8270E/SIM		10-7-20	10-7-20	EPA 8270E/SIM	0.038	0.078	1-Methylnaphthalene
Fluorene 0.26 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Phenanthrene 0.78 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Anthracene 0.12 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Fluoranthene 0.40 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Fluoranthene 0.40 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Pyrene 0.37 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]anthracene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Chrysene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]anthracene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[j,k)fluoranthene 0.15 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]pyrene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Indeno(1,2,3-c,d)pyrene 0.075 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Dibenz[a,h]anthracene ND		10-7-20	10-7-20	EPA 8270E/SIM	0.038	ND	Acenaphthylene
Phenanthrene0.780.038EPA 8270E/SIM10-7-2010-7-20Anthracene0.120.038EPA 8270E/SIM10-7-2010-7-20Fluoranthene0.400.038EPA 8270E/SIM10-7-2010-7-20Pyrene0.370.038EPA 8270E/SIM10-7-2010-7-20Benzo[a]anthracene0.140.038EPA 8270E/SIM10-7-2010-7-20Chrysene0.140.038EPA 8270E/SIM10-7-2010-7-20Benzo[b]fluoranthene0.150.038EPA 8270E/SIM10-7-2010-7-20Benzo[j,k)fluoranthene0.0480.038EPA 8270E/SIM10-7-2010-7-20Benzo[a]pyrene0.140.038EPA 8270E/SIM10-7-2010-7-20Benzo[a]pyrene0.140.038EPA 8270E/SIM10-7-2010-7-20Indeno(1,2,3-c,d)pyrene0.0750.038EPA 8270E/SIM10-7-2010-7-20Dibenz[a,h]anthraceneND0.038EPA 8270E/SIM10-7-2010-7-20Benzo[g,h,i]perylene0.0880.038EPA 8270E/SIM10-7-2010-7-20Surrogate:Percent RecoveryControl Limits2-Fluorobiphenyl5146 - 113		10-7-20	10-7-20	EPA 8270E/SIM	0.038	0.13	Acenaphthene
Anthracene 0.12 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Fluoranthene 0.40 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Pyrene 0.37 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]anthracene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Chrysene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[b]fluoranthene 0.15 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[b]fluoranthene 0.15 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]pyrene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]pyrene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]pyrene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Indeno(1,2,3-c,d)pyrene 0.075 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Dibenz[a,h]anthracene ND 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[g,h,i]perylene <td></td> <td>10-7-20</td> <td>10-7-20</td> <td>EPA 8270E/SIM</td> <td>0.038</td> <td>0.26</td> <td>Fluorene</td>		10-7-20	10-7-20	EPA 8270E/SIM	0.038	0.26	Fluorene
Fluoranthene 0.40 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Pyrene 0.37 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]anthracene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Chrysene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[b]fluoranthene 0.15 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[j,k)fluoranthene 0.15 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[j,k)fluoranthene 0.048 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]pyrene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Indeno(1,2,3-c,d)pyrene 0.075 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Dibenz[a,h]anthracene ND 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[g,h,i]perylene 0.088 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[g,h,i]perylene 0.088		10-7-20	10-7-20	EPA 8270E/SIM	0.038	0.78	Phenanthrene
Pyrene 0.37 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]anthracene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Chrysene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[b]fluoranthene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[b]fluoranthene 0.15 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[j,k)fluoranthene 0.048 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]pyrene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Indeno(1,2,3-c,d)pyrene 0.075 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Dibenz[a,h]anthracene ND 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[g,h,i]perylene 0.088 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Surrogate: Percent Recovery Control Limits 2-Fluorobiphenyl 51 46 - 113		10-7-20	10-7-20	EPA 8270E/SIM	0.038	0.12	Anthracene
Benzo[a]anthracene0.140.038EPA 8270E/SIM10-7-2010-7-20Chrysene0.140.038EPA 8270E/SIM10-7-2010-7-20Benzo[b]fluoranthene0.150.038EPA 8270E/SIM10-7-2010-7-20Benzo(j,k)fluoranthene0.0480.038EPA 8270E/SIM10-7-2010-7-20Benzo[a]pyrene0.140.038EPA 8270E/SIM10-7-2010-7-20Indeno(1,2,3-c,d)pyrene0.0750.038EPA 8270E/SIM10-7-2010-7-20Dibenz[a,h]anthraceneND0.038EPA 8270E/SIM10-7-2010-7-20Benzo[g,h,i]perylene0.0880.038EPA 8270E/SIM10-7-2010-7-20Surrogate:Percent RecoveryControl Limits2-Fluorobiphenyl5146 - 113		10-7-20	10-7-20	EPA 8270E/SIM	0.038	0.40	Fluoranthene
Chrysene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[b]fluoranthene 0.15 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[j,k)fluoranthene 0.048 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]pyrene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]pyrene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Indeno(1,2,3-c,d)pyrene 0.075 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Dibenz[a,h]anthracene ND 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[g,h,i]perylene 0.088 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[g,h,i]perylene 0.088 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Surrogate: Percent Recovery Control Limits 2-Fluorobiphenyl 51 46 - 113		10-7-20	10-7-20	EPA 8270E/SIM	0.038	0.37	Pyrene
Benzo[b]fluoranthene 0.15 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[j,k)fluoranthene 0.048 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]pyrene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Indeno(1,2,3-c,d)pyrene 0.075 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Dibenz[a,h]anthracene ND 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[g,h,i]perylene 0.088 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[g,h,i]perylene 0.088 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Surrogate: Percent Recovery Control Limits 2-Fluorobiphenyl 51 46 - 113		10-7-20	10-7-20	EPA 8270E/SIM	0.038	0.14	Benzo[a]anthracene
Benzo(j,k)fluoranthene 0.048 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[a]pyrene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Indeno(1,2,3-c,d)pyrene 0.075 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Dibenz[a,h]anthracene ND 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[g,h,i]perylene 0.088 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Surrogate: Percent Recovery Control Limits 2-Fluorobiphenyl 51 46 - 113		10-7-20	10-7-20	EPA 8270E/SIM	0.038	0.14	Chrysene
Benzo[a]pyrene 0.14 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Indeno(1,2,3-c,d)pyrene 0.075 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Dibenz[a,h]anthracene ND 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[g,h,i]perylene 0.088 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Surrogate: Percent Recovery Control Limits 2-Fluorobiphenyl 51 46 - 113		10-7-20	10-7-20	EPA 8270E/SIM	0.038	0.15	Benzo[b]fluoranthene
Indeno(1,2,3-c,d)pyrene 0.075 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Dibenz[a,h]anthracene ND 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[g,h,i]perylene 0.088 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Surrogate: Percent Recovery Control Limits 2-Fluorobiphenyl 51 46 - 113		10-7-20	10-7-20	EPA 8270E/SIM	0.038	0.048	Benzo(j,k)fluoranthene
Dibenz[a,h]anthracene ND 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Benzo[g,h,i]perylene 0.088 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Surrogate: Percent Recovery Control Limits 2-Fluorobiphenyl 51 46 - 113 46 - 113		10-7-20	10-7-20	EPA 8270E/SIM	0.038	0.14	Benzo[a]pyrene
Benzo[g,h,i]perylene 0.088 0.038 EPA 8270E/SIM 10-7-20 10-7-20 Surrogate: Percent Recovery Control Limits 2-Fluorobiphenyl 51 46 - 113 46 - 113		10-7-20	10-7-20	EPA 8270E/SIM	0.038	0.075	Indeno(1,2,3-c,d)pyrene
Surrogate:Percent RecoveryControl Limits2-Fluorobiphenyl5146 - 113		10-7-20	10-7-20	EPA 8270E/SIM	0.038	ND	Dibenz[a,h]anthracene
Surrogate:Percent RecoveryControl Limits2-Fluorobiphenyl5146 - 113		10-7-20	10-7-20	EPA 8270E/SIM	0.038	0.088	Benzo[g,h,i]perylene
					Control Limits	Percent Recovery	
					46 - 113	51	2-Fluorobiphenyl
Pyrene-d10 64 45 - 114					45 - 114	64	Pyrene-d10
Terphenyl-d14 56 49 - 121					49 - 121	56	Terphenyl-d14



Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-24-6.0					
Laboratory ID:	10-012-06					
Naphthalene	0.017	0.015	EPA 8270E/SIM	10-7-20	10-8-20	
2-Methylnaphthalene	ND	0.015	EPA 8270E/SIM	10-7-20	10-8-20	
1-Methylnaphthalene	ND	0.015	EPA 8270E/SIM	10-7-20	10-8-20	
Acenaphthylene	ND	0.015	EPA 8270E/SIM	10-7-20	10-8-20	
Acenaphthene	ND	0.015	EPA 8270E/SIM	10-7-20	10-8-20	
Fluorene	ND	0.015	EPA 8270E/SIM	10-7-20	10-8-20	
Phenanthrene	ND	0.015	EPA 8270E/SIM	10-7-20	10-8-20	
Anthracene	ND	0.015	EPA 8270E/SIM	10-7-20	10-8-20	
Fluoranthene	ND	0.015	EPA 8270E/SIM	10-7-20	10-8-20	
Pyrene	ND	0.015	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo[a]anthracene	ND	0.015	EPA 8270E/SIM	10-7-20	10-8-20	
Chrysene	ND	0.015	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo[b]fluoranthene	ND	0.015	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo(j,k)fluoranthene	ND	0.015	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo[a]pyrene	ND	0.015	EPA 8270E/SIM	10-7-20	10-8-20	
Indeno(1,2,3-c,d)pyrene	ND	0.015	EPA 8270E/SIM	10-7-20	10-8-20	
Dibenz[a,h]anthracene	ND	0.015	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo[g,h,i]perylene	ND	0.015	EPA 8270E/SIM	10-7-20	10-8-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	53	46 - 113				
Pyrene-d10	56	45 - 114				
Terphenyl-d14	61	49 - 121				



Matrix: Soil Units: mg/Kg

5 5				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-25-1.0					
Laboratory ID:	10-012-08					
Naphthalene	ND	0.0073	EPA 8270E/SIM	10-7-20	10-8-20	
2-Methylnaphthalene	ND	0.0073	EPA 8270E/SIM	10-7-20	10-8-20	
1-Methylnaphthalene	ND	0.0073	EPA 8270E/SIM	10-7-20	10-8-20	
Acenaphthylene	ND	0.0073	EPA 8270E/SIM	10-7-20	10-8-20	
Acenaphthene	ND	0.0073	EPA 8270E/SIM	10-7-20	10-8-20	
Fluorene	ND	0.0073	EPA 8270E/SIM	10-7-20	10-8-20	
Phenanthrene	ND	0.0073	EPA 8270E/SIM	10-7-20	10-8-20	
Anthracene	ND	0.0073	EPA 8270E/SIM	10-7-20	10-8-20	
Fluoranthene	0.0086	0.0073	EPA 8270E/SIM	10-7-20	10-8-20	
Pyrene	0.0084	0.0073	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo[a]anthracene	ND	0.0073	EPA 8270E/SIM	10-7-20	10-8-20	
Chrysene	ND	0.0073	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo[b]fluoranthene	ND	0.0073	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo(j,k)fluoranthene	ND	0.0073	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo[a]pyrene	ND	0.0073	EPA 8270E/SIM	10-7-20	10-8-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0073	EPA 8270E/SIM	10-7-20	10-8-20	
Dibenz[a,h]anthracene	ND	0.0073	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo[g,h,i]perylene	ND	0.0073	EPA 8270E/SIM	10-7-20	10-8-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	58	46 - 113				
Pyrene-d10	71	45 - 114				
Terphenyl-d14	68	49 - 121				

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Matrix: Soil Units: mg/Kg

0 0				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-25-3.0					
Laboratory ID:	10-012-09					
Naphthalene	0.24	0.0075	EPA 8270E/SIM	10-7-20	10-8-20	
2-Methylnaphthalene	0.052	0.0075	EPA 8270E/SIM	10-7-20	10-8-20	
1-Methylnaphthalene	0.041	0.0075	EPA 8270E/SIM	10-7-20	10-8-20	
Acenaphthylene	ND	0.0075	EPA 8270E/SIM	10-7-20	10-8-20	
Acenaphthene	0.050	0.0075	EPA 8270E/SIM	10-7-20	10-8-20	
Fluorene	0.047	0.0075	EPA 8270E/SIM	10-7-20	10-8-20	
Phenanthrene	0.21	0.0075	EPA 8270E/SIM	10-7-20	10-8-20	
Anthracene	0.037	0.0075	EPA 8270E/SIM	10-7-20	10-8-20	
Fluoranthene	0.20	0.0075	EPA 8270E/SIM	10-7-20	10-8-20	
Pyrene	0.17	0.0075	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo[a]anthracene	0.069	0.0075	EPA 8270E/SIM	10-7-20	10-8-20	
Chrysene	0.069	0.0075	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo[b]fluoranthene	0.059	0.0075	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo(j,k)fluoranthene	0.023	0.0075	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo[a]pyrene	0.053	0.0075	EPA 8270E/SIM	10-7-20	10-8-20	
Indeno(1,2,3-c,d)pyrene	0.028	0.0075	EPA 8270E/SIM	10-7-20	10-8-20	
Dibenz[a,h]anthracene	ND	0.0075	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo[g,h,i]perylene	0.031	0.0075	EPA 8270E/SIM	10-7-20	10-8-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	59	46 - 113				
Pyrene-d10	67	45 - 114				
Terphenyl-d14	66	49 - 121				



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Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-25-7.5					
Laboratory ID:	10-012-10					
Naphthalene	ND	0.0090	EPA 8270E/SIM	10-7-20	10-8-20	
2-Methylnaphthalene	ND	0.0090	EPA 8270E/SIM	10-7-20	10-8-20	
1-Methylnaphthalene	ND	0.0090	EPA 8270E/SIM	10-7-20	10-8-20	
Acenaphthylene	ND	0.0090	EPA 8270E/SIM	10-7-20	10-8-20	
Acenaphthene	ND	0.0090	EPA 8270E/SIM	10-7-20	10-8-20	
Fluorene	ND	0.0090	EPA 8270E/SIM	10-7-20	10-8-20	
Phenanthrene	ND	0.0090	EPA 8270E/SIM	10-7-20	10-8-20	
Anthracene	ND	0.0090	EPA 8270E/SIM	10-7-20	10-8-20	
Fluoranthene	ND	0.0090	EPA 8270E/SIM	10-7-20	10-8-20	
Pyrene	ND	0.0090	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo[a]anthracene	ND	0.0090	EPA 8270E/SIM	10-7-20	10-8-20	
Chrysene	ND	0.0090	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo[b]fluoranthene	ND	0.0090	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo(j,k)fluoranthene	ND	0.0090	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo[a]pyrene	ND	0.0090	EPA 8270E/SIM	10-7-20	10-8-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0090	EPA 8270E/SIM	10-7-20	10-8-20	
Dibenz[a,h]anthracene	ND	0.0090	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo[g,h,i]perylene	ND	0.0090	EPA 8270E/SIM	10-7-20	10-8-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	60	46 - 113				
Pyrene-d10	67	45 - 114				
Terphenyl-d14	67	49 - 121				



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.

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Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-27-1.0					
Laboratory ID:	10-012-15					
Naphthalene	ND	0.0071	EPA 8270E/SIM	10-7-20	10-8-20	
2-Methylnaphthalene	ND	0.0071	EPA 8270E/SIM	10-7-20	10-8-20	
1-Methylnaphthalene	ND	0.0071	EPA 8270E/SIM	10-7-20	10-8-20	
Acenaphthylene	ND	0.0071	EPA 8270E/SIM	10-7-20	10-8-20	
Acenaphthene	ND	0.0071	EPA 8270E/SIM	10-7-20	10-8-20	
Fluorene	ND	0.0071	EPA 8270E/SIM	10-7-20	10-8-20	
Phenanthrene	0.042	0.0071	EPA 8270E/SIM	10-7-20	10-8-20	
Anthracene	0.0086	0.0071	EPA 8270E/SIM	10-7-20	10-8-20	
Fluoranthene	0.043	0.0071	EPA 8270E/SIM	10-7-20	10-8-20	
Pyrene	0.038	0.0071	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo[a]anthracene	0.017	0.0071	EPA 8270E/SIM	10-7-20	10-8-20	
Chrysene	0.017	0.0071	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo[b]fluoranthene	0.019	0.0071	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo(j,k)fluoranthene	0.0080	0.0071	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo[a]pyrene	0.016	0.0071	EPA 8270E/SIM	10-7-20	10-8-20	
Indeno(1,2,3-c,d)pyrene	0.010	0.0071	EPA 8270E/SIM	10-7-20	10-8-20	
Dibenz[a,h]anthracene	ND	0.0071	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo[g,h,i]perylene	0.011	0.0071	EPA 8270E/SIM	10-7-20	10-8-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	63	46 - 113				
Pyrene-d10	73	45 - 114				
Terphenyl-d14	69	49 - 121				



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Matrix: Soil Units: mg/Kg

5 5				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-27-5.0					
Laboratory ID:	10-012-16					
Naphthalene	ND	0.0074	EPA 8270E/SIM	10-7-20	10-8-20	
2-Methylnaphthalene	ND	0.0074	EPA 8270E/SIM	10-7-20	10-8-20	
1-Methylnaphthalene	ND	0.0074	EPA 8270E/SIM	10-7-20	10-8-20	
Acenaphthylene	ND	0.0074	EPA 8270E/SIM	10-7-20	10-8-20	
Acenaphthene	0.010	0.0074	EPA 8270E/SIM	10-7-20	10-8-20	
Fluorene	ND	0.0074	EPA 8270E/SIM	10-7-20	10-8-20	
Phenanthrene	0.064	0.0074	EPA 8270E/SIM	10-7-20	10-8-20	
Anthracene	0.021	0.0074	EPA 8270E/SIM	10-7-20	10-8-20	
Fluoranthene	0.079	0.0074	EPA 8270E/SIM	10-7-20	10-8-20	
Pyrene	0.083	0.0074	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo[a]anthracene	0.033	0.0074	EPA 8270E/SIM	10-7-20	10-8-20	
Chrysene	0.036	0.0074	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo[b]fluoranthene	0.028	0.0074	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo(j,k)fluoranthene	0.012	0.0074	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo[a]pyrene	0.026	0.0074	EPA 8270E/SIM	10-7-20	10-8-20	
Indeno(1,2,3-c,d)pyrene	0.013	0.0074	EPA 8270E/SIM	10-7-20	10-8-20	
Dibenz[a,h]anthracene	ND	0.0074	EPA 8270E/SIM	10-7-20	10-8-20	
Benzo[g,h,i]perylene	0.012	0.0074	EPA 8270E/SIM	10-7-20	10-8-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	56	46 - 113				
Pyrene-d10	72	45 - 114				
Terphenyl-d14	72	49 - 121				



ALA

Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1007S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Acenaphthylene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Acenaphthene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Fluorene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Phenanthrene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Anthracene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Fluoranthene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Pyrene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270E/SIM	10-7-20	10-7-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	57	46 - 113				
Pyrene-d10	72	45 - 114				
Terphenyl-d14	70	49 - 121				



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Matrix: Soil Units: mg/Kg

Onits. hig/kg					Source	Per	cent	Recovery		RPD	
Analyte	Re	sult	Spike	Level	Result	Rec	overy	Limits	RPD	Limit	Flags
MATRIX SPIKES											
Laboratory ID:	09-32	28-05									
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	0.0676	0.0562	0.0833	0.0833	ND	81	67	51 - 115	18	26	
Acenaphthylene	0.0589	0.0577	0.0833	0.0833	ND	71	69	53 - 121	2	24	
Acenaphthene	0.0687	0.0599	0.0833	0.0833	ND	82	72	52 - 121	14	25	
Fluorene	0.0600	0.0610	0.0833	0.0833	ND	72	73	58 - 127	2	23	
Phenanthrene	0.0551	0.0546	0.0833	0.0833	ND	66	66	46 - 129	1	28	
Anthracene	0.0596	0.0598	0.0833	0.0833	ND	72	72	57 - 124	0	21	
Fluoranthene	0.0597	0.0620	0.0833	0.0833	ND	72	74	46 - 136	4	29	
Pyrene	0.0625	0.0618	0.0833	0.0833	ND	75	74	41 - 136	1	32	
Benzo[a]anthracene	0.0607	0.0589	0.0833	0.0833	ND	73	71	56 - 136	3	25	
Chrysene	0.0568	0.0610	0.0833	0.0833	ND	68	73	49 - 130	7	22	
Benzo[b]fluoranthene	0.0574	0.0594	0.0833	0.0833	ND	69	71	51 - 135	3	26	
Benzo(j,k)fluoranthene	0.0577	0.0618	0.0833	0.0833	ND	69	74	56 - 124	7	23	
Benzo[a]pyrene	0.0591	0.0645	0.0833	0.0833	ND	71	77	54 - 133	9	26	
Indeno(1,2,3-c,d)pyrene	0.0543	0.0519	0.0833	0.0833	ND	65	62	52 - 134	5	20	
Dibenz[a,h]anthracene	0.0570	0.0570	0.0833	0.0833	ND	68	68	58 - 127	0	17	
Benzo[g,h,i]perylene	0.0570	0.0580	0.0833	0.0833	ND	68	70	54 - 129	2	21	
Surrogate:											
2-Fluorobiphenyl						58	57	46 - 113			
Pyrene-d10						68	70	45 - 114			
Terphenyl-d14						66	65	49 - 121			

TOTAL ARSENIC EPA 6010D

Matrix: Soil Units: mg/Kg (ppm)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-26-5.0					
Laboratory ID:	10-012-13					
Arsenic	ND	11	EPA 6010D	10-12-20	10-12-20	
Client ID:	FMW-05-1.0					
Laboratory ID:	10-012-18					
Arsenic	ND	12	EPA 6010D	10-12-20	10-12-20	
Client ID:	FMW-06-5.0					
Laboratory ID:	10-012-22					
Arsenic	ND	16	EPA 6010D	10-12-20	10-12-20	
Client ID:	FMW-07-1.0					
Laboratory ID:	10-012-24					
Arsenic	ND	11	EPA 6010D	10-12-20	10-12-20	



TOTAL ARSENIC EPA 6010D QUALITY CONTROL

Matrix: Soil Units: mg/Kg (ppm)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1012SM2					
Arsenic	ND	5.0	EPA 6010D	10-12-20	10-12-20	
				_		
			Source Percen	t Recoverv	RPD	

					Source	Pe	rcent	Recovery		RPD	
Analyte	Res	sult	Spike	e Level	Result	Red	covery	Limits	RPD	Limit	Flags
DUPLICATE											
Laboratory ID:	10-10	06-01									
	ORIG	DUP									
Arsenic	ND	ND	NA	NA			NA	NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	10-10	06-01									
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	93.2	96.3	100	100	ND	93	96	75-125	3	20	



Matrix: Soil Units: mg/Kg

0.0				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-23-1.0					
Laboratory ID:	10-012-01					
Naphthalene	ND	0.0077	EPA 8270E/SIM	10-13-20	10-16-20	
2-Methylnaphthalene	ND	0.0077	EPA 8270E/SIM	10-13-20	10-16-20	
1-Methylnaphthalene	ND	0.0077	EPA 8270E/SIM	10-13-20	10-16-20	
Acenaphthylene	ND	0.0077	EPA 8270E/SIM	10-13-20	10-16-20	
Acenaphthene	ND	0.0077	EPA 8270E/SIM	10-13-20	10-16-20	
Fluorene	ND	0.0077	EPA 8270E/SIM	10-13-20	10-16-20	
Phenanthrene	ND	0.0077	EPA 8270E/SIM	10-13-20	10-16-20	
Anthracene	ND	0.0077	EPA 8270E/SIM	10-13-20	10-16-20	
Fluoranthene	ND	0.0077	EPA 8270E/SIM	10-13-20	10-16-20	
Pyrene	ND	0.0077	EPA 8270E/SIM	10-13-20	10-16-20	
Benzo[a]anthracene	ND	0.0077	EPA 8270E/SIM	10-13-20	10-16-20	
Chrysene	ND	0.0077	EPA 8270E/SIM	10-13-20	10-16-20	
Benzo[b]fluoranthene	ND	0.0077	EPA 8270E/SIM	10-13-20	10-16-20	
Benzo(j,k)fluoranthene	ND	0.0077	EPA 8270E/SIM	10-13-20	10-16-20	
Benzo[a]pyrene	ND	0.0077	EPA 8270E/SIM	10-13-20	10-16-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0077	EPA 8270E/SIM	10-13-20	10-16-20	
Dibenz[a,h]anthracene	ND	0.0077	EPA 8270E/SIM	10-13-20	10-16-20	
Benzo[g,h,i]perylene	ND	0.0077	EPA 8270E/SIM	10-13-20	10-16-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	51	46 - 113				
Pyrene-d10	61	45 - 114				
Terphenyl-d14	58	49 - 121				



Matrix: Soil Units: mg/Kg

			Date	Date	
Result	PQL	Method	Prepared	Analyzed	Flags
MB1013S2					
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Percent Recovery	Control Limits				
60	46 - 113				
72	45 - 114				
67	40 121				
	MB1013S2 ND ND ND ND ND ND ND ND ND ND ND ND ND	MB1013S2 ND 0.0033 ND 0.003	MB1013S2 ND 0.0033 EPA 8270E/SIM ND </td <td>Result PQL Method Prepared MB1013S2 </td> <td>Result PQL Method Prepared Analyzed MB1013S2 ND 0.0033 EPA 8270E/SIM 10-13-20 10-15-20 ND 0.0033 EPA 8270E/SIM 10-13-20</td>	Result PQL Method Prepared MB1013S2	Result PQL Method Prepared Analyzed MB1013S2 ND 0.0033 EPA 8270E/SIM 10-13-20 10-15-20 ND 0.0033 EPA 8270E/SIM 10-13-20



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Matrix: Soil Units: mg/Kg

					Source	Per	cent	Recovery		RPD	
Analyte	Re	sult	Spike	Level	Result	Rec	overy	Limits	RPD	Limit	Flags
MATRIX SPIKES											
Laboratory ID:	10-13	37-04									
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	0.0496	0.0547	0.0833	0.0833	ND	60	66	51 - 115	10	26	
Acenaphthylene	0.0507	0.0557	0.0833	0.0833	ND	61	67	53 - 121	9	24	
Acenaphthene	0.0527	0.0562	0.0833	0.0833	ND	63	67	52 - 121	6	25	
Fluorene	0.0511	0.0553	0.0833	0.0833	ND	61	66	58 - 127	8	23	
Phenanthrene	0.0559	0.0591	0.0833	0.0833	ND	67	71	46 - 129	6	28	
Anthracene	0.0545	0.0555	0.0833	0.0833	ND	65	67	57 - 124	2	21	
Fluoranthene	0.0533	0.0557	0.0833	0.0833	ND	64	67	46 - 136	4	29	
Pyrene	0.0547	0.0558	0.0833	0.0833	ND	66	67	41 - 136	2	32	
Benzo[a]anthracene	0.0664	0.0672	0.0833	0.0833	ND	80	81	56 - 136	1	25	
Chrysene	0.0589	0.0596	0.0833	0.0833	ND	71	72	49 - 130	1	22	
Benzo[b]fluoranthene	0.0627	0.0576	0.0833	0.0833	ND	75	69	51 - 135	8	26	
Benzo(j,k)fluoranthene	0.0547	0.0585	0.0833	0.0833	ND	66	70	56 - 124	7	23	
Benzo[a]pyrene	0.0600	0.0601	0.0833	0.0833	ND	72	72	54 - 133	0	26	
Indeno(1,2,3-c,d)pyrene	0.0584	0.0594	0.0833	0.0833	ND	70	71	52 - 134	2	20	
Dibenz[a,h]anthracene	0.0555	0.0544	0.0833	0.0833	ND	67	65	58 - 127	2	17	
Benzo[g,h,i]perylene	0.0553	0.0556	0.0833	0.0833	ND	66	67	54 - 129	1	21	
Surrogate:											
2-Fluorobiphenyl						52	57	46 - 113			
Pyrene-d10						61	60	45 - 114			
Terphenyl-d14						63	61	49 - 121			

Date of Report: October 19, 2020 Samples Submitted: October 1, 2020 Laboratory Reference: 2010-012 Project: 650-031

% MOISTURE

			Date
Client ID	Lab ID	% Moisture	Analyzed
FB-23-1.0	10-012-01	14	10-13-20
FB-23-4.0	10-012-02	53	10-13-20
FB-24-3.0	10-012-05	11	10-7-20
FB-24-6.0	10-012-06	56	10-7-20
FB-25-1.0	10-012-08	9	10-7-20
FB-25-3.0	10-012-09	11	10-7-20
FB-25-7.5	10-012-10	26	10-7-20
FB-26-5.0	10-012-13	55	10-7-20
FB-27-1.0	10-012-15	6	10-7-20
FB-27-5.0	10-012-16	10	10-7-20
FMW-05-1.0	10-012-18	18	10-7-20
FMW-05-6.0	10-012-19	37	10-13-20
FMW-06-1.0	10-012-21	10	10-13-20
FMW-06-5.0	10-012-22	69	10-7-20
FMW-07-1.0	10-012-24	11	10-7-20
FMW-07-5.0	10-012-25	79	10-13-20



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



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 methods 8260 & 8270, 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.

Ζ-

ND - Not Detected at PQL PQL - Practical Quantitation Limit RPD - Relative Percent Difference



Reviewed/Date	Received	Relinquished	Received	Relinquished	Received	Relinquished	and the second second			8 FB-25-1	7 1-B-24-H.0	4 FB-24-6.0	5 FB-24-3,0	4 FB-24-1.0	3 FB-23-75	2 FB-23-4.0	1 FB-23-1.0	Lab ID S	Phone: (425) & Company: Facallon Project Number: Project Name: Thomp Project Manager: Sampled by: SMB	Analytical La 14648 NE	Enviro
				-V	Nautasilla	Mall	Signature	7.5	3.0	1.0	4.0	0	0	5	5	0		Sample Identification	Phone: (425) 883-3881 · www.onsite-env.com (caller) SO-0:31 hampson Field C. Schmitt SMB	Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052	OnSite Environmental Inc.
Reviewed/Date					in OX	Facilias	Company	V 1000	, 0951	0954	0937	0935	0430	0926	1 0915	0190	10/120 0905	Date Time Sampled Sampled	(Check One)	Turnaround Request (in working days)	Chain
te						2		V V									1 1:05	NWTF	v 3 Days Deer of Containers		in of Custody
					10/11/20 1534	1d1/20 153	Date Time				94R	5					J#16	NWTF NWTF Volatil	PH-Gx/BTEX PH-Gx PH-Dx (X Acid / SG Clean-up) WITH AND WITHOUT les 8260C enated Volatiles 8260C	Laboratory Number:	stody
	Data Package: \$	(2) Added 10/12)		X-Addrd	4 tal u	34 Hold al	Comments/Special Instructions	X	×	×		×	×			MC I	\otimes	Semiv (with I PAHs PCBs	EPA 8011 (Waters Only) /olatiles 8270D/SIM low-level PAHs) 8270D/SIM (low-level) 8082A nochlorine Pesticides 8081B	oer: 10 -	
1	Standard Level III	N	Some PAHS .	10/5/20	Sectal	11 sunntes	ial Instructions											Chlori Total I Total I	nophosphorus Pesticides 8270D/SIM inated Acid Herbicides 8151A RCRA Metals MTCA Metals	012	Page
	Level IV Adde	O-EXTERCT AND	H day TAT	20, 03	aralyses	, PM with		×	×	×	***	×	X				Me to	HEM	Oral ARSENIC DAY TURN		ge of
i,	Ca 10/12/20	素い			k			×		7	Mas	×	X			M	R	% Mo	isture		

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Reviewed/Date					0XC	Facelly	Company	120 4 4	1110	1105	1039	1033	1030	1018	1015	1010	201002 50:1 1	Time Sampled Matrix	Turnaround Request (in working days) (Check One) Same Day 1 Day 2 Days 3 Days Standard (7 Days) 3 Days Standard (7 Days) (TPH analysis 5 Days) (TPH analysis 5 Days) (other)
					4551 02/100	1/20 1534	Date Time	-		7					×			NWTP NWTP NWTP NWTP Volatil	PH-HCID PH-Gx/BTEX PH-Gx PH-Dx ([X Acid / SG Clean-up) WITH AND WITHOUT les 8260C genated Volatiles 8260C EPA 8011 (Waters Only)
Chromatograms with final report Electronic Data Deliverables (EDDs)	Data Package: Standard Level III Level IV						Comments/Special Instructions		×¢	×		×	*		×			(with I PAHs PCBs Organ Organ Chlori Total F Total N Total N TCLP	volatiles 8270D/SIM low-level PAHs) 8270D/SIM (low-level) 8 8082A nochlorine Pesticides 8081B nophosphorus Pesticides 8270D/SIM inated Acid Herbicides 8151A RCRA Metals MTCA Metals MTCA Metals Metals (oil and grease) 1664A
rables (EDDs)								1	**	X		× ×	××					<u>Ч</u> % Моі	DAY TAT

Reviewed/Date	Received	Relinquished	Received	Relinquished	Received Whenelland	Relinquished	Signature	Mart	Ch D	20 FMLV-07-14.0	25 FMW-07-5.0	24 FMLJ-07-1.0	23 FMW-06-A.O	V FMW-06-5.0	21 FML -06-1.0	Lab ID Sample Identification	Samples by SMR	Project Manager: C. Schmitt	Froject Multiple:	r	Phone: (425) 883-3881 • www.onsite-env.com	Environmental Inc.
Reviewed/Date					Ni, OSE	Forallen	Company			V 1424 V	1417	407	1320	1 1315	10/1/20 1310 50:1	Date Time Sampled Sampled Matrix	(other)	(TPH analysis 5 Days)	2 Days 3 Days	Same Day	(in working days)	Turnaround Renuest
					10/11/20 15 34	10/1/20 1534	Date Time					7		X		NWTP NWTP NWTP NWTP Volatil	PH-HCI PH-Gx/ PH-Gx PH-Dx (es 826 enated	BTEX)) ז קר גער ו	Laboratory Number:	
Chromatograms with final report Electronic Data Deliverables (EDDs)	Data Package: Standard Level III Level IV [,	Comments/Special Instructions				0	0		0	0	Semiv (with I PAHs PCBs Organ Organ Chlori Total I Total I Total I TCLP	olatiles ow-lev 8270D 8082A ochlor ophos nated / RCRA I MTCA I Metals	s 8270D/SIM el PAHs) /SIM (low-level) ine Pesticides 8 ohorus Pesticid Acid Herbicides Metals Metals	081B es 8270 8151A		210-01	2
liverables (EDDs)											0	7		×	0	% Moi		1- 1(22	~~ P			



October 22, 2020

Cliff Schmitt Farallon Consulting, LLC 975 5th Avenue NW Issaquah, WA 98027

Re: Analytical Data for Project 650-031 Laboratory Reference No. 2010-012B

Dear Cliff:

Enclosed are the analytical results and associated quality control data for samples submitted on October 1, 2020.

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,

David Baumeister Project Manager

Enclosures



Date of Report: October 22, 2020 Samples Submitted: October 1, 2020 Laboratory Reference: 2010-012B Project: 650-031

Case Narrative

Samples were collected on October 1, 2020 and received by the laboratory on October 1, 2020. 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.



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

Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-05-1.0					
Laboratory ID:	10-012-18					
Naphthalene	ND	0.0081	EPA 8270E/SIM	10-13-20	10-22-20	
2-Methylnaphthalene	ND	0.0081	EPA 8270E/SIM	10-13-20	10-22-20	
1-Methylnaphthalene	ND	0.0081	EPA 8270E/SIM	10-13-20	10-22-20	
Acenaphthylene	ND	0.0081	EPA 8270E/SIM	10-13-20	10-22-20	
Acenaphthene	ND	0.0081	EPA 8270E/SIM	10-13-20	10-22-20	
Fluorene	ND	0.0081	EPA 8270E/SIM	10-13-20	10-22-20	
Phenanthrene	ND	0.0081	EPA 8270E/SIM	10-13-20	10-22-20	
Anthracene	ND	0.0081	EPA 8270E/SIM	10-13-20	10-22-20	
Fluoranthene	ND	0.0081	EPA 8270E/SIM	10-13-20	10-22-20	
Pyrene	ND	0.0081	EPA 8270E/SIM	10-13-20	10-22-20	
Benzo[a]anthracene	ND	0.0081	EPA 8270E/SIM	10-13-20	10-22-20	
Chrysene	ND	0.0081	EPA 8270E/SIM	10-13-20	10-22-20	
Benzo[b]fluoranthene	ND	0.0081	EPA 8270E/SIM	10-13-20	10-22-20	
Benzo(j,k)fluoranthene	ND	0.0081	EPA 8270E/SIM	10-13-20	10-22-20	
Benzo[a]pyrene	ND	0.0081	EPA 8270E/SIM	10-13-20	10-22-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0081	EPA 8270E/SIM	10-13-20	10-22-20	
Dibenz[a,h]anthracene	ND	0.0081	EPA 8270E/SIM	10-13-20	10-22-20	
Benzo[g,h,i]perylene	ND	0.0081	EPA 8270E/SIM	10-13-20	10-22-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	84	46 - 113				
Pyrene-d10	90	45 - 114				
Terphenyl-d14	106	49 - 121				



3

Matrix: Soil Units: mg/Kg

5 5				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-05-6.0					
Laboratory ID:	10-012-19					
Naphthalene	0.029	0.011	EPA 8270E/SIM	10-13-20	10-22-20	
2-Methylnaphthalene	ND	0.011	EPA 8270E/SIM	10-13-20	10-22-20	
1-Methylnaphthalene	ND	0.011	EPA 8270E/SIM	10-13-20	10-22-20	
Acenaphthylene	ND	0.011	EPA 8270E/SIM	10-13-20	10-22-20	
Acenaphthene	ND	0.011	EPA 8270E/SIM	10-13-20	10-22-20	
Fluorene	ND	0.011	EPA 8270E/SIM	10-13-20	10-22-20	
Phenanthrene	0.018	0.011	EPA 8270E/SIM	10-13-20	10-22-20	
Anthracene	ND	0.011	EPA 8270E/SIM	10-13-20	10-22-20	
Fluoranthene	ND	0.011	EPA 8270E/SIM	10-13-20	10-22-20	
Pyrene	ND	0.011	EPA 8270E/SIM	10-13-20	10-22-20	
Benzo[a]anthracene	ND	0.011	EPA 8270E/SIM	10-13-20	10-22-20	
Chrysene	ND	0.011	EPA 8270E/SIM	10-13-20	10-22-20	
Benzo[b]fluoranthene	ND	0.011	EPA 8270E/SIM	10-13-20	10-22-20	
Benzo(j,k)fluoranthene	ND	0.011	EPA 8270E/SIM	10-13-20	10-22-20	
Benzo[a]pyrene	ND	0.011	EPA 8270E/SIM	10-13-20	10-22-20	
Indeno(1,2,3-c,d)pyrene	ND	0.011	EPA 8270E/SIM	10-13-20	10-22-20	
Dibenz[a,h]anthracene	ND	0.011	EPA 8270E/SIM	10-13-20	10-22-20	
Benzo[g,h,i]perylene	ND	0.011	EPA 8270E/SIM	10-13-20	10-22-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	74	46 - 113				
Pyrene-d10	80	45 - 114				
Terphenyl-d14	87	49 - 121				



Matrix: Soil Units: mg/Kg

5 5				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-06-1.0					
Laboratory ID:	10-012-21					
Naphthalene	ND	0.015	EPA 8270E/SIM	10-13-20	10-22-20	
2-Methylnaphthalene	ND	0.015	EPA 8270E/SIM	10-13-20	10-22-20	
1-Methylnaphthalene	ND	0.015	EPA 8270E/SIM	10-13-20	10-22-20	
Acenaphthylene	0.017	0.015	EPA 8270E/SIM	10-13-20	10-22-20	
Acenaphthene	ND	0.015	EPA 8270E/SIM	10-13-20	10-22-20	
Fluorene	ND	0.015	EPA 8270E/SIM	10-13-20	10-22-20	
Phenanthrene	ND	0.015	EPA 8270E/SIM	10-13-20	10-22-20	
Anthracene	0.026	0.015	EPA 8270E/SIM	10-13-20	10-22-20	
Fluoranthene	0.030	0.015	EPA 8270E/SIM	10-13-20	10-22-20	
Pyrene	0.029	0.015	EPA 8270E/SIM	10-13-20	10-22-20	
Benzo[a]anthracene	0.034	0.015	EPA 8270E/SIM	10-13-20	10-22-20	
Chrysene	0.075	0.015	EPA 8270E/SIM	10-13-20	10-22-20	
Benzo[b]fluoranthene	0.064	0.015	EPA 8270E/SIM	10-13-20	10-22-20	
Benzo(j,k)fluoranthene	0.017	0.015	EPA 8270E/SIM	10-13-20	10-22-20	
Benzo[a]pyrene	0.043	0.015	EPA 8270E/SIM	10-13-20	10-22-20	
Indeno(1,2,3-c,d)pyrene	0.044	0.015	EPA 8270E/SIM	10-13-20	10-22-20	
Dibenz[a,h]anthracene	ND	0.015	EPA 8270E/SIM	10-13-20	10-22-20	
Benzo[g,h,i]perylene	0.039	0.015	EPA 8270E/SIM	10-13-20	10-22-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	79	46 - 113				
Pyrene-d10	88	45 - 114				
Terphenyl-d14	91	49 - 121				



Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-06-5.0					
Laboratory ID:	10-012-22					
Naphthalene	ND	0.022	EPA 8270E/SIM	10-13-20	10-21-20	
2-Methylnaphthalene	ND	0.022	EPA 8270E/SIM	10-13-20	10-21-20	
1-Methylnaphthalene	ND	0.022	EPA 8270E/SIM	10-13-20	10-21-20	
Acenaphthylene	ND	0.022	EPA 8270E/SIM	10-13-20	10-21-20	
Acenaphthene	ND	0.022	EPA 8270E/SIM	10-13-20	10-21-20	
Fluorene	ND	0.022	EPA 8270E/SIM	10-13-20	10-21-20	
Phenanthrene	ND	0.022	EPA 8270E/SIM	10-13-20	10-21-20	
Anthracene	ND	0.022	EPA 8270E/SIM	10-13-20	10-21-20	
Fluoranthene	ND	0.022	EPA 8270E/SIM	10-13-20	10-21-20	
Pyrene	ND	0.022	EPA 8270E/SIM	10-13-20	10-21-20	
Benzo[a]anthracene	ND	0.022	EPA 8270E/SIM	10-13-20	10-21-20	
Chrysene	ND	0.022	EPA 8270E/SIM	10-13-20	10-21-20	
Benzo[b]fluoranthene	ND	0.022	EPA 8270E/SIM	10-13-20	10-21-20	
Benzo(j,k)fluoranthene	ND	0.022	EPA 8270E/SIM	10-13-20	10-21-20	
Benzo[a]pyrene	ND	0.022	EPA 8270E/SIM	10-13-20	10-21-20	
Indeno(1,2,3-c,d)pyrene	ND	0.022	EPA 8270E/SIM	10-13-20	10-21-20	
Dibenz[a,h]anthracene	ND	0.022	EPA 8270E/SIM	10-13-20	10-21-20	
Benzo[g,h,i]perylene	ND	0.022	EPA 8270E/SIM	10-13-20	10-21-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	81	46 - 113				
Pyrene-d10	85	45 - 114				
Terphenyl-d14	96	49 - 121				



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Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-07-1.0					
Laboratory ID:	10-012-24					
Naphthalene	ND	0.0075	EPA 8270E/SIM	10-13-20	10-21-20	
2-Methylnaphthalene	ND	0.0075	EPA 8270E/SIM	10-13-20	10-21-20	
1-Methylnaphthalene	ND	0.0075	EPA 8270E/SIM	10-13-20	10-21-20	
Acenaphthylene	ND	0.0075	EPA 8270E/SIM	10-13-20	10-21-20	
Acenaphthene	ND	0.0075	EPA 8270E/SIM	10-13-20	10-21-20	
Fluorene	ND	0.0075	EPA 8270E/SIM	10-13-20	10-21-20	
Phenanthrene	0.019	0.0075	EPA 8270E/SIM	10-13-20	10-21-20	
Anthracene	ND	0.0075	EPA 8270E/SIM	10-13-20	10-21-20	
Fluoranthene	0.021	0.0075	EPA 8270E/SIM	10-13-20	10-21-20	
Pyrene	0.021	0.0075	EPA 8270E/SIM	10-13-20	10-21-20	
Benzo[a]anthracene	0.012	0.0075	EPA 8270E/SIM	10-13-20	10-21-20	
Chrysene	0.012	0.0075	EPA 8270E/SIM	10-13-20	10-21-20	
Benzo[b]fluoranthene	0.015	0.0075	EPA 8270E/SIM	10-13-20	10-21-20	
Benzo(j,k)fluoranthene	ND	0.0075	EPA 8270E/SIM	10-13-20	10-21-20	
Benzo[a]pyrene	0.011	0.0075	EPA 8270E/SIM	10-13-20	10-21-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0075	EPA 8270E/SIM	10-13-20	10-21-20	
Dibenz[a,h]anthracene	ND	0.0075	EPA 8270E/SIM	10-13-20	10-21-20	
Benzo[g,h,i]perylene	ND	0.0075	EPA 8270E/SIM	10-13-20	10-21-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	81	46 - 113				
Pyrene-d10	75	45 - 114				
Terphenyl-d14	85	49 - 121				



Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-07-5.0					
Laboratory ID:	10-012-25					
Naphthalene	ND	0.031	EPA 8270E/SIM	10-13-20	10-21-20	
2-Methylnaphthalene	ND	0.031	EPA 8270E/SIM	10-13-20	10-21-20	
1-Methylnaphthalene	ND	0.031	EPA 8270E/SIM	10-13-20	10-21-20	
Acenaphthylene	ND	0.031	EPA 8270E/SIM	10-13-20	10-21-20	
Acenaphthene	ND	0.031	EPA 8270E/SIM	10-13-20	10-21-20	
Fluorene	ND	0.031	EPA 8270E/SIM	10-13-20	10-21-20	
Phenanthrene	ND	0.031	EPA 8270E/SIM	10-13-20	10-21-20	
Anthracene	ND	0.031	EPA 8270E/SIM	10-13-20	10-21-20	
Fluoranthene	ND	0.031	EPA 8270E/SIM	10-13-20	10-21-20	
Pyrene	ND	0.031	EPA 8270E/SIM	10-13-20	10-21-20	
Benzo[a]anthracene	ND	0.031	EPA 8270E/SIM	10-13-20	10-21-20	
Chrysene	ND	0.031	EPA 8270E/SIM	10-13-20	10-21-20	
Benzo[b]fluoranthene	ND	0.031	EPA 8270E/SIM	10-13-20	10-21-20	
Benzo(j,k)fluoranthene	ND	0.031	EPA 8270E/SIM	10-13-20	10-21-20	
Benzo[a]pyrene	ND	0.031	EPA 8270E/SIM	10-13-20	10-21-20	
Indeno(1,2,3-c,d)pyrene	ND	0.031	EPA 8270E/SIM	10-13-20	10-21-20	
Dibenz[a,h]anthracene	ND	0.031	EPA 8270E/SIM	10-13-20	10-21-20	
Benzo[g,h,i]perylene	ND	0.031	EPA 8270E/SIM	10-13-20	10-21-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	83	46 - 113				
Pyrene-d10	84	45 - 114				
Terphenyl-d14	92	49 - 121				



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PAHs EPA 8270E/SIM QUALITY CONTROL

Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1013S2					
Naphthalene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
2-Methylnaphthalene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
1-Methylnaphthalene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Acenaphthylene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Acenaphthene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Fluorene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Phenanthrene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Anthracene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Fluoranthene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Pyrene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[a]anthracene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Chrysene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[b]fluoranthene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo(j,k)fluoranthene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[a]pyrene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Dibenz[a,h]anthracene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Benzo[g,h,i]perylene	ND	0.0033	EPA 8270E/SIM	10-13-20	10-15-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	60	46 - 113				
Pyrene-d10	72	45 - 114				
Terphenyl-d14	67	49 - 121				



PAHs EPA 8270E/SIM QUALITY CONTROL

Matrix: Soil Units: mg/Kg

					Source	Per	cent	Recovery		RPD	
Analyte	Re	sult	Spike	Level	Result	Reco	overy	Limits	RPD	Limit	Flags
MATRIX SPIKES											
Laboratory ID:	10-13	37-04									
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	0.0496	0.0547	0.0833	0.0833	ND	60	66	51 - 115	10	26	
Acenaphthylene	0.0507	0.0557	0.0833	0.0833	ND	61	67	53 - 121	9	24	
Acenaphthene	0.0527	0.0562	0.0833	0.0833	ND	63	67	52 - 121	6	25	
Fluorene	0.0511	0.0553	0.0833	0.0833	ND	61	66	58 - 127	8	23	
Phenanthrene	0.0559	0.0591	0.0833	0.0833	ND	67	71	46 - 129	6	28	
Anthracene	0.0545	0.0555	0.0833	0.0833	ND	65	67	57 - 124	2	21	
Fluoranthene	0.0533	0.0557	0.0833	0.0833	ND	64	67	46 - 136	4	29	
Pyrene	0.0547	0.0558	0.0833	0.0833	ND	66	67	41 - 136	2	32	
Benzo[a]anthracene	0.0664	0.0672	0.0833	0.0833	ND	80	81	56 - 136	1	25	
Chrysene	0.0589	0.0596	0.0833	0.0833	ND	71	72	49 - 130	1	22	
Benzo[b]fluoranthene	0.0627	0.0576	0.0833	0.0833	ND	75	69	51 - 135	8	26	
Benzo(j,k)fluoranthene	0.0547	0.0585	0.0833	0.0833	ND	66	70	56 - 124	7	23	
Benzo[a]pyrene	0.0600	0.0601	0.0833	0.0833	ND	72	72	54 - 133	0	26	
Indeno(1,2,3-c,d)pyrene	0.0584	0.0594	0.0833	0.0833	ND	70	71	52 - 134	2	20	
Dibenz[a,h]anthracene	0.0555	0.0544	0.0833	0.0833	ND	67	65	58 - 127	2	17	
Benzo[g,h,i]perylene	0.0553	0.0556	0.0833	0.0833	ND	66	67	54 - 129	1	21	
Surrogate:											
2-Fluorobiphenyl						52	57	46 - 113			
Pyrene-d10						61	60	45 - 114			
Terphenyl-d14						63	61	49 - 121			

Date of Report: October 22, 2020 Samples Submitted: October 1, 2020 Laboratory Reference: 2010-012B Project: 650-031

% MOISTURE

			Date
Client ID	Lab ID	% Moisture	Analyzed
FMW-05-1.0	10-012-18	18	10-7-20
FMW-05-6.0	10-012-19	37	10-13-20
FMW-06-1.0	10-012-21	10	10-13-20
FMW-06-5.0	10-012-22	69	10-7-20
FMW-07-1.0	10-012-24	11	10-7-20
FMW-07-5.0	10-012-25	79	10-13-20



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



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 methods 8260 & 8270, 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.

Ζ-

ND - Not Detected at PQL PQL - Practical Quantitation Limit RPD - Relative Percent Difference



Reviewed/Date	Received	Relinquished	Received	Relinquished	Received	Relinquished	Signature	10 FB-25-75	9 FB-25-3.0	8 FB-25-1.0	7 1=B-24-H.0	4 FB-24-6.0	5 P8-24-3.0	4 FB-24-1.0	3 FB-23-25	2 FB-23-4.0	1 FB-23-1.0	Lab ID Sample Identification	Company: Froject Number: Project Number: BSCI-03 Project Name: Thompson F. Jo Project Manager: SMB	Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052
Reviewed/Date					WARSHIMAN OSE	all Faceller	Company	V 1000 V V	, 0951	0954	0937	0.635	0430	0926	1 0915	1 0910	10/1/20 0905 50:1 1	Date Time Sampled Sampled Matrix	WWW.onstre-env.com (Check One) Image: Check One of the constraints Image: Check One of the constraints Image: Check One of the constraints Image: Check One of the constraints Image: Check One of the constraints Image: Check One of the constraints Image: Check One of the constraints Image: Check One of the constraints Image: Check One of the constraints Image: Check One of the constraints Image: Check One of the constraints Image: Check One of the constraints Image: Check One of the constraints Image: Check One of the constraints	Ital Inc. Services Turnaround Request Laboratory
					10/11/20 1534	1/1/20 1534	Date Time				94k	<u> </u>					JWK 10	NWTF NWTF NWTF Volatil Halog	PH-HCID PH-Gx/BTEX PH-Gx PH-Dx (X Acid / SG Clean-up) אוד א אא אידאנאיד les 8260C enated Volatiles 8260C EPA 8011 (Waters Only)	Laboratory Number:
e with final ranort 🗍 Electronic Data De	Level IV	0-Exter	Some PAHS . 4 da	X-Added 10/5/2020, D2	tall w/ soled and ses	Hold all sumples, Put with	Comments/Special Instructions	×	×	× 	×***	×	× 				X	Semix (with I PAHs PCBs Organ Organ Chlori Total I Total I Total I TCLP	Interface and grease) 1664A	r: 10-012
					l	T		×		7	*	×	×			N.C.	R	% Moi	isture	

Reviewed/Date	Relinquished	Received	Relinquished	Received Mauliatoun	Relinquished	Signature	20 FMW-05-13.0	19 FMW-05-6.0	18 FMW-05-1.0	17 FB-770-11.0	14 FB-27-5.0	16 FB-27-1.0	14 153-26-8.0	13 FB-26-5.0	12 FB-26-1.0	11 FB-25-12.5	Lab ID Sample Identification	Environmental Inc. Analytical Laboratory Testing Services 14648 NE 96th Street • Redmond, WA 98052 Phone: (425) 883-3881 • www.onsite-env.com Company: Furallon Project Number: 650 - 031 Project Name: Thumpson Field Project Manager: C. Schmitt Sampled by: SMUS
Reviewed/Date				in one	Firelly	Company	V 1120 V V	1 110 /	1105	1039	1033	1630	1018	1015	1 1010	10/1201002 50:1 1	Date Time Sampled Sampled Matrix	Turnaround Request (in working days) (Check One) Same Day 2 Days 2 Days 3 Days (TPH analysis 5 Days) (TPH analysis 5 Days) (other)
				4251 02/100	1/20 1534	Date Time			7					×			NWTF NWTF NWTF Volatil Halog	PH-HCID PH-Gx/BTEX PH-Gx PH-Gx PH-Dx ([XAcid / SG Clean-up) WITTH AND WITHOUT les 8260C enated Volatiles 8260C EPA 8011 (Waters Only)
Data Package: Standard Level III Level IV Chromatograms with final report Flactonic Data Deliverables (EDDel						Comments/Special Instructions	100 No	*			×	*		×			(with I PAHs PCBs Organ Organ Chlori Total I Total I Total I TCLP	volatiles 8270D/SIM low-level PAHs) 8270D/SIM (low-level) 8082A nochlorine Pesticides 8081B nophosphorus Pesticides 8270D/SIM inated Acid Herbicides 8151A RCRA Metals MTCA Metals Metals (oil and grease) 1664A
liverables (EDDs)							1	**	X		X	××		X			4 % Moi	DAY TAT

Reviewed/Date	Received	Relinquished	Received	Relinquished	C	Relinquished	Signature	$\left(\right)$	- Mur	A.M.	24 FMLJ-07-40	15 FMW-07-5.0	24 FMW-07-1	23 FMW-06-A.O	22 FMW-06-5,0	21 FMW-06-1.0	Lab ID Sample Id	Sampled by: SMR	Company: Fullon Project Number: 650-03 Project Name: Thompson Project Manager: C. Schr	Analytical Laboratory Testing Services 14648 NE 95th Street - Redmonc	Environmental Inc.
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					10/11/20 15 34	10/120 1534	Date Time						· 、 、 、 、 、 、 、 、 、 、 、 、 、		×		Numb NWTP NWTP NWTP NWTP Volatili Halogu	H-HCIE H-Gx/E H-Gx H-Dx ((es 8260 enated	ontainers STEX Acid / SG Clean-up)	Laboratory Number:	Chain of Custody
	Data Package: Standard D Level III D Level IV					1	Comments/Special Instructions										Semiv (with II PAHs PCBs Organ Organ Chlori Total M Total M TCLP HEM (olatiles ow-leve 8270D/ 8082A ochlorir ophosp nated A RCRA N MTCA N Metals oil and	8270D/SIM el PAHs) SIM (low-level) ne Pesticides 8081B whorus Pesticides 8270D/SIM acid Herbicides 8151A Metals Metals grease) 1664A	10-012	Page 2 o
												0	7.		×	0	% Moi		AL ALSENIC		of



October 19, 2020

Cliff Schmitt Farallon Consulting, LLC 975 5th Avenue NW Issaquah, WA 98027

Re: Analytical Data for Project 650-031 Laboratory Reference No. 2010-111

Dear Cliff:

Enclosed are the analytical results and associated quality control data for samples submitted on October 9, 2020.

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,

David Baumeister Project Manager

Enclosures



Date of Report: October 19, 2020 Samples Submitted: October 9, 2020 Laboratory Reference: 2010-111 Project: 650-031

Case Narrative

Samples were collected on October 9, 2020 and received by the laboratory on October 9, 2020. 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.



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

Matrix: Water Units: ug/L

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-05-100920					
Laboratory ID:	10-111-01					
Naphthalene	ND	0.096	EPA 8270E/SIM	10-13-20	10-14-20	
2-Methylnaphthalene	ND	0.096	EPA 8270E/SIM	10-13-20	10-14-20	
1-Methylnaphthalene	ND	0.096	EPA 8270E/SIM	10-13-20	10-14-20	
Acenaphthylene	ND	0.096	EPA 8270E/SIM	10-13-20	10-14-20	
Acenaphthene	ND	0.096	EPA 8270E/SIM	10-13-20	10-14-20	
Fluorene	ND	0.096	EPA 8270E/SIM	10-13-20	10-14-20	
Phenanthrene	ND	0.096	EPA 8270E/SIM	10-13-20	10-14-20	
Anthracene	ND	0.096	EPA 8270E/SIM	10-13-20	10-14-20	
Fluoranthene	ND	0.096	EPA 8270E/SIM	10-13-20	10-14-20	
Pyrene	ND	0.096	EPA 8270E/SIM	10-13-20	10-14-20	
Benzo[a]anthracene	ND	0.0096	EPA 8270E/SIM	10-13-20	10-14-20	
Chrysene	ND	0.0096	EPA 8270E/SIM	10-13-20	10-14-20	
Benzo[b]fluoranthene	ND	0.0096	EPA 8270E/SIM	10-13-20	10-14-20	
Benzo(j,k)fluoranthene	ND	0.0096	EPA 8270E/SIM	10-13-20	10-14-20	
Benzo[a]pyrene	ND	0.0096	EPA 8270E/SIM	10-13-20	10-14-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0096	EPA 8270E/SIM	10-13-20	10-14-20	
Dibenz[a,h]anthracene	ND	0.0096	EPA 8270E/SIM	10-13-20	10-14-20	
Benzo[g,h,i]perylene	ND	0.0096	EPA 8270E/SIM	10-13-20	10-14-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	54	20 - 106				
Pyrene-d10	67	26 - 104				
Terphenyl-d14	65	44 - 127				



Matrix: Water Units: ug/L

-				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-07-100920					
Laboratory ID:	10-111-02					
Naphthalene	ND	0.096	EPA 8270E/SIM	10-13-20	10-14-20	
2-Methylnaphthalene	ND	0.096	EPA 8270E/SIM	10-13-20	10-14-20	
1-Methylnaphthalene	ND	0.096	EPA 8270E/SIM	10-13-20	10-14-20	
Acenaphthylene	ND	0.096	EPA 8270E/SIM	10-13-20	10-14-20	
Acenaphthene	ND	0.096	EPA 8270E/SIM	10-13-20	10-14-20	
Fluorene	ND	0.096	EPA 8270E/SIM	10-13-20	10-14-20	
Phenanthrene	ND	0.096	EPA 8270E/SIM	10-13-20	10-14-20	
Anthracene	ND	0.096	EPA 8270E/SIM	10-13-20	10-14-20	
Fluoranthene	ND	0.096	EPA 8270E/SIM	10-13-20	10-14-20	
Pyrene	ND	0.096	EPA 8270E/SIM	10-13-20	10-14-20	
Benzo[a]anthracene	ND	0.0096	EPA 8270E/SIM	10-13-20	10-14-20	
Chrysene	ND	0.0096	EPA 8270E/SIM	10-13-20	10-14-20	
Benzo[b]fluoranthene	ND	0.0096	EPA 8270E/SIM	10-13-20	10-14-20	
Benzo(j,k)fluoranthene	ND	0.0096	EPA 8270E/SIM	10-13-20	10-14-20	
Benzo[a]pyrene	ND	0.0096	EPA 8270E/SIM	10-13-20	10-14-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0096	EPA 8270E/SIM	10-13-20	10-14-20	
Dibenz[a,h]anthracene	ND	0.0096	EPA 8270E/SIM	10-13-20	10-14-20	
Benzo[g,h,i]perylene	ND	0.0096	EPA 8270E/SIM	10-13-20	10-14-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	49	20 - 106				
Pyrene-d10	60	26 - 104				
Terphenyl-d14	66	44 - 127				



Matrix: Water Units: ug/L

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-06-100920					
Laboratory ID:	10-111-03					
Naphthalene	ND	0.12	EPA 8270E/SIM	10-13-20	10-14-20	
2-Methylnaphthalene	ND	0.12	EPA 8270E/SIM	10-13-20	10-14-20	
1-Methylnaphthalene	ND	0.12	EPA 8270E/SIM	10-13-20	10-14-20	
Acenaphthylene	ND	0.12	EPA 8270E/SIM	10-13-20	10-14-20	
Acenaphthene	ND	0.12	EPA 8270E/SIM	10-13-20	10-14-20	
Fluorene	ND	0.12	EPA 8270E/SIM	10-13-20	10-14-20	
Phenanthrene	ND	0.12	EPA 8270E/SIM	10-13-20	10-14-20	
Anthracene	ND	0.12	EPA 8270E/SIM	10-13-20	10-14-20	
Fluoranthene	ND	0.12	EPA 8270E/SIM	10-13-20	10-14-20	
Pyrene	ND	0.12	EPA 8270E/SIM	10-13-20	10-14-20	
Benzo[a]anthracene	ND	0.012	EPA 8270E/SIM	10-13-20	10-14-20	
Chrysene	ND	0.012	EPA 8270E/SIM	10-13-20	10-14-20	
Benzo[b]fluoranthene	ND	0.012	EPA 8270E/SIM	10-13-20	10-14-20	
Benzo(j,k)fluoranthene	ND	0.012	EPA 8270E/SIM	10-13-20	10-14-20	
Benzo[a]pyrene	ND	0.012	EPA 8270E/SIM	10-13-20	10-14-20	
Indeno(1,2,3-c,d)pyrene	ND	0.012	EPA 8270E/SIM	10-13-20	10-14-20	
Dibenz[a,h]anthracene	ND	0.012	EPA 8270E/SIM	10-13-20	10-14-20	
Benzo[g,h,i]perylene	ND	0.012	EPA 8270E/SIM	10-13-20	10-14-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	55	20 - 106				
Pyrene-d10	58	26 - 104				
Terphenyl-d14	64	44 - 127				



PAHs EPA 8270E/SIM QUALITY CONTROL

Matrix: Water Units: ug/L

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1013W1					
Naphthalene	ND	0.10	EPA 8270E/SIM	10-13-20	10-14-20	
2-Methylnaphthalene	ND	0.10	EPA 8270E/SIM	10-13-20	10-14-20	
1-Methylnaphthalene	ND	0.10	EPA 8270E/SIM	10-13-20	10-14-20	
Acenaphthylene	ND	0.10	EPA 8270E/SIM	10-13-20	10-14-20	
Acenaphthene	ND	0.10	EPA 8270E/SIM	10-13-20	10-14-20	
Fluorene	ND	0.10	EPA 8270E/SIM	10-13-20	10-14-20	
Phenanthrene	ND	0.10	EPA 8270E/SIM	10-13-20	10-14-20	
Anthracene	ND	0.10	EPA 8270E/SIM	10-13-20	10-14-20	
Fluoranthene	ND	0.10	EPA 8270E/SIM	10-13-20	10-14-20	
Pyrene	ND	0.10	EPA 8270E/SIM	10-13-20	10-14-20	
Benzo[a]anthracene	ND	0.010	EPA 8270E/SIM	10-13-20	10-14-20	
Chrysene	ND	0.010	EPA 8270E/SIM	10-13-20	10-14-20	
Benzo[b]fluoranthene	ND	0.010	EPA 8270E/SIM	10-13-20	10-14-20	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270E/SIM	10-13-20	10-14-20	
Benzo[a]pyrene	ND	0.010	EPA 8270E/SIM	10-13-20	10-14-20	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270E/SIM	10-13-20	10-14-20	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270E/SIM	10-13-20	10-14-20	
Benzo[g,h,i]perylene	ND	0.010	EPA 8270E/SIM	10-13-20	10-14-20	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	42	20 - 106				
Pyrene-d10	64	26 - 104				
Terphenyl-d14	61	44 - 127				



. . .

6

PAHs EPA 8270E/SIM QUALITY CONTROL

Matrix: Water Units: ug/L

					Per	cent	Recovery		RPD	
Analyte	Re	sult	Spike	Level	Rec	overy	Limits	RPD	Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB10	13W1								
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	0.256	0.241	0.500	0.500	51	48	30 - 98	6	40	
Acenaphthylene	0.326	0.315	0.500	0.500	65	63	39 - 106	3	32	
Acenaphthene	0.311	0.294	0.500	0.500	62	59	36 - 114	6	33	
Fluorene	0.304	0.300	0.500	0.500	61	60	45 - 112	1	30	
Phenanthrene	0.340	0.343	0.500	0.500	68	69	51 - 109	1	24	
Anthracene	0.301	0.309	0.500	0.500	60	62	49 - 109	3	25	
Fluoranthene	0.342	0.342	0.500	0.500	68	68	53 - 115	0	22	
Pyrene	0.347	0.358	0.500	0.500	69	72	49 - 129	3	32	
Benzo[a]anthracene	0.452	0.458	0.500	0.500	90	92	61 - 123	1	24	
Chrysene	0.414	0.425	0.500	0.500	83	85	59 - 114	3	24	
Benzo[b]fluoranthene	0.405	0.413	0.500	0.500	81	83	60 - 125	2	26	
Benzo(j,k)fluoranthene	0.414	0.416	0.500	0.500	83	83	58 - 121	0	22	
Benzo[a]pyrene	0.374	0.379	0.500	0.500	75	76	58 - 118	1	24	
Indeno(1,2,3-c,d)pyrene	0.393	0.400	0.500	0.500	79	80	59 - 124	2	26	
Dibenz[a,h]anthracene	0.395	0.406	0.500	0.500	79	81	59 - 123	3	25	
Benzo[g,h,i]perylene	0.398	0.406	0.500	0.500	80	81	58 - 120	2	25	
Surrogate:										
2-Fluorobiphenyl					50	49	20 - 106			
Pyrene-d10					72	73	26 - 104			
Terphenyl-d14					73	75	44 - 127			



7

TOTAL ARSENIC EPA 200.8

Matrix: Water Units: ug/L (ppb)

01110. ug/2 (ppb)				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-05-100920					
Laboratory ID:	10-111-01					
Arsenic	ND	3.3	EPA 200.8	10-16-20	10-16-20	
Client ID:	FMW-07-100920					
Laboratory ID:	10-111-02					
Arsenic	7.2	3.3	EPA 200.8	10-16-20	10-16-20	
Client ID:	FMW-06-100920					
Laboratory ID:	10-111-03					
Arsenic	14	3.3	EPA 200.8	10-16-20	10-16-20	



TOTAL ARSENIC EPA 200.8 QUALITY CONTROL

Matrix: Water Units: ug/L (ppb)

								Date	Date	•	
Analyte		Result		PQL	M	ethod		Prepared	Analyz	ed	Flags
METHOD BLANK											
Laboratory ID:	Ν	/IB1016WM1									
Arsenic		ND		3.3	EP	A 200.8	3	10-16-20	10-16-	20	
					Source	Pei	cent	Recovery		RPD	
Analyte	Res	sult	Spike	e Level	Result	Rec	overy	Limits	RPD	Limit	Flags
DUPLICATE											
Laboratory ID:	10-07	75-07									
	ORIG	DUP									
Arsenic	ND	ND	NA	NA		1	A	NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	10-07	75-07									
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	114	121	111	111	ND	102	109	75-125	6	20	





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 methods 8260 & 8270, 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.

Ζ-

ND - Not Detected at PQL PQL - Practical Quantitation Limit RPD - Relative Percent Difference



Reviewed/Date	Received	Relinquished	Received	Relinquished	Received Met Rey (Tally	Relinquished	Signature				5 FMW-06-100920	2 FNW-07-100920	1 FULV-05-160920	Lab ID Sample Identification	SANS	C. Schmitt	Project Manage	Britisch Manace: 650-031	Company: Facallon	Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052 Phone: (425) 883-3881 • www.onsite-env.com	Environmental Inc.
Reviewed/Date					-20	Favallon	Company				V 1345 V	1 1230 1, "	10/9/201145 GW 4	Date Time Sampled Sampled Matrix	(other)		Standard (7 Days)	2 Days 3 Days	Check One)	Turnaround Request (in working days)	Chain of
					14/11 (26/19/01	10/9/20 14-41	Date Time				4	4	4	NWTP NWTP NWTP NWTP Volatile Haloge	H-HCI H-Gx/I H-Gx H-Dx (es 826	BTEX	/ SG C s 82600)	Laboratory Number:	Chain of Custody
Chromatograms with final report 🗌 Electronic Data Deliverables (EDDs)	Data Package: Standard Level III Level IV				D run for dissolved Arsenic.	2 run for Total Assenic, if detections,	Comments/Special Instructions							Semiv. (with ld PAHs I PCBs Organd Organd Chlorir Total P Total N TCLP	olatiles w-levv 2270D/ 8082A ochlori pphosp nated / CCRA N Metals	ne Pest ohorus I Acid Hei Aetals Aetals	/SIM w-level) cides 8 Pesticid bicides	081B es 8270 8151A		er: 10-111	Page of



October 30, 2020

Cliff Schmitt Farallon Consulting, LLC 975 5th Avenue NW Issaquah, WA 98027

Re: Analytical Data for Project 650-031 Laboratory Reference No. 2010-111B

Dear Cliff:

Enclosed are the analytical results and associated quality control data for samples submitted on October 9, 2020.

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,

David Baumeister Project Manager

Enclosures



Date of Report: October 30, 2020 Samples Submitted: October 9, 2020 Laboratory Reference: 2010-111B Project: 650-031

Case Narrative

Samples were collected on October 9, 2020 and received by the laboratory on October 9, 2020. 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.



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

DISSOLVED ARSENIC EPA 200.8

Matrix: Water Units: ug/L (ppb)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-07-100920					
Laboratory ID:	10-111-02					
Arsenic	9.0	3.0	EPA 200.8		10-27-20	
Client ID:	FMW-06-100920					
Laboratory ID:	10-111-03					
Arsenic	9.5	3.0	EPA 200.8		10-27-20	



DISSOLVED ARSENIC EPA 200.8 QUALITY CONTROL

Matrix: Water Units: ug/L (ppb)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1022F1					
Arsenic	ND	3.0	EPA 200.8	10-22-20	10-27-20	

					Source	Ре	rcent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Result	Rec	overy	Limits	RPD	Limit	Flags
DUPLICATE											
Laboratory ID:	10-25	50-02									
	ORIG	DUP									
Arsenic	52.0	52.8	NA	NA			NA	NA	2	20	
MATRIX SPIKES											
Laboratory ID:	10-25	50-02									
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	141	138	80.0	80.0	52.0	111	107	75-125	2	20	





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 methods 8260 & 8270, 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.

Ζ-

ND - Not Detected at PQL PQL - Practical Quantitation Limit RPD - Relative Percent Difference



Reviewed/Date	Received	Relinquished	Received	Received Mother Utalu	Relinquished	ampiñio	Cimeture .					5 FMW-06-100920	020001-40-MWJ 6	FMW-05-100920	Lab ID Sample Identification	SANS	C, Schmitt		650-031	Company: Facallon	Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052 Phone: (425) 883-3881 • www.onsite-env.com	Environmental Inc.
Reviewed/Date				200	Tavallon		Company					V 1345 V 4	1 1230 1, 4	10/9/201145 6W 4	Date Time Sampled Sampled Matrix :	(other)		Standard (7 Days)	2 Days 3 Days	(Check Une)	(in working days)	
				OHHI actual	10/2/20 14-40		_	<u>}</u>				+		+	NWTP NWTP NWTP NWTP Volatile Haloge	PH-HCII PH-Gx/P PH-Gx PH-Dx (es 8260 enated	BTEX	/ SG C s 82600	0)	Laboratory Number:	Cildili Ul Custouy
matograms with final report 🗍 Electronic Data De	Data Package: Standard Level III Level IV	ATS	Added 10/23 BC) run for dissolved Arsenic.	I run for lotal ABLING, it detections,		Commente/Sonecial Instructions		· · · · · · · · · · · · · · · · · · ·				8		Semiv. (with k PAHs I PCBs Organi Organi Chlorir Total F Total F Total N TCLP	olatiless ow-levever 8270D/ 8082A ochlori ophosp nated A RCRA N Metals oil and	8270D al PAHs 'SIM (lo ne Pest ohorus P Acid Hen Acid Hen Acid Hen	/SIM w-level) icides 8 Pesticid bicides	0081B es 8270 8151A		n: 10-111	Page of



December 15, 2020

Cliff Schmitt Farallon Consulting, LLC 975 5th Avenue NW Issaquah, WA 98027

Re: Analytical Data for Project 650-031 Laboratory Reference No. 2010-111C

Dear Cliff:

Enclosed are the analytical results and associated quality control data for samples submitted on October 9, 2020.

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,

David Baumeister Project Manager

Enclosures



Date of Report: December 15, 2020 Samples Submitted: October 9, 2020 Laboratory Reference: 2010-111C Project: 650-031

Case Narrative

Samples were collected on October 9, 2020 and received by the laboratory on October 9, 2020. 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.

Total Metals EPA 7470A Analysis

Sample was analyzed for Hg out of holding time.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.



TOTAL MERCURY EPA 7470A

Matrix: Water Units: ug/L (ppb)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-06-100920					
Laboratory ID:	10-111-03					
Mercury	ND	0.50	EPA 7470A	12-14-20	12-14-20	



TOTAL MERCURY EPA 7470A QUALITY CONTROL

Matrix: Water Units: ug/L (ppb)

								Date	Date	•	
Analyte		Result		PQL	Method			Prepared	Analyz	ed	Flags
METHOD BLANK											
Laboratory ID:		MB1214W1									
Mercury	ND		0.50		EPA 7470A			12-14-20	12-14-	20	
					Source	Pe	rcent	Recovery		RPD	
Analyte	Result		Spike	e Level	Result	Recovery		Limits	RPD	Limit	Flags
DUPLICATE											
Laboratory ID:	12-09	94-01									
	ORIG	DUP									
Mercury	ND	ND	NA	NA			NA	NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	12-09	94-01									
	MS	MSD	MS	MSD		MS	MSD				
Mercury	11.0	11.2	12.5	12.5	ND	88 9		75-125	2	20	



4



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 methods 8260 & 8270, 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.

Ζ-

ND - Not Detected at PQL PQL - Practical Quantitation Limit RPD - Relative Percent Difference



Reviewed/Date	Received	Relinquished	Received	Relinquished	Received in And I want		Signature				3 FMW-06-100920	0 FMW-07-100920	1 FULV-05-100920	Lab ID Sample Identification	Sampled by: SAVA	Project Manager: C. Schmitt	Project Name:	Frider Number 650-031	011	Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052 Phone: (425) 883-3881 • www.onsite-env.com	Environmental Inc.	OnSite
Reviewed/Date				CV-C	Tavallan	Π.	Company				¥ 1345 ¥ 4	1 1230 1 4	10/4/201145 GW 4	Date Time Sampled Sampled Matrix	(other)	ontaine	Standard (7 Days)	2 Days 3 Days	Same Day 1 Day	(in working days)	Turner of Party of	Chain of
				12 HI APINION	101 02 10 101	lalas	Date							NWTP NWTP NWTP NWTP Volatile Haloge	H-HCII H-Gx/E H-Gx H-Dx () es 8260 enated	D BTEX Acid DC Volatile:	/ SG CI	2)	Laboratory Number:	Cuccond	Chain of Custody
Chromatograms with final report 🗌 Electronic Data Deliverables (EDDs)	Data Package: Standard Level III Level IV	CAdded 12/8/2020, 23 (STA)	(X) Added 10/23 BC	I win tor dissource suscent,	for Iotan Misa	Amonia 1	Comments/Special Instructions							Semiv (with k PAHs I PCBs Organ Organ Chlorin Total F Total N TCLP HEM (olatiles ow-leve 3270D/ 8082A ochlorin ophosp nated A RCRA M ATCA M Metals oil and		'SIM v-level) cides 8 Pesticides bicides	081B es 8270 8151A		er: 10-111	Page of	



December 16, 2020

Stuart Brown Farallon Consulting, LLC 975 5th Avenue NW Issaquah, WA 98027

Re: Analytical Data for Project 650-031 Laboratory Reference No. 2012-128

Dear Stuart:

Enclosed are the analytical results and associated quality control data for samples submitted on December 11, 2020.

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,

David Baumeister Project Manager

Enclosures



Date of Report: December 16, 2020 Samples Submitted: December 11, 2020 Laboratory Reference: 2012-128 Project: 650-031

Case Narrative

Samples were collected on December 11, 2020 and received by the laboratory on December 11, 2020. 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.



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

DIESEL AND HEAVY OIL RANGE ORGANICS NWTPH-Dx

Matrix: Water Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-04-121120			•	•	
Laboratory ID:	12-128-01					
Diesel Range Organics	ND	0.21	NWTPH-Dx	12-14-20	12-14-20	
Lube Oil Range Organics	ND	0.21	NWTPH-Dx	12-14-20	12-14-20	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	89	50-150				
Client ID:	FMW-04-121120					
Laboratory ID:	12-128-01					
Diesel Range Organics	ND	0.21	NWTPH-Dx	12-14-20	12-15-20	X1
_ube Oil Range Organics	ND	0.21	NWTPH-Dx	12-14-20	12-15-20	X1
Surrogate:	Percent Recovery	Control Limits				
p-Terphenyl	95	50-150				
Client ID:	FMW-03-121120					
Laboratory ID:	12-128-02					
Diesel Range Organics	ND	0.22	NWTPH-Dx	12-14-20	12-14-20	
Lube Oil Range Organics	ND	0.22	NWTPH-Dx	12-14-20	12-14-20	
Surrogate:	Percent Recovery	Control Limits	HWH H BX	12 11 20	12 11 20	
o-Terphenyl	87	50-150				
Client ID:	FMW-03-121120					
Laboratory ID:	12-128-02					
Diesel Range Organics	ND	0.22	NWTPH-Dx	12-14-20	12-15-20	X1
Lube Oil Range Organics	ND	0.22	NWTPH-Dx	12-14-20	12-15-20	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	101	50-150				
Client ID:	FMW-02-121120					
_aboratory ID:	12-128-03					
Diesel Range Organics	ND	0.21	NWTPH-Dx	12-14-20	12-14-20	
ube Oil Range Organics	ND	0.21	NWTPH-Dx	12-14-20	12-14-20	
Surrogate:	Percent Recovery	Control Limits				
p-Terphenyl	90	50-150				
Client ID:	FMW-02-121120					
_aboratory ID:	12-128-03					
Diesel Range Organics	ND	0.21	NWTPH-Dx	12-14-20	12-15-20	X1
ube Oil Range Organics	ND	0.21	NWTPH-Dx	12-14-20	12-15-20	X1
Surrogate:	Percent Recovery	Control Limits		•		
p-Terphenyl	102	50-150				
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OnSite Environmental, Inc. 14648 NE 95th Street, Redmond, WA 98052 (425) 883-3881

3

DIESEL AND HEAVY OIL RANGE ORGANICS NWTPH-Dx

Matrix: Water Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-05-121120					
Laboratory ID:	12-128-04					
Diesel Range Organics	ND	0.21	NWTPH-Dx	12-14-20	12-14-20	
Lube Oil Range Organics	ND	0.21	NWTPH-Dx	12-14-20	12-14-20	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	84	50-150				
Client ID:	FMW-05-121120					
Laboratory ID:	12-128-04					
Diesel Range Organics	ND	0.21	NWTPH-Dx	12-14-20	12-15-20	X1
ube Oil Range Organics	ND	0.21	NWTPH-Dx	12-14-20	12-15-20	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	92	50-150				
Client ID:	FMW-01-121120					
	12-128-05					
_aboratory ID: Diesel Range Organics	ND	0.21	NWTPH-Dx	12-14-20	12-14-20	
Lube Oil Range Organics	ND	0.21	NWTPH-DX NWTPH-Dx	12-14-20 12-14-20	12-14-20	
	Percent Recovery	Control Limits		12-14-20	12-14-20	
Surrogate: p-Terphenyl	97	50-150				
o-reipinenyi	37	50-150				
Client ID:	FMW-01-121120					
Laboratory ID:	12-128-05					
Diesel Range Organics	ND	0.21	NWTPH-Dx	12-14-20	12-15-20	X1
ube Oil Range Organics	ND	0.21	NWTPH-Dx	12-14-20	12-15-20	X1
Surrogate:	Percent Recovery	Control Limits				
p-Terphenyl	91	50-150				
Client ID:	FMW-06-121120					
_aboratory ID:	12-128-06					
Diesel Range Organics	ND	0.21	NWTPH-Dx	12-14-20	12-14-20	
ube Oil Range Organics	0.34	0.21	NWTPH-Dx	12-14-20	12-14-20	
Surrogate:	Percent Recovery	Control Limits			-	
p-Terphenyl	92	50-150				
Client ID:	FMW-06-121120					
_aboratory ID:	12-128-06					
Diesel Range Organics	ND	0.21	NWTPH-Dx	12-14-20	12-15-20	X1
ube Oil Range Organics	ND	0.21	NWTPH-Dx	12-14-20	12-15-20	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	98	50-150				



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

4

DIESEL AND HEAVY OIL RANGE ORGANICS NWTPH-Dx

Matrix: Water Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-07-121120					
Laboratory ID:	12-128-07					
Diesel Range Organics	0.24	0.21	NWTPH-Dx	12-14-20	12-14-20	
Lube Oil Range Organics	0.29	0.21	NWTPH-Dx	12-14-20	12-14-20	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	83	50-150				
Client ID:	FMW-07-121120					
Laboratory ID:	12-128-07					
Diosol Bango Organico	ND	0.21		12 14 20	12 15 20	V1

Diesel Range Organics	ND	0.21	NWTPH-Dx	12-14-20	12-15-20	X1
Lube Oil Range Organics	ND	0.21	NWTPH-Dx	12-14-20	12-15-20	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	87	50-150				



DIESEL AND HEAVY OIL RANGE ORGANICS NWTPH-Dx QUALITY CONTROL

Matrix: Water Units: mg/L (ppm)

Analyte		Result		PQL	Ме	thod	Date Prepared	Date Analyz		Flags
METHOD BLANK							•			U
Laboratory ID:		MB1214W1								
Diesel Range Organics		ND		0.20	NWT	PH-Dx	12-14-20	12-14-2	20	
Lube Oil Range Organics	6	ND		0.20	NWT	PH-Dx	12-14-20	12-14-2	20	
Surrogate:	Pe	rcent Recovery	Co	ntrol Limits	6					
o-Terphenyl		93		50-150						
Laboratory ID:		MB1214W1								
Diesel Range Organics		ND		0.20	NWT	PH-Dx	12-14-20	12-15-2	20	X1
Lube Oil Range Organics	6	ND		0.20	NWT	PH-Dx	12-14-20	12-15-2	20	X1
Surrogate:	Pe	rcent Recovery	Co	ntrol Limits	5					
o-Terphenyl		109		50-150						
					Source	Percent	Recovery		RPD	
Analyte	Res	sult	Spike	e Level	Result	Recover	-	RPD	Limit	Flags
DUPLICATE										
Laboratory ID:	12-12	28-01								
(DRIG	DUP								
Diesel Range	ND	ND	NA	NA		NA	NA	NA	NA	
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	
Surrogate:										
o-Terphenyl						89 88	3 50-150			
Laboratory ID:	12-12	28-01								
	DRIG	DUP								
Diesel Range	ND	ND	NA	NA		NA	NA	NA	NA	X1
0										

Surrogate: o-Terphenyl

95 99 50-150

6

TOTAL METALS EPA 6010D/200.8

Matrix: Water Units: ug/L (ppb)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-03-121120					
Laboratory ID:	12-128-02					
Aluminum	ND	110	EPA 6010D	12-14-20	12-15-20	
Arsenic	ND	3.3	EPA 200.8	12-14-20	12-14-20	
Iron	1800	56	EPA 6010D	12-14-20	12-15-20	
Manganese	500	11	EPA 6010D	12-14-20	12-15-20	
Client ID:	FMW-02-121120					
Laboratory ID:	12-128-03					
Aluminum	2200	110	EPA 6010D	12-14-20	12-15-20	
Iron	8900	56	EPA 6010D	12-14-20	12-15-20	
Manganese	570	11	EPA 6010D	12-14-20	12-15-20	
Client ID:	FMW-06-121120					
Laboratory ID:	12-128-06					
Arsenic	3.6	3.3	EPA 200.8	12-14-20	12-14-20	
Client ID:	FMW-07-121120					
Laboratory ID:	12-128-07					
Arsenic	5.3	3.3	EPA 200.8	12-14-20	12-14-20	



TOTAL METALS EPA 6010D/200.8 QUALITY CONTROL

Matrix: Water Units: ug/L (ppb)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1214WM1					
Arsenic	ND	3.3	EPA 200.8	12-14-20	12-14-20	
Laboratory ID:	MB1214WM1					
Aluminum	ND	110	EPA 6010D	12-14-20	12-15-20	
Iron	ND	56	EPA 6010D	12-14-20	12-15-20	
Manganese	ND	11	EPA 6010D	12-14-20	12-15-20	

					Source	Pe	rcent	Recovery		RPD	
Analyte	Re	sult	Spike	Level	Result	Rec	overy	Limits	RPD	Limit	Flags
DUPLICATE											
Laboratory ID:	12-0	89-02									
	ORIG	DUP									
Arsenic	3.60	4.02	NA	NA			NA	NA	11	20	
Laboratory ID:	12-0	89-02									
Aluminum	2340	2060	NA	NA		I	NA	NA	13	20	
Iron	2900	2770	NA	NA		I	NA	NA	5	20	
Manganese	489	488	NA	NA		I	NA	NA	0	20	
MATRIX SPIKES											
Laboratory ID:	12-0	89-02									
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	114	115	111	111	3.60	99	101	75-125	1	20	
Laboratory ID:	12-08	89-02									
Aluminum	24600	25300	22200	22200	2340	100	104	75-125	3	20	
Iron	24800	25600	22200	22200	2900	99	102	75-125	3	20	
Manganese	581	580	111	111	489	83	82	75-125	0	20	



DISSOLVED METALS EPA 6010D/200.8

Matrix: Water Units: ug/L (ppb)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-03-121120					
Laboratory ID:	12-128-02					
Aluminum	ND	110	EPA 6010D		12-14-20	
Arsenic	ND	3.0	EPA 200.8		12-14-20	
Iron	1500	56	EPA 6010D		12-14-20	
Manganese	480	11	EPA 6010D		12-14-20	
Client ID:	FMW-02-121120					
Laboratory ID:	12-128-03					
Aluminum	ND	110	EPA 6010D		12-14-20	
Iron	7100	56	EPA 6010D		12-14-20	
Manganese	530	11	EPA 6010D		12-14-20	
Client ID:	FMW-06-121120					
Laboratory ID:	12-128-06					
Arsenic	ND	3.0	EPA 200.8		12-14-20	
Client ID:	FMW-07-121120					
Laboratory ID:	12-128-07					
Arsenic	4.7	3.0	EPA 200.8		12-14-20	



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DISSOLVED METALS EPA 6010D/200.8 QUALITY CONTROL

Matrix: Water Units: ug/L (ppb)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1214D1					
Arsenic	ND	3.0	EPA 200.8		12-14-20	
Laboratory ID:	MB1214D1					
Aluminum	ND	110	EPA 6010D		12-14-20	
Iron	ND	56	EPA 6010D		12-14-20	
Manganese	ND	11	EPA 6010D		12-14-20	

					Source	Pe	rcent	Recovery		RPD	
Analyte	Re	sult	Spike	Level	Result	Rec	overy	Limits	RPD	Limit	Flags
DUPLICATE											
Laboratory ID:	12-12	28-02									
	ORIG	DUP									
Arsenic	ND	ND	NA	NA		1	NA	NA	NA	20	
Laboratory ID:	12-12	28-02									
Aluminum	ND	ND	NA	NA		1	NA	NA	NA	20	
Iron	1540	1540	NA	NA		1	NA	NA	0	20	
Manganese	477	473	NA	NA		1	NA	NA	1	20	
MATRIX SPIKES											
Laboratory ID:	12-12	28-02									
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	80.4	82.0	80.0	80.0	ND	101	103	75-125	2	20	
Laboratory ID:	12-12	28-02									
Aluminum	22500	22500	22200	22200	ND	102	102	75-125	0	20	
Iron	24200	24200	22200	22200	1540	102	102	75-125	0	20	
Manganese	985	992	556	556	477	91	93	75-125	1	20	



TOTAL METALS EPA 7471B

Matrix: Soil Units: mg/Kg (ppm)

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FB-28-1.5					
Laboratory ID:	12-128-08					
Mercury	ND	0.31	EPA 7471B	12-15-20	12-15-20	



TOTAL METALS EPA 7471B QUALITY CONTROL

Matrix: Soil Units: mg/Kg (ppm)

					Date	Date)	
Analyte	Result	PQL	Me	ethod	Prepared	Analyz	ed	Flags
METHOD BLANK								
Laboratory ID:	MB1215S1							
Mercury	ND	0.25	EPA	7471B	12-15-20	12-15-	20	
			Source	Percent	Recovery		RPD	
Analyte	Result	Spike Level	Result	Recovery	,	RPD	Limit	Flags
DUPLICATE								

7.1101910		oun	Opino		Rooun					_	i lugo
DUPLICATE											
Laboratory ID:	12-1	16-01									
	ORIG	DUP									
Mercury	ND	ND	NA	NA			NA	NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	12-1	16-01									
	MS	MSD	MS	MSD		MS	MSD				
Mercury	0.520	0.557	0.500	0.500	0.00850	102	110	80-120	7	20	



% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
FB-28-1.5	12-128-08	21	12-14-20



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



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 methods 8260 & 8270, 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.

Ζ-

ND - Not Detected at PQL PQL - Practical Quantitation Limit RPD - Relative Percent Difference



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January 14, 2021

Stuart Brown Farallon Consulting 975 5th Avenue NW Issaquah, WA 98027

Re: Analytical Data for Project 650-031 Laboratory Reference No. 2101-064

Dear Stuart:

Enclosed are the analytical results and associated quality control data for samples submitted on January 8, 2021.

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,

David Baumeister Project Manager

Enclosures



Date of Report: January 14, 2021 Samples Submitted: January 8, 2021 Laboratory Reference: 2101-064 Project: 650-031

Case Narrative

Samples were collected on January 8, 2021 and received by the laboratory on January 8, 2021. 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.



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

PAHs EPA 8270E/SIM

Matrix: Soil Units: mg/Kg

Client ID: FB-29-14.0 Laboratory ID: 01-064-06 Naphthalene ND 0.0074 EPA 8270E/SIM 1-12-21 2-Methylnaphthalene ND 0.0074 EPA 8270E/SIM 1-12-21 1-Methylnaphthalene ND 0.0074 EPA 8270E/SIM 1-12-21 Acenaphthylene ND 0.0074 EPA 8270E/SIM 1-12-21 Acenaphthene ND 0.0074 EPA 8270E/SIM 1-12-21 Fluorene ND 0.0074 EPA 8270E/SIM 1-12-21 Phenanthrene ND 0.0074 EPA 8270E/SIM 1-12-21 Anthracene ND 0.0074 EPA 8270E/SIM 1-12-21 Fluoranthene ND 0.0074 EPA 8270E/SIM 1-12-21 Pyrene ND 0.0074 EPA 8		Date	
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2-Fluorobiphenyl 71 46 - 113	1	1-13-21	
Pyrene-d10 80 45 - 114			
Terphenyl-d14 90 49 - 121			



3

PAHs EPA 8270E/SIM QUALITY CONTROL

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Matrix: Soil Units: mg/Kg

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0112S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	1-12-21	1-12-21	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	1-12-21	1-12-21	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	1-12-21	1-12-21	
Acenaphthylene	ND	0.0067	EPA 8270E/SIM	1-12-21	1-12-21	
Acenaphthene	ND	0.0067	EPA 8270E/SIM	1-12-21	1-12-21	
Fluorene	ND	0.0067	EPA 8270E/SIM	1-12-21	1-12-21	
Phenanthrene	ND	0.0067	EPA 8270E/SIM	1-12-21	1-12-21	
Anthracene	ND	0.0067	EPA 8270E/SIM	1-12-21	1-12-21	
Fluoranthene	ND	0.0067	EPA 8270E/SIM	1-12-21	1-12-21	
Pyrene	ND	0.0067	EPA 8270E/SIM	1-12-21	1-12-21	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	1-12-21	1-12-21	
Chrysene	ND	0.0067	EPA 8270E/SIM	1-12-21	1-12-21	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	1-12-21	1-12-21	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	1-12-21	1-12-21	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	1-12-21	1-12-21	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	1-12-21	1-12-21	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	1-12-21	1-12-21	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270E/SIM	1-12-21	1-12-21	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	97	46 - 113				
Pyrene-d10	96	45 - 114				
Terphenyl-d14	112	49 - 121				

PAHs EPA 8270E/SIM QUALITY CONTROL

Matrix: Soil Units: mg/Kg

Analyte					Source		cent	Recovery		RPD	
Allalyte	Re	sult	Spike	Level	Result	Rec	overy	Limits	RPD	Limit	Flags
MATRIX SPIKES											
Laboratory ID:	01-04	47-03									
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	0.0744	0.0759	0.0833	0.0833	ND	89	91	51 - 115	2	26	
Acenaphthylene	0.0721	0.0704	0.0833	0.0833	ND	87	85	53 - 121	2	24	
Acenaphthene	0.0718	0.0677	0.0833	0.0833	ND	86	81	52 - 121	6	25	
Fluorene	0.0783	0.0747	0.0833	0.0833	ND	94	90	58 - 127	5	23	
Phenanthrene	0.0799	0.0784	0.0833	0.0833	ND	96	94	46 - 129	2	28	
Anthracene	0.0844	0.0827	0.0833	0.0833	ND	101	99	57 - 124	2	21	
Fluoranthene	0.0841	0.0799	0.0833	0.0833	ND	101	96	46 - 136	5	29	
Pyrene	0.0858	0.0840	0.0833	0.0833	ND	103	101	41 - 136	2	32	
Benzo[a]anthracene	0.0783	0.0794	0.0833	0.0833	ND	94	95	56 - 136	1	25	
Chrysene	0.0816	0.0814	0.0833	0.0833	ND	98	98	49 - 130	0	22	
Benzo[b]fluoranthene	0.0848	0.0804	0.0833	0.0833	ND	102	97	51 - 135	5	26	
Benzo(j,k)fluoranthene	0.0776	0.0814	0.0833	0.0833	ND	93	98	56 - 124	5	23	
Benzo[a]pyrene	0.0794	0.0793	0.0833	0.0833	ND	95	95	54 - 133	0	26	
Indeno(1,2,3-c,d)pyrene	0.0800	0.0824	0.0833	0.0833	ND	96	99	52 - 134	3	20	
Dibenz[a,h]anthracene	0.0795	0.0802	0.0833	0.0833	ND	95	96	58 - 127	1	17	
Benzo[g,h,i]perylene	0.0795	0.0806	0.0833	0.0833	ND	95	97	54 - 129	1	21	
Surrogate:											
2-Fluorobiphenyl						78	71	46 - 113			
Pyrene-d10						87	85	45 - 114			
Terphenyl-d14						93	94	49 - 121			



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

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
FB-29-14.0	01-064-06	10	1-13-21





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 methods 8260 & 8270, 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.

Ζ-

ND - Not Detected at PQL PQL - Practical Quantitation Limit RPD - Relative Percent Difference



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Reviewed/Date	Received	Relinquished	Received	Relinquished	Received	Relinquished Lalur hyp	Signature A	6 FB-29-14.0	5 FB-29-10.0	4 FB-29-5.0	FMW-29	3 FMW-8-13.0	2 FMW-8-5.0	1 FMW-8-1.0	Lab ID Sample Identification	Elise Bugge	Struct Brown	Thompson field	Project Number: 650-031	TT	Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052 Phone: (425) 883-3881 • www.onsite-env.com	Environmental Inc.
Reviewed/Date		-9			ASO	a FLN	Company	S साय न	1212 S	S toul		S 0660	1 0925 S	1/8/21 9/20 S	Date Time Sampled Sampled Matrix	(other)		Standard (7 Days)	2 Days 3 Days	(Check One)	Turnaround Request (in working days)	
				1	1/8/21 14:00	18/21 HOO	Date Time					-		-	NWTF NWTF NWTF Volatil Haloge	PH-HCI PH-Gx/P PH-Gx PH-Dx (es 826 enated	BTEX	/ SG Cl	>		Laboratory Number:	of Custody
Chromatograms with final report	Data Package: Standard Level III Level IV		(1) Sul - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	And 1/8/21 no /STA	and TAT	+ tontard ph for amalyses	Comments/Special Instructions								Semiv (with I PAHs PCBs Organ Organ Chlorin Total F Total N TCLP	olatiles ow-leve 8270D/ 8082A ochlori ophosp hated A RCRA M ATCA M Metals	s 8270D el PAHs /SIM (lo ne Pest bhorus I Acid He Metals Metals) w-level) icides 8	081B es 8270D,	/SIM	er: 01-064	Page / of
(EDDs)						U		R							% Mois	sture						,



January 20, 2021

Stuart Brown Farallon Consulting 975 5th Avenue NW Issaquah, WA 98027

Re: Analytical Data for Project 650-031 Laboratory Reference No. 2101-140

Dear Stuart:

Enclosed are the analytical results and associated quality control data for samples submitted on January 18, 2021.

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,

David Baumeister Project Manager

Enclosures



Date of Report: January 20, 2021 Samples Submitted: January 18, 2021 Laboratory Reference: 2101-140 Project: 650-031

Case Narrative

Samples were collected on January 18, 2021 and received by the laboratory on January 18, 2021. 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.



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

PAHs EPA 8270E/SIM

Matrix: Water Units: ug/L

-				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
Client ID:	FMW-08-011821					
Laboratory ID:	01-140-01					
Naphthalene	ND	0.097	EPA 8270E/SIM	1-19-21	1-19-21	
2-Methylnaphthalene	ND	0.097	EPA 8270E/SIM	1-19-21	1-19-21	
1-Methylnaphthalene	ND	0.097	EPA 8270E/SIM	1-19-21	1-19-21	
Acenaphthylene	ND	0.097	EPA 8270E/SIM	1-19-21	1-19-21	
Acenaphthene	ND	0.097	EPA 8270E/SIM	1-19-21	1-19-21	
Fluorene	ND	0.097	EPA 8270E/SIM	1-19-21	1-19-21	
Phenanthrene	ND	0.097	EPA 8270E/SIM	1-19-21	1-19-21	
Anthracene	ND	0.097	EPA 8270E/SIM	1-19-21	1-19-21	
Fluoranthene	ND	0.097	EPA 8270E/SIM	1-19-21	1-19-21	
Pyrene	ND	0.097	EPA 8270E/SIM	1-19-21	1-19-21	
Benzo[a]anthracene	ND	0.0097	EPA 8270E/SIM	1-19-21	1-19-21	
Chrysene	ND	0.0097	EPA 8270E/SIM	1-19-21	1-19-21	
Benzo[b]fluoranthene	ND	0.0097	EPA 8270E/SIM	1-19-21	1-19-21	
Benzo(j,k)fluoranthene	ND	0.0097	EPA 8270E/SIM	1-19-21	1-19-21	
Benzo[a]pyrene	ND	0.0097	EPA 8270E/SIM	1-19-21	1-19-21	
Indeno(1,2,3-c,d)pyrene	ND	0.0097	EPA 8270E/SIM	1-19-21	1-19-21	
Dibenz[a,h]anthracene	ND	0.0097	EPA 8270E/SIM	1-19-21	1-19-21	
Benzo[g,h,i]perylene	ND	0.0097	EPA 8270E/SIM	1-19-21	1-19-21	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	68	20 - 106				
Pyrene-d10	89	26 - 104				
Terphenyl-d14	99	44 - 127				



3

PAHs EPA 8270E/SIM QUALITY CONTROL

. . .

Matrix: Water Units: ug/L

				Date	Date	
Analyte	Result	PQL	Method	Prepared	Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0119W1					
Naphthalene	ND	0.10	EPA 8270E/SIM	1-19-21	1-19-21	
2-Methylnaphthalene	ND	0.10	EPA 8270E/SIM	1-19-21	1-19-21	
1-Methylnaphthalene	ND	0.10	EPA 8270E/SIM	1-19-21	1-19-21	
Acenaphthylene	ND	0.10	EPA 8270E/SIM	1-19-21	1-19-21	
Acenaphthene	ND	0.10	EPA 8270E/SIM	1-19-21	1-19-21	
Fluorene	ND	0.10	EPA 8270E/SIM	1-19-21	1-19-21	
Phenanthrene	ND	0.10	EPA 8270E/SIM	1-19-21	1-19-21	
Anthracene	ND	0.10	EPA 8270E/SIM	1-19-21	1-19-21	
Fluoranthene	ND	0.10	EPA 8270E/SIM	1-19-21	1-19-21	
Pyrene	ND	0.10	EPA 8270E/SIM	1-19-21	1-19-21	
Benzo[a]anthracene	ND	0.010	EPA 8270E/SIM	1-19-21	1-19-21	
Chrysene	ND	0.010	EPA 8270E/SIM	1-19-21	1-19-21	
Benzo[b]fluoranthene	ND	0.010	EPA 8270E/SIM	1-19-21	1-19-21	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270E/SIM	1-19-21	1-19-21	
Benzo[a]pyrene	ND	0.010	EPA 8270E/SIM	1-19-21	1-19-21	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270E/SIM	1-19-21	1-19-21	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270E/SIM	1-19-21	1-19-21	
Benzo[g,h,i]perylene	ND	0.010	EPA 8270E/SIM	1-19-21	1-19-21	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	68	20 - 106				
Pyrene-d10	90	26 - 104				
Terphenyl-d14	103	44 - 127				

4

PAHs EPA 8270E/SIM QUALITY CONTROL

Matrix: Water Units: ug/L

					Per	cent	Recovery		RPD	
Analyte	Res	sult	Spike	Level	Rec	overy	Limits	RPD	Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB01	19W1								
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	0.374	0.334	0.500	0.500	75	67	30 - 98	11	40	
Acenaphthylene	0.400	0.392	0.500	0.500	80	78	39 - 106	2	32	
Acenaphthene	0.379	0.365	0.500	0.500	76	73	36 - 114	4	33	
Fluorene	0.420	0.425	0.500	0.500	84	85	45 - 112	1	30	
Phenanthrene	0.451	0.433	0.500	0.500	90	87	51 - 109	4	24	
Anthracene	0.465	0.455	0.500	0.500	93	91	49 - 109	2	25	
Fluoranthene	0.517	0.541	0.500	0.500	103	108	53 - 115	5	22	
Pyrene	0.536	0.550	0.500	0.500	107	110	49 - 129	3	32	
Benzo[a]anthracene	0.523	0.508	0.500	0.500	105	102	61 - 123	3	24	
Chrysene	0.552	0.552	0.500	0.500	110	110	59 - 114	0	24	
Benzo[b]fluoranthene	0.583	0.545	0.500	0.500	117	109	60 - 125	7	26	
Benzo(j,k)fluoranthene	0.551	0.560	0.500	0.500	110	112	58 - 121	2	22	
Benzo[a]pyrene	0.549	0.539	0.500	0.500	110	108	58 - 118	2	24	
Indeno(1,2,3-c,d)pyrene	0.498	0.495	0.500	0.500	100	99	59 - 124	1	26	
Dibenz[a,h]anthracene	0.516	0.515	0.500	0.500	103	103	59 - 123	0	25	
Benzo[g,h,i]perylene	0.545	0.531	0.500	0.500	109	106	58 - 120	3	25	
Surrogate:										
2-Fluorobiphenyl					72	65	20 - 106			
Pyrene-d10					99	96	26 - 104			
Terphenyl-d14					119	109	44 - 127			



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 methods 8260 & 8270, 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.

Ζ-

ND - Not Detected at PQL PQL - Practical Quantitation Limit RPD - Relative Percent Difference



Received Relinquished Received Reviewed/Date	Relinquished	Signature						1 FMM-08-011821	Lab ID Sample Identification	Emi Smith	Stuart Brown	Gunshy Manor	Project Number: VSD-031	Company: For allon	Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052 Phone: (425) 883-3881 • www.onsite-env.com	Environmental Inc.
Reviewed/Date	Farallon	Company						1/18/21 12	Date Time Sampled Sampled Matrix	(other)		Standard (7 Days)			(in working days)	Chain of
	1/18/21 17	Date Time		K	7	N		5	NWTP NWTP NWTP	PH-HCI PH-Gx/ PH-Gx	BTEX		lean-up)		Laboratory Nu	Chain of Custody
Data Package: Standard Level III Level IV Chromatograms with final report Electronic Data Deliverables (EDDs)	312	e Comments/Special Instructions							EDB E Semiv (with I PAHs PCBs Organ Organ Organ Chlori Total I Total I Total N	ePA 80 oolatiles ow-lev 8270D. 8082A ochlori ophosj nated / RCRA I MCRA I	11 (Wate s 8270D el PAHs /SIM (lo ine Pest phorus I Acid He Metals) w-level) icides 8 Pesticide) 0081B es 8270[8151A	2/SIM	umber: $01 - 140$	Page of

APPENDIX D SITE-SPECIFIC TERRESTRIAL ECOLOGICAL EVALUATION

REMEDIAL INVESTGATION REPORT Thompson Field Site Portion of King County Parcel No. 0825069104 Redmond, WA

Farallon PN: 650-031



Portland | Baker City California Oakland | Irvine

TECHNICAL MEMORANDUM

- **TO:** Thomas L. Markl Nelson Legacy Group, LLC
- **FROM:** Mathew Luxon, Ecotoxicologist, Ecozoic Environmental Consulting, LLC Stuart Brown, Project Environmental Scientist, Farallon Consulting, L.L.C. Clifford T. Schmitt, L.G., L.H.G., Principal Hydrogeologist, Farallon Consulting, L.L.C
- **DATE:** April 6, 2021
- RE: SITE-SPECIFIC TERRESTRIAL ECOLOGICAL EVALUATION THOMPSON FIELD SITE KING COUNTY PARCEL NO. 0825069104 REDMOND, WASHINGTON FARALLON PN: 650-031

Ecozoic, LLC and Farallon Consulting, L.L.C. (Farallon) have prepared this Technical Memorandum to present the results of the site-specific terrestrial ecological evaluation (TEE) conducted for the Thompson Field Site located on a portion of King County Parcel No. 0825069104 in Redmond, Washington (Figure 1). For this evaluation chemicals of ecological concern in soil and groundwater were evaluated separately. A discussion of habitats and ecological receptors is provided, followed by the soil and groundwater terrestrial ecological risk assessments. Locations of soil and groundwater samples discussed in this Technical Memorandum are shown on Figure 2.

References for documents cited in this Technical Memorandum and associated tables are listed in Attachment A. A TEE Form completed for the Thompson Field Site is included in Attachment B.

SOIL CHEMICALS OF ECOLOGICAL CONCERN

In accordance with Section 7493(2)(a)(i) of Chapter 340 of the Washington Administrative Code (WAC 173-340-7493(2)(a)(i)), chemicals of ecological concern were identified as those chemicals for which the exposure point concentration (EPC) exceeds an Ecological Indicator Soil Concentration (EISC) for plants, soil biota, or wildlife (Table 1). EISCs are those reported in the Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Table 749-3 and presented in Table 1. For chemicals where no EISC is provided in MTCA Table 749-3, protective concentrations were identified based on a literature search using the Oak Ridge National



Laboratory Risk Assessment Information System Ecological Benchmark Tool (Ecological Benchmark Tool) (Oak Ridge National Laboratory 2021). The Ecological Benchmark Tool is a database of screening level chemical concentrations in environmental media that are at or less than thresholds for effects to ecological receptors. U.S. Environmental Protection Agency (EPA) Ecological Soil Screening Levels were selected if available (EPA 2021). Consistent with MTCA, Washington State natural background concentrations were selected as EISCs if background concentrations in soils exceeded identified screening levels. Natural background concentrations were used as EISCs for aluminum, chromium, iron, nickel, and vanadium. Washington State 90th percentile natural background concentrations of aluminum, chromium and iron were those reported in Natural Background Soil Metals Concentrations in Washington State dated October 1994, prepared by the Washington State Department of Ecology (Ecology) (1994). Natural background 90th percentile concentrations of nickel and vanadium were calculated using natural background concentrations in Washington State soils based on a more recent U.S. Geological Survey report (Smith et al. 2013). Specifically, 90th percentile upper tolerance limits (UTLs) for vanadium and nickel were calculated using all A-horizon soils data from Washington State west of latitude -120° using MTCA State Background Module (Ecology 2021) (Table 2).

EPCs were calculated as the Site-wide maximum or 95 percent upper confidence limit on the mean (UCL95) soil concentrations. For chemicals with maximum concentrations exceeding EISCs, the Site-wide UCL95 was calculated using EPA's ProUCL 5.1 (EPA 2015) and following Ecology ProUCL Draft Guidelines (Ecology 2017). Chemicals were not considered chemicals of ecological concern if they met the following criteria:

- The maximum concentration is less than the EISC; or
- The UCL95 is less than the EISC; and
 - No single sample concentration is greater than two times the EISC; and
 - Less than 10 percent of the sample concentrations exceed the EISC.

The screening for identifying chemicals of ecological concern is presented in Table 1 for all detected chemicals. Based on this screening, combined total petroleum hydrocarbons as diesel-range organics (DRO) and oil-ranged organics (ORO), and selenium were retained as chemicals of ecological concern for further evaluation (Table 3).

GROUNDWATER CHEMICALS OF ECOLOGICAL CONCERN

Screening of groundwater chemicals of ecological concern was conducted in two steps in accordance with WAC 173-340-730. In the first step, preliminary groundwater chemicals of ecological concern were identified as those chemicals with maximum detected concentrations in groundwater samples that exceeded concentrations protective of surface water aquatic organisms (freshwater chronic criteria) as specified in WAC 173-340-730. Per WAC 173-340-730(3)(b), for chemicals where no surface water criterion is established in state of federal regulations, concentrations that are estimated to result in no adverse effects on the protection and propagation of wildlife, fish, and other aquatic life were identified based on a literature search using the



Ecological Benchmark Tool (Oak Ridge National Laboratory 2021). The surface water benchmark criteria used for the screening of groundwater chemicals of ecological concern are collectively referred to herein as Screening Level Values (SLVs). In the second screening step, concentrations of preliminary chemicals of ecological concern in groundwater samples collected from the most down-gradient monitoring wells at the Thompson Field Site prior to discharge to surface water were compared to surface water concentrations protective of aquatic life. As described in Section 3.4.1 of the Remedial Investigation Report (Farallon 2021), groundwater at the Thompson Field Site is interpreted as flowing radially from the center of Thompson Field with an overall flow to the northeast and to the northwest, potentially discharging to drainage ditches surrounding Thompson Field, which in turn flow to Evans Creek. Thus, concentrations of chemicals in groundwater samples collected from monitoring wells FMW-08, FMW-05, and FMW-01 represent the most down-gradient groundwater sampling points prior to potential discharge to surface water (Figure 2). Based on this two-step screening process for groundwater chemicals of ecological concern, iron and manganese were retained for further evaluation (Table 4).

HABITATS AND ECOLOGICAL RECEPTORS OF CONCERN

A review of available information was conducted to identify species that may potentially use Thompson Field. Thompson Field comprises approximately 12 acres. Landcover consists of mown fields with drainage ditches surrounded by shrub and forest cover. A mapped wetland is south of the Thompson Field Site. This wetland is contiguous with the Evans Creek Natural Area, a 38acre area managed by King County Department of Natural Resources and Parks Ecological Land for the protection of ecological values. The Washington Department of Fish and Wildlife Priority Habitats and Species (PHS) database (Washington Department of Fish and Wildlife 2020) was queried for the parcel containing the Thompson Field Site (Attachment C). The PHS database lists habitats including wetlands, freshwater forested and/or shrub wetlands, and freshwater emergent wetlands as existing on King County Parcel No. 0825069104. The PHS database also lists Chinook salmon, a federally threatened species, and Coho salmon, a federal candidate species as occurring in Evans Creek located to the south and west of the Thompson Field Site and connected to the wetland located south of the Thompson Field Site.

Evans Creek is home to other native fish and provides substantial habitat for a variety of aquatic animals and plants. Evans Creek Natural Area habitat is predominantly scrub-shrub wetlands with a small forest component (King County 2003). The Evans Creek Natural Area provides habitat for a variety of bird and mammalian wildlife including raptors such as red-tailed hawk, osprey, and bald eagle, and other birds including Swainson's thrush, tree swallows, and woodpeckers. Mammals include abundant blacktail deer and coyote, abundant beavers along the shores of Evans Creek; likely raccoons, river otter, muskrat, and mink; and potentially bear, cougar, and bobcat. In addition, small mammals such as shrews, mice, voles, squirrels, and weasels occur. Finally, a wide variety of unidentified amphibians and reptiles are believed to inhabit the wetland areas (King County 2003).



SOIL ECOLOGICAL RISK ASSESSMENT

Based on the chemicals of ecological concern and species potentially present at the Thompson Field Site, risk from the soil chemicals of ecological concern presented in Table 3 was assessed for the indicated representative receptor species. These representative receptors could be exposed to chemicals of ecological concern through either direct contact with soils or ingestion of contaminated prey.

Site-specific exposure data and the underlying toxicological information associated with selected EISCs were reviewed for each receptor and chemical of ecological concern to evaluate the risk of adverse ecological effects for each receptor.

DRO AND ORO

The Thompson Field soil combined DRO and ORO EPC, 210 milligrams per kilogram (mg/kg), does not exceed the soil biota EISC for DRO, 260 mg/kg. The Thompson Field soil combined DRO and ORO EPC also does not exceed the DRO soil screening level of 460 mg/kg for sites that qualify for the simplified TEE (MTCA Table 749-2). Additionally, none of the soil samples collected at the Thompson Field Site had a concentration greater than two times the EISC. However, the combined DRO and ORO concentration in more than 10 percent of soil samples (i.e., 27 percent) collected at the Thompson Field Site exceed the EISC, thus, DRO was identified as a soil chemical of ecological concern.

The soil biota EISC was derived from toxicity testing of weathered DRO-contaminated soils (Ecology 2016). Ecology (2016) conducted earthworm bioassays for 54 samples collected from 11 petroleum-contaminated sites throughout Washington State. Toxicity was considered evident if the bioassay results were significantly more impacted than uncontaminated control samples. Significant effects on earthworm survival were observed in 18 samples with DRO concentrations ranging from 260 to 20,000 mg/kg. DRO concentrations associated with no-toxicity ranged from 35 to 1,400 mg/kg. ORO-contaminated soils did not show toxicity at concentrations less than 3,800 mg/kg.

Of the eight soil samples collected at the Thompson Field Site with combined DRO and ORO exceeding the EISC, ORO constitutes from 66 to 90 percent of the total combined DRO and ORO concentration. The maximum DRO concentration (without ORO added) in soil was 120 mg/kg, which is less than half the lowest observed adverse effects level for DRO reported by Ecology (2016).

DRO is a complex mixture and wildlife chronic toxicity from dietary and direct contact exposure is attributed primarily to polycyclic aromatic hydrocarbons (PAHs) (Irwin 1997). Concentrations of PAHs in soil samples collected at the Thompson Field Site do not exceed their respective EISCs (Table 1).¹ The combined DRO and ORO concentrations are highly conservative estimates of the

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¹ PAHs were detected in a soil sample collected from boring FB-20 at a depth of approximately 5.0 feet bgs at concentrations exceeding ecological screening levels. The Feasibility Study that will be generated for the Thompson



total petroleum hydrocarbons fractions associated with earthworm toxicity observed by Ecology (2016) since the predominant fraction of the combined DRO and ORO concentrations in soil samples at the Thompson Field Site is ORO, which showed a much lower toxicity in the Ecology (2016) study than DRO. Based on Thompson Field Site soil chemistry data and Ecology (2016) toxicological testing results, the combined DRO and ORO concentrations pose negligible risk to ecological receptors.

SELENIUM

Selenium was detected at a concentration of 3.2 mg/kg, which exceeds MTCA screening level for plants and the EPA Ecological Soil Screening Levels for wildlife in the sample collected at a depth of 8 to 10 feet below ground surface from boring BH02 (Table 1). This sample interval is interpreted as native material below the fill material. Selenium was not detected at a concentration at or exceeding the laboratory practical quantitation limit in the surface soil sample collected from the fill material at boring BH02. In all other samples with detections of selenium, including one surface soil sample, concentrations were less than the EISCs. Based on the sample depth of 8 to 10 feet below ground surface, low detection frequency, and low detected concentrations in other samples; the presence of selenium poses negligible risk to ecological receptors and the elevated concentration in one sample is likely associated with background concentrations.

GROUNDWATER ECOLOGICAL RISK ASSESSMENT

Iron and manganese were detected at concentrations exceeding the SLVs for groundwater in downgradient monitoring well FMW-08 at the Thompson Field Site. These chemicals could potentially leach to surface water resulting in exposure to aquatic biota receptors using the adjacent Evans Creek.

IRON

Dissolved iron concentrations in groundwater samples collected from three monitoring wells at the Thompson Field Site in 2020 ranged from 1,500 to 7,100 micrograms per liter (μ g/l). A groundwater sample collected from monitoring well FWM-08, which is reflective of concentrations near the Thompson Field Site boundary prior to potential discharge to surface water, had a dissolved iron concentration of 5,700 μ g/l which exceeds the SLV (1000 μ g/l). The SLV is a Tier II value noted to be uncertain because it is based on a site receiving acid mine drainage and derivation was not consistent with later methods for deriving ambient water quality criteria (Suter and Tsao 1996). Dissolved iron was detected at a concentration of 4,330 μ g/l in a background reconnaissance groundwater sample collected by Ecology and Environment (E&E) in 2020 from a boring adjacent to the Thompson Field Site.

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Field Site will recommend excavation of soil at FB-20 exceeding MTCA Method A cleanup levels, therefore the PAH exceedances in soil at FB-20 is not relevant for this TEE.



While iron can be toxic at high concentrations, iron is among the most common elements in soil and there is no known source of a release of iron at the Thompson Field Site. In soil samples collected by E&E in 2020 (E&E 2020) at the Thompson Field Site, iron was detected at concentrations ranging from 12,700 to 21,400 mg/kg, which are less than the Washington State natural background concentration of 42,100 mg/kg (Ecology 1994) and are similar to iron concentrations of 12,900 to 19,600 mg/kg reported by E&E (2020) for nearby background soil samples. Iron was detected at concentrations exceeding ecological screening levels in three of four groundwater samples collected by E&E from off-site monitoring wells located approximately 0.4 mile to the northwest of Thompson Field (E&E 2020). Based on the available information, risk to surface water receptors from iron is highly uncertain and concentrations of iron in soil samples collected at the Thompson Field Site are believed to be representative of natural background.

MANGANESE

Dissolved manganese was detected at concentrations ranging from 190 to 530 μ g/l in groundwater samples collected from three monitoring wells at the Thompson Field Site in 2020. A groundwater sample collected from monitoring well FWM-08, which is reflective of concentrations near the Thompson Field Site boundary prior to potential discharge to surface water, had a concentration of 190 μ g/l manganese, which exceeds the SLV of 120 μ g/l. Dissolved manganese was detected at a concentration of 226 μ g/l in a background reconnaissance groundwater sample collected by E&E (2020) in 2020 from a boring adjacent to the Thompson Field Site. Manganese was also detected at elevated concentrations exceeding background concentrations in all but one of the groundwater samples collected by E&E from off-site monitoring wells located up to 0.4 mile from the Thompson Field Site (E&E 2020).

While manganese can be toxic at high concentrations, manganese is among the most common elements in soil and there is no known source of a release of manganese at the Thompson Field Site. In soil samples collected by E&E (2020) at the Thompson Field Site in 2020, manganese was detected at concentrations ranging from 159 to 424 mg/kg which are less than the Washington State natural background soil concentration of 1,100 mg/kg (Ecology 1994) and are similar to manganese concentrations of 166 to 225 mg/kg reported by E&E (2020) for nearby background soil samples. Based on the available information, risk to surface water receptors from concentrations of manganese at the Thompson Field Site is highly uncertain and concentrations are believed to be representative of natural background.

Attachments: Figure 1, Site Vicinity

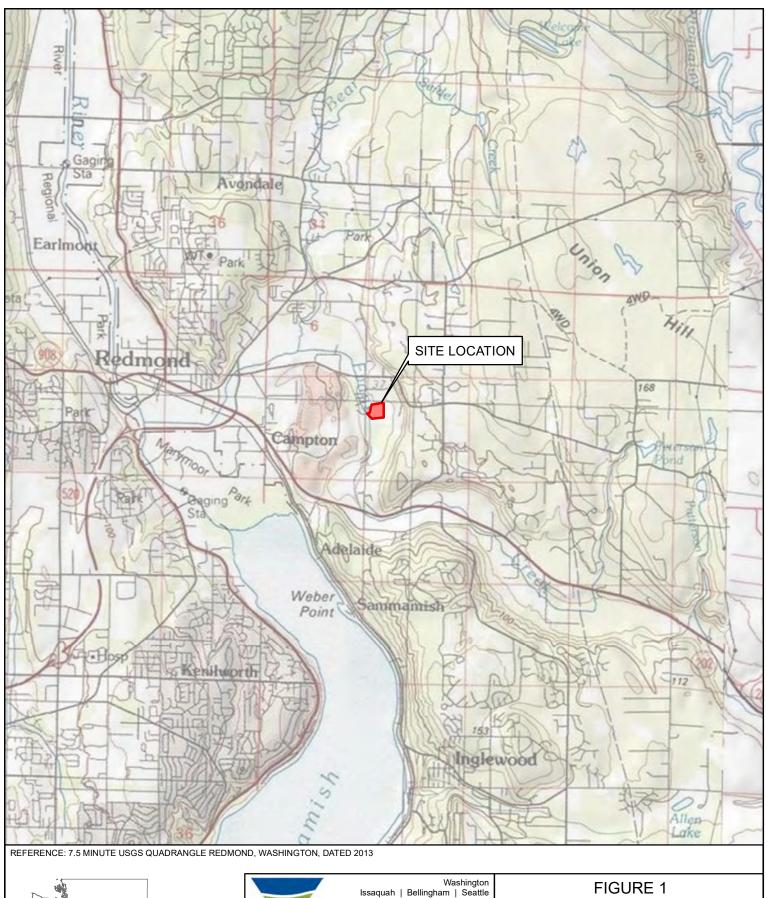
Figure 2, Property Plan Table 1, Soil Ecological Screening Levels and Contaminants of Concern Table 2, Natural Background Soil Concentrations of Nickel and Vanadium – Western Washington Table 3, Ecological Chemicals of Concern for Soil Table 4, Groundwater Chemicals of Ecological Concern Screening Assessment



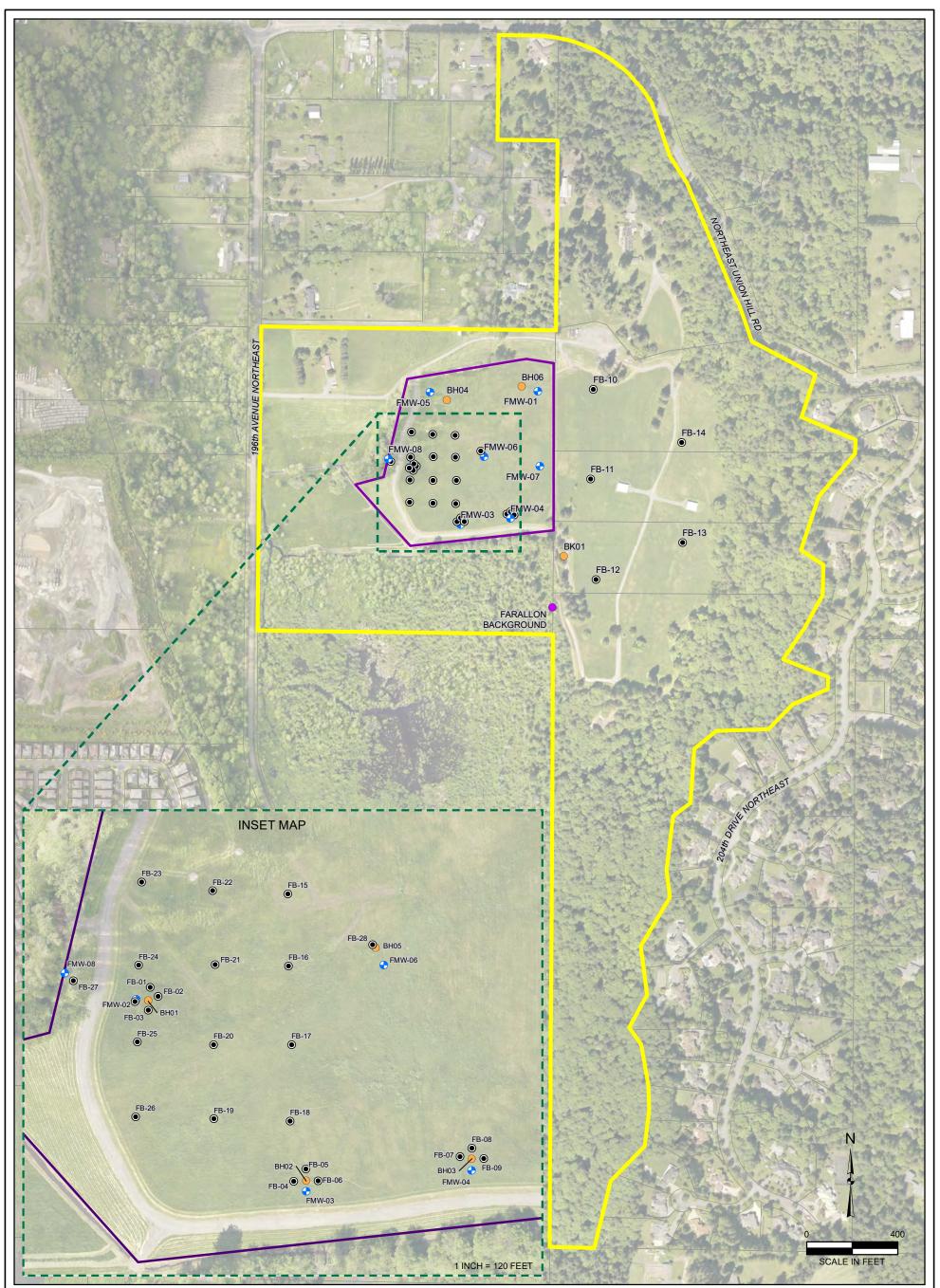
Table 5, *Soil Chemicals of Ecological Concern and Representative Receptors* Attachment A, Bibliography Attachment B, Terrestrial Ecological Evaluation Form Attachment C, Washington Department of Fish and Wildlife Priority Habitats and Species Reports

FIGURES

SITE-SPECIFIC TERRESTRIAL ECOLOGICAL EVALUATION Thompson Field Site A Portion of King County Parcel No. 0825069104 Redmond, Washington







LEGEND

- MONITORING WELL (FARALLON, 2020)
- BORING (FARALLON, 2020)
- BORING (ECOLOGY & ENVIRONMENT, INC, 2019)
- BACKGROUND GRAB SAMPLE (FARALLON, 2019)

THOMPSON FIELD BOUNDARY

PROPERTY BOUNDARY

KING COUNTY PARCEL BOUNDARY

NOTES: 1. ALL LOCATIONS ARE APPROXIMATE. 2. FIGURES WERE PRODUCED IN COLOR. GRAYSCALE COPIES MAY NOT REPRODUCE ALL ORIGINAL INFORMATION.

	Washington Issaquah Bellingham Seattle	FIGURE 2		
	Oregon Portland Baker City	PROPERTY PLAN THOMPSON FIELD		
FARALLON Consulting	LON California PORTION OF KING			
Quality Service for Environment	al Solutions farallonconsulting.com			
		FARALLON PN: 650-031		
Drawn By: jjones	Checked By: SB	Date: 3/24/2021	Disc Reference:	
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TABLES

SITE-SPECIFIC TERRESTRIAL ECOLOGICAL EVALUATION Thompson Field Site A Portion of King County Parcel No. 0825069104 Redmond, Washington

Table 1 Soil Ecological Screening Levels and Contaminants of Concern Thompson Field Site Redmond, Washington Farallon PN: 650-031

								Ecological	Indicator Soil ((EISC)	Concentration		EISC Source ¹		
	Maximum Concentration						Screening Level	Plants	Soil Biota	Wildlife				Chemical
Chemical	(mg/kg-dw)	EF	EF (%)	UCL	Distribution	UCL Method		(mg	/kg dw)		Plants	Soil Biota	Wildlife	Class
2-Butanone (Methyl Ethyl Ketone)	0.94	0/14	0.0%	NC	NC	NA	89.6	89.6	89.6	89.6	EPA 2003	EPA 2003	EPA 2003	VOC
Acetone	4.5	1/18	5.6%	1.6	Gamma	95% Gamma Adjusted KM-UCL	2.5	2.5	2.5	2.5	EPA 2003	EPA 2003	EPA 2003	VOC
Carbon Disulfide	0.024	0/4	0.0%	NC	NC	NA	94.1	94.1	94.1	94.1	EPA 2003	EPA 2003	EPA 2003	VOC
m,p-Xylene	0.0057	0/14	0.0%	NC	NC	NA	10	10	10	10	EPA 2003	EPA 2003	EPA 2003	VOC
Methylene Chloride	0.023	0/18	0.0%	NC	NC	NA	4.05	4.05	4.05	4.05	EPA 2003	EPA 2003	EPA 2003	VOC
Dimethylphthalate	0.99	0/14	0.0%	NC	NC	NA	200	734	200	734	EPA 2003	MTCA Table 749-3	EPA 2003	SVOC
Diesel-Range Organics (DRO+ORO)	460	8/30	26.7%	210	Normal	95% KM (t) UCL	260	1,600	260	6,000	Ecology 2017	Ecology 2017	MTCA Table 749-3	TPH
Naphthalene	91	1/64	1.6%	11	No discernable distribution (log SD = 2.2)	97.5% KM Chebyshev UCL	20	20	30	100	assumed acenaphthene	assumed fluorene	EPA 2007b	LPAH
1-Methylnaphthalene	23	1/64	1.6%	4	No discernable distribution (SD = 2.9)	99% KM (Chebyshev) UCL	20	20	30	100	assumed acenaphthene	assumed fluorene	EPA 2007b	LPAH
2-Methylnaphthalene	39	1/64	1.6%	4.5	lognormal $(\log SD = 2.5)$	97.5% KM (Chebyshev) UCL	20	20	30	100	assumed acenaphthene	assumed fluorene	EPA 2007b	LPAH
Acenaphthene	110	1/64	1.6%	13	lognormal $(\log SD = 2.9)$	97.5% KM (Chebyshev) UCL	20	20	30	100	MTCA Table 749-3	assumed fluorene	EPA 2007b	LPAH
Acenaphthylene	3.2	0/64	0.0%	NC	NC	NA	20	20	30	100	assumed acenaphthene	assumed fluorene	EPA 2007b	LPAH
Anthracene	64	1/64	1.6%	7.4	No discernable distribution (log SD = 2.2)	97.5% KM (Chebyshev) UCL	20	20	30	100	assumed acenaphthene	assumed fluorene	EPA 2007b	LPAH
Fluorene	86	1/64	1.6%	10	lognormal $(\log SD = 2.8)$	97.5% KM (Chebyshev) UCL	20	20	30	100	assumed acenaphthene	MTCA Table 749-3	EPA 2007b	LPAH
Phenanthrene	250	1/64	1.6%	29	lognormal $(\log SD = 2.7)$	97.5% KM (Chebyshev) UCL	20	20	30	100	assumed acenaphthene	assumed fluorene	EPA 2007b	LPAH
Benzo(a)Anthracene	27	1/64	1.6%	3.2	lognormal (log SD = 2.3)	97.5% KM (Chebyshev) UCL	12	18	18	12	assumed soil biota	EPA 2007b	Assumed BaP	HPAH
Benzo(a)Pyrene	17	1/64	1.6%	2	lognormal (log SD = 2.2)	97.5% KM (Chebyshev) UCL	12	18	18	12	assumed soil biota	EPA 2007b	MTCA Table 749-3	HPAH
Benzo(b)Fluoranthene	19	1/64	1.6%	2.3	lognormal $(\log SD = 2.1)$	97.5% KM (Chebyshev) UCL	12	18	18	12	assumed soil biota	EPA 2007b	Assumed BaP	HPAH
Benzo(j,k)Fluoranthene	6.1	0/64	0.0%	NC	NC	NA	12	18	18	12	assumed soil biota	EPA 2007a	Assumed BaP	HPAH
Chrysene	21	1/64	1.6%	2.5	lognormal $(\log SD = 2.2)$	97.5% KM (Chebyshev) UCL	12	18	18	12	assumed soil biota	EPA 2007b	Assumed BaP	HPAH
Dibenzo(a,h)Anthracene	2	0/64	0.0%	NC	NC	NA	12	18	18	12	assumed soil biota	EPA 2007b	Assumed BaP	HPAH
Fluoranthene	110	1/64	1.6%	13	lognormal $(\log SD = 2.5)$	97.5% KM (Chebyshev) UCL	18	18	18	122	assumed soil biota	EPA 2007b	EPA 2003	НРАН
Indeno(1,2,3-cd)Pyrene	7.3	0/64	0.0%	NC	NC	NA	12	18	18	12	assumed soil biota	EPA 2007b	Assumed BaP	HPAH

Table 1 Soil Ecological Screening Levels and Contaminants of Concern **Thompson Field Site Redmond**, Washington Farallon PN: 650-031

								Ecological	Indicator Soil C (EISC)	Concentration	EISC Source ¹			
	Maximum Concentration						Screening Level	Plants	Soil Biota	Wildlife				Chemical
Pyrene	84	1/64	1.6%	9.8	lognormal $(\log SD = 2.4)$	97.5% KM (Chebyshev) UCL	12	18	18	12	assumed soil biota	EPA 2007b	Assumed BaP	HPAH
Aluminum	20,700	0/14	0.0%	NC	NC	NA	37,200	37,200	37,200	37,200	Bac	kground (Ecology 1994	4)	Metal
Arsenic	47.1	2/31	6.5%	13.3	Undefined $(\log SD = 0.53)$	95% KM Chebyshev UCL	20	20	60	132	Table 740-1 footnote	MTCA Table 749-3	MTCA Table 749-3	Metal
Barium	125	0/14	0.0%	NC	NC	NA	330	500	330	2,000	MTCA Table 749-3	EPA 2005a	EPA 2005a	Metal
Chromium	48.2	0/14	0.0%	NC	NC	NA	48.2	48.2	48.2	67	Background (Ecology 1994) MTCA Table 749-3		Metal	
Cobalt	12.5	0/14	0.0%	NC	NC	NA	20	20	20	120	MTCA Table 749-3	assumed plant SL	EPA 2005b	Metal
Copper	35.9	0/14	0.0%	NC	NC	NA	80	100	80	217	MTCA Table 749-3	EPA 2006	MTCA Table 749-3	Metal
Iron	20,800	0/14	0.0%	NC	NC	NA	42,100	42,100	42,100	42,100	Bac	kground (Ecology 1994	4)	Metal
Lead	41.3	0/14	0.0%	NC	NC	NA	118	120	1,700	118	EPA 2005c	EPA 2005c	MTCA Table 749-3	Metal
Manganese	350	0/14	0.0%	NC	NC	NA	450	1,100	450	4,000	MTCA Table 749-3	EPA 2007a	EPA 2007a	Metal
Mercury	0.15	1/14	1.6%	0.09	Gamma	95% KM Bootstrap t UCL	0.1	0.3	0.1	5.5	MTCA Table 749-3	MTCA Table 749-3	MTCA Table 749-3	Metal
Nickel	50.3	0/14	0.0%	NC	NC	NA	70	70	200	980	Background (Smith et al. 2013)	MTCA Table 749-3	MTCA Table 749-3	Metal
Selenium	3.2	1/14	7.1%	1.8	Undefined (log SD = 0.71)	95% KM (Chebyshev) UCL	0.63	1	70	0.63	MTCA Table 749-3	MTCA Table 749-3	EPA 2007d	Metal
Vanadium	75.8	0/14	0.0%	NC	NC	NA	178	178	178	178	Background (Smith et al. 2013)		Metal	
Zinc	55.1	0/14	0.0%	NC	NC	NA	160	160	200	360	EPA 2007c	MTCA Table 749-3	MTCA Table 749-3	Metal

NOTES:

Chemicals in **bold** and highlighted yellow are identified as contaminants of concern (COCs).

¹For a list of ecological indicator soil concentration (EISC) sources cited, see Attachment A.

background = natural background concentration reported in Ecology (1994) or Smith et al. (2013) BaP = benzo(a)pyrene

DRO+ORO = sum of total petroleum hydrocarbons as diesel-range organics and as oil-range organics

EF = exceedance frequency (number of exceedances/number of samples)

EPA = U.S. Environmental Protection Agency

KM = Kaplan Meier

- LPAH = Low molecular weight PAHs including all PAHs with three or fewer benzene rings
- log SD = standard deviation in log scale
- mg/kg dw = milligrams per kilogram dry weight

MTCA = Washington State Model Toxics Control Act Cleanup Regulation (MTCA)

NA = not applicable

NC = not calculated

SL = screening level (lowest EISC)

TPH = total petroleum hydrocarbons

- UCL = 95% upper confidence limit on the mean
- VOC = volatile organic compound

HPAH = high molecular weight polycyclic aromatic hydrocarbons (PAHs) including all PAHs with four or more benzene rings

Table 2

Natural Background Soil Concentrations of Nickel and Vanadium - Western Washington Thompson Field Site Redmond, Washington Farallon PN: 650-031

Chemical ¹	Number of Samples	Concentration Range (milligrams per kilogram)	Distribution	90 th Percentile Concentration
Nickel	42	10-192	Lognormal	70
Vanadium	42	43-292	Lognormal	178

NOTES:

¹Data Source: Smith, D.B., Cannon, W.F., Woodruff, L.G., Solano, Federico, Kilburn, J.E., and Fey, D.L., 2013, Geochemical and mineralogical data for soils of the conterminous United States: U.S. Geological Survey Data Series 801, 19 p., https://pubs.usgs.gov/ds/801/.

Table 3Ecological Chemicals of Concern for SoilThompson Field SiteRedmond, WashingtonFarallon PN: 650-031

	Ecological Indicator Soil Concentration (mg/kg)			Backgrou	nd Samples	Site Samples			
Chemical	Plants	Soil Biota	Wildlife	ExceedanceFrequency(number of(mg/kg)samples ¹ , percent)		Range, Mean (mg/kg)	EPC (mg/kg)	Exceedance Frequency (number of samples ¹ , percent)	
DRO+ORO	1,600	260	6,000	$<98 - <110, 52^{2}$	0/4, 0%	<89- 460, 221 ³	210	8/30, 27%	
Selenium	1	70	0.63	<2.4 - <3.0, 1.4 ²	0/3, 0%	<0.2- 3.2, 0.84 ³	1.8	1/14, 7%	

NOTES:

Sample results or exposure point concentrations in **bold** exceed EISCs.

< denotes analyte not detected at or exceeding the reporting limit listed.

¹Number of detected samples exceeding the screening lowest EISC level divided

by the number of samples analyzed for chemical. ²Non-detects included at half the detection limit.

³Detected data only⁻

DRO+ORO = sum of total petroleum hydrocarbons as diesel-range organics and as oil-range organics

EISC = Ecological Indicator Soil Concentration

EPC = Exposure Point Concentration

mg/kg = milligrams per kilogram

MTCA = Model Toxics Control Act Cleanup Regulation (MTCA)

Table 4 Groundwater Chemicals of Ecologic Concern Screening Assessment Thompson Field Site Redmond, Washington Farallon PN: 650-031

Chemical	Downgradient Wells Maximum	Site Maximum	SLV	SLV Source
		(micrograms per liter)	
Xylenes	NE	0.91	27	EPA 2003
Acenaphthene	NE	2.4	5.8	Environment Canada 2021
Anthracene	< 0.097	0.17	0.012	Environment Canada 2021
Fluoranthene	< 0.097	0.19	0.04	Environment Canada 2021
Fluorene	< 0.097	2.1	3	Environment Canada 2021
Naphthalene	< 0.097	5.4	1.1	Environment Canada 2021
Naphthalene (total)	<0.291	8.4	1.1	Environment Canada 2021
Phenanthrene	< 0.097	2.0	0.4	Environment Canada 2021
Pyrene	< 0.097	0.15	0.025	Environment Canada 2021
TPH (DRO+ORO)	NE	530	$3,000^{1}$	Hobbs et al. 2020
Aluminum	NE	<110	87	Clean Water Act, U.S. Code §304
Arsenic	NE	9.5	190	173-201A WAC
Iron	5,700	7,100	1,000	Clean Water Act, U.S. Code §304
Manganese	200	530	120	Suter and Tsao 1996

NOTES:

Results in **bold** denote sample results exceeding SLVs.

< denotes analyte not detected at or exceeding the reporting limit listed.

¹The weathered diesel SLV was used rather than the fresh diesel SLV because silica gel cleanup resulted in a substantially lower NWTPH-Dx concentration demonstrating that polar metabolites constitute a significant portion of the Dx in site samples (Ecology 2020).

DRO+ORO = sum of total petroleum hydrocarbons as diesel-range organics and as oil-range organics NE = Not evaluated; groundwater concentration in downgradient wells not evaluated because Site maximum groundwater concentration is less than SLV.

SLV = Screening Level Value, concentration protective of surface water aquatic organisms (freshwater chronic criteria)

TPH = total petroleum hydrocarbons

Table 5 Soil Chemicals of Ecologic Concern and Representative Receptors Thompson Field Site Redmond, Washington Farallon PN: 650-031

				Wildlife	
Chemical	Vascular Plants	Soil Biota (Earthworm)	Shrew	Vole	American Robin
DRO+ORO		Х			
Selenium	Х		Х	Х	Х

NOTES:

DRO+ORO = sum of total petroleum hydrocarbons as diesel-range organics and as oil-range organics

X = indicates chemical is of ecological concern to specified receptor

ATTACHMENT A BIBLIOGRAPHY

SITE-SPECIFIC TERRESTRIAL ECOLOGICAL EVALUATION Thompson Field Site A Portion of King County Parcel No. 0825069104 Redmond, Washington



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ATTACHMENT B TERRESTRIAL ECOLOGICAL EVALUATION FORM

SITE-SPECIFIC TERRESTRIAL ECOLOGICAL EVALUATION Thompson Field Site A Portion of King County Parcel No. 0825069104 Redmond, Washington



Voluntary Cleanup Program

Washington State Department of Ecology **Toxics Cleanup Program**

ERRESTRIAL ECOLOGICAL EVALUATION FORM

Under the Model Toxics Control Act (MTCA), a terrestrial ecological evaluation is necessary if hazardous substances are released into the soils at a Site. In the event of such a release, you must take one of the following three actions as part of your investigation and cleanup of the Site:

- 1. Document an exclusion from further evaluation using the criteria in WAC 173-340-7491.
- 2. Conduct a simplified evaluation as set forth in WAC 173-340-7492.
- 3. Conduct a site-specific evaluation as set forth in WAC 173-340-7493.

When requesting a written opinion under the Voluntary Cleanup Program (VCP), you must complete this form and submit it to the Department of Ecology (Ecology). The form documents the type and results of your evaluation.

Completion of this form is not sufficient to document your evaluation. You still need to document your analysis and the basis for your conclusion in your cleanup plan or report.

If you have questions about how to conduct a terrestrial ecological evaluation, please contact the Ecology site manager assigned to your Site. For additional guidance, please refer to https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Terrestrial-ecologicalevaluation.

Step 1: IDENTIFY HAZARDOUS WASTE SITE

Please identify below the hazardous waste site for which you are documenting an evaluation.

Facility/Site Name: Thompson Field Gunshy Manor

Facility/Site Address:

Facility/Site	No:	8042
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VCP Project No.:

Step 2: IDENTIFY EVALUATOR

Please identify below the person who conducted the evaluation and their contact information.

Title: Ecotoxicologist

Organization: Ecozoic Environmental Consulting LLC

Mailing address: 2629 Iron Street

City: Bellingham		State: WA		Zip code: 98225
Phone: 360-296-6712 Fax:			E-mail: Matt@	@EcozoicLLC.com

Step 3: D	OCUME	ENT EVALUATION TYPE AND RESULTS
A. Exclus	sion from	n further evaluation.
1. Does t	he Site q	ualify for an exclusion from further evaluation?
	Yes	If you answered "YES," then answer Question 2.
	✓ No or Jnknown	If you answered "NO" or "UNKNOWN," then skip to Step 3B of this form.
2. What is	s the bas	sis for the exclusion? Check all that apply. Then skip to Step 4 of this form.
Point o	of Complia	ance: WAC 173-340-7491(1)(a)
		soil contamination is, or will be,* at least 15 feet below the surface.
	_ dep	soil contamination is, or will be,* at least 6 feet below the surface (or alternative oth if approved by Ecology), and institutional controls are used to manage naining contamination.
Barrier	s to Expo	osure: WAC 173-340-7491(1)(b)
] pav	contaminated soil, is or will be,* covered by physical barriers (such as buildings or ved roads) that prevent exposure to plants and wildlife, and institutional controls used to manage remaining contamination.
Undeve	eloped La	and: WAC 173-340-7491(1)(c)
	of a diox enc	ere is less than 0.25 acres of contiguous [#] undeveloped [±] land on or within 500 feet any area of the Site and any of the following chemicals is present: chlorinated xins or furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, dosulfan, endrin, heptachlor, heptachlor epoxide, benzene hexachloride, aphene, hexachlorobenzene, pentachlorophenol, or pentachlorobenzene.
		sites not containing any of the chemicals mentioned above, there is less than 1.5 es of contiguous [#] undeveloped [±] land on or within 500 feet of any area of the Site.
Backgr	round Co	ncentrations: WAC 173-340-7491(1)(d)
		ncentrations of hazardous substances in soil do not exceed natural background levels described in WAC 173-340-200 and 173-340-709.
acceptable [±] "Undevel prevent wild [#] "Contiguo	to Ecolog oped land dlife from f ous" undev	d on future land use must have a completion date for future development that is y. " is land that is not covered by building, roads, paved areas, or other barriers that would feeding on plants, earthworms, insects, or other food in or on the soil. veloped land is an area of undeveloped land that is not divided into smaller areas of paving, or similar structures that are likely to reduce the potential use of the overall area

В.	Simplified	Simplified evaluation.						
1.	. Does the Site qualify for a simplified evaluation?							
		es If you answered "YES," then answer Question 2 below.						
	⊠ N Unkne	IT VOLLANSWARAD "NL)" OF "LINK NLIWN " THAN SKIN TO NTAN KLI OT THIS TORM						
2.	Did you co	nduct a simplified evaluation?						
	Y	es If you answered "YES," then answer Question 3 below.						
	🖂 N	o If you answered " NO, " then skip to Step 3C of this form.						
3.	Was furthe	r evaluation necessary?						
		es If you answered "YES," then answer Question 4 below.						
	🗌 N	o If you answered " NO, " then answer Question 5 below.						
4.	If further e	valuation was necessary, what did you do?						
		Used the concentrations listed in Table 749-2 as cleanup levels. <i>If so, then skip to Step 4 of this form.</i>						
		Conducted a site-specific evaluation. If so, then skip to Step 3C of this form.						
5.	If no furthe to Step 4 of	er evaluation was necessary, what was the reason? Check all that apply. Then skip f this form.						
	Exposure A	Analysis: WAC 173-340-7492(2)(a)						
		Area of soil contamination at the Site is not more than 350 square feet.						
		Current or planned land use makes wildlife exposure unlikely. Used Table 749-1.						
	Pathway A	nalysis: WAC 173-340-7492(2)(b)						
		No potential exposure pathways from soil contamination to ecological receptors.						
	Contamina	nt Analysis: WAC 173-340-7492(2)(c)						
		No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations that exceed the values listed in Table 749-2.						
		No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations that exceed the values listed in Table 749-2, and institutional controls are used to manage remaining contamination.						
		No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays.						
		No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays, and institutional controls are used to manage remaining contamination.						

 C. Site-specific evaluation. A site-specific evaluation process consists of two parts: (1) formulating the problem, and (2) selecting the methods for addressing the identified problem. Both steps require consultation with and approval by Ecology. See WAC 173-340-7493(1)(c). 1. Was there a problem? See WAC 173-340-7493(2). Yes If you answered "YES," then answer Question 2 below. If you answered "NO," then identify the reason here and then skip to Question below. No While issues were identified during the problem formulation step. While issues were identified, those issues were addressed by the cleanup actions for protecting human health. 2. What did you do to resolve the problem? See WAC 173-340-7493(3). Used the concentrations listed in Table 749-3 as cleanup levels. If so, then skip to Question 5 below. Used one or more of the methods listed in WAC 173-340-7493(3) to evaluate and address the identified problem. If so, then answer Questions 3 and 4 below. 3. If you conducted further site-specific evaluations, what methods did you use? Check all that apply. See WAC 173-340-7493(3). Literature surveys. Soil bioassays. Wildlife exposure model. Biomarkers. Site-specific field studies. Weight of evidence. Other methods approved by Ecology. If so, please specify: 4. What was the result of those evaluations? Confirmed there was a problem and established site-specific cleanup levels. 5. Have you already obtained Ecology's approval of both your problem formulation and problem resolution steps? Yes If so, please identify the Ecology staff who approved those steps:				
 Yes If you answered "YES," then answer Question 2 below. If you answered "NO," then identify the reason here and then skip to Question below: No issues were identified during the problem formulation step. While issues were identified during the problem formulation step. While issues were identified during the problem formulation step. While issues were identified during the problem formulation step. While issues were identified during the problem formulation step. While issues were identified during the problem formulation step. While issues were identified during the problem formulation step. What did you do to resolve the problem? See WAC 173-340-7493(3). Used the concentrations listed in Table 749-3 as cleanup levels. If so, then skip to Question 5 below. Used one or more of the methods listed in WAC 173-340-7493(3) to evaluate and address the identified problem. If so, then answer Questions 3 and 4 below. If you conducted further site-specific evaluations, what methods did you use? Check all that apply. See WAC 173-340-7493(3). Literature surveys. Soil bioassays. Wildlife exposure model. Biomarkers. Site-specific field studies. Weight of evidence. Other methods approved by Ecology. If so, please specify: 4. What was the result of those evaluations? Confirmed there was no problem. Confirmed there was a problem and established site-specific cleanup levels. 5. Have you already obtained Ecology's approval of both your problem formulation and problem resolution steps?	C.			
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problem resolution steps?			Confirmed ther	e was a problem and established site-specific cleanup levels.
Yes If so, please identify the Ecology staff who approved those steps:	5.			
		□ Y	es If so, pleas	se identify the Ecology staff who approved those steps:
⊠ No				

Step 4: SUBMITTAL

Please mail your completed form to the Ecology site manager assigned to your Site. If a site manager has not yet been assigned, please mail your completed form to the Ecology regional office for the County in which your Site is located.



If you need this publication in an alternate format, please call the Toxics Cleanup Program at 360-407-7170. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call 877-833-6341.

ATTACHMENT C WASHINGTON DEPARTMENT OF FISH AND WILDLIFE PRIORITY HABITATS AND SPECIES REPORTS

SITE-SPECIFIC TERRESTRIAL ECOLOGICAL EVALUATION Thompson Field Site A Portion of King County Parcel No. 0825069104 Redmond, Washington





Report Date: 11/09/2020, Parcel ID: 0825069104

PHS Species/Habitats Overview:

Occurence Name	Federal Status	State Status	Generalized Location
Coho	N/A	N/A	No
Chinook	Threatened	N/A	No
Coho	Candidate	N/A	No
Resident Coastal Cutthroat	N/A	N/A	No
Wetlands	N/A	N/A	No
Freshwater Forested/Shrub Wetland	N/A	N/A	No
Freshwater Emergent Wetland	N/A	N/A	No

PHS Species/Habitats Details:

Coho		
Scientific Name	Oncorhynchus kisutch	
Priority Area	Occurrence/Migration	
Accuracy	NA	
Notes	LLID: 1220776476697, Fish Name: Coho Salmon, Run Time: Unknown or not Applicable, Life History: Anadromous	
Source Record	28534	
Source Dataset	SWIFD	
Federal Status	N/A	
State Status	N/A	
PHS Listing Status	PHS Listed Occurrence	
Sensitive	Ν	
SGCN	Ν	
Display Resolution	AS MAPPED	
More Info	http://wdfw.wa.gov/wlm/diversty/soc/soc.htm	
Geometry Type	Lines	

Chinook		
Scientific Name	Oncorhynchus tshawytscha	
Priority Area	Occurrence	
Site Name	Evans Creek	
Accuracy	NA	
Notes	LLID: 1220921476788, Stock Name: Sammamish Chinook, Run: Sum/Fall, Status: Healthy	
Source Record	1128	
Source Dataset	SASI	
Source Name	Not Given	
Source Entity	WDFW Fish Program	
Federal Status	Threatened	
State Status	N/A	
PHS Listing Status	PHS Listed Occurrence	
Sensitive	Ν	
SGCN	Ν	
Display Resolution	AS MAPPED	
More Info	http://wdfw.wa.gov/wlm/diversty/soc/soc.htm	
Geometry Type	Lines	

Coho		
Scientific Name	Oncorhynchus kisutch	
Priority Area	Occurrence	
Site Name	Evans Creek	
Accuracy	NA	
Notes	LLID: 1220921476788, Stock Name: Lake Washington/Sammamish Tribs Coho, Run: Unspecified, Status: Depressed	
Source Record	3120	
Source Dataset	SASI	
Source Name	Not Given	
Source Entity	WDFW Fish Program	
Federal Status	Candidate	
State Status	N/A	
PHS Listing Status	PHS Listed Occurrence	
Sensitive	N	
SGCN	N	
Display Resolution	AS MAPPED	
More Info	http://wdfw.wa.gov/wlm/diversty/soc/soc.htm	
Geometry Type	Lines	

Resident Coastal Cutthroat		
Scientific Name	Oncorhynchus clarki	
Priority Area	Occurrence/Migration	
Accuracy	NA	
Notes	LLID: 1220776476697, Fish Name: Cutthroat Trout, Run Time: Unknown or not Applicable, Life History: Unknown	
Source Record	28532	
Source Dataset	SWIFD	
Federal Status	N/A	
State Status	N/A	
PHS Listing Status	PHS Listed Occurrence	
Sensitive	Ν	
SGCN	Ν	
Display Resolution	AS MAPPED	
More Info	http://wdfw.wa.gov/wlm/diversty/soc/soc.htm	
Geometry Type	Lines	

Wetlands		
Priority Area	Aquatic Habitat	
Site Name	EVANS CREEK WETLANDS	
Accuracy	1/4 mile (Quarter Section)	
Notes	A GROUP OF WETLANDS ASSOCIATED WITH THE EVANS CREEK DRAINAGE SYSTEM. THOSE ALONG THE DOWNSTREAM REACHES ARE COVERED LARGELY BY WILLOWSPIRAEA. THOSE FURTHER UPSTREAM ALSO HAVE A MIXED FOREST COMPONENT. SEVERAL ALSO HAVE OPEN WATER.	
Source Record	902526	
Source Dataset	PHSREGION	
Source Name	MULLER, TED	
Source Entity	WA Dept. of Fish and Wildlife	
Federal Status	N/A	
State Status	N/A	
PHS Listing Status	PHS Listed Occurrence	
Sensitive	Ν	
SGCN	Ν	
Display Resolution	AS MAPPED	
ManagementRecommendations	http://www.ecy.wa.gov/programs/sea/wetlands/bas/index.html	
Geometry Type	Polygons	

Freshwater Forested/Shrub Wetland		
Priority Area	Aquatic Habitat	
Site Name	N/A	
Accuracy	NA	
Notes	Wetland System: PALUSTRINE - NWI Code: PFO/SSC	
Source Dataset	NWIWetlands	
Source Name	Not Given	
Source Entity	US Fish and Wildlife Service	
Federal Status	N/A	
State Status	N/A	
PHS Listing Status	PHS Listed Occurrence	
Sensitive	Ν	
SGCN	Ν	
Display Resolution	AS MAPPED	
ManagementRecommendations	http://www.ecy.wa.gov/programs/sea/wetlands/bas/index.html	
Geometry Type	Polygons	

Freshwater Forested/Shrub Wetland		
Priority Area	Aquatic Habitat	
Site Name	N/A	
Accuracy	NA	
Notes	Wetland System: PALUSTRINE - NWI Code: PFOA	
Source Dataset	NWIWetlands	
Source Name	Not Given	
Source Entity	US Fish and Wildlife Service	
Federal Status	N/A	
State Status	N/A	
PHS Listing Status	PHS Listed Occurrence	
Sensitive	Ν	
SGCN	Ν	
Display Resolution	AS MAPPED	
ManagementRecommendations	http://www.ecy.wa.gov/programs/sea/wetlands/bas/index.html	
Geometry Type	Polygons	

Freshwater Emergent Wetland		
Priority Area	Aquatic Habitat	
Site Name	N/A	
Accuracy	NA	
Notes	Wetland System: PALUSTRINE - NWI Code: PEMA	
Source Dataset	NWIWetlands	
Source Name	Not Given	
Source Entity	US Fish and Wildlife Service	
Federal Status	N/A	
State Status	N/A	
PHS Listing Status	PHS Listed Occurrence	
Sensitive	Ν	
SGCN	Ν	
Display Resolution	AS MAPPED	
ManagementRecommendations	http://www.ecy.wa.gov/programs/sea/wetlands/bas/index.html	
Geometry Type	Polygons	

Freshwater Forested/Shrub Wetland		
Priority Area	Aquatic Habitat	
Site Name	N/A	
Accuracy	NA	
Notes	Wetland System: PALUSTRINE - NWI Code: PSSCd	
Source Dataset	NWIWetlands	
Source Name	Not Given	
Source Entity	US Fish and Wildlife Service	
Federal Status	N/A	
State Status	N/A	
PHS Listing Status	PHS Listed Occurrence	
Sensitive	N	
SGCN	N	
Display Resolution	AS MAPPED	
ManagementRecommendations	http://www.ecy.wa.gov/programs/sea/wetlands/bas/index.html	
Geometry Type	Polygons	

DISCLAIMER. This report includes information that the Washington Department of Fish and Wildlife (WDFW) maintains in a central computer database. It is not an attempt to provide you with an official agency response as to the impacts of your project on fish and wildlife resources may occur in a reas not currently known to WDFW biologits, or in areas for which comprehensive surveys have not been conducted. Site specific surveys are frequently not excess may occur in a reas and currently known to WDFW biologits, or in areas for which comprehensive surveys have not been conducted. Site specific surveys are frequently necessary to rule out the presence of priority resources. Locations of fish and wildlife resources are subject to variation caused by disturbance, changes in season and weather, and other factors. WDFW does not recommend using reports more than is twomths did.