



March 9, 2020

Ms. Kathryn Dobler
1920 Tacoma Ave., LLC
PO Box 111088
Tacoma, Washington 98411

**RE: SITE ASSESSMENT REPORT
UNIVERSITY OF WASHINGTON TACOMA BRANCH PLP STATUS
1920 TACOMA AVENUE SOUTH
TACOMA, WASHINGTON
FARALLON PN: 2309-001**

Dear Ms. Dobler:

Farallon Consulting, L.L.C. (Farallon) has prepared this letter to summarize the results of the site assessment conducted for 1920 Tacoma Ave., LLC at the property at 1920 Tacoma Avenue in Tacoma, Washington (herein referred to as the Site) (Figure 1). The site assessment was conducted to evaluate soil and groundwater at the Site to assess whether a source of tetrachloroethene (PCE) and/or trichloroethene (TCE) exists at the Site, or whether an off-Site source such as the sanitary sewer system or other up-gradient or cross-gradient source not associated with prior or current Site activities exists.

This letter report provides a summary of the relevant Site background information; geology and hydrogeology; a description of the site assessment conducted by Farallon; analytical results of samples collected at the Site; and Farallon's conclusions.

SITE DESCRIPTION AND BACKGROUND

The Site comprises Pierce County Parcel No. 2019120131, which totals 1.29 acres of land in a commercial and residential area of Tacoma, Washington. The Site slopes down from west to east with an approximate elevation difference of 22 feet between the western Site boundary and the eastern Site boundary along Tacoma Avenue South. The northeastern portion of the Site is approximately level with Tacoma Avenue South and transitions to an abrupt upward slope toward the west-adjacent alley. The central and southern portions of the Site consist of a more gradual downward slope from west to east. Municipal sanitary sewer main lines that flow from north to south are present in the west-adjacent alley and in east-adjacent Tacoma Avenue South. Municipal stormwater main lines also are present mostly parallel to the sanitary sewer main lines. Figure 2 depicts the approximate locations of the utilities.

The Site is owned by 1920 Tacoma Ave., LLC and currently is vacant. Historically, the Site was developed with at least two structures, including a 2,000-square-foot tire shop providing brake and alignment services on the northern portion of the Site between 1953 and 1999, and Delta Camshaft, a camshaft machining facility, on the southern portion of the Site from at least 1983 until 2010.



The building housing the tire shop was demolished in 1999, and the building housing Delta Camshaft was demolished in 2010. Adjacent properties include a medical supply store to the north; Tacoma Avenue South followed by vacant land and a glass shop to the east and southeast; and residences, a youth organization, and a church to the south and west.

According to the letter regarding Preliminary Determination of Liability for Release of Hazardous Substances at the Following Contaminated Site: WA UW Tacoma Branch, 1900 Commerce, Tacoma, WA 98402 dated September 11, 2019, from Mr. Thomas Middleton of the Washington State Department of Ecology (Ecology) to Ms. Dobler of 1920 Tacoma Ave., LLC (Ecology potentially liable person [PLP] Letter), operations at Delta Camshaft included grinding, deburring, and coating camshafts for engine building. The Ecology PLP Letter also indicated that an underground storage tank (UST) of unspecified contents and capacity and associated impacted soil also were identified and removed near the former tire shop building, presumably during demolition activities in 1999. The Ecology PLP Letter indicated that information about the UST had been obtained from a final inspection permit from the City of Tacoma. Ecology and the Tacoma – Pierce County Health Department reportedly did not have records related to the UST removed from the Site.

The Ecology PLP Letter identified 1920 Tacoma Ave., LLC as a PLP for PCE and TCE identified in groundwater, which Ecology has alleged could be associated with historical operations at the Site. Subsurface investigation work completed by GeoEngineers, Inc. of Tacoma, Washington on behalf of the University of Washington between 2016 and 2019 under an Agreed Order with Ecology identified PCE and TCE in groundwater in both a shallow and deep groundwater-bearing zone at monitoring wells immediately down-gradient of the Site, but not in monitoring wells up-gradient of the Site. Consequently, Ecology issued PLP notifications to landowners with property hydraulically up-gradient of the University of Washington Tacoma campus, which required each landowner to conduct an assessment of their property and demonstrate their PLP status to Ecology.

GEOLOGY AND HYDROGEOLOGY

The Site is located approximately 0.25 mile southwest of downtown Tacoma, Washington on a hill that slopes down to the east. The Site is within the Puget Sound region, which is underlain by Quaternary sediments deposited by a number of glacial episodes. Deposition occurred during glacial advances and retreats, which created the existing subsurface conditions. The regional sediments consist primarily of interlayered and/or sequential deposits of alluvial clays, silts, and sands that typically are situated over deposits of glacial till that consist of silty sand to sandy silt with gravel. Outwash sediments consisting of sands, silts, clays, and gravels were deposited by rivers, streams, and post-glacial lakes during the glacial episodes. Except for the most recent recessional deposits, the outwash sediments have been over-consolidated by the overriding ice sheets. Soil encountered during drilling at the Site generally consisted of sand and gravel with varying amounts of silt to the maximum explored depth of 50 feet below ground surface (bgs).

During the site assessment, shallow groundwater was first encountered at depths ranging from approximately 1 to 5 feet bgs in a sand layer encountered in several of the direct-push borings.



However, shallow groundwater was not encountered in some borings. Determination of the first-encountered groundwater was based on wet soil conditions. Subsequently, temporary monitoring wells were installed for collection of reconnaissance groundwater samples. However, in some borings, minimal groundwater was found to enter the well casings after installation and stabilization for over 12 hours. The absence of contiguous shallow groundwater across the Site and minimal groundwater accumulation for reconnaissance groundwater sampling suggest that the groundwater encountered may be associated with seasonal surface water infiltration or recharge rather than representative of a groundwater-bearing zone.

A narrow zone of groundwater was encountered during drilling in silty sand in monitoring well boring FMW-01D between approximately 23 and 25 feet bgs, and in monitoring well boring FMW-02D between approximately 20 and 20.5 feet bgs. This zone of groundwater was underlain by a moist silty sand to a depth of approximately 30 feet bgs. A second deeper groundwater zone was encountered at a depth of approximately 30 feet bgs in monitoring well borings FMW-01D and FMW-02D, and at 20 feet bgs at monitoring well boring FMW-03S during drilling, based on consistently saturated soil conditions at the time of drilling. Subsequent water-level measurements indicated groundwater was present in the monitoring wells at depths of approximately 23 feet below the top of the well casings at monitoring well borings FMW-01D and FMW-02D, on the northwestern portion of the Site, and at approximately 16.5 feet below the top of the well casing at monitoring well boring FMW-03S, on the southern portion of the Site.

The monitoring well elevations were not surveyed for the purpose of this investigation. However, as sufficient historical hydrogeological information associated with the investigation of the source(s) of PCE and TCE by Ecology and others exists, it is likely that regional groundwater flow in the area of the Site is to the east, following local topography.

SITE ASSESSMENT

The scope of work for the Site assessment included:

- Locating subsurface utilities;
- Advancing 11 borings for collection of soil samples;
- Installing temporary monitoring wells and collecting reconnaissance groundwater samples from the first-encountered groundwater-bearing zone from four of the borings;
- Installing permanent groundwater monitoring wells in three of the borings and collecting groundwater samples from the deeper groundwater-bearing zone.

Holt Services Inc of Edgewood, Washington advanced borings FB-01 through FB-07 to a maximum depth of 20 feet bgs using a limited-access direct-push drill rig. Refusal was encountered at depths of approximately 9.5 feet bgs and 5 feet bgs at borings FB-06 and FB-07, respectively. Due to the shallow refusal at borings FB-06 and FB-07, boring FB-08 was installed proximate to borings FB-06 and FB-07 using a limited-access sonic drill rig to a depth 20 feet bgs to obtain additional soil samples (Figure 2). Monitoring well borings FMW-01D, FMW-02D, and



FMW-03S were advanced to a maximum depth of 50 feet bgs using a limited-access sonic drill rig. Boring and monitoring well locations are presented on Figure 2. The boring logs are included in Attachment A.

SUBSURFACE UTILITY LOCATION

Prior to conducting subsurface drilling activities, Farallon retained both public and private utility locating services to clear the proposed boring and monitoring well locations and also to gain information pertaining to the locations of subsurface utilities at and proximate to the Site. The locations of the utilities identified are depicted on Figure 2.

SOIL SAMPLING

Prior to commencement of drilling activities, boring locations were manually cleared for potential utilities to a depth of up to 5 feet bgs using an air knife or hand auger. A direct-push drill rig was used to advance each boring to the target depth, or refusal, at locations where underlying cobbles prohibited direct-push drilling from advancing further. The limited-access sonic drill rig was used to complete borings where refusal was encountered and for installation of the monitoring wells.

A Farallon Field Scientist/Geologist observed and logged subsurface conditions. Soil samples from select depth intervals were retained for laboratory analysis based on field indications of potential contamination and geology. The information recorded for each boring log included soil types encountered, groundwater conditions, visual and olfactory observations (e.g. staining, odor, etc.), and volatile organic vapor concentrations as measured using a photoionization detector. Boring logs are provided in Attachment A.

Soil samples were collected and transferred directly into laboratory-prepared sample containers. Soil samples collected for analysis for halogenated volatile organic compounds (HVOCs) were fitted with a Teflon-lined lid in accordance with U.S. Environmental Protection Agency (EPA) Method 5035A for sampling for HVOCs. Soil samples collected from the borings were placed on ice in a cooler under standard chain-of-custody procedures and delivered to OnSite Environmental Inc. of Redmond, Washington (OnSite) for analysis of HVOCs by EPA Method 8260C.

RECONNAISSANCE GROUNDWATER SAMPLING

Temporary well casings were installed in borings FB-01, FB-03, FB-04, FB-06, and FB-07 (Figure 2) for collection of reconnaissance groundwater samples. The temporary well casings consisted of dedicated 1-inch-diameter polyvinyl chloride casing with a 5-foot section of 0.010-inch slotted screen for each boring and were placed directly into each boring to intercept groundwater from the first-encountered groundwater-bearing zone. Reconnaissance groundwater samples were collected from borings FB-01, FB-03, FB-04, and FB-07 using a peristaltic pump using dedicated silicone and polyethylene tubing for each boring. Groundwater was decanted directly from the pump outlet into laboratory-supplied sample containers. The laboratory containers were immediately placed on ice in a laboratory-provided cooler and transported under standard chain-of-custody protocols to OnSite for analysis of HVOCs by EPA Method 8260C. No



groundwater was encountered at the time of drilling at boring FB-06, nor did groundwater enter the installed temporary well casing after 22 hours.

GROUNDWATER MONITORING WELL INSTALLATION

Monitoring wells FMW-01D, FMW-02D, and FMW-03S (Figure 2) were advanced to a depth of 50 feet bgs and completed as permanent groundwater monitoring wells using a sonic drill rig. During drilling, as a precautionary measure, a conductor casing was advanced to a depth of 20 feet bgs at monitoring wells FMW-01D and FMW-02D to seal the boreholes from shallow groundwater encountered above the targeted groundwater-bearing zone.

The monitoring wells were installed with 15 feet of 2-inch diameter 0.010-inch slotted polyvinyl chloride screen set between approximately 31 to 46 feet bgs in monitoring wells FMW-01D and FMW-02D, and between approximately 20 to 35 feet bgs in monitoring well FMW-03S. The over-drilled portion of each borehole was backfilled with bentonite from the bottom of the borehole to approximately 1 foot below the bottom of the screened interval. A sand filter pack was placed in the annular space from approximately 1 foot below the bottom of the screen to approximately 1 foot above the top of the screened interval, and was overlain by hydrated bentonite to a depth of approximately 2 feet bgs. Wells were constructed with flush-mount monuments set in concrete. The well construction details are presented with the boring logs in Attachment A.

Monitoring wells were developed immediately after installation using a downhole pump to surge and purge the wells in order to remove fine-grain materials until the water drawn from each well appeared clear. Approximately 50 to 150 gallons of water was purged from each monitoring well during development. The boring and monitoring well locations were recorded using a portable global positioning unit. However, as previously discussed, the well casing elevations were not surveyed for the purpose of this investigation, as sufficient historical information on groundwater flow is available from Ecology and others.

GROUNDWATER MONITORING EVENT

Farallon conducted a groundwater monitoring event at the Site on November 21, 2019. The groundwater monitoring event included measuring the depth to groundwater and sampling monitoring wells FMW-01D, FMW-02D, and FMW-03S (Figure 2).

Depths to groundwater were measured by opening each monitoring well and allowing the wells to equilibrate to atmospheric pressure for at least 15 minutes, and then using an electronic water-level meter to measure the depth to water in each well to the nearest one-hundredth of a foot.

Groundwater samples were collected in accordance with EPA low-flow groundwater sampling procedures. Purging and sampling of each monitoring well was performed using a peristaltic pump and dedicated silicone and polyethylene tubing at flow rates ranging from approximately 200 milliliters per minute. The tubing intake was placed in the approximate middle of the submerged screen interval in each monitoring well.



During purging, water quality was measured using a YSI ProDSS water quality system equipped with a flow-through cell. Water quality parameters were monitored and recorded at 3-minute intervals during purging and included temperature, pH, specific conductance, dissolved oxygen, oxidation-reduction potential, and turbidity. Purging was continued until stabilization criteria were achieved for temperature, pH, specific conductance, dissolved oxygen, and oxidation-reduction potential. Following purging, groundwater samples were collected from the pump outlet tubing upstream of the flow-through cell and placed directly into laboratory-prepared sample containers. Each sample container was labeled with a unique sample identification number, placed on ice in a laboratory-provided cooler, and transported to OnSite for laboratory analysis of HVOCs by EPA Method 8260C.

INVESTIGATION-DERIVED WASTE

Soil cuttings, decontamination water, purge water, and other wastewater generated during the site assessment were temporarily stored on the Site in labeled 55-gallon steel drums pending profiling for disposal at a facility authorized to receive such waste. The waste materials will be transported off the Site to an appropriate disposal facility within 90 days of the generation date. Waste profiling and disposal documentation will be maintained in the project file.

RESULTS

A summary of the analytical results for soil and groundwater samples collected is presented below. The complete laboratory analytical reports are provided in Attachment B. The analytical data are also presented on Figures 3 and 4 and in Tables 1 and 2. Laboratory analytical reports are provided as Attachment B.

SOIL RESULTS

HVOCs including PCE and TCE were reported either non-detect at the laboratory practical quantitation limit (PQL) or were detected at concentrations less than Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A or B soil cleanup levels in all soil samples analyzed at all locations (Table 1, Figure 3).

TCE was detected at concentrations slightly exceeding the MTCA Method B cleanup level for soil protective of groundwater in saturated-zone soil samples collected from boring FB-08 at depths of 15 and 20 feet bgs, and in monitoring well FMW-02D at a depth of 50 feet bgs.

GROUNDWATER SAMPLING RESULTS

HVOCs, including PCE and TCE, were reported either non-detect at the laboratory PQL or were detected at concentrations less than MTCA Method A or B cleanup levels in all groundwater samples analyzed (Table 2, Figure 4). TCE was detected only in the groundwater sample collected from monitoring well FMW-03S at a concentration of 0.78 micrograms per liter, which is less than the MTCA Method A cleanup level of 5.0 micrograms per liter.



CONCLUSIONS

The site assessment scope of work primarily was designed to evaluate groundwater quality in the first-encountered and deep groundwater-bearing zones as indicators of whether a source of PCE and/or TCE exists at the Site, or is possibly associated with an up-gradient source such as the sanitary sewer, the stormwater system, or off-Site properties. The distribution of borings and monitoring wells supplement the investigation work conducted by others up-gradient and down-gradient of the Site. The collective soil and groundwater data are sufficient to evaluate the potential for the Site to be a contributing source of PCE and/or TCE to the regional groundwater impacts.

The collective soil and groundwater data for this site assessment confirm that the Site is not a source of the PCE and TCE observed in groundwater at down-gradient monitoring wells. Therefore, 1920 Tacoma Ave., LLC should not be designated by Ecology as a PLP for PCE and TCE impacts to groundwater at the Site or surrounding properties where elevated concentrations of PCE and/or TCE have been confirmed to exceed the MTCA cleanup levels.

Soil at the Site was not observed to be impacted above applicable cleanup levels, except for a saturated-zone soil sample in monitoring well FMW-02D, and two saturated-zone soil samples in boring FB-08 (Table 1, Figure 3). The saturated-zone soil samples were intended to supplement reconnaissance groundwater samples from borings FB-01, FB-03, FB-04, and FB-07 and monitoring wells FMW-01D, FMW-02D, and FMW-03S. The absence and very low concentrations of PCE and TCE in soil, including saturated soil, indicate that no source of PCE and/or TCE exists at the Site. The low concentrations of TCE detected in the saturated zone are likely associated with the more-elevated concentrations of TCE that have been detected cross-gradient of the Site to the north, transported via soil gas.

The reconnaissance groundwater sampling results indicated that neither PCE nor TCE were detected in first-encountered groundwater. Concentrations of these analytes would be expected if a source of PCE or TCE that could result in the impacts to the deeper groundwater-bearing zone was present at the Site. Further, the groundwater sampling results from the monitoring wells do not indicate that the deeper groundwater-bearing zone contains concentrations of PCE or TCE representative of a source at the Site that could be impacting groundwater down-gradient of the Site in the shallow or deeper groundwater-bearing zones identified by Ecology and others. Additionally, the groundwater data does not support that the municipal sanitary sewer and stormwater systems immediately up-gradient of the Site are likely sources of the PCE and TCE in groundwater. Monitoring well FMW-01D was intended to evaluate both the municipal sanitary sewer and stormwater systems and the potential existence of an up-gradient source to the west and north of the Site. The absence of PCE and TCE in groundwater at this monitoring well location suggests that the source affecting groundwater is north of the Site. Collectively, the groundwater data from the Site combined with Ecology's data down-gradient of the Site suggest that the low concentrations of PCE and TCE detected at monitoring wells in the Tacoma Avenue South right-of-way adjacent to the eastern Site boundary are associated with a source to the north of the Site. Concentrations of PCE and TCE may have been transported cross-gradient via localized variability in groundwater flow direction and possibly the utility corridor on the eastern boundary of the Site.



Based on the results of this assessment, the Site is not a source of the impacts of PCE and TCE observed in groundwater; no further investigation of the Site as a potential source of PCE or TCE is required; and 1920 Tacoma Ave., LLC should not be named a PLP for PCE and TCE impacts down-gradient of the Site.

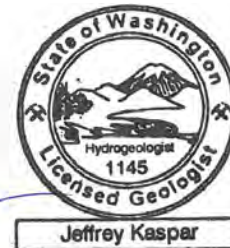
CLOSING

Farallon appreciates the opportunity to provide environmental consulting services for this project. Please contact either of the undersigned at (425) 295-0800 if you have questions or need additional information.

Sincerely,

Farallon Consulting, L.L.C.

Yusuf Pehlivan, L.G.
Project Geologist



Jeffrey Kaspar, L.G., L.H.G.
Principal Geologist

Attachments: Figure 1, *Site Vicinity Map*
Figure 2, *Site Plan*
Figure 3, *Soil Analytical Results for HVOCs*
Figure 4, *Groundwater Analytical Results for HVOCs*
Table 1, *Soil Analytical Results for HVOCs*
Table 2, *Groundwater Analytical Results for HVOCs*
Attachment A, Boring Logs
Attachment B, Laboratory Analytical Reports

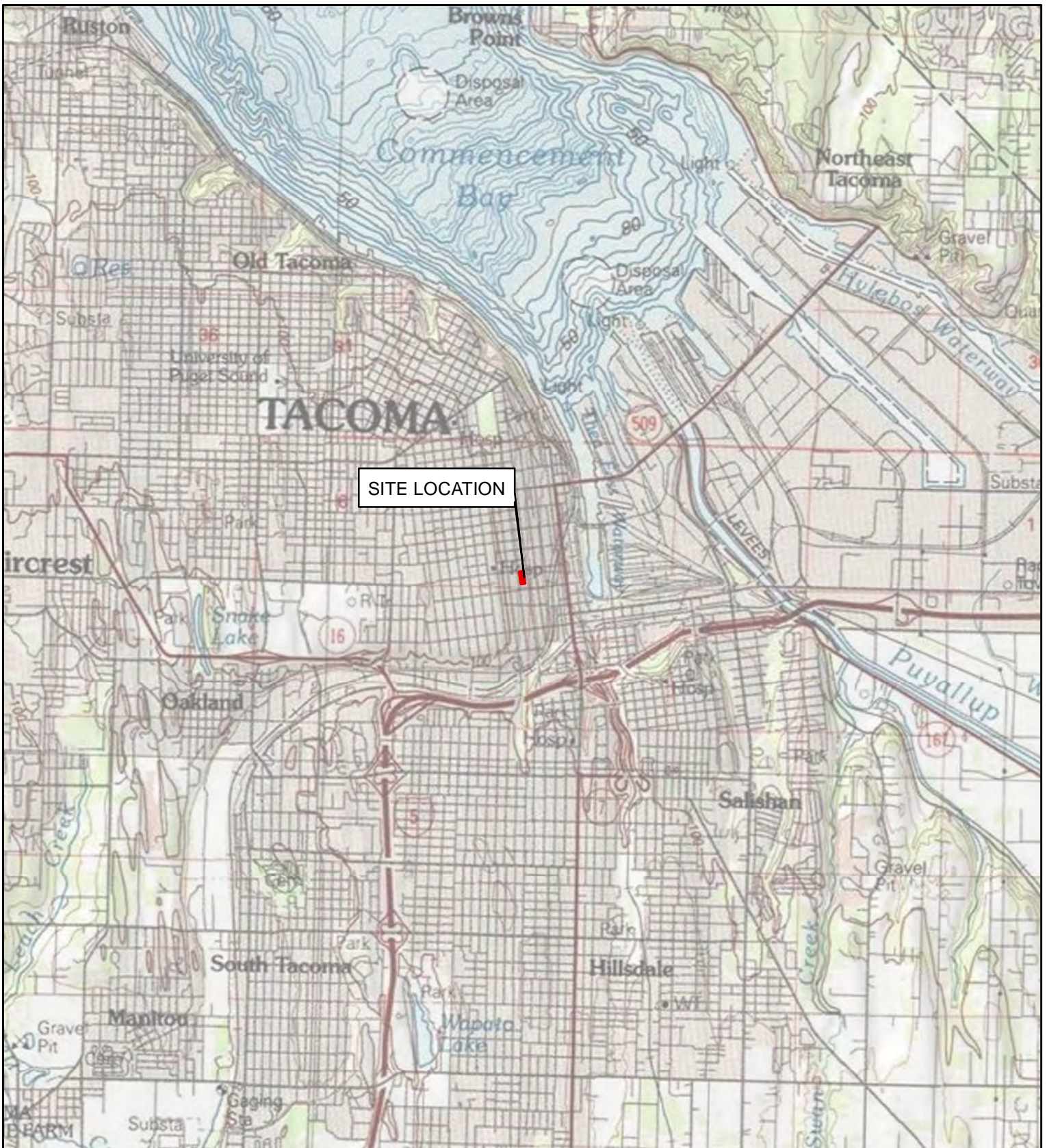
cc: Mark Holcomb, Morton McGoldrick PLLC

YP/JK:kr

FIGURES

SITE ASSESSMENT REPORT
University of Washington Tacoma Branch PLP Status
1920 Tacoma Avenue South
Tacoma, Washington

Farallon PN: 2309-001



REFERENCE: 7.5 MINUTE USGS QUADRANGLE TACOMA SOUTH, WASHINGTON, DATED 2013



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FIGURE 1

SITE VICINITY MAP
1920 TACOMA AVENUE SOUTH
TACOMA, WASHINGTON

FARALLON PN: 2309-001

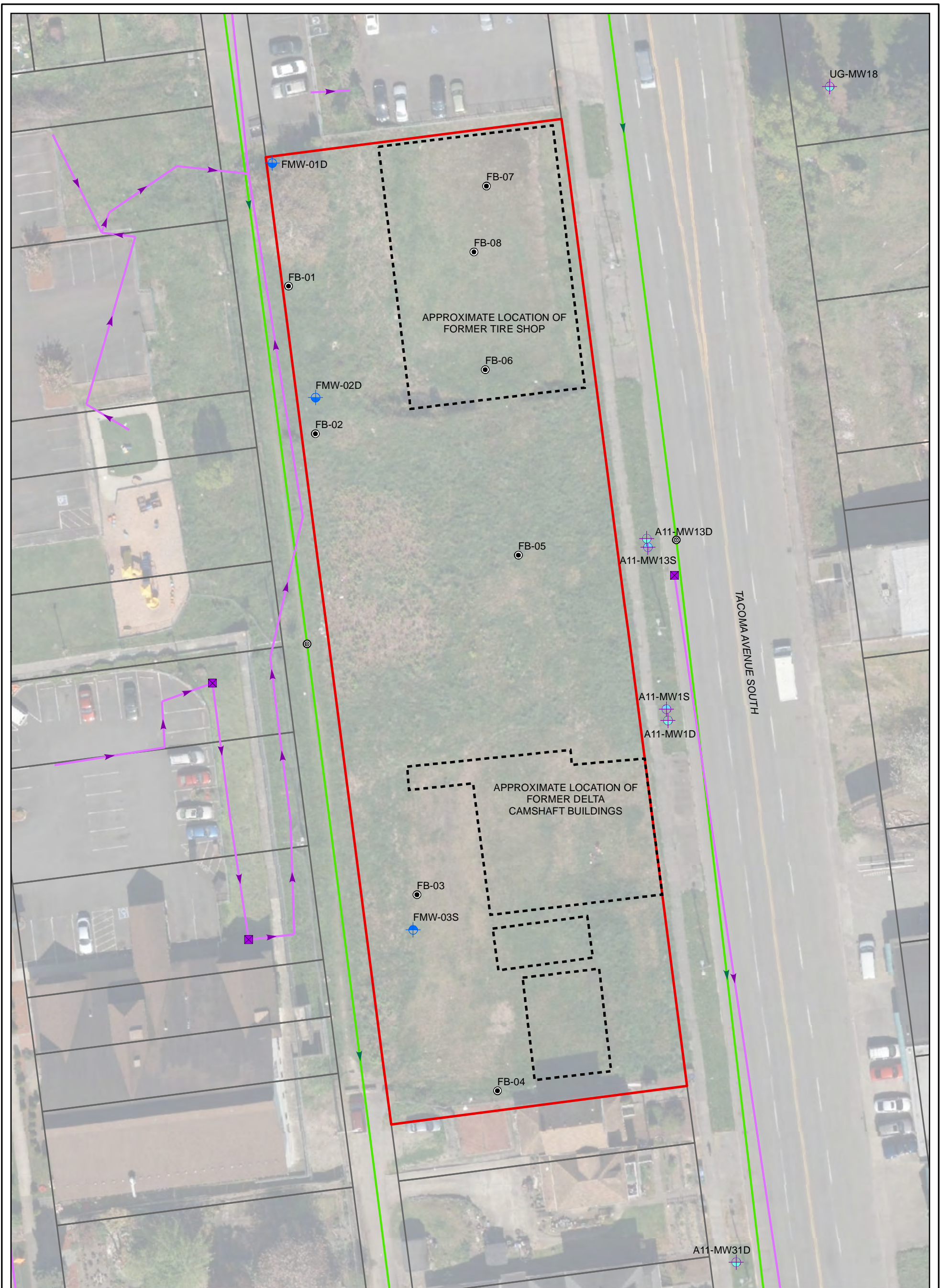
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Checked By: YP

Date: 11/19/2019

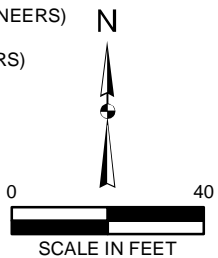
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LEGEND

- SHALLOW RECONNAISSANCE BORING (FARALLON, 2019)
- SHALLOW MONITORING WELL (FARALLON, 2019)
- DEEP MONITORING WELL (FARALLON, 2019)
- SHALLOW MONITORING WELL (GEOENGINEERS)
- DEEP MONITORING WELL (GEOENGINEERS)
- FORMER SITE FEATURE
- MANHOLE - STORMWATER
- STORMWATER LINE
- ⊙ MANHOLE - SEWER
- SEWER LINE
- ▭ SITE BOUNDARY
- ▭ PIERCE COUNTY PARCEL BOUNDARY



NOTES:

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



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FIGURE 2

SITE PLAN
1920 TACOMA AVENUE SOUTH
TACOMA, WASHINGTON

FARALLON PN: 2309-001

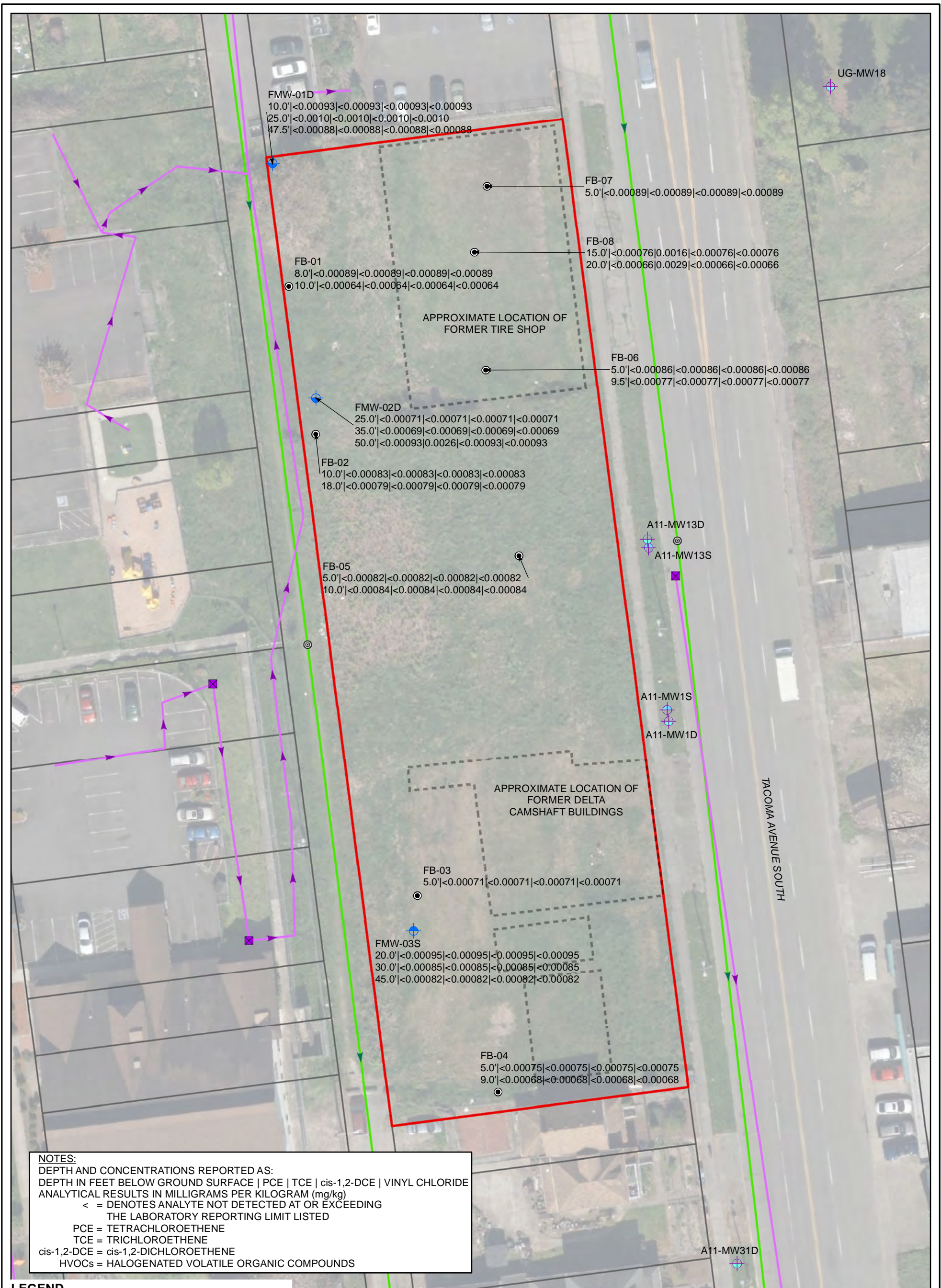
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Checked By: YP

Date: 1/20/2020

Disc Reference:

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NOTES:
 DEPTH AND CONCENTRATIONS REPORTED AS:
 DEPTH IN FEET BELOW GROUND SURFACE | PCE | TCE | cis-1,2-DCE | VINYL CHLORIDE
 ANALYTICAL RESULTS IN MILLIGRAMS PER KILOGRAM (mg/kg)
 < = DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING
 THE LABORATORY REPORTING LIMIT LISTED
 PCE = TETRACHLOROETHENE
 TCE = TRICHLOROETHENE
 cis-1,2-DCE = cis-1,2-DICHLOROETHENE
 HVOCs = HALOGENATED VOLATILE ORGANIC COMPOUNDS

LEGEND

- SHALLOW RECONNAISSANCE BORING (FARALLON, 2019)
- ⊕ SHALLOW MONITORING WELL (FARALLON, 2019)
- ⊕ DEEP MONITORING WELL (FARALLON, 2019)
- ⊕ SHALLOW MONITORING WELL (GEOENGINEERS)
- ⊕ DEEP MONITORING WELL (GEOENGINEERS)
- ⊗ MANHOLE - STORMWATER
- STORMWATER LINE
- ⊙ MANHOLE - SEWER
- SEWER LINE
- FORMER SITE FEATURE
- ▭ SITE BOUNDARY
- ▭ PIERCE COUNTY PARCEL BOUNDARY

N

 0 40
 SCALE IN FEET

NOTES:
 1. ALL LOCATIONS ARE APPROXIMATE.
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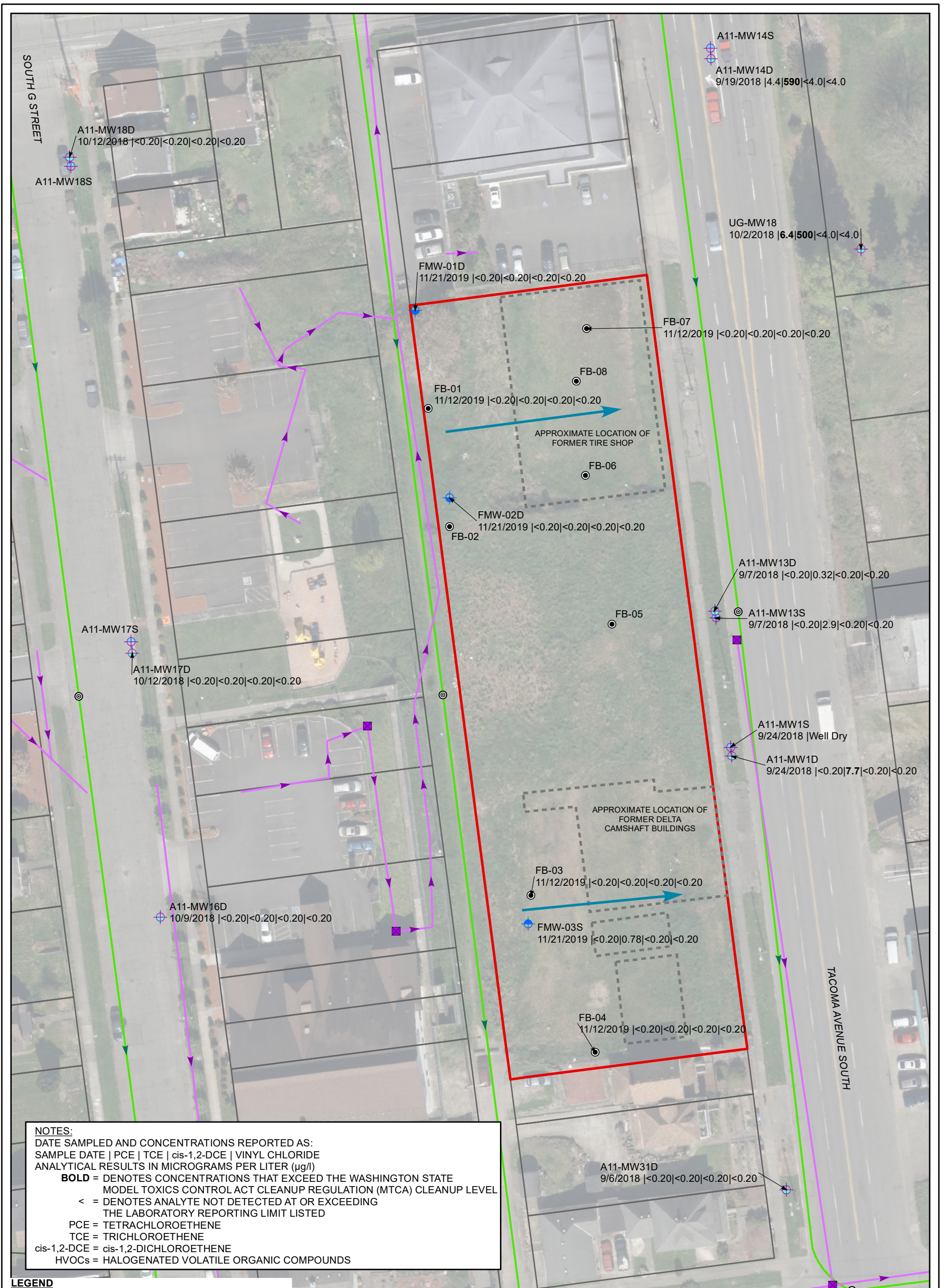
Drawn By: jjones Checked By: YP Date: 1/21/2020

FIGURE 3

SOIL ANALYTICAL RESULTS FOR HVOCs
 1920 TACOMA AVENUE SOUTH
 TACOMA, WASHINGTON

FARALLON PN: 2309-001

Disc Reference:
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NOTES:
 DATE SAMPLED AND CONCENTRATIONS REPORTED AS:
 SAMPLE DATE | PCE | TCE | cis-1,2-DCE | VINYL CHLORIDE
 ANALYTICAL RESULTS IN MICROGRAMS PER LITER (µg/l)
BOLD = DENOTES CONCENTRATIONS THAT EXCEEDED THE WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION (MTCA) CLEANUP LEVEL
 < = DENOTES ANALYTE NOT DETECTED AT OR EXCEEDING THE LABORATORY REPORTING LIMIT LISTED
 PCE = TETRACHLOROETHENE
 TCE = TRICHLOROETHENE
 cis-1,2-DCE = cis-1,2-DICHLOROETHENE
 HVOCs = HALOGENATED VOLATILE ORGANIC COMPOUNDS

- LEGEND**
- SHALLOW RECONNAISSANCE BORING (FARALLON, 2019)
 - ⊕ SHALLOW MONITORING WELL (FARALLON, 2019)
 - ⊕ DEEP MONITORING WELL (FARALLON, 2019)
 - ⊕ SHALLOW MONITORING WELL (GEOENGINEERS)
 - ⊕ DEEP MONITORING WELL (GEOENGINEERS)
 - ⊗ MANHOLE - STORMWATER
 - STORMWATER LINE
 - ⊗ MANHOLE - SEWER
 - SEWER LINE
 - ⋯ FORMER SITE FEATURE
 - ▭ SITE BOUNDARY
 - ▭ PIERCE COUNTY PARCEL BOUNDARY
 - APPROXIMATE GROUNDWATER FLOW DIRECTION

NOTES:
 1. ALL LOCATIONS ARE APPROXIMATE.
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Drawn By: jjones Checked By: YP Date: 1/21/2020

FIGURE 4

GROUNDWATER ANALYTICAL RESULTS FOR HVOCs
 1920 TACOMA AVENUE SOUTH
 TACOMA, WASHINGTON

FARALLON PN: 2309-001

Disc Reference:

TABLES

SITE ASSESSMENT REPORT
University of Washington Tacoma Branch PLP Status
1920 Tacoma Avenue South
Tacoma, Washington

Farallon PN: 2309-001

Table 1
Soil Analytical Results for HVOCs
University of Washington Tacoma Branch PLP Status
Tacoma, Washington
Farallon PN: 2309-001

Sample Location	Sample Identification	Sample Depth (feet) ¹	Sample Date	Analytical Results (milligrams per kilogram) ²				
				PCE	TCE	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
FB-01	FB-01-8.0	8.0	11/11/2019	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089
	FB-01-10.0	10.0	11/11/2019	< 0.00064	< 0.00064	< 0.00064	< 0.00064	< 0.00064
FB-02	FB-02-10.0	10.0	11/11/2019	< 0.00083	< 0.00083	< 0.00083	< 0.00083	< 0.00083
	FB-02-18.0	18.0	11/11/2019	< 0.00079	< 0.00079	< 0.00079	< 0.00079	< 0.00079
FB-03	FB-03-5.0	5.0	11/11/2019	< 0.00071	< 0.00071	< 0.00071	< 0.00071	< 0.00071
FB-04	FB-04-5.0	5.0	11/11/2019	< 0.00075	< 0.00075	< 0.00075	< 0.00075	< 0.00075
	FB-04-9.0	9.0	11/11/2019	< 0.00068	< 0.00068	< 0.00068	< 0.00068	< 0.00068
FB-05	FB-05-5.0	5.0	11/11/2019	< 0.00082	< 0.00082	< 0.00082	< 0.00082	< 0.00082
	FB-05-10.0	10.0	11/11/2019	< 0.00084	< 0.00084	< 0.00084	< 0.00084	< 0.00084
FB-06	FB-06-5.0	5.0	11/11/2019	< 0.00086	< 0.00086	< 0.00086	< 0.00086	< 0.00086
	FB-06-9.5	9.5	11/11/2019	< 0.00077	< 0.00077	< 0.00077	< 0.00077	< 0.00077
FB-07	FB-07-5.0	5.0	11/12/2019	< 0.00089	< 0.00089	< 0.00089	< 0.00089	< 0.00089
FB-08	FB-08-15.0	15.0	11/15/2019	< 0.00076	0.0016	< 0.00076	< 0.00076	< 0.00076
	FB-08-20.0	20.0	11/15/2019	< 0.00066	0.0029	< 0.00066	< 0.00066	< 0.00066
FMW-01D	FMW-01D-10.0	10.0	11/13/2019	< 0.00093	< 0.00093	< 0.00093	< 0.00093	< 0.00093
	FMW-01D-25.0	25.0	11/13/2019	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
	FMW-01D-47.5	47.5	11/13/2019	< 0.00088	< 0.00088	< 0.00088	< 0.00088	< 0.00088
FMW-02D	FMW-02D-25.0	25.0	11/14/2019	< 0.00071	< 0.00071	< 0.00071	< 0.00071	< 0.00071
	FMW-02D-35.0	35.0	11/14/2019	< 0.00069	< 0.00069	< 0.00069	< 0.00069	< 0.00069
	FMW-02D-50.0	50.0	11/14/2019	< 0.00093	0.0026	< 0.00093	< 0.00093	< 0.00093
FMW-03S	FMW-03S-20.0	20.0	11/15/2019	< 0.00095	< 0.00095	< 0.00095	< 0.00095	< 0.00095
	FMW-03S-30.0	30.0	11/15/2019	< 0.00085	< 0.00085	< 0.00085	< 0.00085	< 0.00085
	FMW-03S-45.0	45.0	11/15/2019	< 0.00082	< 0.00082	< 0.00082	< 0.00082	< 0.00082
MTCA Cleanup Levels for Soil³				0.05	0.03	160⁴	1,600⁴	0.67⁴
MTCA Method B Cleanup Levels for Soil Protective of Groundwater Vadose at 13 Degrees Celsius⁴				0.05	0.025	0.078	0.52	0.0017
MTCA Method B Cleanup Levels for Soil Protective of Groundwater Saturated⁴				0.0028	0.0015	0.0052	0.032	0.000089

NOTES:

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

Bold denotes that that analyte was detected.

Bold denotes analyte concentration exceeds a cleanup level listed.

¹Depth in feet below ground surface.

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

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, unless otherwise noted.

⁴Washington State Cleanup Levels and Risk Calculations under MTCA. Standard Method B Formula Values for Soil from CLARC Master spreadsheet updated May 2019, <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Contamination-clean-up-tools/CLARC>.

PCE = tetrachloroethene

TCE = trichloroethene

VOC = volatile organic compound

Table 2
Groundwater Analytical Results for HVOCs
University of Washington Tacoma Branch PLP Status
Tacoma, Washington
Farallon PN: 2309-001

Sample Location	Sample Date	Sample Identification	Analytical Results (micrograms per liter) ¹					
			PCE	TCE	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	Chloroform
Reconnaissance Groundwater Samples								
FB-01	11/12/2019	RGW-FB-01	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
FB-03	11/12/2019	RGW-FB-03	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
FB-04	11/12/2019	RGW-FB-04	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
FB-07	11/12/2019	RGW-FB-07	< 0.20 J	< 0.20 J	< 0.20 J	< 0.20 J	< 0.20 J	< 0.20 J
Monitoring Well Groundwater Samples								
FMW-01D	11/21/2019	FMW-01-112119	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	0.59
FMW-02D	11/21/2019	FMW-02-112119	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
FMW-03S	11/21/2019	FMW-03-112119	< 0.20	0.78	< 0.20	< 0.20	< 0.20	< 0.20
MTCA Cleanup Levels for Groundwater²			5	5	16³	160³	0.2	1.4³

NOTES:

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

Bold denotes that that analyte was detected.

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

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>

J = result is an estimate

PCE = tetrachloroethene

TCE = trichloroethene

VOC = volatile organic compound

**ATTACHMENT A
BORING LOGS**

**SITE ASSESSMENT REPORT
University of Washington Tacoma Branch PLP Status
1920 Tacoma Avenue South
Tacoma, Washington**

Farallon PN: 2309-001



Log of Boring: FB-01

Client: 1920 Tacoma Ave., LLC
Project: 1920 Tacoma Ave
Location: Tacoma, Washington

Date/Time Started: 11/11/2019 @ 1053
Date/Time Completed: 11/11/2019 @ 1130
Equipment: 7822 DT
Drilling Company: Holt
Drilling Foreman: Mike Renning
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): NE
Total Boring Depth (ft bgs): 11.0
Total Well Depth (ft bgs): 11.0 (Temp.)

Farallon PN: 2309-001

Logged By: C. Banfield

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
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0	0.0-1.0':	Poorly graded SAND (95% sand, 5% silt), fine sand, trace coarse gravel, brown, moist, organic odor, some organic material.	SP		20					
	1.0-5.0':	No Recovery.								
5	5.0-6.0':	Poorly graded SAND (95% sand, 5% silt), fine sand, trace fine gravel, brown with orange mottling, moist, no odor.	SP		60		0.8	FB-01-5.0		Bentonite
	6.0-8.0':	Well graded SAND (90% sand, 5% silt, 5% gravel), fine to coarse sand, fine and coarse gravel, trace cobbles, brown, dry, no odor.	SW							
	8.0-10.0':	No recovery.					1.4	FB-01-8.0	X	
10	10.0-11.0':	Poorly graded SAND with silt (85% sand, 10% silt, 5% gravel), fine sand, fine and coarse gravel, brown, moist, no odor. Refusal at 11.0' bgs.	SP-SM		100		1.1	FB-01-10.0	X	
		Temporary well screen set between 6.0 and 11.0' bgs for reconnaissance groundwater sample collection.						RGW-FB-01	X	

Well Construction Information

Monument Type: N/A	Filter Pack: N/A	Ground Surface Elevation (ft): N/A
Casing Diameter (inches): 1.0 (Temp.)	Surface Seal: Bentonite and backfill	Top of Casing Elevation (ft): N/A
Screen Slot Size (inches): 0.010 (Temp.)	Annular Seal: N/A	Surveyed Location: X: N/A Y: N/A
Screened Interval (ft bgs): 6.0-11.0 (Temp.)	Boring Abandonment: Bentonite	Unique Well ID: N/A



Log of Boring: FB-02

Client: 1920 Tacoma Ave., LLC
Project: 1920 Tacoma Ave
Location: Tacoma, Washington

Date/Time Started: 11/11/2019 @ 0932
Date/Time Completed: 11/11/2019 @ 0958
Equipment: 7822 DT
Drilling Company: Holt
Drilling Foreman: Mike Renning
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): NE
Total Boring Depth (ft bgs): 18.0
Total Well Depth (ft bgs): N/A

Farallon PN: 2309-001

Logged By: C. Banfield

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
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0	0.0-1.0'	Grass and topsoil.	TOP SOIL		100					
	Air knife to 5.0' bgs to clear for utilities.									
5	5.0-8.0'	Poorly graded SAND (90% sand, 5% silt, 5% gravel), fine and medium sand, fine gravel, brown, dry, no odor, trace cobbles.	SP		100	0.5	FB-02-5.0			
	8.0-10.0'	Well graded SAND with silt (85% sand, 10% silt, 5% gravel), fine to coarse sand, fine gravel, brown with red mottling, dry, moist from 8.5-9.5' bgs, no odor.	SW-SM							
10	10.0-13.0'	Poorly graded SAND with gravel (50% sand, 45% gravel, 5% silt), fine and medium sand, fine and coarse gravel, brown, dry, no odor.	SP		100	0.6	FB-02-10.0	X		Bentonite
	13.0-15.0'	Poorly graded SAND with gravel (80% sand, 15% gravel, 5% silt), fine and medium sand, fine and coarse gravel, brown, dry, no odor.	SP							
15	15.0-17.0'	Poorly graded SAND with gravel (50% sand, 45% gravel, 5% silt), fine to coarse sand, fine and coarse gravel, trace cobbles, brown and gray, dry, no odor.	SP		100	0.5	FB-02-15.0			
	17.0-18.0'	Poorly graded SAND with silt (90% sand, 10% silt), fine and medium sand, brown, dry, organic odor. Refusal at 18.0' bgs.	SP-SM							
						1.5	FB-02-18.0	X		

Well Construction Information

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



Log of Boring: FB-03

Client: 1920 Tacoma Ave., LLC
Project: 1920 Tacoma Ave
Location: Tacoma, Washington

Date/Time Started: 11/11/2019 @ 1315
Date/Time Completed: 11/11/2019 @ 1330
Equipment: 7822 DT
Drilling Company: Holt
Drilling Foreman: Mike Renning
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 1.0
Total Boring Depth (ft bgs): 6.0
Total Well Depth (ft bgs): 5.0 (Temp.)

Farallon PN: 2309-001

Logged By: C. Banfield

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0	0.0-1.0'	Grass, topsoil. Wet at 1.0' bgs.	TOP SOIL							
		Hand auger to 2.5' bgs to clear for utilities.								Water Level
	2.5-5.0'	Poorly graded SAND (90% sand, 5% silt, 5% gravel), fine and medium sand, fine and coarse gravel, trace cobbles, brown, wet to 3.0' bgs, then moist, no odor.	SP		100					Bentonite
5	5.0-6.0'	Poorly graded SAND (90% sand, 5% silt, 5% gravel), fine and medium sand, fine and coarse gravel, trace cobbles, brown, moist, no odor. Refusal at 6.0' bgs.	SP		100		0.7	FB-03-5.0	X	
		Temporary well screen set between 1.0 and 5.0' bgs for reconnaissance groundwater sample collection.					0.6	FB-03-6.0		
								RGW-FB-03	X	

Well Construction Information

Monument Type: N/A	Filter Pack: N/A	Ground Surface Elevation (ft): N/A
Casing Diameter (inches): 1.0 (Temp.)	Surface Seal: Bentonite and backfill	Top of Casing Elevation (ft): N/A
Screen Slot Size (inches): 0.010 (Temp.)	Annular Seal: N/A	Surveyed Location: X: N/A Y: N/A
Screened Interval (ft bgs): 1.0-5.0 (Temp.)	Boring Abandonment: Bentonite	Unique Well ID: N/A



Log of Boring: FB-04

Client: 1920 Tacoma Ave., LLC
Project: 1920 Tacoma Ave
Location: Tacoma, Washington

Date/Time Started: 11/11/2019 @ 1405
Date/Time Completed: 11/11/2019 @ 1435
Equipment: 7822 DT
Drilling Company: Holt
Drilling Foreman: Mike Renning
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 1.5
Total Boring Depth (ft bgs): 9.0
Total Well Depth (ft bgs): 9.0 (Temp.)

Farallon PN: 2309-001

Logged By: C. Banfield

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
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0	0.0-1.0':	Grass, topsoil.	TOP SOIL							
	Hand auger to 4.0' bgs to clear for utilities. Wet from 2.0-4.0' bgs.									
	4.0-5.0':	Poorly graded SAND with silt (85% sand, 10% silt, 5% gravel), fine and medium sand, fine and coarse gravel, brown, wet.	SP-SM		100					
5	5.0-9.0':	Poorly graded SAND with silt (85% sand, 10% silt, 5% gravel), fine and medium sand, fine and coarse gravel, trace cobbles, brown, moist, lens of coarse orange and white sand at 5.6' bgs. Refusal at 9.0' bgs.	SP-SM		100		1.4	FB-04-5.0	X	Bentonite
		Temporary well screen set between 4.0 and 9.0' bgs for reconnaissance groundwater sample collection.					0.9	FB-04-9.0	X	
10								RGW-FB-04	X	

Well Construction Information

Monument Type: N/A	Filter Pack: N/A	Ground Surface Elevation (ft): N/A
Casing Diameter (inches): 1.0 (Temp.)	Surface Seal: Bentonite and backfill	Top of Casing Elevation (ft): N/A
Screen Slot Size (inches): 0.010 (Temp.)	Annular Seal: N/A	Surveyed Location: X: N/A Y: N/A
Screened Interval (ft bgs): 4.0-9.0 (Temp.)	Boring Abandonment: Bentonite	Unique Well ID: N/A



Log of Boring: FB-05

Client: 1920 Tacoma Ave., LLC
Project: 1920 Tacoma Ave
Location: Tacoma, Washington

Date/Time Started: 11/11/2019 @ 1435
Date/Time Completed: 11/11/2019 @ 1515
Equipment: 7822 DT
Drilling Company: Holt
Drilling Foreman: Mike Renning
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): NE
Total Boring Depth (ft bgs): 10.0
Total Well Depth (ft bgs): N/A

Farallon PN: 2309-001

Logged By: C. Banfield

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0	0.0-1.0'	Grass, topsoil.	TOP SOIL							
	1.0-4.0'	Air knife to clear for utilities.								
	4.0-5.0'	Poorly graded SAND (90% sand, 5% silt, 5% gravel), fine and medium sand, fine and coarse gravel, brown, moist, no odor.	SP		100					
5	5.0-10.0'	Poorly graded SAND (90% sand, 5% silt, 5% gravel), fine and medium sand, fine and coarse gravel, trace cobbles, brown, dry, no odor. Refusal at 10.0' bgs.	SP		100		0.3	FB-05-5.0	X	Bentonite
10							0.6	FB-05-10.0	X	

Well Construction Information

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



Log of Boring: FB-06

Client: 1920 Tacoma Ave., LLC
Project: 1920 Tacoma Ave
Location: Tacoma, Washington

Date/Time Started: 11/11/2019 @ 1535
Date/Time Completed: 11/11/2019 @ 1550
Equipment: 7822 DT
Drilling Company: Holt
Drilling Foreman: Mike Renning
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): NE
Total Boring Depth (ft bgs): 9.5
Total Well Depth (ft bgs): N/A

Farallon PN: 2309-001

Logged By: C. Banfield

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
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0	0.0-1.5'	Grass, topsoil. Air knife to 1.5' bgs to clear for utilities.	TOP SOIL							
	1.5-5.0'	Poorly graded SAND (90% sand, 5% silt, 5% gravel), fine and medium sand, fine and coarse gravel, cobbles, brown, moist, no odor.	SP		100					
5	5.0-8.0'	Poorly graded SAND (90% sand, 5% silt, 5% gravel), fine and medium sand, fine and coarse gravel, cobbles, brown, moist to 6.0' bgs, then dry, no odor.	SP		100	0.3	FB-06-5.0	X		Bentonite
	8.0-9.5'	Well graded SAND with gravel (50% sand, 45% gravel, 5% silt), fine to coarse sand, fine and coarse gravel, cobbles, brown and orange, moist, no odor. Refusal at 9.5' bgs.	SW							
10						0.9	FB-06-9.5	X		

Well Construction Information

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



Log of Boring: FB-07

Client: 1920 Tacoma Ave., LLC
Project: 1920 Tacoma Ave
Location: Tacoma, Washington

Date/Time Started: 11/12/2019 @ 1035
Date/Time Completed: 11/12/2019 @ 1042
Equipment: 7822 DT
Drilling Company: Holt
Drilling Foreman: Mike Renning
Drilling Method: Direct Push

Sampler Type: 5' Macrocore
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 2.4
Total Boring Depth (ft bgs): 5.0
Total Well Depth (ft bgs): 5.0 (Temp.)

Farallon PN: 2309-001

Logged By: C. Banfield

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
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0	0.0-1.0':	Grass, topsoil. Air knife to 1.0' bgs to clear for utilities.	TOP SOIL							
	1.0-2.6':	Silty SAND with gravel (70% sand, 15% silt, 15% gravel), fine to coarse sand, fine and coarse gravel, trace cobbles, gray, moist, no odor. Wet at 2.4' bgs.	SM		100			RGW-FB-07	X	Water Level
	2.6-5.0':	Silty SAND (85% sand, 15% silt), fine and medium sand, trace fine gravel, gray, moist, no odor. Wet at 4.8' bgs.	SM							Bentonite
5		Temporary well screen set between 0.0 and 5.0' bgs for reconnaissance groundwater sample collection.						FB-07-5.0	X	

Well Construction Information

Monument Type: N/A	Filter Pack: N/A	Ground Surface Elevation (ft): N/A
Casing Diameter (inches): 1.0 (Temp.)	Surface Seal: Bentonite and backfill	Top of Casing Elevation (ft): N/A
Screen Slot Size (inches): 0.010 (Temp.)	Annular Seal: N/A	Surveyed Location: X: N/A Y: N/A
Screened Interval (ft bgs): 0.0-5.0 (Temp.)	Boring Abandonment: Bentonite	Unique Well ID: N/A



Log of Boring: FB-08

Client: 1920 Tacoma Ave., LLC
Project: 1920 Tacoma Ave
Location: Tacoma, Washington

Date/Time Started: 11/15/2019 @ 1350
Date/Time Completed: 11/15/2019 @ 1440
Equipment: TS 150
Drilling Company: Holt
Drilling Foreman: Arthur Wischott
Drilling Method: Sonic

Sampler Type: 10' Corebarrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 5.0
Total Boring Depth (ft bgs): 20.0
Total Well Depth (ft bgs): N/A

Farallon PN: 2309-001

Logged By: M. Gehring

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
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0	0.0-5.0'	Silty SAND with gravel (65% sand, 20% gravel, 15% silt), fine to coarse sand and gravel, gray, moist, no odor.	SM		100					
5	5.0-10.0'	Well graded GRAVEL with silt and sand (55% gravel, 35% sand, 10% silt), fine to coarse sand and gravel, brownish-orange, wet, no odor.	GW-GM		100		1.9	FB-08-5.0		Water Level
10	10.0-13.0'	Silty SAND with gravel (45% sand, 40% gravel, 15% silt), fine to coarse sand and gravel, brownish-orange, wet, no odor.	SM				1.1	FB-08-10.0		Bentonite
13	13.0-15.0'	Well graded SAND with silt and gravel (65% sand, 25% gravel, 10% silt), fine to coarse sand and gravel, brownish-orange, wet, no odor.	SW-SM							
15	15.0-16.0'	Well graded SAND with silt and gravel (75% sand, 15% gravel, 10% silt), fine to coarse sand and gravel, brownish-orange, wet, no odor.	SW-SM				1.5	FB-08-15.0	X	
16	16.0-20.0'	Well graded SAND with silt and gravel (70% sand, 20% gravel, 10% silt), fine to coarse sand and gravel, brownish-orange, wet, no odor.	SW-SM							
20							1.4	FB-08-20.0	X	

Well Construction Information

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



Log of Boring: FMW-01D

Client: 1920 Tacoma Ave., LLC
Project: 1920 Tacoma Ave
Location: Tacoma, Washington

Date/Time Started: 11/13/2019 @ 1000
Date/Time Completed: 11/13/2019 @ 1430
Equipment: TS 150
Drilling Company: Holt
Drilling Foreman: Arthur Wischatt
Drilling Method: Sonic

Sampler Type: 10' Corebarrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 30.0
Total Boring Depth (ft bgs): 50.0
Total Well Depth (ft bgs): 46.0

Farallon PN: 2309-001

Logged By: M. Gehring

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
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0	0.0-3.0'	Silty SAND with gravel (45% sand, 40% silt, 15% gravel), fine and medium sand, fine and coarse gravel, trace cobbles, dark brown, moist, no odor, some organic debris. Air knife to 5.0' bgs to clear for utilities.	SM		100					Concrete
	3.0-5.0'	Silty SAND with gravel (55% sand, 30% silt, 15% gravel), fine and medium sand, fine and coarse gravel, trace cobbles, light brown, moist, no odor.	SM							
5	5.0-10.0'	Silty SAND with gravel (60% sand, 25% silt, 15% gravel), fine sand, fine and coarse gravel, trace cobbles, light brown, dry, no odor.	SM		100		0.4	FMW-01D-5.0		
	10.0-12.0'	Well graded SAND with silt and gravel (65% sand, 25% gravel, 10% silt), fine to coarse sand and gravel, brown, moist, no odor.	SW-SM		100		1.2	FMW-01D-10.0	X	Bentonite
	12.0-13.0'	Well graded SAND with silt (80% sand, 10% silt, 10% gravel), fine to coarse sand and gravel, brown, moist, no odor.	SW-SM							
	13.0-17.0'	Well graded SAND with silt and gravel (65% sand, 25% gravel, 10% silt), fine to coarse sand and gravel, moist, no odor.	SW-SM							
15	17.0-18.0'	Well graded SAND with silt (80% sand, 10% silt, 10% gravel), fine to coarse sand and gravel, brown, moist, no odor.	SW-SM		100		0.7	FMW-01D-15.0		
	18.0-20.0'	Well graded SAND with silt and gravel (65% sand, 25% gravel, 10% silt), fine to coarse sand and gravel, some cobbles, brown, moist, no odor.	SW-SM							
20	20.0-25.0'	Silty SAND with gravel (55% sand, 25% gravel, 20% silt), fine to coarse sand and gravel, brown, moist, wet at 23.0' bgs, no odor.	SM		100		0.7	FMW-01D-20.0		
25	25.0-29.5'	Silty SAND with gravel (60% sand, 25% gravel, 15% silt),	SM				0.8	FMW-01D-25.0	X	Water Level

Well Construction Information

Monument Type: Flush Mount
Casing Diameter (inches): 2.0"
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 31.0-46.0

Filter Pack: 10x20 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Boring Abandonment: N/A

Ground Surface Elevation (ft): N/A
Top of Casing Elevation (ft): N/A
Surveyed Location: X: N/A Y: N/A
Unique Well ID: BME-507



Log of Boring: FMW-01D

Client: 1920 Tacoma Ave., LLC
Project: 1920 Tacoma Ave
Location: Tacoma, Washington

Date/Time Started: 11/13/2019 @ 1000
Date/Time Completed: 11/13/2019 @ 1430
Equipment: TS 150
Drilling Company: Holt
Drilling Foreman: Arthur Wischatt
Drilling Method: Sonic

Sampler Type: 10' Corebarrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 30.0
Total Boring Depth (ft bgs): 50.0
Total Well Depth (ft bgs): 46.0

Farallon PN: 2309-001

Logged By: M. Gehring

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
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		fine to coarse sand and gravel, some cobbles, brown, moist, no odor.								Bentonite
30	29.5-30.0'	Silty SAND with gravel (55% sand, 25% gravel, 20% silt), fine to coarse sand and gravel, some cobbles, brown, moist, no odor.	SM		100		1.0	FMW-01D-30.0		Water Level
	30.0-34.0'	Silty SAND with gravel (50% sand, 25% silt, 25% gravel), fine to coarse sand and gravel, trace cobbles, brown, wet, no odor.	SM							
35	34.0-36.5'	Silty SAND with gravel (55% sand, 25% gravel, 20% silt), fine to coarse sand and gravel, brown, wet, no odor.	SM				1.0	FMW-01D-35.0		Sand Pack
	36.5-38.5'	Silty SAND with gravel (60% sand, 25% gravel, 15% silt), fine to coarse sand and gravel, orange-brown, wet, no odor. 1.0" thick lens of coarse brown sand at 38.5' bgs.	SM							Well Screen
40	38.5-40.0'	Well graded SAND with silt and gravel (65% sand, 25% gravel, 10% silt), fine to coarse sand and gravel, brown, wet, no odor.	SW-SM							
	40.0-41.5'	Silty SAND with gravel (55% sand, 25% gravel, 20% silt), fine to coarse sand and gravel, some cobbles, brown, wet, no odor.	SM		100		1.3	FMW-01D-40.0		
	41.5-45.0'	Silty SAND with gravel (50% sand, 25% silt, 25% gravel), fine to coarse sand and gravel, gray, wet, no odor.	SM							
45	45.0-47.5'	Silty SAND with gravel (55% sand, 25% gravel, 20% silt), fine to coarse sand and gravel, gray, wet, no odor.	SM				1.0	FMW-01D-45.0		Sand Pack
	47.5-50.0'	Silty SAND (55% sand, 35% silt, 10% gravel) fine to coarse sand, fine gravel, redish-brown, moist, no odor.	SM				1.3	FMW-01D-47.5	X	Bentonite
50							1.2	FMW-01D-50.0		

Well Construction Information

Monument Type: Flush Mount
Casing Diameter (inches): 2.0"
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 31.0-46.0

Filter Pack: 10x20 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Boring Abandonment: N/A

Ground Surface Elevation (ft): N/A
Top of Casing Elevation (ft): N/A
Surveyed Location: X: N/A Y: N/A
Unique Well ID: BME-507



Log of Boring: FMW-02D

Client: 1920 Tacoma Ave., LLC
Project: 1920 Tacoma Ave
Location: Tacoma, Washington

Date/Time Started: 11/14/2019 @ 1020
Date/Time Completed: 11/14/2019 @ 1400
Equipment: TS 150
Drilling Company: Holt
Drilling Foreman: Arthur Wischatt
Drilling Method: Sonic

Sampler Type: 10' Corebarrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 20.0
Total Boring Depth (ft bgs): 50.0
Total Well Depth (ft bgs): 46.0

Farallon PN: 2309-001

Logged By: M. Gehring

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
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0	0.0-4.0'	Well graded SAND with silt (80% sand, 10% silt, 10% gravel), fine to coarse sand and gravel, brown, moist, no odor, organic debris top 3" bgs. Vac clear for utilities to 5.0' bgs.	SW-SM		100					Concrete
4.0	4.0-5.0'	Well graded SAND (90% sand, 5% silt, 5% gravel), fine to coarse sand and gravel, dark brown, moist, no odor, some glass debris.	SW		100		0.5			
5.0	5.0-7.0'	Well graded SAND with silt and gravel (70% sand, 20% gravel, 10% silt), fine to coarse sand and gravel, brown, moist, no odor.	SW-SM		100					
7.0	7.0-10.0'	Well graded SAND with gravel (70% sand, 25% gravel, 5% silt), fine to coarse sand and gravel, brown, dry, no odor.	SW		100					
10.0	10.0-15.0'	Well graded SAND with gravel (70% sand, 25% gravel, 5% silt), fine to coarse sand and gravel, some cobbles, brown, moist, no odor.	SW		100		0.6			Bentonite
15.0	15.0-16.0'	Well graded SAND with gravel (75% sand, 20% gravel, 5% silt), fine to coarse sand and gravel, trace cobbles, moist, no odor.	SW		100		0.9			
16.0	16.0-20.0'	Well graded SAND with gravel (70% sand, 25% gravel, 5% silt), fine to coarse sand and gravel, some cobbles, brown, moist, no odor.	SW		100					
20.0	20.0-25.0'	Silty SAND with gravel (55% sand, 25% gravel, 20% silt), fine to coarse sand and gravel, brown, wet from 20.0' to 20.5' bgs, moist from 20.5-25.0' bgs, no odor.	SM		100		0.6	FMW-02D-20.0		Water Level
25.0	25.0-29.5'	Silty SAND with gravel (50% sand, 25% gravel, 25% silt), fine to coarse sand and gravel, brown, moist, no odor.	SM		100		1.7	FMW-02D-25.0	X	

Well Construction Information

Monument Type: Flush Mount
Casing Diameter (inches): 2.0"
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 31.0-46.0

Filter Pack: 10x20 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Boring Abandonment: N/A

Ground Surface Elevation (ft): N/A
Top of Casing Elevation (ft): N/A
Surveyed Location: X: N/A Y: N/A
Unique Well ID: BME-508



Log of Boring: FMW-02D

Client: 1920 Tacoma Ave., LLC
Project: 1920 Tacoma Ave
Location: Tacoma, Washington

Date/Time Started: 11/14/2019 @ 1020
Date/Time Completed: 11/14/2019 @ 1400
Equipment: TS 150
Drilling Company: Holt
Drilling Foreman: Arthur Wischatt
Drilling Method: Sonic

Sampler Type: 10' Corebarrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 20.0
Total Boring Depth (ft bgs): 50.0
Total Well Depth (ft bgs): 46.0

Farallon PN: 2309-001

Logged By: M. Gehring

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
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29.5-30.0'		Well graded SAND with silt and gravel (75% sand, 15% gravel, 10% silt), fine to coarse sand and gravel, brown, moist, no odor.	SW-SM		100		0.9	FMW-02D-30.0		
30.0-32.0'		Silty SAND with gravel (55% sand, 25% gravel, 20% silt), fine to coarse sand, fine and coarse gravel, trace cobbles, brown, wet, no odor.	SM							
32.0-34.0'		Well graded SAND with silt and gravel (75% sand, 15% gravel, 10% silt), fine to coarse sand and gravel, trace cobbles, brown, wet, no odor.	SW-SM							
34.0-36.0'		Well graded GRAVEL with silt and sand (75% gravel, 15% sand, 10% silt), fine to coarse sand and gravel, brown, wet, no odor.	GW-GM				5.5	FMW-02D-35.0	X	Sand Pack
36.0-38.5'		Silty SAND with gravel (55% sand, 25% gravel, 20% silt), fine to coarse sand and gravel, brown, wet, no odor.	SM							Well Screen
38.5-40.0'		Well graded SAND with silt and gravel (65% sand, 25% gravel, 10% silt), fine to coarse sand and gravel, brown, wet, no odor.	SW-SM							
40.0-42.0'		Silty SAND with gravel (55% sand, 25% gravel, 20% silt), fine to coarse sand and gravel, brown, wet, no odor.	SM		100		0.7	FMW-02D-40.0		
42.0-47.0'		Silty SAND with gravel (65% sand, 20% gravel, 15% silt), fine to coarse sand and gravel, trace cobbles, wet, no odor.	SM							
47.0-48.0'		Well graded SAND with silt (80% sand, 10% silt, 10% gravel), fine to coarse sand and gravel, brown, wet, no odor.	SW-SM					FMW-02D-47.5		
48.0-49.0'		Silty SAND with gravel (60% sand, 20% silt, 20% gravel), fine to coarse sand and gravel, trace cobbles, wet, no odor.	SM							
49.0-50.0'		Well graded SAND with silt and gravel (70% sand, 20% gravel, 10% silt), fine to coarse sand and gravel, brown, wet, no odor. 2" thick lens of silt at base.	SW-SM				1.5	FMW-02D-50.0	X	Sand Pack
										Bentonite

Well Construction Information

Monument Type: Flush Mount
Casing Diameter (inches): 2.0"
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 31.0-46.0

Filter Pack: 10x20 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Boring Abandonment: N/A

Ground Surface Elevation (ft): N/A
Top of Casing Elevation (ft): N/A
Surveyed Location: X: N/A Y: N/A
Unique Well ID: BME-508



Log of Boring: FMW-03S

Client: 1920 Tacoma Ave., LLC
Project: 1920 Tacoma Ave
Location: Tacoma, Washington

Date/Time Started: 11/15/2019 @ 0840
Date/Time Completed: 11/15/2019 @ 1200
Equipment: TS 150
Drilling Company: Holt
Drilling Foreman: Arthur Wischatt
Drilling Method: Sonic

Sampler Type: 10' Corebarrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 20.0
Total Boring Depth (ft bgs): 50.0
Total Well Depth (ft bgs): 35.0

Farallon PN: 2309-001

Logged By: M. Gehring

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
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0	0.0-5.0'	Silty SAND with gravel (60% sand, 20% silt, 20% gravel), fine to coarse sand and gravel, brown, top 3" bgs wet, moist, no odor. Vac cleared for utilities to 5.0' bgs.	SM		100					Concrete
5	5.0-7.0'	Silty SAND with gravel (60% sand, 25% gravel, 15% silt), fine to coarse sand and gravel, gray, dry, no odor.	SM				3.4	FMW-03S-5.0		Bentonite
	7.0-10.0'	Silty SAND with gravel (60% sand, 20% silt, 20% gravel), fine to coarse sand and gravel, brown, moist, no odor.	SM							
10	10.0-15.0'	Silty SAND with gravel (60% sand, 20% silt, 20% gravel), fine to coarse sand and gravel, trace cobbles, brown, moist, no odor.	SM		100		2.8	FMW-03S-10.0		
15	15.0-17.0'	Well graded SAND (80% sand, 10% gravel, 5% silt), fine to coarse sand and gravel, brown, moist, no odor.	SW				1.3	FMW-03S-15.0		Water Level
	17.0-19.0'	Silty SAND with gravel (60% sand, 20% silt, 20% gravel), fine to coarse sand and gravel, brown, moist, no odor.	SM							
20	19.0-20.0'	SILT (90% silt, 10% sand), fine sand, brown, moist, no odor.	ML				1.1	FMW-03S-19.0		
	20.0-24.0'	SILT with sand (80% silt, 20% sand), fine sand, gray, wet, no odor.	ML		100		14.1	FMW-03S-20.0	X	
25	24.0-30.0'	Silty SAND (80% sand, 20% silt), fine sand, brown, wet, no odor.	SM				1.3	FMW-03S-25.0		Sand Pack

Well Construction Information

Monument Type: Flush Mount
Casing Diameter (inches): 2.0"
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 20.0-35.0

Filter Pack: 10x20 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Boring Abandonment: N/A

Ground Surface Elevation (ft): N/A
Top of Casing Elevation (ft): N/A
Surveyed Location: X: N/A Y: N/A
Unique Well ID: BME-509



Log of Boring: FMW-03S

Client: 1920 Tacoma Ave., LLC
Project: 1920 Tacoma Ave
Location: Tacoma, Washington

Date/Time Started: 11/15/2019 @ 0840
Date/Time Completed: 11/15/2019 @ 1200
Equipment: TS 150
Drilling Company: Holt
Drilling Foreman: Arthur Wischatt
Drilling Method: Sonic

Sampler Type: 10' Corebarrel
Drive Hammer (lbs.): Auto
Depth of Water ATD (ft bgs): 20.0
Total Boring Depth (ft bgs): 50.0
Total Well Depth (ft bgs): 35.0

Farallon PN: 2309-001

Logged By: M. Gehring

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USCS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
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30	30.0-34.5'	Silty SAND (80% sand, 20% silt), fine sand, brown, wet, no odor.	SM		100		2.6	FMW-03S-30.0	X	Well Screen
35	34.5-35.5'	SILT with sand (80% silt, 20% sand), fine sand, gray, wet, no odor.	ML				1.4	FMW-03S-35.0		Sand Pack
	35.5-39.5'	Silty SAND (80% sand, 20% silt), fine sand, brown, wet, no odor.	SM							
40	39.5-40.0'	Silty SAND (70% sand, 30% silt), fine sand, brown, moist, no odor.	SM		100		2.2	FMW-03S-40.0		Bentonite
	40.0-42.0'	Silty SAND with gravel (65% sand, 20% gravel, 15% silt), fine to coarse sand and gravel, brown, wet, no odor.	SM							
	42.0-45.0'	Silty SAND with gravel (65% sand, 20% gravel, 15% silt), fine to coarse sand and gravel, gray, moist, no odor.	SM							
45	45.0-47.0'	Silty SAND with gravel (65% sand, 20% gravel, 15% silt), fine to coarse sand and gravel, dark gray, moist, no odor.	SM				1.8	FMW-03S-45.0	X	
50	47.0-50.0'	SILT with sand (80% silt, 20% sand), fine sand, trace gravel, dark gray, moist, no odor.	ML				1.0	FMW-03S-50.0		

Well Construction Information

Monument Type: Flush Mount
Casing Diameter (inches): 2.0"
Screen Slot Size (inches): 0.010
Screened Interval (ft bgs): 20.0-35.0

Filter Pack: 10x20 Sand
Surface Seal: Concrete
Annular Seal: Bentonite
Boring Abandonment: N/A

Ground Surface Elevation (ft): N/A
Top of Casing Elevation (ft): N/A
Surveyed Location: X: N/A Y: N/A
Unique Well ID: BME-509

ATTACHMENT B
LABORATORY ANALYTICAL REPORTS

SITE ASSESSMENT REPORT
University of Washington Tacoma Branch PLP Status
1920 Tacoma Avenue South
Tacoma, Washington

Farallon PN: 2309-001



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

November 19, 2019

Yusuf Pehlivan
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 2309-001
Laboratory Reference No. 1911-122

Dear Yusuf:

Enclosed are the analytical results and associated quality control data for samples submitted on November 12, 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,

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

David Baumeister
Project Manager

Enclosures



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

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

Date of Report: November 19, 2019
Samples Submitted: November 12, 2019
Laboratory Reference: 1911-122
Project: 2309-001

Case Narrative

Samples were collected on November 11, 2019 and received by the laboratory on November 12, 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.



Date of Report: November 19, 2019
 Samples Submitted: November 12, 2019
 Laboratory Reference: 1911-122
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-01-8.0					
Laboratory ID:	11-122-02					
Dichlorodifluoromethane	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
Chloromethane	ND	0.0044	EPA 8260D	11-14-19	11-14-19	
Vinyl Chloride	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
Bromomethane	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
Chloroethane	ND	0.0044	EPA 8260D	11-14-19	11-14-19	
Trichlorofluoromethane	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethene	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
Iodomethane	ND	0.0044	EPA 8260D	11-14-19	11-14-19	
Methylene Chloride	ND	0.0044	EPA 8260D	11-14-19	11-14-19	
(trans) 1,2-Dichloroethene	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethane	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
2,2-Dichloropropane	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
(cis) 1,2-Dichloroethene	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
Bromochloromethane	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
Chloroform	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
1,1,1-Trichloroethane	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
Carbon Tetrachloride	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloropropene	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloroethane	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
Trichloroethene	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloropropane	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
Dibromomethane	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
Bromodichloromethane	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
2-Chloroethyl Vinyl Ether	ND	0.0065	EPA 8260D	11-14-19	11-14-19	
(cis) 1,3-Dichloropropene	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
(trans) 1,3-Dichloropropene	ND	0.00089	EPA 8260D	11-14-19	11-14-19	



Date of Report: November 19, 2019
 Samples Submitted: November 12, 2019
 Laboratory Reference: 1911-122
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-01-8.0					
Laboratory ID:	11-122-02					
1,1,2-Trichloroethane	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
Tetrachloroethene	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
1,3-Dichloropropane	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
Dibromochloromethane	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromoethane	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
Chlorobenzene	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
1,1,1,2-Tetrachloroethane	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
Bromoform	ND	0.0044	EPA 8260D	11-14-19	11-14-19	
Bromobenzene	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
1,1,2,2-Tetrachloroethane	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichloropropane	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
2-Chlorotoluene	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
4-Chlorotoluene	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
1,3-Dichlorobenzene	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
1,4-Dichlorobenzene	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
1,2-Dichlorobenzene	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromo-3-chloropropane	ND	0.0044	EPA 8260D	11-14-19	11-14-19	
1,2,4-Trichlorobenzene	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
Hexachlorobutadiene	ND	0.0044	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichlorobenzene	ND	0.00089	EPA 8260D	11-14-19	11-14-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>90</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>91</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>94</i>	<i>71-130</i>				



Date of Report: November 19, 2019
 Samples Submitted: November 12, 2019
 Laboratory Reference: 1911-122
 Project: 2309-001

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-01-10.0					
Laboratory ID:	11-122-03					
Dichlorodifluoromethane	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
Chloromethane	ND	0.0032	EPA 8260D	11-14-19	11-14-19	
Vinyl Chloride	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
Bromomethane	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
Chloroethane	ND	0.0032	EPA 8260D	11-14-19	11-14-19	
Trichlorofluoromethane	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethene	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
Iodomethane	ND	0.0032	EPA 8260D	11-14-19	11-14-19	
Methylene Chloride	ND	0.0032	EPA 8260D	11-14-19	11-14-19	
(trans) 1,2-Dichloroethene	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethane	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
2,2-Dichloropropane	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
(cis) 1,2-Dichloroethene	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
Bromochloromethane	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
Chloroform	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
1,1,1-Trichloroethane	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
Carbon Tetrachloride	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloropropene	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloroethane	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
Trichloroethene	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloropropane	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
Dibromomethane	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
Bromodichloromethane	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
2-Chloroethyl Vinyl Ether	ND	0.0046	EPA 8260D	11-14-19	11-14-19	
(cis) 1,3-Dichloropropene	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
(trans) 1,3-Dichloropropene	ND	0.00064	EPA 8260D	11-14-19	11-14-19	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-01-10.0					
Laboratory ID:	11-122-03					
1,1,2-Trichloroethane	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
Tetrachloroethene	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
1,3-Dichloropropane	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
Dibromochloromethane	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromoethane	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
Chlorobenzene	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
1,1,1,2-Tetrachloroethane	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
Bromoform	ND	0.0032	EPA 8260D	11-14-19	11-14-19	
Bromobenzene	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
1,1,2,2-Tetrachloroethane	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichloropropane	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
2-Chlorotoluene	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
4-Chlorotoluene	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
1,3-Dichlorobenzene	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
1,4-Dichlorobenzene	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
1,2-Dichlorobenzene	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromo-3-chloropropane	ND	0.0032	EPA 8260D	11-14-19	11-14-19	
1,2,4-Trichlorobenzene	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
Hexachlorobutadiene	ND	0.0032	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichlorobenzene	ND	0.00064	EPA 8260D	11-14-19	11-14-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>93</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>93</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>71-130</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-02-10.0					
Laboratory ID:	11-122-05					
Dichlorodifluoromethane	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
Chloromethane	ND	0.0042	EPA 8260D	11-14-19	11-14-19	
Vinyl Chloride	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
Bromomethane	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
Chloroethane	ND	0.0042	EPA 8260D	11-14-19	11-14-19	
Trichlorofluoromethane	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethene	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
Iodomethane	ND	0.0042	EPA 8260D	11-14-19	11-14-19	
Methylene Chloride	ND	0.0042	EPA 8260D	11-14-19	11-14-19	
(trans) 1,2-Dichloroethene	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethane	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
2,2-Dichloropropane	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
(cis) 1,2-Dichloroethene	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
Bromochloromethane	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
Chloroform	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
1,1,1-Trichloroethane	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
Carbon Tetrachloride	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloropropene	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloroethane	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
Trichloroethene	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloropropane	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
Dibromomethane	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
Bromodichloromethane	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
2-Chloroethyl Vinyl Ether	ND	0.0061	EPA 8260D	11-14-19	11-14-19	
(cis) 1,3-Dichloropropene	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
(trans) 1,3-Dichloropropene	ND	0.00083	EPA 8260D	11-14-19	11-14-19	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-02-10.0					
Laboratory ID:	11-122-05					
1,1,2-Trichloroethane	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
Tetrachloroethene	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
1,3-Dichloropropane	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
Dibromochloromethane	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromoethane	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
Chlorobenzene	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
1,1,1,2-Tetrachloroethane	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
Bromoform	ND	0.0042	EPA 8260D	11-14-19	11-14-19	
Bromobenzene	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
1,1,2,2-Tetrachloroethane	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichloropropane	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
2-Chlorotoluene	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
4-Chlorotoluene	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
1,3-Dichlorobenzene	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
1,4-Dichlorobenzene	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
1,2-Dichlorobenzene	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromo-3-chloropropane	ND	0.0042	EPA 8260D	11-14-19	11-14-19	
1,2,4-Trichlorobenzene	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
Hexachlorobutadiene	ND	0.0042	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichlorobenzene	ND	0.00083	EPA 8260D	11-14-19	11-14-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>102</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>106</i>	<i>71-130</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-02-18.0					
Laboratory ID:	11-122-07					
Dichlorodifluoromethane	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
Chloromethane	ND	0.0040	EPA 8260D	11-14-19	11-14-19	
Vinyl Chloride	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
Bromomethane	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
Chloroethane	ND	0.0040	EPA 8260D	11-14-19	11-14-19	
Trichlorofluoromethane	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethene	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
Iodomethane	ND	0.0040	EPA 8260D	11-14-19	11-14-19	
Methylene Chloride	ND	0.0040	EPA 8260D	11-14-19	11-14-19	
(trans) 1,2-Dichloroethene	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethane	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
2,2-Dichloropropane	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
(cis) 1,2-Dichloroethene	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
Bromochloromethane	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
Chloroform	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
1,1,1-Trichloroethane	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
Carbon Tetrachloride	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloropropene	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloroethane	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
Trichloroethene	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloropropane	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
Dibromomethane	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
Bromodichloromethane	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
2-Chloroethyl Vinyl Ether	ND	0.0058	EPA 8260D	11-14-19	11-14-19	
(cis) 1,3-Dichloropropene	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
(trans) 1,3-Dichloropropene	ND	0.00079	EPA 8260D	11-14-19	11-14-19	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-02-18.0					
Laboratory ID:	11-122-07					
1,1,2-Trichloroethane	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
Tetrachloroethene	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
1,3-Dichloropropane	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
Dibromochloromethane	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromoethane	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
Chlorobenzene	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
1,1,1,2-Tetrachloroethane	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
Bromoform	ND	0.0040	EPA 8260D	11-14-19	11-14-19	
Bromobenzene	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
1,1,2,2-Tetrachloroethane	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichloropropane	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
2-Chlorotoluene	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
4-Chlorotoluene	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
1,3-Dichlorobenzene	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
1,4-Dichlorobenzene	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
1,2-Dichlorobenzene	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromo-3-chloropropane	ND	0.0040	EPA 8260D	11-14-19	11-14-19	
1,2,4-Trichlorobenzene	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
Hexachlorobutadiene	ND	0.0040	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichlorobenzene	ND	0.00079	EPA 8260D	11-14-19	11-14-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>94</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>90</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>90</i>	<i>71-130</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-03-5.0					
Laboratory ID:	11-122-08					
Dichlorodifluoromethane	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
Chloromethane	ND	0.0036	EPA 8260D	11-14-19	11-14-19	
Vinyl Chloride	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
Bromomethane	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
Chloroethane	ND	0.0036	EPA 8260D	11-14-19	11-14-19	
Trichlorofluoromethane	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethene	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
Iodomethane	ND	0.0036	EPA 8260D	11-14-19	11-14-19	
Methylene Chloride	ND	0.0036	EPA 8260D	11-14-19	11-14-19	
(trans) 1,2-Dichloroethene	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethane	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
2,2-Dichloropropane	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
(cis) 1,2-Dichloroethene	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
Bromochloromethane	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
Chloroform	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
1,1,1-Trichloroethane	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
Carbon Tetrachloride	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloropropene	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloroethane	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
Trichloroethene	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloropropane	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
Dibromomethane	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
Bromodichloromethane	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
2-Chloroethyl Vinyl Ether	ND	0.0052	EPA 8260D	11-14-19	11-14-19	
(cis) 1,3-Dichloropropene	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
(trans) 1,3-Dichloropropene	ND	0.00071	EPA 8260D	11-14-19	11-14-19	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-03-5.0					
Laboratory ID:	11-122-08					
1,1,2-Trichloroethane	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
Tetrachloroethene	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
1,3-Dichloropropane	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
Dibromochloromethane	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromoethane	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
Chlorobenzene	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
1,1,1,2-Tetrachloroethane	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
Bromoform	ND	0.0036	EPA 8260D	11-14-19	11-14-19	
Bromobenzene	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
1,1,2,2-Tetrachloroethane	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichloropropane	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
2-Chlorotoluene	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
4-Chlorotoluene	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
1,3-Dichlorobenzene	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
1,4-Dichlorobenzene	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
1,2-Dichlorobenzene	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromo-3-chloropropane	ND	0.0036	EPA 8260D	11-14-19	11-14-19	
1,2,4-Trichlorobenzene	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
Hexachlorobutadiene	ND	0.0036	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichlorobenzene	ND	0.00071	EPA 8260D	11-14-19	11-14-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>91</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>90</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>71-130</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-04-5.0					
Laboratory ID:	11-122-10					
Dichlorodifluoromethane	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
Chloromethane	ND	0.0037	EPA 8260D	11-14-19	11-14-19	
Vinyl Chloride	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
Bromomethane	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
Chloroethane	ND	0.0037	EPA 8260D	11-14-19	11-14-19	
Trichlorofluoromethane	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethene	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
Iodomethane	ND	0.0037	EPA 8260D	11-14-19	11-14-19	
Methylene Chloride	ND	0.0037	EPA 8260D	11-14-19	11-14-19	
(trans) 1,2-Dichloroethene	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethane	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
2,2-Dichloropropane	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
(cis) 1,2-Dichloroethene	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
Bromochloromethane	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
Chloroform	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
1,1,1-Trichloroethane	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
Carbon Tetrachloride	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloropropene	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloroethane	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
Trichloroethene	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloropropane	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
Dibromomethane	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
Bromodichloromethane	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
2-Chloroethyl Vinyl Ether	ND	0.0055	EPA 8260D	11-14-19	11-14-19	
(cis) 1,3-Dichloropropene	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
(trans) 1,3-Dichloropropene	ND	0.00075	EPA 8260D	11-14-19	11-14-19	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-04-5.0					
Laboratory ID:	11-122-10					
1,1,2-Trichloroethane	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
Tetrachloroethene	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
1,3-Dichloropropane	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
Dibromochloromethane	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromoethane	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
Chlorobenzene	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
1,1,1,2-Tetrachloroethane	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
Bromoform	ND	0.0037	EPA 8260D	11-14-19	11-14-19	
Bromobenzene	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
1,1,2,2-Tetrachloroethane	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichloropropane	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
2-Chlorotoluene	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
4-Chlorotoluene	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
1,3-Dichlorobenzene	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
1,4-Dichlorobenzene	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
1,2-Dichlorobenzene	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromo-3-chloropropane	ND	0.0037	EPA 8260D	11-14-19	11-14-19	
1,2,4-Trichlorobenzene	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
Hexachlorobutadiene	ND	0.0037	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichlorobenzene	ND	0.00075	EPA 8260D	11-14-19	11-14-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>90</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>89</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>89</i>	<i>71-130</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-04-9.0					
Laboratory ID:	11-122-11					
Dichlorodifluoromethane	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
Chloromethane	ND	0.0034	EPA 8260D	11-14-19	11-14-19	
Vinyl Chloride	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
Bromomethane	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
Chloroethane	ND	0.0034	EPA 8260D	11-14-19	11-14-19	
Trichlorofluoromethane	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethene	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
Iodomethane	ND	0.0034	EPA 8260D	11-14-19	11-14-19	
Methylene Chloride	ND	0.0034	EPA 8260D	11-14-19	11-14-19	
(trans) 1,2-Dichloroethene	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethane	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
2,2-Dichloropropane	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
(cis) 1,2-Dichloroethene	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
Bromochloromethane	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
Chloroform	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
1,1,1-Trichloroethane	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
Carbon Tetrachloride	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloropropene	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloroethane	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
Trichloroethene	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloropropane	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
Dibromomethane	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
Bromodichloromethane	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260D	11-14-19	11-14-19	
(cis) 1,3-Dichloropropene	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
(trans) 1,3-Dichloropropene	ND	0.00068	EPA 8260D	11-14-19	11-14-19	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-04-9.0					
Laboratory ID:	11-122-11					
1,1,2-Trichloroethane	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
Tetrachloroethene	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
1,3-Dichloropropane	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
Dibromochloromethane	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromoethane	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
Chlorobenzene	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
1,1,1,2-Tetrachloroethane	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
Bromoform	ND	0.0034	EPA 8260D	11-14-19	11-14-19	
Bromobenzene	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
1,1,2,2-Tetrachloroethane	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichloropropane	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
2-Chlorotoluene	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
4-Chlorotoluene	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
1,3-Dichlorobenzene	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
1,4-Dichlorobenzene	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
1,2-Dichlorobenzene	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromo-3-chloropropane	ND	0.0034	EPA 8260D	11-14-19	11-14-19	
1,2,4-Trichlorobenzene	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
Hexachlorobutadiene	ND	0.0034	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichlorobenzene	ND	0.00068	EPA 8260D	11-14-19	11-14-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>90</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>92</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>94</i>	<i>71-130</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-05-5.0					
Laboratory ID:	11-122-12					
Dichlorodifluoromethane	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
Chloromethane	ND	0.0041	EPA 8260D	11-14-19	11-14-19	
Vinyl Chloride	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
Bromomethane	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
Chloroethane	ND	0.0041	EPA 8260D	11-14-19	11-14-19	
Trichlorofluoromethane	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethene	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
Iodomethane	ND	0.0041	EPA 8260D	11-14-19	11-14-19	
Methylene Chloride	ND	0.0041	EPA 8260D	11-14-19	11-14-19	
(trans) 1,2-Dichloroethene	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethane	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
2,2-Dichloropropane	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
(cis) 1,2-Dichloroethene	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
Bromochloromethane	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
Chloroform	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
1,1,1-Trichloroethane	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
Carbon Tetrachloride	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloropropene	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloroethane	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
Trichloroethene	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloropropane	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
Dibromomethane	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
Bromodichloromethane	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
2-Chloroethyl Vinyl Ether	ND	0.0060	EPA 8260D	11-14-19	11-14-19	
(cis) 1,3-Dichloropropene	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
(trans) 1,3-Dichloropropene	ND	0.00082	EPA 8260D	11-14-19	11-14-19	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-05-5.0					
Laboratory ID:	11-122-12					
1,1,2-Trichloroethane	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
Tetrachloroethene	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
1,3-Dichloropropane	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
Dibromochloromethane	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromoethane	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
Chlorobenzene	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
1,1,1,2-Tetrachloroethane	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
Bromoform	ND	0.0041	EPA 8260D	11-14-19	11-14-19	
Bromobenzene	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
1,1,2,2-Tetrachloroethane	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichloropropane	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
2-Chlorotoluene	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
4-Chlorotoluene	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
1,3-Dichlorobenzene	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
1,4-Dichlorobenzene	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
1,2-Dichlorobenzene	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromo-3-chloropropane	ND	0.0041	EPA 8260D	11-14-19	11-14-19	
1,2,4-Trichlorobenzene	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
Hexachlorobutadiene	ND	0.0041	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichlorobenzene	ND	0.00082	EPA 8260D	11-14-19	11-14-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>92</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>92</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>71-130</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-05-10.0					
Laboratory ID:	11-122-13					
Dichlorodifluoromethane	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
Chloromethane	ND	0.0042	EPA 8260D	11-14-19	11-14-19	
Vinyl Chloride	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
Bromomethane	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
Chloroethane	ND	0.0042	EPA 8260D	11-14-19	11-14-19	
Trichlorofluoromethane	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethene	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
Iodomethane	ND	0.0042	EPA 8260D	11-14-19	11-14-19	
Methylene Chloride	ND	0.0042	EPA 8260D	11-14-19	11-14-19	
(trans) 1,2-Dichloroethene	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethane	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
2,2-Dichloropropane	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
(cis) 1,2-Dichloroethene	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
Bromochloromethane	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
Chloroform	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
1,1,1-Trichloroethane	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
Carbon Tetrachloride	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloropropene	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloroethane	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
Trichloroethene	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloropropane	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
Dibromomethane	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
Bromodichloromethane	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
2-Chloroethyl Vinyl Ether	ND	0.0061	EPA 8260D	11-14-19	11-14-19	
(cis) 1,3-Dichloropropene	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
(trans) 1,3-Dichloropropene	ND	0.00084	EPA 8260D	11-14-19	11-14-19	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-05-10.0					
Laboratory ID:	11-122-13					
1,1,2-Trichloroethane	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
Tetrachloroethene	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
1,3-Dichloropropane	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
Dibromochloromethane	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromoethane	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
Chlorobenzene	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
1,1,1,2-Tetrachloroethane	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
Bromoform	ND	0.0042	EPA 8260D	11-14-19	11-14-19	
Bromobenzene	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
1,1,2,2-Tetrachloroethane	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichloropropane	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
2-Chlorotoluene	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
4-Chlorotoluene	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
1,3-Dichlorobenzene	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
1,4-Dichlorobenzene	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
1,2-Dichlorobenzene	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromo-3-chloropropane	ND	0.0042	EPA 8260D	11-14-19	11-14-19	
1,2,4-Trichlorobenzene	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
Hexachlorobutadiene	ND	0.0042	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichlorobenzene	ND	0.00084	EPA 8260D	11-14-19	11-14-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	95	76-131				
<i>Toluene-d8</i>	93	78-128				
<i>4-Bromofluorobenzene</i>	96	71-130				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-06-5.0					
Laboratory ID:	11-122-14					
Dichlorodifluoromethane	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
Chloromethane	ND	0.0043	EPA 8260D	11-14-19	11-14-19	
Vinyl Chloride	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
Bromomethane	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
Chloroethane	ND	0.0043	EPA 8260D	11-14-19	11-14-19	
Trichlorofluoromethane	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethene	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
Iodomethane	ND	0.0043	EPA 8260D	11-14-19	11-14-19	
Methylene Chloride	ND	0.0043	EPA 8260D	11-14-19	11-14-19	
(trans) 1,2-Dichloroethene	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethane	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
2,2-Dichloropropane	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
(cis) 1,2-Dichloroethene	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
Bromochloromethane	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
Chloroform	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
1,1,1-Trichloroethane	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
Carbon Tetrachloride	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloropropene	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloroethane	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
Trichloroethene	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloropropane	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
Dibromomethane	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
Bromodichloromethane	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
2-Chloroethyl Vinyl Ether	ND	0.0063	EPA 8260D	11-14-19	11-14-19	
(cis) 1,3-Dichloropropene	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
(trans) 1,3-Dichloropropene	ND	0.00086	EPA 8260D	11-14-19	11-14-19	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-06-5.0					
Laboratory ID:	11-122-14					
1,1,2-Trichloroethane	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
Tetrachloroethene	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
1,3-Dichloropropane	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
Dibromochloromethane	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromoethane	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
Chlorobenzene	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
1,1,1,2-Tetrachloroethane	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
Bromoform	ND	0.0043	EPA 8260D	11-14-19	11-14-19	
Bromobenzene	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
1,1,2,2-Tetrachloroethane	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichloropropane	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
2-Chlorotoluene	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
4-Chlorotoluene	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
1,3-Dichlorobenzene	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
1,4-Dichlorobenzene	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
1,2-Dichlorobenzene	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromo-3-chloropropane	ND	0.0043	EPA 8260D	11-14-19	11-14-19	
1,2,4-Trichlorobenzene	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
Hexachlorobutadiene	ND	0.0043	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichlorobenzene	ND	0.00086	EPA 8260D	11-14-19	11-14-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>91</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>91</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>71-130</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-06-9.5					
Laboratory ID:	11-122-15					
Dichlorodifluoromethane	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
Chloromethane	ND	0.0039	EPA 8260D	11-14-19	11-14-19	
Vinyl Chloride	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
Bromomethane	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
Chloroethane	ND	0.0039	EPA 8260D	11-14-19	11-14-19	
Trichlorofluoromethane	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethene	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
Iodomethane	ND	0.0039	EPA 8260D	11-14-19	11-14-19	
Methylene Chloride	ND	0.0039	EPA 8260D	11-14-19	11-14-19	
(trans) 1,2-Dichloroethene	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethane	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
2,2-Dichloropropane	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
(cis) 1,2-Dichloroethene	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
Bromochloromethane	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
Chloroform	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
1,1,1-Trichloroethane	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
Carbon Tetrachloride	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloropropene	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloroethane	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
Trichloroethene	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloropropane	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
Dibromomethane	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
Bromodichloromethane	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
2-Chloroethyl Vinyl Ether	ND	0.0056	EPA 8260D	11-14-19	11-14-19	
(cis) 1,3-Dichloropropene	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
(trans) 1,3-Dichloropropene	ND	0.00077	EPA 8260D	11-14-19	11-14-19	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-06-9.5					
Laboratory ID:	11-122-15					
1,1,2-Trichloroethane	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
Tetrachloroethene	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
1,3-Dichloropropane	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
Dibromochloromethane	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromoethane	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
Chlorobenzene	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
1,1,1,2-Tetrachloroethane	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
Bromoform	ND	0.0039	EPA 8260D	11-14-19	11-14-19	
Bromobenzene	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
1,1,2,2-Tetrachloroethane	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichloropropane	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
2-Chlorotoluene	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
4-Chlorotoluene	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
1,3-Dichlorobenzene	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
1,4-Dichlorobenzene	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
1,2-Dichlorobenzene	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromo-3-chloropropane	ND	0.0039	EPA 8260D	11-14-19	11-14-19	
1,2,4-Trichlorobenzene	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
Hexachlorobutadiene	ND	0.0039	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichlorobenzene	ND	0.00077	EPA 8260D	11-14-19	11-14-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>91</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>93</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>71-130</i>				



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VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1114S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Chloromethane	ND	0.0050	EPA 8260D	11-14-19	11-14-19	
Vinyl Chloride	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Bromomethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Chloroethane	ND	0.0050	EPA 8260D	11-14-19	11-14-19	
Trichlorofluoromethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Iodomethane	ND	0.0050	EPA 8260D	11-14-19	11-14-19	
Methylene Chloride	ND	0.0050	EPA 8260D	11-14-19	11-14-19	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
2,2-Dichloropropane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Bromochloromethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Chloroform	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Carbon Tetrachloride	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloropropene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloroethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Trichloroethene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloropropane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Dibromomethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Bromodichloromethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
2-Chloroethyl Vinyl Ether	ND	0.0073	EPA 8260D	11-14-19	11-14-19	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	



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VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1114S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Tetrachloroethene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,3-Dichloropropane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Dibromochloromethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromoethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Chlorobenzene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Bromoform	ND	0.0050	EPA 8260D	11-14-19	11-14-19	
Bromobenzene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
2-Chlorotoluene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
4-Chlorotoluene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260D	11-14-19	11-14-19	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Hexachlorobutadiene	ND	0.0050	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>94</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>97</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>90</i>	<i>71-130</i>				



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 Project: 2309-001

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB1114S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0464	0.0419	0.0500	0.0500	93	84	57-133	10	18	
Benzene	0.0488	0.0465	0.0500	0.0500	98	93	71-129	5	16	
Trichloroethene	0.0511	0.0505	0.0500	0.0500	102	101	71-122	1	16	
Toluene	0.0494	0.0464	0.0500	0.0500	99	93	74-125	6	15	
Chlorobenzene	0.0488	0.0467	0.0500	0.0500	98	93	72-120	4	14	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					92	90	76-131			
<i>Toluene-d8</i>					91	90	78-128			
<i>4-Bromofluorobenzene</i>					96	93	71-130			



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Samples Submitted: November 12, 2019
Laboratory Reference: 1911-122
Project: 2309-001

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
FB-01-8.0	11-122-02	7	11-15-19
FB-01-10.0	11-122-03	9	11-15-19
FB-02-10.0	11-122-05	11	11-15-19
FB-02-18.0	11-122-07	7	11-15-19
FB-03-5.0	11-122-08	8	11-15-19
FB-04-5.0	11-122-10	10	11-15-19
FB-04-9.0	11-122-11	7	11-15-19
FB-05-5.0	11-122-12	6	11-15-19
FB-05-10.0	11-122-13	7	11-15-19
FB-06-5.0	11-122-14	8	11-15-19
FB-06-9.5	11-122-15	6	11-15-19





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





Onsite Environmental Inc.

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

Chain of Custody

Turnaround Request (in working days)

(Check One)

- Same Day 1 Day
- 2 Days 3 Days
- Standard (7 Days)

Hold (other)

Laboratory Number: **11-122**

Company: Farellon

Project Number: 2309-001

Project Name: University of WA - Tacoma

Project Manager: Yusuf Pehlivan

Sampled by: C. Benfield

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	FB-01-5.0	11/11/19	1110	S	5
2	FB-01-8.0		1115		
3	FB-01-10.0		1130		
4	FB-02-5.0		0945		
5	FB-02-10.0		0950		
6	FB-02-15.0		1015		
7	FB-02-18.0		1020		
8	FB-03-5.0		1320		
9	FB-03-6.0		1330		
10	FB-04-5.0		1430		

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

Relinquished Signature: [Signature] Company: Farellon

Received Signature: [Signature] Company: Speedy

Relinquished Signature: [Signature] Company: Speedy

Received Signature: [Signature] Company: OSI

Relinquished Signature: [Signature] Company: OSI

Received Signature: [Signature] Company: OSI

Reviewed/Date: _____ Reviewed/Date: _____

Comments/Special Instructions: Please Hold. Please contact Yusuf Pehlivan
X-Added 11/12/19. DB (STA)

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

Chain of Custody

Turnaround Request
 (in Working days)

(Check One)

- Same Day 1 Day
- 2 Days 3 Days
- Standard (7 Days)

~~HAZD~~
 (other)

Laboratory Number: **11-122**

Company: Farellon
 Project Number: 2309-001
 Project Name: University of WA - Tacoma
 Project Manager: Yusef Penhven
 Sampled by: C. Bonfield

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
11	FB-04-9.0	11/11/19	1435	S	5
12	FB-05-5.0		1455	S	5
13	FB-05-10.0		1515	S	5
14	FB-06-5.0		1540	S	5
15	FB-06-9.5		1550	S	5

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (<input type="checkbox"/> Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture
11	FB-04-9.0	11/11/19	1435	S	5						X												X
12	FB-05-5.0		1455	S	5						X												X
13	FB-05-10.0		1515	S	5						X												X
14	FB-06-5.0		1540	S	5						X												X
15	FB-06-9.5		1550	S	5						X												X

Signature	Company	Date	Time	Comments/Special Instructions
	Farellon	11/11/19	1730	Please HAZD for PAH
	Speedy	11-12-19	1035	
	Speedy	11-12-19	1117	
	OSE	11/12/19	1117	
Received				
Relinquished				
Received				
Relinquished				
Reviewed/Date	Reviewed/Date			

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

November 19, 2019

Yusuf Pehlivan
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 2309-001
Laboratory Reference No. 1911-130

Dear Yusuf:

Enclosed are the analytical results and associated quality control data for samples submitted on November 13, 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,

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

David Baumeister
Project Manager

Enclosures



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

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

Date of Report: November 19, 2019
Samples Submitted: November 13, 2019
Laboratory Reference: 1911-130
Project: 2309-001

Case Narrative

Samples were collected on November 12, 2019 and received by the laboratory on November 13, 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.

Halogenated Volatiles EPA 8260C Analysis:

Due to the levels of sediment present in the VOA vials provided for sample RGW-FB-07, the aqueous layers from two VOA vials were combined to perform the requested analysis. Some loss of volatiles may have occurred.

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.



Date of Report: November 19, 2019
 Samples Submitted: November 13, 2019
 Laboratory Reference: 1911-130
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	RGW-FB-03					
Laboratory ID:	11-130-01					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Chloromethane	ND	1.0	EPA 8260D	11-14-19	11-14-19	
Vinyl Chloride	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Bromomethane	ND	0.37	EPA 8260D	11-14-19	11-14-19	
Chloroethane	ND	1.0	EPA 8260D	11-14-19	11-14-19	
Trichlorofluoromethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Iodomethane	ND	2.2	EPA 8260D	11-14-19	11-14-19	
Methylene Chloride	ND	1.0	EPA 8260D	11-14-19	11-14-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
2,2-Dichloropropane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Bromochloromethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Chloroform	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Carbon Tetrachloride	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloropropene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Trichloroethene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloropropane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Dibromomethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Bromodichloromethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	11-14-19	11-14-19	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	11-14-19	11-14-19	



Date of Report: November 19, 2019
 Samples Submitted: November 13, 2019
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VOLATILE ORGANICS EPA 8260D
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	RGW-FB-03					
Laboratory ID:	11-130-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Tetrachloroethene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,3-Dichloropropane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Dibromochloromethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromoethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Chlorobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Bromoform	ND	1.0	EPA 8260D	11-14-19	11-14-19	
Bromobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
2-Chlorotoluene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
4-Chlorotoluene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromo-3-chloropropane	ND	1.4	EPA 8260D	11-14-19	11-14-19	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Hexachlorobutadiene	ND	1.0	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichlorobenzene	ND	0.26	EPA 8260D	11-14-19	11-14-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>78-125</i>				



Date of Report: November 19, 2019
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 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	RGW-FB-04					
Laboratory ID:	11-130-02					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Chloromethane	ND	1.0	EPA 8260D	11-14-19	11-14-19	
Vinyl Chloride	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Bromomethane	ND	0.37	EPA 8260D	11-14-19	11-14-19	
Chloroethane	ND	1.0	EPA 8260D	11-14-19	11-14-19	
Trichlorofluoromethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Iodomethane	ND	2.2	EPA 8260D	11-14-19	11-14-19	
Methylene Chloride	ND	1.0	EPA 8260D	11-14-19	11-14-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
2,2-Dichloropropane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Bromochloromethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Chloroform	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Carbon Tetrachloride	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloropropene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Trichloroethene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloropropane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Dibromomethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Bromodichloromethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	11-14-19	11-14-19	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	11-14-19	11-14-19	



Date of Report: November 19, 2019
 Samples Submitted: November 13, 2019
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	RGW-FB-04					
Laboratory ID:	11-130-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Tetrachloroethene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,3-Dichloropropane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Dibromochloromethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromoethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Chlorobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Bromoform	ND	1.0	EPA 8260D	11-14-19	11-14-19	
Bromobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
2-Chlorotoluene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
4-Chlorotoluene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromo-3-chloropropane	ND	1.4	EPA 8260D	11-14-19	11-14-19	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Hexachlorobutadiene	ND	1.0	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichlorobenzene	ND	0.26	EPA 8260D	11-14-19	11-14-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>105</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>78-125</i>				



Date of Report: November 19, 2019
 Samples Submitted: November 13, 2019
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 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	RGW-FB-01					
Laboratory ID:	11-130-03					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Chloromethane	ND	1.0	EPA 8260D	11-14-19	11-14-19	
Vinyl Chloride	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Bromomethane	ND	0.37	EPA 8260D	11-14-19	11-14-19	
Chloroethane	ND	1.0	EPA 8260D	11-14-19	11-14-19	
Trichlorofluoromethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Iodomethane	ND	2.2	EPA 8260D	11-14-19	11-14-19	
Methylene Chloride	ND	1.0	EPA 8260D	11-14-19	11-14-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
2,2-Dichloropropane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Bromochloromethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Chloroform	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Carbon Tetrachloride	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloropropene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Trichloroethene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloropropane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Dibromomethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Bromodichloromethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	11-14-19	11-14-19	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	11-14-19	11-14-19	



Date of Report: November 19, 2019
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VOLATILE ORGANICS EPA 8260D
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	RGW-FB-01					
Laboratory ID:	11-130-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Tetrachloroethene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,3-Dichloropropane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Dibromochloromethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromoethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Chlorobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Bromoform	ND	1.0	EPA 8260D	11-14-19	11-14-19	
Bromobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
2-Chlorotoluene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
4-Chlorotoluene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromo-3-chloropropane	ND	1.4	EPA 8260D	11-14-19	11-14-19	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Hexachlorobutadiene	ND	1.0	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichlorobenzene	ND	0.26	EPA 8260D	11-14-19	11-14-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>103</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>78-125</i>				



Date of Report: November 19, 2019
 Samples Submitted: November 13, 2019
 Laboratory Reference: 1911-130
 Project: 2309-001

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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	RGW-FB-07					
Laboratory ID:	11-130-04					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Chloromethane	ND	1.0	EPA 8260D	11-14-19	11-14-19	
Vinyl Chloride	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Bromomethane	ND	0.37	EPA 8260D	11-14-19	11-14-19	
Chloroethane	ND	1.0	EPA 8260D	11-14-19	11-14-19	
Trichlorofluoromethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Iodomethane	ND	2.2	EPA 8260D	11-14-19	11-14-19	
Methylene Chloride	ND	1.0	EPA 8260D	11-14-19	11-14-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
2,2-Dichloropropane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Bromochloromethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Chloroform	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Carbon Tetrachloride	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloropropene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Trichloroethene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloropropane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Dibromomethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Bromodichloromethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	11-14-19	11-14-19	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	11-14-19	11-14-19	



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 Samples Submitted: November 13, 2019
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 Project: 2309-001

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	RGW-FB-07					
Laboratory ID:	11-130-04					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Tetrachloroethene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,3-Dichloropropane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Dibromochloromethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromoethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Chlorobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Bromoform	ND	1.0	EPA 8260D	11-14-19	11-14-19	
Bromobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
2-Chlorotoluene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
4-Chlorotoluene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromo-3-chloropropane	ND	1.4	EPA 8260D	11-14-19	11-14-19	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Hexachlorobutadiene	ND	1.0	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichlorobenzene	ND	0.26	EPA 8260D	11-14-19	11-14-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>102</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>78-125</i>				



Date of Report: November 19, 2019
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 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1114W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Chloromethane	ND	1.0	EPA 8260D	11-14-19	11-14-19	
Vinyl Chloride	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Bromomethane	ND	0.37	EPA 8260D	11-14-19	11-14-19	
Chloroethane	ND	1.0	EPA 8260D	11-14-19	11-14-19	
Trichlorofluoromethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Iodomethane	ND	2.2	EPA 8260D	11-14-19	11-14-19	
Methylene Chloride	ND	1.0	EPA 8260D	11-14-19	11-14-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
2,2-Dichloropropane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Bromochloromethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Chloroform	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Carbon Tetrachloride	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloropropene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Trichloroethene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloropropane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Dibromomethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Bromodichloromethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260D	11-14-19	11-14-19	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	11-14-19	11-14-19	



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QUALITY CONTROL
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1114W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Tetrachloroethene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,3-Dichloropropane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Dibromochloromethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromoethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Chlorobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Bromoform	ND	1.0	EPA 8260D	11-14-19	11-14-19	
Bromobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	11-14-19	11-14-19	
2-Chlorotoluene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
4-Chlorotoluene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromo-3-chloropropane	ND	1.4	EPA 8260D	11-14-19	11-14-19	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	11-14-19	11-14-19	
Hexachlorobutadiene	ND	1.0	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichlorobenzene	ND	0.26	EPA 8260D	11-14-19	11-14-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>103</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>78-125</i>				



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**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					SB	SBD	Limits	RPD	Limit	
SPIKE BLANKS										
Laboratory ID:	SB1114W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	11.8	11.1	10.0	10.0	118	111	63-130	6	17	
Benzene	11.2	10.7	10.0	10.0	112	107	76-125	5	19	
Trichloroethene	11.2	10.6	10.0	10.0	112	106	76-121	6	18	
Toluene	11.1	10.5	10.0	10.0	111	105	80-124	6	18	
Chlorobenzene	11.1	10.3	10.0	10.0	111	103	75-120	7	19	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					103	104	75-127			
<i>Toluene-d8</i>					102	102	80-127			
<i>4-Bromofluorobenzene</i>					99	99	78-125			



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-07-5.0					
Laboratory ID:	11-130-05					
Dichlorodifluoromethane	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
Chloromethane	ND	0.0057	EPA 8260D	11-13-19	11-13-19	
Vinyl Chloride	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
Bromomethane	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
Chloroethane	ND	0.0045	EPA 8260D	11-13-19	11-13-19	
Trichlorofluoromethane	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
1,1-Dichloroethene	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
Iodomethane	ND	0.0045	EPA 8260D	11-13-19	11-13-19	
Methylene Chloride	ND	0.0045	EPA 8260D	11-13-19	11-13-19	
(trans) 1,2-Dichloroethene	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
1,1-Dichloroethane	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
2,2-Dichloropropane	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
(cis) 1,2-Dichloroethene	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
Bromochloromethane	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
Chloroform	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
1,1,1-Trichloroethane	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
Carbon Tetrachloride	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
1,1-Dichloropropene	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
1,2-Dichloroethane	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
Trichloroethene	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
1,2-Dichloropropane	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
Dibromomethane	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
Bromodichloromethane	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
2-Chloroethyl Vinyl Ether	ND	0.011	EPA 8260D	11-13-19	11-13-19	
(cis) 1,3-Dichloropropene	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
(trans) 1,3-Dichloropropene	ND	0.00089	EPA 8260D	11-13-19	11-13-19	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-07-5.0					
Laboratory ID:	11-130-05					
1,1,2-Trichloroethane	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
Tetrachloroethene	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
1,3-Dichloropropane	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
Dibromochloromethane	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
1,2-Dibromoethane	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
Chlorobenzene	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
1,1,1,2-Tetrachloroethane	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
Bromoform	ND	0.0057	EPA 8260D	11-13-19	11-13-19	
Bromobenzene	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
1,1,2,2-Tetrachloroethane	ND	0.0012	EPA 8260D	11-13-19	11-13-19	
1,2,3-Trichloropropane	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
2-Chlorotoluene	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
4-Chlorotoluene	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
1,3-Dichlorobenzene	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
1,4-Dichlorobenzene	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
1,2-Dichlorobenzene	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
1,2-Dibromo-3-chloropropane	ND	0.0057	EPA 8260D	11-13-19	11-13-19	
1,2,4-Trichlorobenzene	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
Hexachlorobutadiene	ND	0.0056	EPA 8260D	11-13-19	11-13-19	
1,2,3-Trichlorobenzene	ND	0.00089	EPA 8260D	11-13-19	11-13-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>91</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>95</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>92</i>	<i>71-130</i>				



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QUALITY CONTROL
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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1113S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
Chloromethane	ND	0.0064	EPA 8260D	11-13-19	11-13-19	
Vinyl Chloride	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
Bromomethane	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
Chloroethane	ND	0.0050	EPA 8260D	11-13-19	11-13-19	
Trichlorofluoromethane	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
1,1-Dichloroethene	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
Iodomethane	ND	0.0050	EPA 8260D	11-13-19	11-13-19	
Methylene Chloride	ND	0.0050	EPA 8260D	11-13-19	11-13-19	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
1,1-Dichloroethane	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
2,2-Dichloropropane	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
Bromochloromethane	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
Chloroform	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
Carbon Tetrachloride	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
1,1-Dichloropropene	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
1,2-Dichloroethane	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
Trichloroethene	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
1,2-Dichloropropane	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
Dibromomethane	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
Bromodichloromethane	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
2-Chloroethyl Vinyl Ether	ND	0.012	EPA 8260D	11-13-19	11-13-19	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260D	11-13-19	11-13-19	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1113S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
Tetrachloroethene	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
1,3-Dichloropropane	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
Dibromochloromethane	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
1,2-Dibromoethane	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
Chlorobenzene	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
Bromoform	ND	0.0064	EPA 8260D	11-13-19	11-13-19	
Bromobenzene	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
1,1,2,2-Tetrachloroethane	ND	0.0013	EPA 8260D	11-13-19	11-13-19	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
2-Chlorotoluene	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
4-Chlorotoluene	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
1,2-Dibromo-3-chloropropane	ND	0.0064	EPA 8260D	11-13-19	11-13-19	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
Hexachlorobutadiene	ND	0.0063	EPA 8260D	11-13-19	11-13-19	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260D	11-13-19	11-13-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>92</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>93</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>71-130</i>				



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 Project: 2309-001

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB1113S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0472	0.0492	0.0500	0.0500	94	98	57-133	4	18	
Benzene	0.0517	0.0528	0.0500	0.0500	103	106	71-129	2	16	
Trichloroethene	0.0564	0.0579	0.0500	0.0500	113	116	71-122	3	16	
Toluene	0.0523	0.0544	0.0500	0.0500	105	109	74-125	4	15	
Chlorobenzene	0.0529	0.0523	0.0500	0.0500	106	105	72-120	1	14	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					90	91	76-131			
<i>Toluene-d8</i>					93	94	78-128			
<i>4-Bromofluorobenzene</i>					96	95	71-130			



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% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
FB-07-5.0	11-130-05	12	11-13-19





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





MVA Onsite Environmental Inc.

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

Chain of Custody

Turnaround Request (in working days)
(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

_____ (other)

Laboratory Number: **11-130**

Company: Farellon

Project Number: 2309-001

Project Name: University of Fort-Lima

Project Manager: Yosof Rehlwan

Sampled by: C. Barfield

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	RGW-FB-03	11/12/19	935	W	3
2	RGW-FB-04		930	W	
3	RGW-FB-01		935	W	
4	RGW-FB-07		1050	W	
5	FB-07-5.0		1045	S	

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

CHAS

Signature	Company	Date	Time	Comments/Special Instructions
<u>Marshall Barfield</u>	<u>Farellon</u>	<u>11/12/19</u>	<u>1420</u>	
<u>[Signature]</u>	<u>Speedy</u>	<u>11-13-19</u>	<u>0835</u>	
<u>[Signature]</u>	<u>Speedy</u>	<u>11-13-19</u>	<u>1035</u>	
<u>[Signature]</u>	<u>[Signature]</u>	<u>11/13/19</u>	<u>1035</u>	
Received				
Relinquished				
Received				
Relinquished				
Reviewed/Date	Reviewed/Date			

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

November 19, 2019

Yusuf Pehlivan
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 2309-001
Laboratory Reference No. 1911-142

Dear Yusuf:

Enclosed are the analytical results and associated quality control data for samples submitted on November 14, 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,

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

David Baumeister
Project Manager

Enclosures



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

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

Date of Report: November 19, 2019
Samples Submitted: November 14, 2019
Laboratory Reference: 1911-142
Project: 2309-001

Case Narrative

Samples were collected on November 13, 2019 and received by the laboratory on November 14, 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.



Date of Report: November 19, 2019
 Samples Submitted: November 14, 2019
 Laboratory Reference: 1911-142
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-01D-10.0					
Laboratory ID:	11-142-02					
Dichlorodifluoromethane	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
Chloromethane	ND	0.0047	EPA 8260D	11-14-19	11-14-19	
Vinyl Chloride	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
Bromomethane	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
Chloroethane	ND	0.0047	EPA 8260D	11-14-19	11-14-19	
Trichlorofluoromethane	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethene	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
Iodomethane	ND	0.0047	EPA 8260D	11-14-19	11-14-19	
Methylene Chloride	ND	0.0047	EPA 8260D	11-14-19	11-14-19	
(trans) 1,2-Dichloroethene	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethane	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
2,2-Dichloropropane	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
(cis) 1,2-Dichloroethene	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
Bromochloromethane	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
Chloroform	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
1,1,1-Trichloroethane	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
Carbon Tetrachloride	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloropropene	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloroethane	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
Trichloroethene	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloropropane	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
Dibromomethane	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
Bromodichloromethane	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
2-Chloroethyl Vinyl Ether	ND	0.0068	EPA 8260D	11-14-19	11-14-19	
(cis) 1,3-Dichloropropene	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
(trans) 1,3-Dichloropropene	ND	0.00093	EPA 8260D	11-14-19	11-14-19	



Date of Report: November 19, 2019
 Samples Submitted: November 14, 2019
 Laboratory Reference: 1911-142
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-01D-10.0					
Laboratory ID:	11-142-02					
1,1,2-Trichloroethane	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
Tetrachloroethene	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
1,3-Dichloropropane	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
Dibromochloromethane	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromoethane	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
Chlorobenzene	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
1,1,1,2-Tetrachloroethane	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
Bromoform	ND	0.0047	EPA 8260D	11-14-19	11-14-19	
Bromobenzene	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
1,1,2,2-Tetrachloroethane	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichloropropane	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
2-Chlorotoluene	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
4-Chlorotoluene	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
1,3-Dichlorobenzene	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
1,4-Dichlorobenzene	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
1,2-Dichlorobenzene	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromo-3-chloropropane	ND	0.0047	EPA 8260D	11-14-19	11-14-19	
1,2,4-Trichlorobenzene	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
Hexachlorobutadiene	ND	0.0047	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichlorobenzene	ND	0.00093	EPA 8260D	11-14-19	11-14-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	93	76-131				
<i>Toluene-d8</i>	95	78-128				
<i>4-Bromofluorobenzene</i>	95	71-130				



Date of Report: November 19, 2019
 Samples Submitted: November 14, 2019
 Laboratory Reference: 1911-142
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-01D-25.0					
Laboratory ID:	11-142-05					
Dichlorodifluoromethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Chloromethane	ND	0.0052	EPA 8260D	11-14-19	11-14-19	
Vinyl Chloride	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Bromomethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Chloroethane	ND	0.0052	EPA 8260D	11-14-19	11-14-19	
Trichlorofluoromethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Iodomethane	ND	0.0052	EPA 8260D	11-14-19	11-14-19	
Methylene Chloride	ND	0.0052	EPA 8260D	11-14-19	11-14-19	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
2,2-Dichloropropane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Bromochloromethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Chloroform	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Carbon Tetrachloride	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloropropene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloroethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Trichloroethene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloropropane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Dibromomethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Bromodichloromethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
2-Chloroethyl Vinyl Ether	ND	0.0076	EPA 8260D	11-14-19	11-14-19	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	



Date of Report: November 19, 2019
 Samples Submitted: November 14, 2019
 Laboratory Reference: 1911-142
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-01D-25.0					
Laboratory ID:	11-142-05					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Tetrachloroethene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,3-Dichloropropane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Dibromochloromethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromoethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Chlorobenzene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Bromoform	ND	0.0052	EPA 8260D	11-14-19	11-14-19	
Bromobenzene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
2-Chlorotoluene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
4-Chlorotoluene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromo-3-chloropropane	ND	0.0052	EPA 8260D	11-14-19	11-14-19	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Hexachlorobutadiene	ND	0.0052	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>91</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>90</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>92</i>	<i>71-130</i>				



Date of Report: November 19, 2019
 Samples Submitted: November 14, 2019
 Laboratory Reference: 1911-142
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-01D-47.5					
Laboratory ID:	11-142-10					
Dichlorodifluoromethane	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
Chloromethane	ND	0.0044	EPA 8260D	11-14-19	11-14-19	
Vinyl Chloride	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
Bromomethane	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
Chloroethane	ND	0.0044	EPA 8260D	11-14-19	11-14-19	
Trichlorofluoromethane	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethene	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
Iodomethane	ND	0.0044	EPA 8260D	11-14-19	11-14-19	
Methylene Chloride	ND	0.0044	EPA 8260D	11-14-19	11-14-19	
(trans) 1,2-Dichloroethene	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethane	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
2,2-Dichloropropane	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
(cis) 1,2-Dichloroethene	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
Bromochloromethane	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
Chloroform	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
1,1,1-Trichloroethane	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
Carbon Tetrachloride	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloropropene	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloroethane	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
Trichloroethene	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloropropane	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
Dibromomethane	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
Bromodichloromethane	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
2-Chloroethyl Vinyl Ether	ND	0.0064	EPA 8260D	11-14-19	11-14-19	
(cis) 1,3-Dichloropropene	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
(trans) 1,3-Dichloropropene	ND	0.00088	EPA 8260D	11-14-19	11-14-19	



Date of Report: November 19, 2019
 Samples Submitted: November 14, 2019
 Laboratory Reference: 1911-142
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-01D-47.5					
Laboratory ID:	11-142-10					
1,1,2-Trichloroethane	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
Tetrachloroethene	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
1,3-Dichloropropane	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
Dibromochloromethane	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromoethane	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
Chlorobenzene	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
1,1,1,2-Tetrachloroethane	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
Bromoform	ND	0.0044	EPA 8260D	11-14-19	11-14-19	
Bromobenzene	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
1,1,2,2-Tetrachloroethane	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichloropropane	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
2-Chlorotoluene	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
4-Chlorotoluene	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
1,3-Dichlorobenzene	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
1,4-Dichlorobenzene	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
1,2-Dichlorobenzene	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromo-3-chloropropane	ND	0.0044	EPA 8260D	11-14-19	11-14-19	
1,2,4-Trichlorobenzene	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
Hexachlorobutadiene	ND	0.0044	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichlorobenzene	ND	0.00088	EPA 8260D	11-14-19	11-14-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>91</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>91</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>92</i>	<i>71-130</i>				



Date of Report: November 19, 2019
 Samples Submitted: November 14, 2019
 Laboratory Reference: 1911-142
 Project: 2309-001

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1114S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Chloromethane	ND	0.0050	EPA 8260D	11-14-19	11-14-19	
Vinyl Chloride	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Bromomethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Chloroethane	ND	0.0050	EPA 8260D	11-14-19	11-14-19	
Trichlorofluoromethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Iodomethane	ND	0.0050	EPA 8260D	11-14-19	11-14-19	
Methylene Chloride	ND	0.0050	EPA 8260D	11-14-19	11-14-19	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloroethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
2,2-Dichloropropane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Bromochloromethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Chloroform	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Carbon Tetrachloride	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,1-Dichloropropene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloroethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Trichloroethene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,2-Dichloropropane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Dibromomethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Bromodichloromethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
2-Chloroethyl Vinyl Ether	ND	0.0073	EPA 8260D	11-14-19	11-14-19	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	



Date of Report: November 19, 2019
 Samples Submitted: November 14, 2019
 Laboratory Reference: 1911-142
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1114S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Tetrachloroethene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,3-Dichloropropane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Dibromochloromethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromoethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Chlorobenzene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Bromoform	ND	0.0050	EPA 8260D	11-14-19	11-14-19	
Bromobenzene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
2-Chlorotoluene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
4-Chlorotoluene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260D	11-14-19	11-14-19	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
Hexachlorobutadiene	ND	0.0050	EPA 8260D	11-14-19	11-14-19	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260D	11-14-19	11-14-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>94</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>97</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>90</i>	<i>71-130</i>				



Date of Report: November 19, 2019
 Samples Submitted: November 14, 2019
 Laboratory Reference: 1911-142
 Project: 2309-001

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB1114S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0464	0.0419	0.0500	0.0500	93	84	57-133	10	18	
Benzene	0.0488	0.0465	0.0500	0.0500	98	93	71-129	5	16	
Trichloroethene	0.0511	0.0505	0.0500	0.0500	102	101	71-122	1	16	
Toluene	0.0494	0.0464	0.0500	0.0500	99	93	74-125	6	15	
Chlorobenzene	0.0488	0.0467	0.0500	0.0500	98	93	72-120	4	14	
<i>Surrogate:</i>										
Dibromofluoromethane					92	90	76-131			
Toluene-d8					91	90	78-128			
4-Bromofluorobenzene					96	93	71-130			



Date of Report: November 19, 2019
Samples Submitted: November 14, 2019
Laboratory Reference: 1911-142
Project: 2309-001

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
FMW-01D-10.0	11-142-02	6	11-15-19
FMW-01D-25.0	11-142-05	9	11-15-19
FMW-01D-47.5	11-142-10	11	11-15-19





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





MVA Onsite Environmental Inc.
 Analytical Laboratory Testing Services
 14648 NE 95th Street • Redmond, WA 98052
 Phone: (425) 883-3981 • www.onsite-env.com

Chain of Custody

Turnaround Request
 (in working days)

(Check One)

- Same Day 1 Day
- 2 Days 3 Days
- Standard (7 Days)

HOLD (other) 11-14-19

Laboratory Number:

11-142

Company: Farrallon
 Project Number: 2309-001
 Project Name: University of WA, Tacoma
 Project Manager: Yusuf Pehivan
 Sampled by: N. Gehring, C. Banfield

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	FMW-01D-5.0	11/13/19	1020	S	S
2	FMW-01D-10.0		1030	S	S
3	FMW-01D-15.0		1045	S	S
4	FMW-01D-20.0		1055	S	S
5	FMW-01D-25.0		1255	S	S
6	FMW-01D-30.0		1300	S	S
7	FMW-01D-35.0		1330	S	S
8	FMW-01D-40.0		1335	S	S
9	FMW-01D-45.0		1400	S	S
10	FMW-01D-47.5		1415	S	S

Date	Time	Matrix	Number of Containers
11/13/19	1800	S	S
11-14-19	0845	S	S
11-14-19	1043	S	S
11/19/19	1043	S	S

Date	Time	Comments/Special Instructions
11/13/19	1800	
11-14-19	0845	
11-14-19	1043	
11/19/19	1043	

Signature	Company	Date	Time	Comments/Special Instructions
<u>Megan Gi</u>	<u>Farrallon</u>	11/13/19	1800	
<u>RD Bonds</u>	<u>Speedy</u>	11-14-19	0845	
<u>RD Bonds</u>	<u>Speedy</u>	11-14-19	1043	
<u>Molly Lynn</u>	<u>OSE</u>	11/19/19	1043	

Received/Date: _____ Reviewed/Date: _____

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)

Please HOLD, PM will contact w/ analysis X - Added 11-14-19 KL (STA)



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

November 22, 2019

Yusuf Pehlivan
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 2309-001
Laboratory Reference No. 1911-156

Dear Yusuf:

Enclosed are the analytical results and associated quality control data for samples submitted on November 15, 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,

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

David Baumeister
Project Manager

Enclosures



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

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

Date of Report: November 22, 2019
Samples Submitted: November 15, 2019
Laboratory Reference: 1911-156
Project: 2309-001

Case Narrative

Samples were collected on November 14, 2019 and received by the laboratory on November 15, 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.



Date of Report: November 22, 2019
 Samples Submitted: November 15, 2019
 Laboratory Reference: 1911-156
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-02D-25.0					
Laboratory ID:	11-156-02					
Dichlorodifluoromethane	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
Chloromethane	ND	0.0036	EPA 8260D	11-19-19	11-19-19	
Vinyl Chloride	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
Bromomethane	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
Chloroethane	ND	0.0036	EPA 8260D	11-19-19	11-19-19	
Trichlorofluoromethane	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloroethene	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
Iodomethane	ND	0.0036	EPA 8260D	11-19-19	11-19-19	
Methylene Chloride	ND	0.0036	EPA 8260D	11-19-19	11-19-19	
(trans) 1,2-Dichloroethene	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloroethane	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
2,2-Dichloropropane	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
(cis) 1,2-Dichloroethene	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
Bromochloromethane	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
Chloroform	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
1,1,1-Trichloroethane	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
Carbon Tetrachloride	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloropropene	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
1,2-Dichloroethane	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
Trichloroethene	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
1,2-Dichloropropane	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
Dibromomethane	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
Bromodichloromethane	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
2-Chloroethyl Vinyl Ether	ND	0.0036	EPA 8260D	11-19-19	11-19-19	
(cis) 1,3-Dichloropropene	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
(trans) 1,3-Dichloropropene	ND	0.00071	EPA 8260D	11-19-19	11-19-19	



Date of Report: November 22, 2019
 Samples Submitted: November 15, 2019
 Laboratory Reference: 1911-156
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-02D-25.0					
Laboratory ID:	11-156-02					
1,1,2-Trichloroethane	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
Tetrachloroethene	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
1,3-Dichloropropane	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
Dibromochloromethane	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
1,2-Dibromoethane	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
Chlorobenzene	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
1,1,1,2-Tetrachloroethane	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
Bromoform	ND	0.0036	EPA 8260D	11-19-19	11-19-19	
Bromobenzene	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
1,1,2,2-Tetrachloroethane	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
1,2,3-Trichloropropane	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
2-Chlorotoluene	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
4-Chlorotoluene	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
1,3-Dichlorobenzene	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
1,4-Dichlorobenzene	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
1,2-Dichlorobenzene	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
1,2-Dibromo-3-chloropropane	ND	0.0036	EPA 8260D	11-19-19	11-19-19	
1,2,4-Trichlorobenzene	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
Hexachlorobutadiene	ND	0.0036	EPA 8260D	11-19-19	11-19-19	
1,2,3-Trichlorobenzene	ND	0.00071	EPA 8260D	11-19-19	11-19-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>111</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>97</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>71-130</i>				



Date of Report: November 22, 2019
 Samples Submitted: November 15, 2019
 Laboratory Reference: 1911-156
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-02D-35.0					
Laboratory ID:	11-156-04					
Dichlorodifluoromethane	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
Chloromethane	ND	0.0035	EPA 8260D	11-19-19	11-19-19	
Vinyl Chloride	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
Bromomethane	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
Chloroethane	ND	0.0035	EPA 8260D	11-19-19	11-19-19	
Trichlorofluoromethane	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloroethene	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
Iodomethane	ND	0.0035	EPA 8260D	11-19-19	11-19-19	
Methylene Chloride	ND	0.0035	EPA 8260D	11-19-19	11-19-19	
(trans) 1,2-Dichloroethene	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloroethane	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
2,2-Dichloropropane	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
(cis) 1,2-Dichloroethene	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
Bromochloromethane	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
Chloroform	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
1,1,1-Trichloroethane	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
Carbon Tetrachloride	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloropropene	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
1,2-Dichloroethane	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
Trichloroethene	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
1,2-Dichloropropane	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
Dibromomethane	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
Bromodichloromethane	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
2-Chloroethyl Vinyl Ether	ND	0.0035	EPA 8260D	11-19-19	11-19-19	
(cis) 1,3-Dichloropropene	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
(trans) 1,3-Dichloropropene	ND	0.00069	EPA 8260D	11-19-19	11-19-19	



Date of Report: November 22, 2019
 Samples Submitted: November 15, 2019
 Laboratory Reference: 1911-156
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-02D-35.0					
Laboratory ID:	11-156-04					
1,1,2-Trichloroethane	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
Tetrachloroethene	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
1,3-Dichloropropane	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
Dibromochloromethane	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
1,2-Dibromoethane	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
Chlorobenzene	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
1,1,1,2-Tetrachloroethane	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
Bromoform	ND	0.0035	EPA 8260D	11-19-19	11-19-19	
Bromobenzene	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
1,1,2,2-Tetrachloroethane	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
1,2,3-Trichloropropane	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
2-Chlorotoluene	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
4-Chlorotoluene	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
1,3-Dichlorobenzene	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
1,4-Dichlorobenzene	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
1,2-Dichlorobenzene	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
1,2-Dibromo-3-chloropropane	ND	0.0035	EPA 8260D	11-19-19	11-19-19	
1,2,4-Trichlorobenzene	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
Hexachlorobutadiene	ND	0.0035	EPA 8260D	11-19-19	11-19-19	
1,2,3-Trichlorobenzene	ND	0.00069	EPA 8260D	11-19-19	11-19-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>104</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>71-130</i>				



Date of Report: November 22, 2019
 Samples Submitted: November 15, 2019
 Laboratory Reference: 1911-156
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-02D-50.0					
Laboratory ID:	11-156-07					
Dichlorodifluoromethane	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
Chloromethane	ND	0.0046	EPA 8260D	11-19-19	11-19-19	
Vinyl Chloride	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
Bromomethane	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
Chloroethane	ND	0.0046	EPA 8260D	11-19-19	11-19-19	
Trichlorofluoromethane	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloroethene	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
Iodomethane	ND	0.0046	EPA 8260D	11-19-19	11-19-19	
Methylene Chloride	ND	0.0046	EPA 8260D	11-19-19	11-19-19	
(trans) 1,2-Dichloroethene	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloroethane	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
2,2-Dichloropropane	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
(cis) 1,2-Dichloroethene	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
Bromochloromethane	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
Chloroform	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
1,1,1-Trichloroethane	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
Carbon Tetrachloride	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloropropene	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
1,2-Dichloroethane	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
Trichloroethene	0.0026	0.00093	EPA 8260D	11-19-19	11-19-19	
1,2-Dichloropropane	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
Dibromomethane	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
Bromodichloromethane	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
2-Chloroethyl Vinyl Ether	ND	0.0046	EPA 8260D	11-19-19	11-19-19	
(cis) 1,3-Dichloropropene	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
(trans) 1,3-Dichloropropene	ND	0.00093	EPA 8260D	11-19-19	11-19-19	



Date of Report: November 22, 2019
 Samples Submitted: November 15, 2019
 Laboratory Reference: 1911-156
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-02D-50.0					
Laboratory ID:	11-156-07					
1,1,2-Trichloroethane	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
Tetrachloroethene	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
1,3-Dichloropropane	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
Dibromochloromethane	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
1,2-Dibromoethane	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
Chlorobenzene	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
1,1,1,2-Tetrachloroethane	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
Bromoform	ND	0.0046	EPA 8260D	11-19-19	11-19-19	
Bromobenzene	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
1,1,2,2-Tetrachloroethane	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
1,2,3-Trichloropropane	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
2-Chlorotoluene	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
4-Chlorotoluene	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
1,3-Dichlorobenzene	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
1,4-Dichlorobenzene	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
1,2-Dichlorobenzene	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
1,2-Dibromo-3-chloropropane	ND	0.0046	EPA 8260D	11-19-19	11-19-19	
1,2,4-Trichlorobenzene	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
Hexachlorobutadiene	ND	0.0046	EPA 8260D	11-19-19	11-19-19	
1,2,3-Trichlorobenzene	ND	0.00093	EPA 8260D	11-19-19	11-19-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>111</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>71-130</i>				



Date of Report: November 22, 2019
 Samples Submitted: November 15, 2019
 Laboratory Reference: 1911-156
 Project: 2309-001

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1119S2					
Dichlorodifluoromethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Chloromethane	ND	0.0050	EPA 8260D	11-19-19	11-19-19	
Vinyl Chloride	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Bromomethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Chloroethane	ND	0.0050	EPA 8260D	11-19-19	11-19-19	
Trichlorofluoromethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloroethene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Iodomethane	ND	0.0050	EPA 8260D	11-19-19	11-19-19	
Methylene Chloride	ND	0.0050	EPA 8260D	11-19-19	11-19-19	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloroethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
2,2-Dichloropropane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Bromochloromethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Chloroform	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Carbon Tetrachloride	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloropropene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,2-Dichloroethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Trichloroethene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,2-Dichloropropane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Dibromomethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Bromodichloromethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260D	11-19-19	11-19-19	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	



Date of Report: November 22, 2019
 Samples Submitted: November 15, 2019
 Laboratory Reference: 1911-156
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1119S2					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Tetrachloroethene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,3-Dichloropropane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Dibromochloromethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,2-Dibromoethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Chlorobenzene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Bromoform	ND	0.0050	EPA 8260D	11-19-19	11-19-19	
Bromobenzene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
2-Chlorotoluene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
4-Chlorotoluene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260D	11-19-19	11-19-19	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Hexachlorobutadiene	ND	0.0050	EPA 8260D	11-19-19	11-19-19	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>109</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>93</i>	<i>71-130</i>				



Date of Report: November 22, 2019
 Samples Submitted: November 15, 2019
 Laboratory Reference: 1911-156
 Project: 2309-001

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB1119S3									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0497	0.0485	0.0500	0.0500	99	97	57-133	2	18	
Benzene	0.0469	0.0458	0.0500	0.0500	94	92	71-129	2	16	
Trichloroethene	0.0505	0.0495	0.0500	0.0500	101	99	71-122	2	16	
Toluene	0.0497	0.0483	0.0500	0.0500	99	97	74-125	3	15	
Chlorobenzene	0.0526	0.0511	0.0500	0.0500	105	102	72-120	3	14	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					<i>106</i>	<i>106</i>	<i>76-131</i>			
<i>Toluene-d8</i>					<i>98</i>	<i>97</i>	<i>78-128</i>			
<i>4-Bromofluorobenzene</i>					<i>92</i>	<i>97</i>	<i>71-130</i>			



Date of Report: November 22, 2019
Samples Submitted: November 15, 2019
Laboratory Reference: 1911-156
Project: 2309-001

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
FMW-02D-25.0	11-156-02	8	11-19-19
FMW-02D-35.0	11-156-04	10	11-19-19
FMW-02D-50.0	11-156-07	26	11-19-19





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





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

Chain of Custody

Laboratory Number: **11-156**

Company: Farallon		Turnaround Request (in working days) (Check One)		Laboratory Number: 11-156																				
Project Number: 2309-001		<input type="checkbox"/> Same Day <input type="checkbox"/> 1 Day <input type="checkbox"/> 2 Days <input type="checkbox"/> 3 Days <input checked="" type="checkbox"/> Standard (7 Days)																						
Project Name: University of WA, Tacoma		<input checked="" type="checkbox"/> Hold (other)																						
Project Manager: Yusuf Pehivan																								
Sampled by: M. Gehring																								
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers																			
1	FMW-020-20.0	11/14/19	1105	S	4	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (<input type="checkbox"/> Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture	
2	FMW-020-25.0		1300							X														X
3	FMW-020-30.0		1305								X													X
4	FMW-020-35.0		1310								X													X
5	FMW-020-40.0		1315																					X
6	FMW-020-45.0		1340																					X
7	FMW-020-50.0		1345							X														X
						Hold																		
Signature: M. Gehring		Company: Farallon		Date: 11/14/19		Time: 1700		Comments/Special Instructions: PLEASE HOLD, PM WITH CONTACT w/ ANALYSIS																
Received: DB Bock		Company: Farallon		Date: 11-15-19		Time: 0900																		
Relinquished: DB Bock		Company: Farallon		Date: 11-15-19		Time: 1043																		
Received: DB Bock		Company: Farallon		Date: 11/15/19		Time: 1043																		
Relinquished: DB Bock		Company: Farallon		Date: 11/15/19		Time: 1043																		
Received: DB Bock		Company: Farallon		Date: 11/15/19		Time: 1043																		
Relinquished: DB Bock		Company: Farallon		Date: 11/15/19		Time: 1043																		
Reviewed/Date: _____		Reviewed/Date: _____		Reviewed/Date: _____		Reviewed/Date: _____		Data Package: Standard <input checked="" type="checkbox"/> Level III <input type="checkbox"/> Level IV <input type="checkbox"/>																
Reviewed/Date: _____		Reviewed/Date: _____		Reviewed/Date: _____		Reviewed/Date: _____		Chromatograms with final report <input type="checkbox"/> Electronic Data Deliverables (EDDs) <input checked="" type="checkbox"/>																



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

November 22, 2019

Yusuf Pehlivan
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 2309-001
Laboratory Reference No. 1911-169

Dear Yusuf:

Enclosed are the analytical results and associated quality control data for samples submitted on November 15, 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,

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

David Baumeister
Project Manager

Enclosures



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

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

Date of Report: November 22, 2019
Samples Submitted: November 15, 2019
Laboratory Reference: 1911-169
Project: 2309-001

Case Narrative

Samples were collected on November 15, 2019 and received by the laboratory on November 15, 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.



Date of Report: November 22, 2019
 Samples Submitted: November 15, 2019
 Laboratory Reference: 1911-169
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-03S-20.0					
Laboratory ID:	11-169-04					
Dichlorodifluoromethane	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
Chloromethane	ND	0.0048	EPA 8260D	11-19-19	11-19-19	
Vinyl Chloride	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
Bromomethane	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
Chloroethane	ND	0.0048	EPA 8260D	11-19-19	11-19-19	
Trichlorofluoromethane	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloroethene	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
Iodomethane	ND	0.0048	EPA 8260D	11-19-19	11-19-19	
Methylene Chloride	ND	0.0048	EPA 8260D	11-19-19	11-19-19	
(trans) 1,2-Dichloroethene	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloroethane	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
2,2-Dichloropropane	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
(cis) 1,2-Dichloroethene	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
Bromochloromethane	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
Chloroform	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
1,1,1-Trichloroethane	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
Carbon Tetrachloride	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloropropene	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
1,2-Dichloroethane	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
Trichloroethene	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
1,2-Dichloropropane	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
Dibromomethane	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
Bromodichloromethane	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
2-Chloroethyl Vinyl Ether	ND	0.0048	EPA 8260D	11-19-19	11-19-19	
(cis) 1,3-Dichloropropene	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
(trans) 1,3-Dichloropropene	ND	0.00095	EPA 8260D	11-19-19	11-19-19	



Date of Report: November 22, 2019
 Samples Submitted: November 15, 2019
 Laboratory Reference: 1911-169
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-03S-20.0					
Laboratory ID:	11-169-04					
1,1,2-Trichloroethane	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
Tetrachloroethene	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
1,3-Dichloropropane	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
Dibromochloromethane	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
1,2-Dibromoethane	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
Chlorobenzene	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
1,1,1,2-Tetrachloroethane	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
Bromoform	ND	0.0048	EPA 8260D	11-19-19	11-19-19	
Bromobenzene	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
1,1,2,2-Tetrachloroethane	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
1,2,3-Trichloropropane	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
2-Chlorotoluene	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
4-Chlorotoluene	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
1,3-Dichlorobenzene	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
1,4-Dichlorobenzene	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
1,2-Dichlorobenzene	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
1,2-Dibromo-3-chloropropane	ND	0.0048	EPA 8260D	11-19-19	11-19-19	
1,2,4-Trichlorobenzene	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
Hexachlorobutadiene	ND	0.0048	EPA 8260D	11-19-19	11-19-19	
1,2,3-Trichlorobenzene	ND	0.00095	EPA 8260D	11-19-19	11-19-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>111</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>94</i>	<i>71-130</i>				



Date of Report: November 22, 2019
 Samples Submitted: November 15, 2019
 Laboratory Reference: 1911-169
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-03S-30.0					
Laboratory ID:	11-169-07					
Dichlorodifluoromethane	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
Chloromethane	ND	0.0042	EPA 8260D	11-19-19	11-19-19	
Vinyl Chloride	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
Bromomethane	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
Chloroethane	ND	0.0042	EPA 8260D	11-19-19	11-19-19	
Trichlorofluoromethane	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloroethene	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
Iodomethane	ND	0.0042	EPA 8260D	11-19-19	11-19-19	
Methylene Chloride	ND	0.0042	EPA 8260D	11-19-19	11-19-19	
(trans) 1,2-Dichloroethene	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloroethane	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
2,2-Dichloropropane	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
(cis) 1,2-Dichloroethene	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
Bromochloromethane	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
Chloroform	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
1,1,1-Trichloroethane	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
Carbon Tetrachloride	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloropropene	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
1,2-Dichloroethane	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
Trichloroethene	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
1,2-Dichloropropane	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
Dibromomethane	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
Bromodichloromethane	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
2-Chloroethyl Vinyl Ether	ND	0.0042	EPA 8260D	11-19-19	11-19-19	
(cis) 1,3-Dichloropropene	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
(trans) 1,3-Dichloropropene	ND	0.00085	EPA 8260D	11-19-19	11-19-19	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-03S-30.0					
Laboratory ID:	11-169-07					
1,1,2-Trichloroethane	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
Tetrachloroethene	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
1,3-Dichloropropane	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
Dibromochloromethane	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
1,2-Dibromoethane	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
Chlorobenzene	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
1,1,1,2-Tetrachloroethane	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
Bromoform	ND	0.0042	EPA 8260D	11-19-19	11-19-19	
Bromobenzene	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
1,1,2,2-Tetrachloroethane	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
1,2,3-Trichloropropane	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
2-Chlorotoluene	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
4-Chlorotoluene	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
1,3-Dichlorobenzene	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
1,4-Dichlorobenzene	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
1,2-Dichlorobenzene	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
1,2-Dibromo-3-chloropropane	ND	0.0042	EPA 8260D	11-19-19	11-19-19	
1,2,4-Trichlorobenzene	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
Hexachlorobutadiene	ND	0.0042	EPA 8260D	11-19-19	11-19-19	
1,2,3-Trichlorobenzene	ND	0.00085	EPA 8260D	11-19-19	11-19-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>111</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>71-130</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-03S-45.0					
Laboratory ID:	11-169-10					
Dichlorodifluoromethane	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
Chloromethane	ND	0.0041	EPA 8260D	11-19-19	11-19-19	
Vinyl Chloride	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
Bromomethane	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
Chloroethane	ND	0.0041	EPA 8260D	11-19-19	11-19-19	
Trichlorofluoromethane	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloroethene	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
Iodomethane	ND	0.0041	EPA 8260D	11-19-19	11-19-19	
Methylene Chloride	ND	0.0041	EPA 8260D	11-19-19	11-19-19	
(trans) 1,2-Dichloroethene	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloroethane	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
2,2-Dichloropropane	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
(cis) 1,2-Dichloroethene	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
Bromochloromethane	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
Chloroform	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
1,1,1-Trichloroethane	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
Carbon Tetrachloride	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloropropene	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
1,2-Dichloroethane	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
Trichloroethene	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
1,2-Dichloropropane	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
Dibromomethane	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
Bromodichloromethane	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
2-Chloroethyl Vinyl Ether	ND	0.0041	EPA 8260D	11-19-19	11-19-19	
(cis) 1,3-Dichloropropene	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
(trans) 1,3-Dichloropropene	ND	0.00082	EPA 8260D	11-19-19	11-19-19	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-03S-45.0					
Laboratory ID:	11-169-10					
1,1,2-Trichloroethane	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
Tetrachloroethene	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
1,3-Dichloropropane	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
Dibromochloromethane	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
1,2-Dibromoethane	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
Chlorobenzene	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
1,1,1,2-Tetrachloroethane	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
Bromoform	ND	0.0041	EPA 8260D	11-19-19	11-19-19	
Bromobenzene	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
1,1,2,2-Tetrachloroethane	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
1,2,3-Trichloropropane	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
2-Chlorotoluene	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
4-Chlorotoluene	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
1,3-Dichlorobenzene	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
1,4-Dichlorobenzene	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
1,2-Dichlorobenzene	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
1,2-Dibromo-3-chloropropane	ND	0.0041	EPA 8260D	11-19-19	11-19-19	
1,2,4-Trichlorobenzene	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
Hexachlorobutadiene	ND	0.0041	EPA 8260D	11-19-19	11-19-19	
1,2,3-Trichlorobenzene	ND	0.00082	EPA 8260D	11-19-19	11-19-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>108</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>71-130</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-08-15.0					
Laboratory ID:	11-169-14					
Dichlorodifluoromethane	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
Chloromethane	ND	0.0038	EPA 8260D	11-19-19	11-19-19	
Vinyl Chloride	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
Bromomethane	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
Chloroethane	ND	0.0038	EPA 8260D	11-19-19	11-19-19	
Trichlorofluoromethane	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloroethene	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
Iodomethane	ND	0.0038	EPA 8260D	11-19-19	11-19-19	
Methylene Chloride	ND	0.0038	EPA 8260D	11-19-19	11-19-19	
(trans) 1,2-Dichloroethene	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloroethane	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
2,2-Dichloropropane	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
(cis) 1,2-Dichloroethene	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
Bromochloromethane	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
Chloroform	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
1,1,1-Trichloroethane	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
Carbon Tetrachloride	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloropropene	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
1,2-Dichloroethane	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
Trichloroethene	0.0016	0.00076	EPA 8260D	11-19-19	11-19-19	
1,2-Dichloropropane	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
Dibromomethane	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
Bromodichloromethane	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
2-Chloroethyl Vinyl Ether	ND	0.0038	EPA 8260D	11-19-19	11-19-19	
(cis) 1,3-Dichloropropene	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
(trans) 1,3-Dichloropropene	ND	0.00076	EPA 8260D	11-19-19	11-19-19	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-08-15.0					
Laboratory ID:	11-169-14					
1,1,2-Trichloroethane	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
Tetrachloroethene	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
1,3-Dichloropropane	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
Dibromochloromethane	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
1,2-Dibromoethane	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
Chlorobenzene	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
1,1,1,2-Tetrachloroethane	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
Bromoform	ND	0.0038	EPA 8260D	11-19-19	11-19-19	
Bromobenzene	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
1,1,2,2-Tetrachloroethane	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
1,2,3-Trichloropropane	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
2-Chlorotoluene	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
4-Chlorotoluene	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
1,3-Dichlorobenzene	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
1,4-Dichlorobenzene	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
1,2-Dichlorobenzene	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
1,2-Dibromo-3-chloropropane	ND	0.0038	EPA 8260D	11-19-19	11-19-19	
1,2,4-Trichlorobenzene	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
Hexachlorobutadiene	ND	0.0038	EPA 8260D	11-19-19	11-19-19	
1,2,3-Trichlorobenzene	ND	0.00076	EPA 8260D	11-19-19	11-19-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>107</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>71-130</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-08-20.0					
Laboratory ID:	11-169-15					
Dichlorodifluoromethane	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
Chloromethane	ND	0.0033	EPA 8260D	11-19-19	11-19-19	
Vinyl Chloride	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
Bromomethane	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
Chloroethane	ND	0.0033	EPA 8260D	11-19-19	11-19-19	
Trichlorofluoromethane	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloroethene	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
Iodomethane	ND	0.0033	EPA 8260D	11-19-19	11-19-19	
Methylene Chloride	ND	0.0033	EPA 8260D	11-19-19	11-19-19	
(trans) 1,2-Dichloroethene	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloroethane	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
2,2-Dichloropropane	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
(cis) 1,2-Dichloroethene	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
Bromochloromethane	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
Chloroform	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
1,1,1-Trichloroethane	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
Carbon Tetrachloride	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloropropene	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
1,2-Dichloroethane	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
Trichloroethene	0.0029	0.00066	EPA 8260D	11-19-19	11-19-19	
1,2-Dichloropropane	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
Dibromomethane	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
Bromodichloromethane	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
2-Chloroethyl Vinyl Ether	ND	0.0033	EPA 8260D	11-19-19	11-19-19	
(cis) 1,3-Dichloropropene	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
(trans) 1,3-Dichloropropene	ND	0.00066	EPA 8260D	11-19-19	11-19-19	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-08-20.0					
Laboratory ID:	11-169-15					
1,1,2-Trichloroethane	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
Tetrachloroethene	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
1,3-Dichloropropane	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
Dibromochloromethane	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
1,2-Dibromoethane	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
Chlorobenzene	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
1,1,1,2-Tetrachloroethane	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
Bromoform	ND	0.0033	EPA 8260D	11-19-19	11-19-19	
Bromobenzene	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
1,1,2,2-Tetrachloroethane	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
1,2,3-Trichloropropane	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
2-Chlorotoluene	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
4-Chlorotoluene	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
1,3-Dichlorobenzene	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
1,4-Dichlorobenzene	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
1,2-Dichlorobenzene	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
1,2-Dibromo-3-chloropropane	ND	0.0033	EPA 8260D	11-19-19	11-19-19	
1,2,4-Trichlorobenzene	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
Hexachlorobutadiene	ND	0.0033	EPA 8260D	11-19-19	11-19-19	
1,2,3-Trichlorobenzene	ND	0.00066	EPA 8260D	11-19-19	11-19-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>109</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>71-130</i>				



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QUALITY CONTROL
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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1119S2					
Dichlorodifluoromethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Chloromethane	ND	0.0050	EPA 8260D	11-19-19	11-19-19	
Vinyl Chloride	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Bromomethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Chloroethane	ND	0.0050	EPA 8260D	11-19-19	11-19-19	
Trichlorofluoromethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloroethene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Iodomethane	ND	0.0050	EPA 8260D	11-19-19	11-19-19	
Methylene Chloride	ND	0.0050	EPA 8260D	11-19-19	11-19-19	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloroethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
2,2-Dichloropropane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Bromochloromethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Chloroform	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Carbon Tetrachloride	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,1-Dichloropropene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,2-Dichloroethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Trichloroethene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,2-Dichloropropane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Dibromomethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Bromodichloromethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260D	11-19-19	11-19-19	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	



Date of Report: November 22, 2019
 Samples Submitted: November 15, 2019
 Laboratory Reference: 1911-169
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1119S2					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Tetrachloroethene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,3-Dichloropropane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Dibromochloromethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,2-Dibromoethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Chlorobenzene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Bromoform	ND	0.0050	EPA 8260D	11-19-19	11-19-19	
Bromobenzene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
2-Chlorotoluene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
4-Chlorotoluene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260D	11-19-19	11-19-19	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
Hexachlorobutadiene	ND	0.0050	EPA 8260D	11-19-19	11-19-19	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260D	11-19-19	11-19-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>109</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>93</i>	<i>71-130</i>				



Date of Report: November 22, 2019
 Samples Submitted: November 15, 2019
 Laboratory Reference: 1911-169
 Project: 2309-001

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB1119S3									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0497	0.0485	0.0500	0.0500	99	97	57-133	2	18	
Benzene	0.0469	0.0458	0.0500	0.0500	94	92	71-129	2	16	
Trichloroethene	0.0505	0.0495	0.0500	0.0500	101	99	71-122	2	16	
Toluene	0.0497	0.0483	0.0500	0.0500	99	97	74-125	3	15	
Chlorobenzene	0.0526	0.0511	0.0500	0.0500	105	102	72-120	3	14	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					106	106	76-131			
<i>Toluene-d8</i>					98	97	78-128			
<i>4-Bromofluorobenzene</i>					92	97	71-130			



Date of Report: November 22, 2019
Samples Submitted: November 15, 2019
Laboratory Reference: 1911-169
Project: 2309-001

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
FMW-03S-20.0	11-169-04	17	11-19-19
FMW-03S-30.0	11-169-07	17	11-19-19
FMW-03S-45.0	11-169-10	12	11-19-19
FB-08-15.0	11-169-14	9	11-19-19
FB-08-20.0	11-169-15	10	11-19-19





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





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

Chain of Custody

Turnaround Request
 (in working days)
 (Check One)

Laboratory Number: **11-169**

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

HOLD
 (other)

Company: Evallon
 Project Number: 2309-001
 Project Name: University of WA, Tacoma
 Project Manager: Yusuf Pehlivan
 Sampled by: M. Gehring

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
11	ENUS-035-50.0	11/15/19	1130	S	4
12	FB-08-5.0		1410		
13	FB-08-10.0		1425		
14	FB-08-15.0		1430		
15	FB-08-20.0		1435		

Parameter	11	12	13	14	15
NWTPH-HCID					
NWTPH-Gx/BTEX					
NWTPH-Gx					
NWTPH-Dx (<input type="checkbox"/> Acid / SG Clean-up)					
Volatiles 8260C					
Halogenated Volatiles 8260C				X	X
EDB EPA 8011 (Waters Only)					
Semivolatiles 8270D/SIM (with low-level PAHs)					
PAHs 8270D/SIM (low-level)					
PCBs 8082A					
Organochlorine Pesticides 8081B					
Organophosphorus Pesticides 8270D/SIM					
Chlorinated Acid Herbicides 8151A					
Total RCRA Metals					
Total MTCA Metals					
TCLP Metals					
HEM (oil and grease) 1664A					
<u>HOLD</u>					
% Moisture					X

Received	Signature	Company	Date	Time	Comments/Special Instructions
Relinquished	<u>Megan Gi</u>	<u>Evallon</u>	<u>11/15/19</u>	<u>1440</u>	<u>Please HOLD, PM will contact w/ analysis</u> <u>PD</u>
Received	<u>[Signature]</u>	<u>UPWA</u>	<u>11/15/19</u>	<u>1440</u>	
Relinquished	<u>[Signature]</u>	<u>UPWA</u>	<u>11/15/19</u>	<u>1650</u>	
Received	<u>[Signature]</u>	<u>COBE</u>			
Relinquished					
Received					
Relinquished					
Received					
Relinquished					

Signature: [Signature]

Company: Evallon

Date: 11/15/19 Time: 1440

Comments/Special Instructions: Please HOLD, PM will contact w/ analysis
PD

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

December 2, 2019

Yusuf Pehlivan
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 2309-001
Laboratory Reference No. 1911-235

Dear Yusuf:

Enclosed are the analytical results and associated quality control data for samples submitted on November 22, 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,

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

David Baumeister
Project Manager

Enclosures



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

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

Date of Report: December 2, 2019
Samples Submitted: November 22, 2019
Laboratory Reference: 1911-235
Project: 2309-001

Case Narrative

Samples were collected on November 21, 2019 and received by the laboratory on November 22, 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.



Date of Report: December 2, 2019
 Samples Submitted: November 22, 2019
 Laboratory Reference: 1911-235
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-01-112119					
Laboratory ID:	11-235-01					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Chloromethane	ND	1.0	EPA 8260D	11-27-19	11-27-19	
Vinyl Chloride	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Bromomethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Chloroethane	ND	1.0	EPA 8260D	11-27-19	11-27-19	
Trichlorofluoromethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,1-Dichloroethene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Iodomethane	ND	1.0	EPA 8260D	11-27-19	11-27-19	
Methylene Chloride	ND	1.0	EPA 8260D	11-27-19	11-27-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,1-Dichloroethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
2,2-Dichloropropane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Bromochloromethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Chloroform	0.59	0.20	EPA 8260D	11-27-19	11-27-19	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Carbon Tetrachloride	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,1-Dichloropropene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,2-Dichloroethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Trichloroethene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,2-Dichloropropane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Dibromomethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Bromodichloromethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
2-Chloroethyl Vinyl Ether	ND	1.3	EPA 8260D	11-27-19	11-27-19	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	11-27-19	11-27-19	



Date of Report: December 2, 2019
 Samples Submitted: November 22, 2019
 Laboratory Reference: 1911-235
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-01-112119					
Laboratory ID:	11-235-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Tetrachloroethene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,3-Dichloropropane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Dibromochloromethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,2-Dibromoethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Chlorobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Bromoform	ND	1.0	EPA 8260D	11-27-19	11-27-19	
Bromobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
2-Chlorotoluene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
4-Chlorotoluene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	11-27-19	11-27-19	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Hexachlorobutadiene	ND	1.0	EPA 8260D	11-27-19	11-27-19	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>108</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>107</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>91</i>	<i>78-125</i>				



Date of Report: December 2, 2019
 Samples Submitted: November 22, 2019
 Laboratory Reference: 1911-235
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-02-112119					
Laboratory ID:	11-235-02					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Chloromethane	ND	1.0	EPA 8260D	11-27-19	11-27-19	
Vinyl Chloride	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Bromomethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Chloroethane	ND	1.0	EPA 8260D	11-27-19	11-27-19	
Trichlorofluoromethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,1-Dichloroethene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Iodomethane	ND	1.0	EPA 8260D	11-27-19	11-27-19	
Methylene Chloride	ND	1.0	EPA 8260D	11-27-19	11-27-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,1-Dichloroethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
2,2-Dichloropropane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Bromochloromethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Chloroform	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Carbon Tetrachloride	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,1-Dichloropropene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,2-Dichloroethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Trichloroethene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,2-Dichloropropane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Dibromomethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Bromodichloromethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
2-Chloroethyl Vinyl Ether	ND	1.3	EPA 8260D	11-27-19	11-27-19	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	11-27-19	11-27-19	



Date of Report: December 2, 2019
 Samples Submitted: November 22, 2019
 Laboratory Reference: 1911-235
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-02-112119					
Laboratory ID:	11-235-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Tetrachloroethene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,3-Dichloropropane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Dibromochloromethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,2-Dibromoethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Chlorobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Bromoform	ND	1.0	EPA 8260D	11-27-19	11-27-19	
Bromobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
2-Chlorotoluene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
4-Chlorotoluene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	11-27-19	11-27-19	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Hexachlorobutadiene	ND	1.0	EPA 8260D	11-27-19	11-27-19	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>112</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>108</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>78-125</i>				



Date of Report: December 2, 2019
 Samples Submitted: November 22, 2019
 Laboratory Reference: 1911-235
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-03-112119					
Laboratory ID:	11-235-03					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Chloromethane	ND	1.0	EPA 8260D	11-27-19	11-27-19	
Vinyl Chloride	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Bromomethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Chloroethane	ND	1.0	EPA 8260D	11-27-19	11-27-19	
Trichlorofluoromethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,1-Dichloroethene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Iodomethane	ND	1.0	EPA 8260D	11-27-19	11-27-19	
Methylene Chloride	ND	1.0	EPA 8260D	11-27-19	11-27-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,1-Dichloroethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
2,2-Dichloropropane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Bromochloromethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Chloroform	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Carbon Tetrachloride	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,1-Dichloropropene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,2-Dichloroethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Trichloroethene	0.78	0.20	EPA 8260D	11-27-19	11-27-19	
1,2-Dichloropropane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Dibromomethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Bromodichloromethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
2-Chloroethyl Vinyl Ether	ND	1.3	EPA 8260D	11-27-19	11-27-19	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	11-27-19	11-27-19	



Date of Report: December 2, 2019
 Samples Submitted: November 22, 2019
 Laboratory Reference: 1911-235
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-03-112119					
Laboratory ID:	11-235-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Tetrachloroethene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,3-Dichloropropane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Dibromochloromethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,2-Dibromoethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Chlorobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Bromoform	ND	1.0	EPA 8260D	11-27-19	11-27-19	
Bromobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
2-Chlorotoluene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
4-Chlorotoluene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	11-27-19	11-27-19	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Hexachlorobutadiene	ND	1.0	EPA 8260D	11-27-19	11-27-19	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>112</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>111</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>78-125</i>				



Date of Report: December 2, 2019
 Samples Submitted: November 22, 2019
 Laboratory Reference: 1911-235
 Project: 2309-001

VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1127W2					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Chloromethane	ND	1.0	EPA 8260D	11-27-19	11-27-19	
Vinyl Chloride	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Bromomethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Chloroethane	ND	1.0	EPA 8260D	11-27-19	11-27-19	
Trichlorofluoromethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,1-Dichloroethene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Iodomethane	ND	1.0	EPA 8260D	11-27-19	11-27-19	
Methylene Chloride	ND	1.0	EPA 8260D	11-27-19	11-27-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,1-Dichloroethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
2,2-Dichloropropane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Bromochloromethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Chloroform	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Carbon Tetrachloride	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,1-Dichloropropene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,2-Dichloroethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Trichloroethene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,2-Dichloropropane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Dibromomethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Bromodichloromethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
2-Chloroethyl Vinyl Ether	ND	1.3	EPA 8260D	11-27-19	11-27-19	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	11-27-19	11-27-19	



Date of Report: December 2, 2019
 Samples Submitted: November 22, 2019
 Laboratory Reference: 1911-235
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VOLATILE ORGANICS EPA 8260D
QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1127W2					
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Tetrachloroethene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,3-Dichloropropane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Dibromochloromethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,2-Dibromoethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Chlorobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Bromoform	ND	1.0	EPA 8260D	11-27-19	11-27-19	
Bromobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	11-27-19	11-27-19	
2-Chlorotoluene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
4-Chlorotoluene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	11-27-19	11-27-19	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
Hexachlorobutadiene	ND	1.0	EPA 8260D	11-27-19	11-27-19	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260D	11-27-19	11-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>113</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>107</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>93</i>	<i>78-125</i>				



Date of Report: December 2, 2019
 Samples Submitted: November 22, 2019
 Laboratory Reference: 1911-235
 Project: 2309-001

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB1127W2									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	10.0	10.7	10.0	10.0	100	107	63-130	7	17	
Benzene	11.1	11.6	10.0	10.0	111	116	76-125	4	19	
Trichloroethene	11.8	12.0	10.0	10.0	118	120	76-121	2	18	
Toluene	11.4	11.9	10.0	10.0	114	119	80-124	4	18	
Chlorobenzene	10.5	10.9	10.0	10.0	105	109	75-120	4	19	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					<i>110</i>	<i>114</i>	<i>75-127</i>			
<i>Toluene-d8</i>					<i>108</i>	<i>109</i>	<i>80-127</i>			
<i>4-Bromofluorobenzene</i>					<i>95</i>	<i>100</i>	<i>78-125</i>			





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





MVA Onsite Environmental Inc.

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

Chain of Custody

Turnaround Request (In working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

_____ (other)

Laboratory Number:

11-235

Company: Farallon
 Project Number: 2309-001
 Project Name: 1920 Tacoma Avenue South
 Project Manager: Yosuf Pehlivan
 Sampled by: Ryan Ostrow

Lab ID Sample Identification

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	FMW-01-112119	11/21/19	1147	W	3
2	FMW-02-112119	↓	1224	↓	3
3	FMW-03-112119	↓	1338	↓	3

(Handwritten signature and date)
 11/21/19

Signature

Ryan Ostrow Farallon

Yosuf Pehlivan OSE

Relinquished

Received

Relinquished

Received

Relinquished

Received

Reviewed/Date

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

Comments/Special Instructions

Date: 11/21/19 Time: 1700

Date: 11/22/19 Time: 1140

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)